

## APPENDIX G

<b>AUTHORIZED SALES OF FOOD ITEMS EXCLUDING AUTHORIZED MESSES</b>				
<b>Category</b>	<b>Approving Authority</b>	<b>Administrative Charge</b>	<b>Accessorial Charge</b>	<b>Remarks</b>
Components of DoD, including Reserve Activities and Coast Guard	Commanding Officer	No	No	Approving authority may be delegated to the Supply Officer or Regional Supply Officer.
American National Red Cross at naval activities in Alaska and Hawaii and outside the United States	Regional Commander or Overseas Area Commander	NAVCOMPT Manual, Vol. 3	NAVCOMPT Manual, Vol. 3	Items may be used only for food service in local Red Cross canteens and will not be transferred nor resold.
Authorized contract messes	Commander, Naval Supply Systems Command	NAVCOMPT Manual, Vol. 3	NAVCOMPT Manual, Vol. 3	
Civilian cafeterias at military installations in Alaska and Hawaii outside the United States	Regional Commander or Overseas Area Commander	NAVCOMPT Manual, Vol. 3	NAVCOMPT Manual, Vol. 3	Authorized only when commercial activities sources are not available or when it is impracticable for the cafeteria to procure items from commercial sources without impairing the efficient operation of the military activity.
Civilian cafeterias at military installations inside the United States except Alaska and Hawaii	Commander, Naval Supply Systems Command or Regional Commander	NAVCOMPT Manual, Vol. 3	NAVCOMPT Manual, Vol. 3	
Foreign naval vessels and foreign military aircraft	Commanding Officer	No	NAVCOMPT Manual, Vol. 3	
Ashore installations of foreign governments	SecNav	No		Application of administrative/accessorial charges will be determined in accordance with NAVCOMPT Manual, paras. 035963 and 036964.

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Navy and Marine Corps exchanges	Chief of Naval Air Training, Commander Amphibious Training Command or the Overseas Area Commander, when items are not available conveniently from commercial sources	No	No	Items may be used for food service in Navy and Marine Corps exchanges and for resale in exchanges authorized to operate grocery sections.
Other government departments officer (e.g., embassies)	Commanding Officer	No	NAVCOMPT Manual, Vol. 3 para.035961	
Individuals who are authorized patrons of resale activities in Alaska and Hawaii outside the United States	Regional Commander or Overseas Area Commander	NAVCOMPT Manual, Vol. 3	No	Granted only when commissary store facilities are not available within a reasonable distance. A copy of each authorization will be furnished to the Navy Fleet Material Support Office.
Individuals who are authorized patrons of resale activities inside the United States except Alaska and Hawaii	Commander Naval Supply Systems Command or Regional Commander	NAVCOMPT Manual, Vol. 3	No	Requests will be forwarded via the normal military chain of command. Sales will not be made to individuals at Navy activities having commissary stores.
Ship personnel tasked with MWR function	Commanding Officer Navy and Marine Corps	No	No	Granted only when OCONUS and exchange food service is not available.
Distressed ships and aircraft of the United States and of foreign states at peace with the United States	Senior officer present	NAVCOMPT Manual, Vol. 3	NAVCOMPT Manual, Vol. 3	Sales may be made to ships and aircraft in distress or needing supplies and having no other immediate source.

**APPENDIX H**  
**NAVY FOOD MANAGEMENT TEAM ASSISTANCE**

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1. **FUNCTION.** Assistance in the form of on-the-job training is provided by the Navy Food Management Teams (NFMT) in the following functional areas:

- a. Proper food service techniques, including management, production, service of food, sanitation, food safety, training and accounting, menu planning and nutrition;
- b. Management awareness in progressive cookery, proper serving techniques, food service safety precautions, operating procedures, fire prevention, sanitation, and personal hygiene;
- c. Use of facilities, equipment, personnel, and other food service resources;
- d. Automated food service records Food Service Management (FSM), financial returns, and organization and operating procedures;
- e. DOD, Navy and command food service policy and procedures;
- f. Food service education programs;
- g. New developments in food service operations and food items;
- h. Prime Vendor and automated ordering procedures;
- i. Providing written guidance and recommendations for follow-up action by the command;
- j. Conducting evaluations for the Ney Memorial Awards program; and,
- k. Classroom and specialized training.

2. **LOCATION AND AREAS OF RESPONSIBILITY.** The Navy Food Management Teams are based in fleet concentrated areas servicing afloat and ashore activities within the areas of responsibility as indicated in Figure H-1.

3. **ASSISTANCE VISITS.**

a. **Requests for Assistance.** Activities desiring food service training assistance should send a letter of request (Figure H-2) or naval message sixty to ninety days prior to the desired visit dates directly to the Officer-in-Charge of the appropriate Navy Food Management Team as listed in Figure H-1. It is recommended that afloat activities request a visit every 18 months and ashore activities every 24 months.

b. **Length of Visit.** Standard team visits can be requested from three days up to 14. Longer visits may be arranged if necessary due to operating schedules. Commands may request a follow-up visit within 90 days of the initial visit.

c. **Time Periods for Visit.** Requests should indicate two or more convenient periods for the assistance visit. Ship assist visits are best conducted when the ship is underway, to which the team has the undivided attention of the CSs. The type of assist visit can be tailored to the requirements identified by the requesting command. Normally the NFMT will spend the majority of their time working with the CS division hands-on in the galley, cooking and training. The teams also provide classroom instruction on any of the food service lesson plans, identified on Navsup Web Page.

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d. Advance written or telephone contact with the Officer in Charge of the Navy Food Management Team within the designated area of responsibility is encouraged. The following information should be provided to the team before the visit:

- (1) Location of ship during the requested dates;
- (2) Information on the Supply Officer, Food Service Officer, and Leading Culinary Specialist, such as name, rank/rate;
- (3) Particular problem areas requiring special attention;
- (4) Date of last/next Supply Management Inspection (SMI).

e. Exclusions from Assist Visits. A Navy Food Management Team assist visit will not be made to a general mess after it has been nominated by the cognizant Fleet Commander/Major Claimant for Ney Awards competition. This exclusion will apply even if a visit had been previously scheduled and will remain in effect as long as the general mess is in competition. If an assist visit is in progress when a general mess is nominated by the cognizant commander, the visit will be completed. General messes effected by this provision should take action to reschedule a Navy Food Management Team assist visit based on evaluation results announced in accordance with NAVSUPINST 5061.2 series. Team visits will not be requested during yard overhaul or prior to shakedown periods of newly commissioned ships.

f. Report of Visit. At the end of each visit, the Officer-in-Charge of the Navy Food Management Team or the designated representative will informally discuss the overall operation of the general mess with the Commanding Officer or designated representative, the Supply Officer, the Food Service Officer, and key food service personnel. The Officer in Charge of the team will submit a summary of each assist visit to the Readiness Branch, Navy Food Service, ACOS Navy Family Support, Mechanicsburg.

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### NAVY FOOD MANAGEMENT TEAM LOCATIONS AND AREAS OF RESPONSIBILITY

NFMT	ADDRESSES AND PHONE NUMBERS	GEOGRAPHIC AREA OF RESPONSIBILITY
Norfolk	Officer-in-Charge Navy Food Management Team, Norfolk 1955 Morris Street, Norfolk, VA 23511-3497 Commercial: (757) 443-1900 DSN: 646-1900 Fax: (757) 443-1902	Virginia; West Virginia; Illinois; North Carolina; Maryland; NAVDISTWASH; Keflavik; and European areas as far east as the eastern border of Turkey
New London	Officer-in-Charge Navy Food Management Team, New London Naval Submarine Base, New London Supply Department, Box 500, Groton, CT 06349 Commercial: (860) 694-4938/4939 DSN: 694-4938 Fax: (860) 694-4939	Pennsylvania; New York; New Jersey; Connecticut; Rhode Island; Massachusetts; and Maine
Mayport	Officer-in-Charge Navy Food Management Team, Mayport Naval Station, Box 280021 Mayport, FL 32228-0021 Commercial: (904) 270-5544 DSN: 960-5544 Fax: (904) 270-7099 E-Mail: NFMTMYPOR@AOL.COM	Florida; Louisiana; Bahamas; West Indies; Gulfport & Pascagoula, MS; Kings Bay, Georgia; Texas; South Carolina; Tennessee; Puerto Rico; Guantanamo Bay, Cuba; and Panama Canal Zone
San Diego	Officer-in-Charge Navy Food Management Team, San Diego 3985 Cummings Road, Suite #6 Naval Station San Diego San Diego, CA 92136-5206 Commercial: (619) 556-5651/5652 DSN: 526-5651 Fax: (619) 556-5653	California; Nevada; and Oregon
Puget	Officer-in-Charge Navy Food Management Team, Puget Fleet and Industrial Supply Center 35 Scuba Lane, Keyport, WA 98345 Commercial: (360) 396-1382 DSN: 439-1382 Fax: (360) 396-1381 E-Mail: NFMT@CNBS.NAVY.MIL	Washington; Oregon; and Alaska
Pearl Harbor	Officer-in-Charge Navy Food Management Team, Pearl Harbor Bldg 482, 1950 Utah Street Pearl Harbor, HI 96860-4533 Commercial: (808) 471-9871 DSN: 474-7700 Fax: (808) 474-3763	Hawaii; Guam, Southwest Asia (SWA), Japan, and Korea
Yokosuka	Officer-in-Charge Navy Food Management Team, Yokosuka Attn: Code 105-FM Fleet and Industrial Supply Center PSC 473, Box 11 FPO AP 96349-1500 Commercial: (822) 234-7324 Calling from CONUS: 011-81-3117-43-7324 DSN: 243-7051	Diego Garcia; Japan; and Korea

**Figure H-1**

**NAVSUP P-486 - Food Service Management**

**SAMPLE LETTER REQUESTING  
NAVY FOOD MANAGEMENT TEAM ASSISTANCE VISIT**

*Letterhead*

IN REPLY REFER TO

1500

Ser

(DATE)

From: Commanding Officer \_\_\_\_\_

To: Officer-in-Charge, Navy Food Management Team \_\_\_\_\_

Subj: **REQUEST FOR NAVY FOOD MANAGEMENT TEAM ASSISTANCE VISIT**

Ref: (a) NAVSUP Pub 486, Appendix H

(b) Phone call to Navy Food Management Team requesting visit (if desired)

1. In accordance with reference (a) and as discussed in reference (b), a Navy Food Management Team assistance visit is requested during the period (*inclusive dates*). Alternate dates are (*inclusive dates*).

(signed)

Commanding Officer

Copy to:

TYCOM/Major Claimant

**Figure H-2**

**APPENDIX I**

**PART I: FOOD SERVICE EVALUATION/  
TRAINING/INSPECTION CHECKLIST**

<b>AREAS:</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
<b>I. FOOD</b>		
a. Menu Planning	120	
b. Preparation/Acceptability/Conservation	105	
c. Serving Techniques	40	
<b>AREA I TOTAL:</b>	<b>265</b>	
<b>II. ADMINISTRATION</b>		
a. Financial Records and Returns	200	
b. Procurement/Receipt/Storage	20	
c. Food Service Management (FSM) Automated System	15	
<b>AREA II TOTAL:</b>	<b>235</b>	
<b>III. MANAGEMENT</b>		
a. General	20	
b. Command Relations	4	
c. Letters of Authority	16	
d. Security	10	
<b>AREA III TOTAL:</b>	<b>50</b>	
<b>IV. FACILITIES, EQUIPMENT, AND UTENSILS</b>		
<b>AREA IV TOTAL:</b>	<b>25</b>	
<b>V. SAFETY</b>		
<b>AREA V TOTAL:</b>	<b>95</b>	
<b>VI. TRAINING</b>		
<b>AREA VI TOTAL:</b>	<b>25</b>	
<b>VII. SANITATION</b>		
a. Food Storage and Food Protection	68	
b. Food Service Spaces, Equipment, and Utensils	39	
c. Personal	20	
d. Water and Ice Sanitation	9	
e. Sewage and Plumbing	12	
f. Sanitary Facilities, Refuse Disposal, & Pest Control	15	
g. Facility Structure and Housekeeping	24	
h. Ashore general messes only	18	
<b>AREA VII TOTAL:</b>	<b>205</b>	

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**VIII. SHIPBOARD SOLID AND PLASTICS WASTE MANAGEMENT (WRAPS/PRIME)**

**AREA VIII TOTAL:**

<b>20</b>	
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**IX. ARMY VETERINARY FOOD SAFETY NCO ASSISTANCE CHECKLIST**

- a. Receipt Inspection Responsibilities
- b. Food Inspection Responsibilities After receipt
- c. Storage

55	
15	
10	
<b>80</b>	

**AREA IX TOTAL:**

**GRAND TOTAL:**

<b>1000</b>	
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SCORE COMPUTATION:

$$\frac{(\text{MAX PTS ASSIGNED})}{(\text{MAX PTS APPLICABLE})} \quad \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \times 100 = \underline{\hspace{2cm}} \text{ Total points}$$

$\frac{(\text{MAX PTS ASSIGNED})}{(\text{MAX PTS APPLICABLE})} \quad \frac{850}{1000} = \frac{X}{100} \quad (850 \times 100 \div 1000 = \underline{85\%} \text{ Total points})$	<p><b>(SAMPLE)</b></p>
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## NAVSUP P-486 - Food Service Management

### AREA I: FOOD

#### A. MENU PLANNING GENERAL

	MAX PTS	ASSIGNED PTS
1. Menus are posted daily in the general mess to describe and merchandize meals. (NAVSUP P-486, 3102.9)	4	
2. A Menu Production/Menu Review Board was established, and effectively used as a management tool to reflect the crew's preferences. (NAVSUP P-486, 3100.1i(1), 3100.1i(2))	4	
3. Menu reflects efficient use of manpower and equipment. (NAVSUP P-486, 3101.1c)	4	
4. Menu planned using Armed Forces Recipe Service and/or locally approved recipes. (NAVSUP P-486, 3100.1a)	4	
5. Complete set of Armed Forces Recipe Cards with changes is current and on-hand. (NAVSUP P-486, 3100.1a)	4	
6. Meat block and frequency chart(s) were developed and used as the basis for planning each cycle menu. (NAVSUP P-486, 3101.2a(2))	4	
7. Cycle menus are developed which saves time and allows an easier and more thorough analysis. (NAVSUP P-486, 3101)	4	
8. Menu has been reviewed by the NAVSUP dietitian with a score of 90% or greater.	4	

#### MENUS MEETING NUTRITIONAL STANDARDS AND CNO GOALS (CONSIDERATION IS GIVEN TO FAT, SATURATED FAT, AND CHOLESTEROL)

9. Fish and poultry are integrated throughout the menu cycle. (NAVSUP P-486, 3102.2a(2), 3102.2b(2))	4	
10. Speedline includes variety, when possible. (NAVSUP P-486, 3102.12)	4	

#### HEALTHY FOOD OPTIONS/WEIGHT CONTROL

11. Foods from each of the pyramid food groups are represented in each day's menu. (NAVSUP P-486, 3000.3)	4	
12. Weight control information is accurate and up to date. (NAVSUP P-486, 3100.1e)	4	
13. Each meal offers a Healthy Navy entrée, vegetable starch and dessert. Healthy menu options are available: (NAVSUP P-486, 3102)		
a. A Healthy Navy entrée will be offered as an alternate, when deep fat fried entrée or entrée containing >15g fat is offered.	2	
b. A hot vegetable prepared without added fat is offered at lunch and dinner.	2	
c. Fat free/low fat salad dressings are available.	2	
d. Low fat/low calorie dessert options (such as fruit) are available at lunch and dinner.	2	

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<b>HEALTHY FOOD OPTIONS/WEIGHT CONTROL (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
e. At breakfast, reduced cholesterol eggs and whole eggs are prepared without additional fat are available.	2	
f. A starch prepared without added fat is offered at lunch and dinner.	2	
g. Salad bar includes a tossed green salad, when available.	2	
h. Whole grain breads are offered every meal, when available.	2	
i. Fruits are offered every meal.	2	
j. At breakfast assorted lower fat breads and muffins are offered as an alternate to pastries, when available.	2	
14. Menu avoids reliance on snack foods (e.g., potato chips) as a starch item. (NAVSUP P-486, 3102.10k)	4	
15. When serving a high sodium item, a lower sodium alternate is available. (NAVSUP P-486, 3102.1c(5))	4	
16. Breakfast includes a good source of Vitamin C. (NAVSUP P-486, 3102.1c(2))	4	
17. Seasonal fruits and vegetables are incorporated when practical. (NAVSUP P-486, 3101.1(b))	4	
18. Maximum use is made of the salad bar. (NAVSUP P-486, 3102.6)	4	

**FOOD COMBINATIONS/SCHEDULING/  
VARIETY/INNOVATION**

19. Combinations are acceptable to most people. (NAVSUP P-486, 3102.10)	4	
20. Menu items are not over scheduled. (NAVSUP P-486, 3102.10)	5	
21. Effective use is made of the variety available in the AFRS. (NAVSUP P-486, 3100.1a)	6	
22. Theme meals/special meals/monotony breakers are scheduled. (NAVSUP P-486, 3102.10(l))	5	
23. The following characteristics were considered: Color, Shape, Texture, and Flavor. (NAVSUP P-486, 3102.11)	6	
24. Soup ingredients differ from other menu selections (i.e., tomato sauce - tomato soup). (NAVSUP P-486, 3102.10(h))	4	

**MENU TERMS/PUNCTUATION/LEGIBILITY**

25. The approved menu will list each item in a descriptive wording with the nutritional information. (NAVSUP P-486, 3101.2(3c))	6	
<b>AREA I, SECTION A, SUBTOTAL</b>	<b>120</b>	

**B. PREPARATION/ACCEPTABILITY/CONSERVATION**

26. General Messes having more than (1) CS assigned are properly utilizing the NAVSUP 1090. NAVSUP P-486, 3107.1)	10	
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### B. PREPARATION/ACCEPTABILITY/ CONSERVATION (cont'd)

	MAX PTS	ASSIGNED PTS
27. NAVSUP 1090's are retained for a minimum of current and three previous monthly accounting periods. (NAVSUP P-486, Appendix A, Section 2)	5	
28. Food Preparation Worksheet (NAVSUP Form 1090) is being effectively used as a management tool. (Use NAVSUP 1090 Worksheet Appendix I Attachment A) and matrix (Appendix I Attachment B) to determine numerical grade.) (NAVSUP P-486, 3101.2b)	10	
29. All local recipes are properly developed and approved by the Food Service Officer. (NAVSUP P-486, 3101.2a)	4	
30. Appropriate food preparation thermometers are on hand, accurate, and used effectively in food preparation. (NAVSUP P-486, 3103.3)	10	
31. Progressive/batch cooking principles are practiced. (NAVSUP P-486, 3103.2)	4	
32. Standard volume measuring devices and scales are on hand, accurate, and used effectively in food preparation. (AFRS Section A)	4	
33. All food items prepared are being sampled during preparation and prior to serving. (NAVSUP P-486, 1106.2i)	8	
34. Substitute food items served to "finish" the line, equaled or exceeded the acceptability of the items replaced. (NAVSUP P-486, 1106.2j)	4	
35. Portion control programs are in effect to eliminate food waste. (NAVSUP P-486, 3400.2)	4	
36. Number of personnel to be fed is accurately estimated. (NAVSUP P-486, 3100.1h)	8	
37. Garnishing techniques support conservation objectives. (NAVSUP P-486, 3200.3b)	4	
38. A conservation education program is in effect. (NAVSUP P-486, 3400)	4	
39. Food service surveys are taken periodically to determine preferences. (NAVSUP P-486, 3100.1g)	4	
40. Suggestion box is available and effectively used. (NAVSUP P-486, 3108)	4	
41. A designated meal sampler as assigned by the Commanding Officer periodically samples meals served in the General Mess. (NAVSUP P-486, 2201.5)	4	
42. Menu sampling. (Use menu sampling worksheet (Attachment C-1 Lunch/Dinner or Attachment C-2 Breakfast) to determine numerical grade). (NAVSUP P-486, Appendix I, Attachment C-1 or C-2)	10	
<b>AREA I, SECTION B, SUBTOTAL:</b>	<b>105</b>	

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<b>SERVING TECHNIQUES</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
43. During meal service, serving lines and salad bars are promptly cleaned. (NAVSUP P-486, 3201.2)	10	
44. All food placed on the serving line was kept covered (as applicable) until served to prevent shriveling and drying. (NAVSUP P-486, 3200.1a)	10	
45. Food items are attractively and properly displayed on the serving line. (NAVSUP P-486, 3200.3a)	5	
46. Proper serving temperatures are maintained for hot and cold foods. (NAVMED P-5010, Chap 1, 3-5.3)	10	
47. Food is served using properly sized and configured trays, pans, plates, utensils, etc. (NAVSUP P-486, 3200.1)	5	
<b>AREA I, SECTION C, SUBTOTAL</b>	<b>40</b>	
<b>AREA I, TOTAL:</b>	<b>265</b>	

**AREA II: ADMINISTRATION**

**A FINANCIAL RECORDS AND RETURNS**

**DD FORM 200**

1. DD 200 was prepared and distributed IAW governing regulations. (NAVSUP P-486, 6000 and 6001.8)	2	
2. Copy of DD 200 was sent to cognizant type commander for losses in excess of \$500. (NAVSUP P-486, 6000.8f)	2	
3. Veterinary or medical representative has certified that food was unfit for human consumption and attached certification to the DD 200 (if applicable). (NAVSUP P-486, 6001.4c)	2	
4. A document number is entered upon approval of the Approving Official consisting of the service designator, UIC, 4 digit Julian date and expenditure number. (NAVSUP P-486, 6001.7a.17)	2	
5. Surveyed material was disposed of as indicated in block 15. (NAVSUP P-486, 6001.7a.15)	2	
6. Block number 9 on the DD 200 answers the questions who, what, where, when and how. (NAVSUP P-486, 6001.7a.9)	2	
7. Corrective actions and measures to prevent future occurrences were indicated on the DD 200. (NAVSUP P-486, 6001.7a.10)	2	

**DD FORM 1149**

8. DD 1149's were properly prepared and distributed in all cases. (NAVSUP P-486, 4201)	2	
9. A DD 1149 was used for requesting sales from the general mess by other activities authorized to purchase subsistence. (NAVSUP P-486, 6305.1)	2	

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### A. FINANCIAL RECORDS AND RETURNS

#### DD FORM 1149 (cont'd)

	MAX PTS	ASSIGNED PTS
10. DD form 1149 was used to transfer the money value of inventories between blue and gold crews and it has been properly prepared and distributed. (NAVSUP P-486, 7103.3)	2	
11. A DD 1149 that is used for expending MRE's is properly prepared and distributed. (NAVSUP P-486, 2605.5)	2	

#### DD FORM 1155

12. DD 1155 was used for definite delivery and indefinite delivery contracts are properly prepared, approved, certified, and distributed. (NAVSUP P-486, 4202)	2	
13. Upon completion of processing dealer's bill for payment, copies of DD 1155's were placed in the completed purchase order file and have been annotated per NAVSUP P-486, 5601.1c.	2	
14. The Medical Representative signed the DD 1155 certifying that food items received from commercial vendors were fit for human consumption over stamped or typewritten name and rank/rate. When receipt inspection was performed at central inspection point by military veterinary service or EPMU personnel, and proof of inspection was on vendor's invoice, the name of the inspection unit was entered instead of the signature. (NAVSUP P-486, 5202)	2	
15. The Receipt Inspector records and circles exact quantities received and signs/dates the DD 1155. (NAVSUP P-486, 5204.3b(1))	2	

#### DD FORM 1608

16. A DD Form 1608 (UMR) will be prepared by all activities (afloat and ashore) receiving unsatisfactory food items that do not conform to specifications that were received from Naval and other government sources. (NAVSUP P-486, 5300.2c) A standard form 364 (ROD) will be prepared by all activities for unsatisfactory food items received directly from the SPV and all other commercial vendors. (NAVSUP P-486, 5300.2b.)	2	
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#### DD FORM 1544

17. DD 1544s were used in the prescribed manner for meals sold for cash from the general mess. (NAVSUP P-486, 2201.1b)	2	
18. Correct basic meal charges and surcharges are published in the quarterly NAVSUPNOTE 7330 and Naval Message from NAVSUP (NAVSUP 51). (NAVSUP P-486, 2200) (NAVSUPNOTE 7330, Encl (4))	2	
19. Food Service Officer reviewed the DD 1544's at least weekly and ensured an audit was made when cash was collected. (NAVSUP P-486, 2201.b(4) (d))	2	

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<b>A FINANCIAL RECORDS AND RETURNS DD FORM 1544 (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
20. Overages/shortages in cash received from the sale of general mess meals were recorded on DD 1544 by the cashier. The collection agent verified the differences in excess of \$1.00 or .05% (whichever was larger) per cashier for the week and took appropriate action to prevent recurrence. (NAVSUP P-486, 2201.1b.(5))	2	
<b>NAVSUP FORM 335</b>		
21. Accurate nomenclature, stock numbers, units of issues, high/low limit, fixed price and receipt price were recorded on all NAVSUP 335 ledgers. (NAVSUP P-486, 5402.1)	2	
22. High and low limits were updated quarterly to reflect current usage (for manual records this information may be recorded in pencil with date of update). (NAVSUP P-486, 4003.1)	2	
23. Receipts are properly posted to all NAVSUP 335s. (NAVSUP P-486, 5402.2)	2	
24. Surveys are properly posted to all NAVSUP 335s as each survey occurs. (NAVSUP P-486, 6001.9)	2	
25. General Mess issues are properly posted to all NAVSUP 335's daily. (NAVSUP P-486, 6102)	2	
26. Transfers with or without charge are properly posted, by quantity, to all NAVSUP 335's to the expenditure column as the transaction occur. (NAVSUP P-486, 6205)	2	
27. Sales of subsistence, by quantity, are properly posted to all NAVSUP 335's as the transactions occur. (NAVSUP P-486, 6306)	2	
28. All inventory adjustments greater than 5% of total expenditures were investigated and initialed by the Food Service Officer. (NAVSUP P-486, 7103.1.c(1))	2	
<b>NAVSUP FORM 338</b>		
29. The Food Service Officer logs onto FSM and reviews the NAVSUP 338 weekly to ensure proper financial control of the mess and that the operation is within the established monetary allowance. (NAVSUP P-486, 6103.3a)	2	
30. NAVSUP 338 was properly prepared and posted on a daily basis. (NAVSUP P-486, 6103.1)	2	
31. A comparison between the total food cost in column (17) of the NAVSUP 338 with the actual stores consumed figure was conducted IAW NAVSUP P-486, 6103.3a(3)).	2	
32. Actual over/under issue values of the total food allowances of the current month was carried forward to the next month as a negative/positive value on the NAVSUP 338 except at the end of the fiscal year. (NAVSUP P-486, 7002.11)	2	

## NAVSUP P-486 - Food Service Management

### A. FINANCIAL RECORDS AND RETURNS

#### NAVSUP FORM 338 (cont'd)

	MAX PTS	ASSIGNED PTS
33. NAVSUP 338 was submitted to NAVSUP 51 along with returns for general messes over issue of total allowances at the end of the fiscal year. (NAVSUP P-486, 7002.11)	2	

#### NAVSUP FORM 367

34. Money value of "Inventory Brought Forward" on the first day of the month is correct and agrees with the "Inventory on Hand" on the last day of the previous month. (NAVSUP P-486, 5403.3b)	2	
35. Money value of receipts with/without charge were properly posted to the NAVSUP 367 as they occurred to include proper document numbers. (Indefinite delivery type contracts may be posted as a single total entry on the last day of the month). These values agree with receipt documents in the accountability file. (NAVSUP P-486, 5403)	2	
36. Money value and document number of each transfer was properly posted as they occur. These values agree with transfer documents in the accountability file. (NAVSUP P-486, 6206)	2	
37. Total money value of each survey (DD 200) was properly posted upon approval. These values agree with survey documents in the accountability file. (NAVSUP P-486, 6001.9)	2	
38. Total value and document number of the Expenditure Log NAVSUP 1334 was properly posted to the NAVSUP 367 at the end of the monthly accounting period. (NAVSUP P-486, 6002.2)	2	
39. Total money value of sales to private messes were properly posted at the end of each month. These values agree with sales documents in the accountability file. (NAVSUP P-486, 6308)	2	
40. Total money value of issues to the general mess was properly posted at the end of the monthly accounting period as summarized on the NAVSUP 1059 (Fixed Price List). (NAVSUP P-486, 7203.6)	2	
41. Total money value of ending inventory (extended at last receipt price) was properly posted at the end of the monthly accounting period. (NAVSUP P-486, 7203.7)	2	

#### NAVSUP FORM 470

42. All transfers of funds between cashier(s), collection agents and disbursing officers was accounted for on a NAVSUP 470 showing collection date and amount collected, both in figures and words, and signed by the individual authorized to deliver cash and the individual authorized to receive cash. (NAVSUP P-486, 2202.2e)	2	
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**NAVSUP P-486 - Food Service Management**

<b>A. FINANCIAL RECORDS AND RETURNS NAVSUP FORM 470 (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
43. DD 1544 serial and sheet numbers were inserted next to the cashier's signature on the NAVSUP 470. (NAVSUP P-486, 2202.2e)	2	
44. All cash collected from sales were deposited with the disbursing officer: a. on or before the last day of each month, b. on relief of the food service officer, c. on relief of the commanding officer aboard ships without Supply Corps officers, and d. daily or at least twice weekly. (NAVSUP P-486, 2202.3)	2	
45. The deposit number of the Deposit Ticket OCR (SF 215) obtained from the disbursing officer was recorded in the NAVSUP 470 in the space provided for the signature of the disbursing officer in all cases when cash was deposited with a United States Government general depository for credit to the account of the disbursing officer. (NAVSUP P-486, 2202.3)	2	
<b>NAVSUP FORM 1046</b>		
46. NAVSUP 1046 is properly maintained for the credit sale of meals sold from the general mess. (NAVSUP P-486, 2201.2)	2	
47. Payment for all meals sold on a credit basis was collected prior to the 15th day following the month in which the meals were provided or prior to detachment of individual to whom the meals were provided. (NAVSUP P-486, 2201.2d)	2	
<b>NAVSUP FORM 1059 USED FOR INVENTORY</b>		
48. An inventory of 40 food items showed a stock validity of 90% or better (use Inventory Validity Worksheet Attachment D). (NAVSUP P-486, 7101)	20	
49. A smooth NAVSUP 1059 was accurately prepared, extended at last receipt price and totaled as of the last day of the accounting period. The Food Service Officer signed and dated the bottom of the last page certifying correctness. The rough inventory has been retained in the FSO accountability file until the next complete inventory has been conducted and reconciled. (NAVSUP P-486, 7103.2 and 7103.1a.)	2	

## NAVSUP P-486 - Food Service Management

<b>A. FINANCIAL RECORDS AND RETURNS</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
<b>NAVSUP FORM 1059 (cont'd)</b>		
50. Inventories were taken as required: (NAVSUP P-486, 7100.3) a. Upon relief of the accountable food service officer. b. Upon relief of the responsible bulk storeroom custodian should be at FSO discretion. c. A full physical inventory of each storeroom will be conducted within 90 days of the last full physical inventory. d. For Trident submarines, at the end of each patrol cycle. e. When there is evidence of unauthorized entry into that storeroom. f. At any other time when directed by TYCOM, Major Claimant, Commanding Officer, Supply Officer or Food Service Officer.	2	
51. Spot Inventories: A minimum of 5% of subsistence line items maintained in the bulk storeroom will be inventoried at least twice a month (for a total of 10% monthly). (NAVSUP P-486, 7101.1a)	2	
<b>NAVSUP FORM 1282</b>		
52. The Food Service Officer has procedures in place to control each issue document. All serial numbered originals are accounted for (i.e.: manual 1282's used to issue to private messes). (NAVSUP P-486, 6101.1)	2	
53. Appropriate signatures were annotated on all NAVSUP 1282's. (NAVSUP P-486, 6101.5)	2	
54. Post daily issue documents are kept in the accountability file for the current and three previous monthly accounting periods only. (NAVSUP P-486, 6101.6)	2	
<b>GENERAL MESS ISSUES</b>		
55. Credit issues were not in excess of 1% of the stores consumed. (NAVSUP P-486, 6105)	2	
56. All items on the issue documents were required to prepare the menu. (NAVSUP P-486, 6101.5b)	2	
57. Quantities that were issued were not in excess of requirements. (NAVSUP P-486, 6101.5c)	2	
58. Unprepared food items left over at the end of the day (intended for use that day) are returned to the storeroom on a daily basis. (NAVSUP P-486, 6101.3)	2	
<b>PRIVATE MESS SALES</b>		
59. Documents are prepared for sales of subsistence items from the General Mess. (NAVSUP P-486, 6302.1)	2	

**NAVSUP P-486 - Food Service Management**

**A. FINANCIAL RECORDS AND RETURNS**

<b>PRIVATE MESS SALES (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
60. Sales documents are price extended at last receipt price. (NAVSUP P-486, 6302.4)	2	
61. A mess bill for the sale of food items was provided to each mess on or before the 5th of the month following the sale. (NAVSUP P-486, 6304.1)	2	
62. The Private Mess paid the Food Service Officer within 15 days following the month in which the food items were sold. (NAVSUP P-486, 6304.2)	2	
<b>NAVSUP FORM 1291</b>		
63. NAVSUP 1291's are serialized and the headings completed prior to each meal. (NAVSUP P-486, 2303.2a)	2	
64. Separate forms are prepared for each category of personnel. (NAVSUP P-486, 2303.2a)	2	
<b>NAVSUP FORM 1292</b>		
65. The NAVSUP 1292 is properly filled out with all appropriate signatures and initials. (NAVSUP P-486, 2304)	2	
66. A monthly audit (based on command procedures) was conducted on the monthly records and supporting documents. (NAVSUP P-486, 2305.3)	2	
<b>NAVSUP FORM 1334</b>		
67. NAVSUP 1334 was prepared in all cases where: (NAVSUP P-486, 6000.5) a. Material was short or lost in shipment, and the value of the loss was less than \$50 per line item; b. Food items were lost as a result of physical deterioration, veterinary sampling, damage in handling, fire, water, or similar circumstances, and the value of the loss was \$500 or less per line item (\$1,000 for AS/CV/CVN/LCC/LHA/LHD/LPD/LSD). When the loss of several items for the same reason exceeded \$500 per line item (\$1,000 for AS/CV/CVN/LCC/LHA/LHD/LPD/LSD) a DD Form 200 was prepared.	2	
68. NAVSUP 1334 was properly prepared and distributed. (NAVSUP P-486, 6002.3)	2	
69. NAVSUP 1334 was properly closed out at the end of the accounting period (or upon relief of the FSO) to include totaling money value and assignment of a document number. (NAVSUP P-486, 6000.5d)	2	
<b>NAVSUP FORM 1359</b>		
70. The monthly General Mess Summary Document (NAVSUP Form 1359) was properly prepared. (Use the NAVSUP 1359 worksheets (Attachment E) to determine numerical grade.) (NAVSUP P-486, 7002)	30	

## NAVSUP P-486 - Food Service Management

### A. FINANCIAL RECORDS AND RETURNS

#### NAVSUP FORM 1359 (cont'd)

	MAX PTS	ASSIGNED PTS
71. All cash deposited was reported as collected and credited to the fiscal year in which the sale took place. (NAVSUPNOTE 7300)	2	
72. The NAVSUP 1359 is electronically transmitted to SUP 51 by the 5th day of the month following the end of the reporting period. (NAVSUP P-486, 7300)	2	
73. Correct procedures were used for submitting corrected NAVSUP 1359's. (NAVSUP P-486, 7006)	2	
74. The NAVSUP 1359 is prepared in an original and one copy and distributed as follows: (NAVSUP P-486, 7003) a. Original retained by the FSO. b. Copy provided to the disbursing officer.	2	
75. The Food Service Officer has conducted a monthly audit of the NAVSUP 1359 utilizing the audit sheet found in Appendix I, or a TYCOM approved audit sheet. (NAVSUP P-486, 7001.3)	2	
76. Notifications are forwarded to SUP 51 indicating receipts with charge when the NAVSUP 1359 was unable to be submitted on time due to operational necessity. (NAVSUP P-486, 7302)	2	
77. A notification is forwarded to SUP 51 when returns could not be submitted on or before the date they were required explaining the reason for the delay and anticipated submission date. (NAVSUP P-486, 7302)	2	
<b>AREA II, SECTION A, SUBTOTAL:</b>	<b>200</b>	

### B. PROCUREMENT/RECEIPT/STORAGE PROCUREMENT

78. Food items procured from sources other than Subsistence Prime Vendor are IAW governing regulations. (NAVSUP P-486, 4101)	6	
79. Subsistence items purchased from a foreign source were not excessive in quantity and completely consumed or properly disposed of prior to entering a U.S. port. (NAVSUP P-486, 4102.2d)	3	
80. Operational Rations/MREs, when carried onboard, must have major claimant/TYCOM approval. (NAVSUP P-486, 2605.1c(1))	3	

#### RECEIPTS

81. Receipt inspector circled quantity actually received and signed all receipt documents. (NAVSUP P-486, 5204.3)	4	
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## NAVSUP P-486 - Food Service Management

<b>B. PROCUREMENT/RECEIPT/STORAGE PROCUREMENT (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
82. For Prime Vendor receipt document changes in quantity received, the incorrect quantity should be lined out, the correction initialed, annotated and circled with the actual quantity received and the reason for the change annotated, i.e., rejected, missing, substitution. The Subsistence Prime Vendor representative/driver must initial all corrections. (NAVSUP P-486, 5106s)	4	
<b>AREA II, SECTION B, SUBTOTAL:</b>	20	
<b>C. FOOD SERVICE MANAGEMENT (FSM) AUTOMATED SYSTEM</b>		
83. The most current system back-up is maintained in the Food Service Officer's Accountability File. (NAVSUP P-486, Appendix A, Section 1)	2	
84. SPAWARSYSCEN's ID number and password have been deleted from the Access Log. (NAVSUP P 486, Appendix A, Section 1)	2	
85. FSM users other than the Food Service Officer do not have access to the security module and hardware configuration function. (NAVSUP P-486, Appendix A, Section I)	2	
86. Restricted FSM user control program is followed. (NAVSUP P-486, 1302)	2	
87. An instruction was prepared by the Food Service Officer to food service personnel covering the operation of the FSM computer and security. (NAVSUP P-486, Appendix A, Section I)	1	
88. Daily back-ups are properly performed including Friday dayback held for 13 weeks. (NAVSUP P-486, Appendix A, Section II)	2	
89. FSM monthly back-ups created and maintained for the previous 12 months. (NAVSUP P-486, Appendix A, Section II)	2	
90. FSO has a signed and sealed envelope in the supply officer's safe with the log-on ID and password for emergencies. (NAVSUP P-486, Appendix A - Section 1)	2	
<b>AREA II, SECTION C, SUBTOTAL:</b>	15	
<b>AREA II, TOTAL:</b>	200	

### **AREA III: MANAGEMENT**

#### **A. GENERAL**

1. Efforts are continuously made to improve the appearance and general working conditions of facilities and equipment. (NAVSUP P-486, 1104, 1106)	5	
2. A current "Pledge of Service" is signed and appropriately displayed. (NAVSUP P-486, 1106.2, 1106.24)	2	
3. The FSO, Leading CS and Training PO have read and signed the Navy Food Service P-476. (NAVSUP P-486, 3100.1c(2))	2	

## NAVSUP P-486 - Food Service Management

### AREA III: MANAGEMENT

#### A. MANAGEMENT (cont'd)

	MAX PTS	ASSIGNED PTS
4. Contingencies are established to facilitate meeting commitments during unique operational periods. (NAVSUP P-486, 3300, 3301)	5	
5. Applicable NAVSUP directives, required food service publications, and notices are current. (Navy Food Service P-476)	4	
6. A Contracting Officer's Technical Representative (COTR) has been assigned to the galley and is monitoring the performance of the contractors. (Appendix K-2-2)	2	
AREA III, SECTION A, SUBTOTAL:	20	

#### B. COMMAND RELATIONS

7. An effective relationship exists throughout the command (positive response to request for funds, maintenance of equipment, allocations of manpower, and coordination of special requirements). (NAVSUP P-486, 1104.9)	2	
8. Command/Food Service Division program is in effect to recognize outstanding personnel. (NAVSUP P-486, 1104.4e)	2	
AREA III, SECTION B, SUBTOTAL	4	

#### C. LETTERS OF AUTHORITY

9. The Commanding Officer's letter of authority for the Authorization for the Advancement of a Change Fund for the General Mess is on file. (NAVSUP P-486, 1117.2a)	1	
10. Food Service Officer's letter of appointment is on file. (NAVSUP P-486, 1117.2b)	1	
11. Supply Officer letter of appointment as Control Officer for the handling and security of the cash meal payment booklet (DD Form 1544) is on file. (NAVSUP P-486, 1117.2b)	1	
12. Supply Officer authorization for the cash sales of meals from the general mess is on file. (NAVSUP P-486, 1117.2b)	1	
13. Supply Officer authorization for sale meals from the general mess on a credit basis (NAVSUP 1046) is on file. (NAVSUP P-486, 1117.2b)	1	
14. Supply Officer authorization for the sale of food items to afloat private messes is on file. (NAVSUP P-486, 1117.2b)	1	
15. Supply Officer authorization for the sale of food items to activities other than afloat units is on file. (NAVSUP P-486, 1117.2b)	1	
16. Supply Officer Custodial authorization to hold Group II duplicate master key is on file. (NAVSUP P-486, 1117.2b)	1	

## NAVSUP P-486 - Food Service Management

<b>C. LETTERS OF AUTHORITY (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
17. Food Service Officer appointment letter for General Mess Cash Collection Agent or authorized funds custodian is on file. (NAVSUP P-486, 1117.2c)	1	
18. Food Service Officer appointment letter for Food Service Recordskeeper is on file. (NAVSUP P-486, 1117.2c)	1	
19. Food Service Officer appointment letter for Receipt Inspector for subsistence items in the absence of the Food Service Officer is on file. (NAVSUP P-486, 1117.2c)	1	
20. Food Service Officer appointment letter for cashier to receive payment for meals sold from the general mess is on file. (NAVSUP P-486, 1117.2c)	1	
21. Food Service Officer appointment letter for Bulk Storeroom Custodian is on file. (NAVSUP P-486, 1117.2c)	1	
22. Food Service Officer appointment for supervising the signing of the meal signature record (NAVSUP Form 1291) is on file. (NAVSUP P-486, 1117.2c)	1	
23. Letter of Authority for Wardroom Mess Treasurer on file to authorize the requisition and receipt for subsistence items from the general mess to the wardroom. (NAVSUP P-486, 1117.2c)	1	
24. Letter of Authority for Chief Petty Officers' Mess Treasurer/Caterer on file authorizing the requisition and receipt of subsistence items from the general mess to the Chief Petty Officers' Mess. (NAVSUP P-486, 1117.2c)	1	
<b>AREA III, SECTION C, SUBTOTAL</b>	<b>16</b>	
<b>D. SECURITY</b>		
25. The grand master, master, duplicate master, and original keys are properly maintained. (NAVSUP P-486, 1201.1)	2	
26. Command and/or department instruction is in effect providing the location of a special duplicate key locker, control access to the locker, and limits on the use of duplicate keys. (NAVSUP P-486, 1202.1b, Local Procedures)	2	
27. All padlocks used to secure food service spaces are of a key type and contain dead bolts with pin tumblers of either brass or bronze. (NAVSUP P-486, 1201.1h)	2	
28. All storage spaces are identified to indicate function and contents. The person responsible for the space is listed as well as a contact in an emergency. (NAVSUP P-486, 1200.1)	2	

## NAVSUP P-486 - Food Service Management

<b>D. SECURITY (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
29. A secured safe with a three tumbler combination lock or a locked container within a safe of this type is being used for the safekeeping of funds. (NAVSUP P-486, 2202.2a5(b))	2	
AREA III, SECTION D, TOTAL:	10	
AREA III, TOTAL:	50	

### **AREA IV: FACILITIES, EQUIPMENT, AND UTENSILS**

1. A preventive maintenance program for food service equipment is active, effective, and monitored by food service personnel. (NAVSUP P-486, Appendix P)	7	
2. Food service equipment was COSAL supported. (OPNAVINST 4790.4c)	2	
3. Thermostats are calibrated for fryers, ovens and grills. (OPNAVINST 4790.4c) PMS 6532/A-1R)	5	
4. All food service equipment was operative or identified as Out of Commission (OOC) on the Supply Department 8 o'clock reports for afloat units. (Local governing regulations)	2	
5. A phased replacement program was in effect to replace aged food service equipment. (Local governing regulations)	2	
6. Mess gear inventory was conducted twice monthly to ensure adequate quantities are available. (NAVSUP P-486, Appendix K)	2	
7. A three compartment deep sink or its authorized alternative exists where adequate mechanical washing machines are not installed. Accessory equipment and supplies required for the sanitizing sink include a booster heater, thermometers, drip and drain basket, arm length rubber gloves, approved brushes, ware washing compounds, and sanitizing agents. (NAVMED P-5010, 4-2.19.1) (NAVSUP P-486, Appendix K-6-3)	5	
AREA IV, TOTAL:	25	

### **AREA V: SAFETY**

1. Safety devices including interlock switches, shielded toggle switches, temperature/pressure gauges, steam relief valves and machinery guards are in place and in proper operating condition. (NAVSUP P-486, Appendix P)	4	
2. Support stanchions, toggle pins or safety support chains are in place. (Gen Specs 622, 624B)	3	
3. Preventive maintenance on fire safety equipment (CO2/PKP bottles) was in periodicity. (OPNAVINST/4790.4C) (NSTM 555) (NAVSUP P-486, Appendix P)	3	

## NAVSUP P-486 - Food Service Management

AREA V: SAFETY (cont'd)	MAX PTS	ASSIGNED PTS
4. Personnel are aware of and educated in the proper emergency procedures and use of emergency/safety devices. (NAVSUP P-486, Appendix P)	5	
5. All safety hazards such as slippery floors, hot pipes, live steam, etc., do not exist. (NAVSUP P-486, Appendix P)	5	
6. Heat Stress Program is in effect with appropriate instructions, logs, forms, and reports being maintained and adhered to. (OPNAVINST 5100.19D, Chapter B-2)	5	
7. Personnel display sufficient caution when handling and operating all utensils and equipment. (NAVSUP P-486, Appendix P)	5	
8. Integral electrical wiring on all equipment is mounted and secured properly. There is no evidence of electrical shock hazards in any food service space. (NAVSUP P-486, Appendix P-1-2) (OPNAVINST 5100.19C, Section C-9)	5	
9. Emergency lighting (provided by relay operated lanterns) for exits and above the inside door of the general mess spaces, refrigerated and dry provisions storerooms were installed and in good order. (Gen Specs Section 332, para 25)	5	
10. Chill and freeze storerooms are configured with the capability for emergency escape and emergency escape procedures are posted inside. (Gen Specs 638E, para 50/NFPA Regs)	5	
11. A fixed fire extinguishing system is provided over deep fat fryers and continuous doughnut fryers with a 3" travel on fusible links. (Gen Specs 555F/NFPA Regs/S9555-AR-MMO-010)	5	
12. A remote activating station for installed fire fighting system is clearly labeled and is located at the exit to the door away from equipment. (Gen Specs 555F, para 60/NSTM 555)	5	
13. The deep fat fryer is not operated unattended or without a thermometer inserted. (NAVSUP P-486, Appendix P) (OPNAVINST 5100.19D, Chapter C-19)	5	
14. Guards were installed over the drive shafts/clutch plate of the scullery dishwashing machine. (Gen Spec 651B, para 35)	5	
15. Grease trap pans are provided with latch to prevent slipping out during heavy seas. (MIL-G-2338L)	5	
16. Shunt trip relay that de-energizes the electrical source to the deep fat fryer when the temperature reaches 430° - 460° F. is properly working. (Afloat PMS 6539/1R1Q, R2Q/Ashore Tech Manual/Gen Specs 320)	5	

## NAVSUP P-486 - Food Service Management

<b>AREA V: SAFETY (cont'd)</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
17. Hydrostatic testing of steam jacketed kettles and high compression steam cookers are completed in accordance with maintenance schedule. (NAVSEA Tech, Manual 340.62) (NAVSUP P-486, Appendix P) (PMS 6520/001 A-1)	5	
18. Pull chains on the steam-jacketed kettles were readily accessible without the risk of being burned from the steam relief valve and steam pipe lagging. (Gen Spec 651B, para 35) (NAVMED P-5010, 4-7.2)	5	
19. Food service personnel are provided with protective clothing (i.e., rubber gloves and aprons, face shields, and chemical safety goggles) for the performance of their duties. (OPNAV 5100.19D, Section C-4) (NAVSUP P-486, Appendix P)	5	
20. Knives and cutlery shall be stored and secured in provided knife racks. (GSFS 651)	5	
<b>AREA V, TOTAL:</b>	<b>95</b>	

### **AREA VI: TRAINING**

1. A long and short range training program is established and promulgated. (OPNAVINST 3120.32C, Chapter 8) (NAVSUP P-486, Appendix L)	5	
2. Constructive food service training is conducted on a regular schedule utilizing ship/station and outside resources. (NAVSUP P-486, Appendix L)	3	
3. Culinary Specialist training curriculum (Lesson Plans) is being effectively utilized. (NAVSUP P-486, Appendix L-6)	3	
4. All food service personnel have received a minimum of 4 hours initial and 4 hours annual refresher food sanitation training. Food Service Training Certificates are current for all food service personnel. (NAVMED P-5010, Chapter 1, Section 2-1.2.2.B and Section 2-1.2.2.C.d)	5	
5. A Job rotation log is established and carried out effectively. (NAVSUP P-486, Appendix L)	4	
6. If individual training records are not maintained, the following will be kept on file by the divisional training Petty Officer: (NAVSUP P-486, Appendix L-2) (NAVMED P-5010, Chapter 1, Section 2-1.2.2.B and Section 2-1.2.2.c.d) a. Record of physical exam. b. Food handler's training certificate. c. Job rotation log. d. Record of training accomplished. e. Profile sheets of exams completed. f. All other information considered pertinent by the respective FSO.	5	
<b>AREA VI TOTAL:</b>	<b>25</b>	

## NAVSUP P-486 - Food Service Management

### AREA VII: SANITATION

*All articles listed as references come from the NAVMED P-5010, Chapter 1*

<b>A. FOOD STORAGE AND FOOD PROTECTION</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
1. Food and milk are wholesome, procured from approved sources and properly inspected upon receipt. (Section 3-1)	5	
2. Food containers (cans, boxes, bags) are not dented, torn or crushed and are labeled. The integrity of food products are maintained. (Section 3-1)	3	
3. All milk and milk products are stored at temperatures of 41° F. or below until served. Temperature of milk dispenser cabinet is between 32° F. to 41° F. (Section 3-4.2)	5	
4. All refrigerated storage spaces (including milk dispensers, refrigerated display cases and salad bars, galley pantry reach-in reefers, bulk reefers, and freezers) are maintained at the following temperatures and have a relative humidity from 85 to 90 percent: (Section 3-4) a. Freezers - 0° F. or lower b. Dairy Products Box - 41° F. or below c. Chilled Bulk Storage - 32° - 41° F. d. Thaw Box - 36° - 38° F. e. Reach-in Reefer - 32° - 41° F.	8	
5. Fresh and frozen foods are protected from the influence of decayed foods, contamination, and spoilage and correctly loaded to allow for adequate circulation. Food items which have been removed from their original containers and stored in refrigerated spaces are covered with suitable non-absorbent material with labels indicating contents. Frozen foods are correctly thawed and not refrozen. (Section 3-4)	8	
6. Semi-perishable foods are adequately protected from spoilage due to improper storage practices including excessive temperatures and moisture, lack of adequate ventilation, and insufficient stock rotation. (Section 3-4)	6	
7. Prepackaged foods such as salads and Class, I, II, and III sandwiches are made from approved ingredients, properly prepared, labeled, and dispensed. (Section 3-5, 9, 11)	6	
8. Potentially hazardous foods and beverages are protected from contamination and meet time and temperature requirements as follows: a. Food items are labeled with time and date prepared and the discard date. (Section 3-2)	3	
b. Elapsed time in which food is held between 41° F. and 140° F. does not exceed 4 hours. (Section 3-5.6.2c)	3	
c. Food served cold or saved as leftovers are placed in shallow pans (food depth not more than 3") and cooled to 41° F. within 4 hours. (Section 3-5.6.2i(2))	3	

## NAVSUP P-486 - Food Service Management

### AREA VII: SANITATION

#### A. FOOD STORAGE AND FOOD PROTECTION

(cont'd)

	MAX PTS	ASSIGNED PTS
d. Leftover foods are not being retained over 24 hours when properly chilled at 41° F. or below or 5 hours when maintained hot 140° F. or higher. (Section 3-5.6.2)	3	
e. Unsliced bulk meat items prepared within the facility that have been covered and placed directly from cooking into refrigeration are served or disposed of within 60 hours of preparation. (Section 3-5.6.1)	3	
f. Commercially prepared luncheon meat loaves and high moisture cheese are served or disposed of within 7 days of first being removed from the original container and cut. (Section 3-5.16)	3	
g. Dry or semi-dry sausage and hard natural cheeses are visually inspected prior to serving and discarded at the first sign of deterioration. (Section 3-5.16)	3	
h. Leftovers are not being frozen. (Section 3-5.6.2f)	3	
i. Food items placed on the serving line are discarded after the end of the meal. (Section 3-5.6.2)	3	
<b>AREA VII, SECTION A, SUBTOTAL:</b>	<b>68</b>	

#### B. FOOD SERVICE SPACES, EQUIPMENT AND UTENSILS

9. Refrigerated storage spaces are properly constructed, installed, and cleaned. Frost or glaze ice was not allowed to accumulate more than 1/4" in thickness on the interior surfaces or on the refrigeration coils. (Section 3-4.2)	3	
10. Internal temperatures of all bulk cold storage spaces are logged at least twice daily. (P-5010, Section 3-4.2)	3	
11. Food service equipment is installed with adequate (6" ashore, 8" afloat) clearance between floor and equipment. If no part of the floor under the floor mounted equipment is more than 6" from cleaning access, the clearance space may be only 4". (Section 4-1.13)	3	
12. Thermometers or air measuring devices are readily observable, easily readable, numerically scaled, and accurate to ± 3° F. at the critical range in all refrigerated spaces. (Section 3-4.2(a))	3	
13. All surfaces of equipment or utensils which come in direct contact with food are impervious, corrosion resistant, of smooth construction and are kept clean and properly sanitized. Cracks/crevices and open seams are sealed to prevent food particles and foreign matter from accumulating. (Section 4-1)	3	
14. All serving lines and food/salad bars and soup pots (set up on a self-service basis) are equipped with a functional sneeze-shield. (Section 3-5.10)	3	

## NAVSUP P-486 - Food Service Management

### AREA VII: SANITATION

#### B. FOOD SERVICE SPACES, EQUIPMENT AND UTENSILS (cont'd)

	MAX PTS	ASSIGNED PTS
15. Cutting boards have smooth surfaces and are free of crevices and nicks that impede cleaning and sanitizing. (Section 4-7.5)	3	
16. Food service equipment and utensils are properly maintained, serviced, cleaned, and sanitized. (Section 4-7.1)	3	
17. All sponges and cleaning cloths used for cleaning galley utensils and equipment are washed and sanitized after each meal period. (Section 4-7.6)	3	
18. Automatic dishwashing machines meet NSF standards or equivalent, and are properly cleaned, maintained, and operated at proper temperatures with approved dishwashing and sanitizing agents IAW manufacturer's provided instructions. (Section 4-2.14, Section 4-2.16, Section 4-2.17) a. Wash temperature: 150° - 160° F. b. Rinse temperature: 160° - 180° F. c. Final rinse temperature: 180° - 194° F.	3	
19. Manual dishwashing is accomplished in accordance with correct procedures and in properly designated three compartment sinks. (Section 4-2.19.1) a. Wash temperature: not less than 110° F. (Section 4-2.13) b. Rinse temperature: 120° - 140° F. c. Sanitizing temperature: 171° for over 30 seconds or 1 minute in approved sanitizing solution. (Section 4-2.15)	3	
20. Equipment and utensils are properly air dried, handled and stored after being washed. (Section 4-2.1)	3	
21. No unauthorized supplies are present or in use such as unauthorized soap or steel wool. (Section 4-7.7, 4-7.8)	3	
<b>AREA VII, SECTION B, SUBTOTAL:</b>	<b>39</b>	

#### C. PERSONNEL

22. Personnel performing food service duties are free from communicable diseases and open lesions on the exposed portions of their bodies. (Section 2-2)	4	
23. Food service personnel are physically clean, wearing clean garments and practicing good personal hygiene and proper food handling procedures. (Section 2-3)	5	
24. Caps, hairnets or other effective hair restraints are worn to prevent hair from falling into food. Beards are completely covered with a "snood" or beard bag at all times while preparing, handling, and serving food or while cleaning and sanitizing food contact surfaces. (Section 2-4)	3	

## NAVSUP P-486 - Food Service Management

### AREA VII: SANITATION C. PERSONNEL (cont'd)

	MAX PTS	ASSIGNED PTS
25. Clothing and personal effects of food service personnel are not kept in food preparation and serving areas; nor are personnel using these areas for changing their clothes. (Section 2-3)	3	
26. Physical examinations for food service personnel (military, civilian, and contract) are current. (Section 2-2)	5	
AREA VII, SECTION C, SUBTOTAL:	20	

### D. WATER AND ICE SANITATION

27. Adequate potable water is supplied from approved sources, protected against contamination and meets current water quality. (Section 3-7.6)	3	
28. Ice is procured from approved sources, and/or manufactured from potable water from ice making machines or ice flakers that are located, installed, operated, and maintained in a sanitary manner. Ice from approximately 1/4 of the ice machines are bacteriologically sampled weekly. (Section 3-4.7)	3	
29. Ice scoops are stored handle up in a freely draining metal bracket outside the ice storage compartment or in a metal bracket installed with the machine. (Section 3-4.7)	3	
AREA VII, SECTION D, SUBTOTAL:	9	

### E. SEWAGE AND PLUMBING

30. Sewage is disposed into a public sewer system or approved sewage disposal system. (Section 5-6.3)	3	
31. Plumbing, fixtures, and equipment is properly installed to preclude backflow into the potable water supply system. (Section 5-6.1)	3	
32. Other outlets are protected by an air gap twice the effective opening of the potable water outlet diameter. (If the outlet is a distance less than three times the effective opening away from a wall or similar vertical surface, the air gap is three times the effective opening of the outlet). In no case was there an air gap less than 1". (Section 5-6.1)	3	
33. Adequate drains are provided in floors that are flushed with water for cleaning or receive discharges of water or other fluid wastes from equipment. (Section 5-2.1)	3	
AREA VII, SECTION E, SUBTOTAL:	12	

### F. SANITARY FACILITIES, REFUSE DISPOSAL, AND PEST CONTROL

34. Toilets, hand washing sinks and locker rooms are conveniently located and properly equipped. They are maintained in good working order and supplied with soap, proper hand drying equipment such as disposable paper towels and hot hand dryers and toilet tissue. (Section 5-7.1 and 5-7.2)	3	
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## NAVSUP P-486 - Food Service Management

<b>F. SANITARY FACILITIES, REFUSE DISPOSAL, AND PEST CONTROL</b>	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
35. Heads and locker rooms are clean, neat, free of malodors and in good repair. Head facilities do not open directly into food preparation areas. (Section 5-7.1)	3	
36. Garbage and refuse are properly collected in clean, covered, leak-proof containers and stored in a manner which preclude nuisance conditions or accessibility to insects and rodents. (Section 5-8.1)	3	
37. Food service facility is adequately protected against the entry and harborage of insects, rodents, birds, and other pests. An effective pest control program is being carried out under the supervision of trained and certified pest control personnel. (Section 5-9.2 & 5-9.3)	3	
38. Conspicuously posted signs in food service and toilet areas instructing personnel to wash their hands with soap and potable water prior to engaging in any food service operation and always after visiting toilet facilities. (NAVSUP P-486, Appendix K-2-9)	3	
<b>AREA VII, SECTION F, SUBTOTAL:</b>	<b>15</b>	
<b>G. FACILITY STRUCTURE AND HOUSEKEEPING</b>		
39. Floors, walls, ceiling, and attached equipment are properly constructed, well maintained, and free of accumulated dirt, dust, and food residues. (Section 5-2.1 & 5-2.2)	3	
40. The entire facility and surrounding premises used in connection with food service operations are kept neat, clean, and free of litter, refuse, and garbage. (Section 5-5.1)	3	
41. Shielding to protect food from broken glass is provided in all artificial lighting fixtures located in food preparation and storage areas. (Section 5-3.1)	3	
42. Food service spaces are adequately ventilated and maintained at comfortable temperatures. (Section 5-3.2)	3	
43. Ventilation hoods and grease filters are cleaned of dirt and grease as often as necessary (no less than weekly) to avoid danger of fire. Filters which cannot be adequately cleaned are replaced. (Section 5-3.2)	3	
44. Interior of ventilation ducting is cleaned at least quarterly. Access plates are provided to gain cleaning access to duct work. (Section 5-3.2)	3	
45. Food service facilities are inspected once monthly by a Medical Department Representative and findings are recorded on NAVMED 6204/1 and retained copies of completed forms are maintained by food service management personnel. Sanitation inspections may be performed on a quarterly basis if authorized by the cognizant PMA in writing. (Section 6-1.1, 6-1.2, 6-2.2)	3	

## NAVSUP P-486 - Food Service Management

### G. FACILITY STRUCTURE AND HOUSEKEEPING (cont'd)

	MAX PTS	ASSIGNED PTS
46. Cleaning gear (swabs, brushes, etc.) and cleaning supplies (detergents, disinfectants, and other toxic materials) are properly stored. (Section 5-5.4)	3	
AREA VII, SECTION G, SUBTOTAL:	24	

### H. ASHORE GENERAL MESSES ONLY

47. Dining areas neat and clean (clean from dirt, dust and food residues). (NAVSUP P-486, 3700.2)	3	
48. Patron service areas are organized and well stocked. (NAVSUP P-486, 3700.3)	3	
49. Flooring, ceiling and walls are in good repair (no marks, chips or discoloration). (NAVSUP P-486, 3700.3)	3	
50. Dining areas contain sufficient lighting. (NAVSUP P-486, 3700.2)	3	
51. The color scheme of the dining area includes subtle complementing colors. (NAVSUP P-486, 3700.3)	3	
52. The overall atmosphere is conducive to providing a pleasurable dining experience. (NAVSUP P-486, 3700.3)	3	
AREA VII, SECTION H, SUBTOTAL:	18	
AREA VII, TOTAL:	200	

### AREA VIII: SHIPBOARD SOLID AND PLASTICS WASTE MANAGEMENT (WRAPS/PRIME)

1. An internal instruction is in place that outlines policy, procedures and responsibilities for solid waste management. (NAVSUP P-486, 3601) (OPNAVINST 5090.1)	5	
2. Food Service personnel recognize the differences between and understand the requirements for handling of food-contaminated and nonfood-contaminated plastic waste. Adequate storage spaces are allocated for the different waste types. (NAVSUP P-486, 3601)	5	
3. Procedures and receptacles (for plastics, pulpables, metal and glass) are in place to promote source separation of wastes in galley, mess and scullery areas. (NAVSUP P-486, 3603)	5	
4. A training program is in place to educate Food Service personnel about the Navy's solid waste reduction program. (NAVSUP P-486, 3604)	5	
AREA VIII, TOTAL:	20	

### IX. ARMY VETERINARY FOOD SAFETY NCO ASSISTANCE CHECKLIST

#### A. RECEIPT INSPECTION RESPONSIBILITIES

1. Food Service Officer or designated representative are thoroughly familiar with requirements set forth in the Subsistence Prime Vendor contract and solicitation. (NAVSUP P-486, 5103)	5	
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**NAVSUP P-486 - Food Service Management**

**IX. ARMY VETERINARY FOOD SAFETY NCO ASSISTANCE CHECKLIST**

**A. RECEIPT INSPECTION RESPONSIBILITIES (cont'd)**

	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
2. Receiving personnel determine and record temperatures of food products at delivery. (NAVSUP P-486, 5103.4)	5	
3. Corrective action was taken on products delivered that do not meet specified temperature requirements. (NAVSUP P-486, 5104)	5	
4. Receiving personnel have correct information, e.g. buy sheets, available to check against vendor's invoice. (NAVSUP P-486, 5103)	5	
5. Are less than satisfactory products accepted at time of delivery? YES or NO (NAVSUP P-486, 5107)	5	
6. Are substitute products offered at delivery accepted, without prior approval of the FSO? YES or NO (NAVSUP P-486, 5103.6)	5	
7. If yes to either 6 or 7 above, was mission requirements or necessity the reason? (NAVSUP P-486, 5103)	2	
8. Receipt personnel able to identify products from sanitarily approved sources. (NAVSUP P-486, 5103.6)	2	
9. Products inspected for shelf life and marking requirements at the time of delivery. (NAVSUP P-486, 5103.2)	5	
10. Veterinary Assistance may be requested, in advance for all load outs/deployments. (NAVSUP P-486, 5101.1)	2	
11. Receiving personnel advise the accountable officer of discrepancies/non-conformances found at the time of delivery. (NAVSUP P-486, 5103)	2	
12. FSO/Leading CS contacted the Prime Vendor (ASHORE FACILITIES) or FISC customer service (AFLOAT GALLEYS) of less than satisfactory deliveries. (NAVSUP P-486, 5105.1)	5	
13. Less than satisfactory products replaced in a timely manner, as required by the Prime Vendor contract. (NAVSUP P-486, 5105.4)	2	
14. Food Service Officers will contact the US Army Veterinary Service for advice on any suspected wholesomeness issues. (NAVSUP P-486, 5101.1)	5	
<b>AREA IV, SECTION A, SUBTOTAL:</b>	<b>55</b>	

**B. FOOD INSPECTION RESPONSIBILITIES AFTER RECEIPT**

15. FSO/Leading CS contacted the Prime Vendor (Ashore Facilities) or FISC customer service (Afloat Galleys) when discrepancies (latent defects) are detected. (NAVSUP P-486, 5108.2)	5	
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**NAVSUP P-486 - Food Service Management**

**IX. ARMY VETERINARY FOOD SAFETY NCO ASSISTANCE CHECKLIST**

**B. FOOD INSPECTION RESPONSIBILITIES AFTER RECEIPT (cont'd)**

	<b>MAX PTS</b>	<b>ASSIGNED PTS</b>
16. Food service personnel submit a SF 364 (Report of Discrepancy) to DSCP for action via FISC and TYCOM for afloat commands. (NAVSUP P-486, 5108.2c)	5	
17. All food ordered/received meet customer's needs and expectations. (NAVSUP P-486, 5103)	5	
<b>AREA IV, SECTION B, SUBTOTAL:</b>	<b>15</b>	

**C. STORAGE**

18. Care is taken to keep food items away from areas where asphalt, fuel, creosote, or lubricating oils are present. (NAVSUP P-486, 5700.1)	2	
19. Only food items are stored in food storage space (storerooms, refrigerators, food lockers, etc.) and Proper stock rotation being adhered to. (NAVSUP P-486, 5700.3) (P-5010, Section 4-1)	4	
20. Hazardous food items are being surveyed and disposed of. (NAVSUP P-486, 5108.2c)	4	
<b>AREA IX, SECTION C, SUBTOTAL:</b>	<b>10</b>	
<b>AREA IX, TOTAL:</b>	<b>80</b>	
Annotate Last Routine Or Special Product Compliance Evaluation Date:		
Product(s) Evaluated:		
Comments:		

NAVSUP P-486 - Food Service Management

**FOOD PREPARATION WORKSHEET**  
**ACTUAL PORTIONS PREPARED VALIDITY CHECK**

	DATE	AFRS	MENU/ITEM	UI/HD	1282	CONV	1090
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

**NAVSUP P-486 - Food Service Management**

**NAVSUP 1090 GRADE MATRIX**

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
Tot				

A - Actual prepared based on breakout

B - All required signed blocks were signed

C - Leftovers were properly accounted for all items.

D - Allowed and actual fed blocks were properly filled out

Multiply total points by .178 to obtain numerical grade

\_\_\_\_\_ X .178 = \_\_\_\_\_

Insert numerical grade in element #28 under assigned points

\_\_\_\_\_ Total Points

**NAVSUP P-486 - Food Service Management**

**MENU SAMPLING  
(Lunch/Dinner)**

MENU ITEM	APPEARANCE (0-5)	FLAVOR (0-5)	TEXTURE (0-5)	TEMPERATURE (0-5)	TOTAL (0-20)
Soup					
Salad					
Entrée					
Vegetable					
Starch					
Dessert					
Bread					
Total					

(The maximum points for each menu item under each section is 5 points. If more than one item per category is served, score each item separately and calculate the average.)

Add total points and multiply by  
.107 to obtain numerical grade

\_\_\_\_\_ x .107 = \_\_\_\_\_

Insert numerical grade in area IB  
element #42 under assigned points

See Page I-5

**NAVSUP P-486 - Food Service Management**

**MENU SAMPLING  
(Breakfast)**

MENU ITEM	APPEARANCE (0-5)	FLAVOR (0-5)	TEXTURE (0-5)	TEMPERATURE (0-5)	TOTAL (0-20)
Meat					
Eggs					
Starch					
Cereals					
Pastry					
Juices/Milk					
Fruit					
Total					

(The maximum points for each menu item under each section is 5 points. If more than one item per category is served, score each item separately and calculate the average.)

Add total points and multiply by  
.107 to obtain numerical grade

$$\underline{\hspace{2cm}} \times .107 = \underline{\hspace{2cm}}$$

Insert numerical grade in area IB  
element #42 under assigned points

See Page I-5



# NAVSUP P-486 - Food Service Management

## NAVSUP FORM 1359 WORKSHEET

Evaluate the most recent two quarters worth of NAVSUP Form 1359s. Each element for each monthly NAVSUP 1359 is worth 1 points for a total of 186 points.

	1	2	3	4	5	6	TOT
a. The country code is inserted after the "Country Code" caption of the left side of the line bearing the "Accounting Classification" caption. (NAVSUP P-486, 7002.1)							
b. Disposition of surcharges for meals sold from the general mess was properly accounted for. (NAVSUP P-486, 7002.1(b))							
c. The total dollar amount reported on the "Sales" and "Surcharges, OMN" lines agree with the amount reported in the "Certification" section. (NAVSUP P-486, 7002.2b(2))							
d. Certification block included the disbursing Officer Symbol and CV number. (NAVSUP P-486, 7002.2b(3))							
e. Undeposited sales at the beginning of the month/patrol cycle (line 1) equals the entry on line (5) of the previous NAVSUP 1359. (NAVSUP P-486, 7002.3b)							
f. Undeposited Sales end of Month/Patrol Cycle (line 5) equals the total dollar value of all cash on hand that is undeposited and uncollected and/or vouchers representing cash in the FSO's accountability. (NAVSUP P-486, 7002.3b)							
g. The Cash Deposited with the Disbursing Officer equals the total value of all deposits made with the Disbursing Officer during the month as recorded in the NAVSUP 470 and agrees with the value contained in the "Certification" block of the NAVSUP 1359. (NAVSUP P-486, 7002.3b)							
h. Rations fed by category were extracted from Recapitulation of Meal Record (1292) Ashore, or NAVSUP 338 Afloat. (NAVSUP P-486, 7002.3a(1)(2))							

## NAVSUP P-486 - Food Service Management

	1	2	3	4	5	6	TOT
i. Ration credits annotated with a "1/" are supported by a Certification of Rations Issued form. (NAVSUP P-486, 7002.3 (see NOTE))							
j. Rations Fed caption does not exceed Rations Allowed caption. (NAVSUP P-486, 7002.3)							
k. The Sale of GM Meals (excluding surcharge) equals the sum of the value of the meals sold caption on the DD 1544 and NAVSUP 1046. (NAVSUP P-486, 7002.3b)							
l. The Sale of Bulk Food Items equals the sum of all sales of food items from the General mess. (NAVSUP P-486, 7002.3b)							
m. Cash overages and shortages (including thefts) of \$5 or less generated during the month is explained by a memo on the reverse side of the NAVSUP 1359. (NAVSUP P-486, 7002.3b)							
n. Total receipts with charge during the reporting period agrees with the total on the NAVSUP 367. (NAVSUP P-486, 7002.4)							
o. Balance Brought Forward caption on the receipts section of the Balance Sheet equals the "Balance on Hand" caption on the NAVSUP 1359 submitted for the previous period. (NAVSUP P-486, 7002.4)							
p. Receipts with Charge caption on the receipts section of the Balance Sheet equals the amount reported on NAVSUP 1359s. (NAVSUP P-486, 7002.4)							
q. Balance on Hand caption on the expenditure section of the Balance Sheet agrees with the "Inventory" entry on the "Expenditure" section of the NAVSUP 367 rounded to the nearest dollar. (NAVSUP P-486, 7002.5)							

## NAVSUP P-486 - Food Service Management

	1	2	3	4	5	6	TOT
r. Price Adjustment caption on the expenditure section of the Balance Sheet (+ or -) makes the total expenditure equal to the total receipts. Value is explained on the reverse side of the NAVSUP 1359 if in excess of 10% of total stores consumed. (NAVSUP P-486, 7002.5)							

s. Total caption on the expenditure section of the Balance Sheet equals the caption on the receipts section of the Balance Sheet and agrees with the final total of the "Expenditure" section of the NAVSUP 367 as modified by rounding. (NAVSUP P-486, 7002.5 and 7203.8)							
--	--	--	--	--	--	--	--

t. Stores Consumed caption on the expenditure section of the NAVSUP 1359 Summary as posted from the summary of issues to the GM equals issues to the "GM" entry on the NAVSUP 367 rounded to the nearest dollar and does not include the value of galley produced bakery products sold. (NAVSUP P-486, 7002.5, 7002.7)							
--	--	--	--	--	--	--	--

u. Survey and Loss Without Survey caption on the expenditure section of the Balance Sheet and NAVSUP 367 agrees with the total value of all DD 200s and NAVSUP 1334 except for rounding. (NAVSUP P-486, 7002.5)							
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v. Sale of Bulk Food Items caption in the Expenditure section of NAVSUP 1359 agrees with the sale of bulk food items in the "Expenditure" section of the NAVSUP Form 367. (NAVSUP P-486, 7002.5)							
--	--	--	--	--	--	--	--

w. Transfers with Reimbursement caption on the expenditure section of the Balance Sheet equals the value of food items - turned into stock points and stores ships and transfers to ships stores as reported on the "Expenditure" section of the NAVSUP 367. (NAVSUP P-486, 7002.5)							
---	--	--	--	--	--	--	--

## NAVSUP P-486 - Food Service Management

	1	2	3	4	5	6	TOT
x. Transfers without Reimbursement caption on the expenditure section of the Balance Sheet equals the value of food items transferred to other GMs as reported on the "Expenditure" section of the NAVSUP 367 rounded to the nearest dollar. (NAVSUP P-486, 7002.5)							
y. Current Basic, Special and Supplemental Allowances as listed in NAVSUPNOTE 7330 series are entered in the appropriate allowance sections. (NAVSUP P-486, 7002.7)							
z. Total allowances caption equals the sum of all allowances and the previous Over/Under issue carried forward value from the previous quarter. (NAVSUP P-486, 7002.7)							
aa. Stores Consumed caption in the "Expenditure" section of the NAVSUP 1359 equals the summary of issues report NAVSUP 1059. (NAVSUP P-486, 7002.7)							
bb. The following signatures were entered on the NAVSUP 1359: (1) XO/Personel Officer certifying rations allowed figure; (2) Leading CS; (3) FSO. (NAVSUP P-486, 7002.10)							
cc. 100% of the Over/Under issue value is carried forward from previous month with the exceptions noted in para 7002.11. (NAVSUP P-486, 7002.11)							
dd. Reporting over issues are in accordance with NAVSUP P-486, para 7002.1 1f. (NAVSUP P-486, 7002.1 1f)							
ee. NAVSUP 1359 with required substantiating documents are properly assembled. (NAVSUP P-486, 7003)							

Add total points and multiply by .162 to obtain numerical grade, \_\_\_\_\_ x .162 = \_\_\_\_\_

Insert numerical grade in area IIA element #70 under assigned points, See Page I-12

# **NAVSUP P-486 - Food Service Management**

## **APPENDIX I**

### **PART II: REVIEW OF ENLISTED FOOD SERVICE OPERATIONS ASHORE**

Part II provides check-off lists to (1) guide station audit boards in reviewing ration credit procedures and validating signature head counts, and (2) assist Food Service Officers in preventing or correcting discrepancies frequently surfaced during the inspection of food service operations.

Station audit boards will use Section 1 of Part II, Appendix I as a guide in performing the monthly audits required by NAVSUP P-486. When conducting audits, the station audit board will obtain reports of previous audits, inspections and surveys since the last internal audit. These findings will be reviewed to determine actions taken to implement recommendations and to evaluate the adequacy of corrective actions. Summary reports of audit findings will be submitted to Commanding Officers. In situations where problems of a continuing nature are encountered, a copy of the audit report will be furnished to the Navy Supply System Command (SUP 51).

Food Service Officers will use Section 1 as a general guide for review and management control of food service operations regarding signature head count, meal pass controls, collection and deposit of cash resulting from the sale of meals, issuance of flight meals, and physical security of subsistence stocks. As a general rule, Section 1 will be completed in its entirety, or appropriately annotated when respective audit steps are considered inappropriate. In addition, working papers prepared in support of audits will be retained for one year.

Section 2 contains optional, detailed procedures for use by the Food Service Officer and audit board when verifying data reported on NAVSUP Form 1359.

All concerned are encouraged to modify these check-off lists in order to more adequately suit individual food service operations.

## NAVSUP P-486 - Food Service Management

### SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING FOOD SERVICE OPERATIONS

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
<b><u>HEAD COUNT PROCEDURES</u></b>			
1. Head count procedures will be reviewed to ensure that:	2303		
a. NAVSUP Form 1291 is serialized and the heading completed prior to meal time to maintain control and prevent loss or misuse of forms.	2303.2a		
b. NAVSUP Form 1291 contains the surname and meal pass number of each meal recipient, except in the case of transient personnel who also must furnish their command or unit name.	2303.2b		
c. All signatures contained on NAVSUP Form 1291 are in ink.	2303.1		
d. Signatures, legible meal pass numbers, and legible activity designator where applicable are obtained on NAVSUP Form 1291. Signatures are obtained on DD Form 1544 for cash sales of meals.	2303.2b 2306.2d		
e. MAA (Master at Arms) properly verifies that all meal patrons are eligible to pass through the serving line. <i>*MAA authorized in writing by FSO to supervise the signing of NAVSUP Form 1291</i>	1108 2300 2301 2302 2303 2304		
f. All personnel exhibit both a valid meal pass and identification card.	2306.2b		

**NAVSUP P-486 - Food Service Management**

**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
FOOD SERVICE OPERATIONS**

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
<p>g. Immediately after securing the serving line, the Mess Deck Master at Arms (MDMAA) assembles the NAVSUP Forms 1291 and draws an ink line below the last name on each form. The MAA determines the total number of signatures for each category and prepares a NAVSUP Form 1292 in an original and one copy. The MAA will sign the first signature line on NAVSUP Form 1292, and when there is more than one MAA on duty at different meal periods, each will initial the appropriate column (Breakfast, Lunch and Dinner) applicable and each will sign the first signature line.</p>	2303.2		
<p>h. When groups are fed under mass feeding conditions, the MAA will verify that the number of persons within the group agrees with the number contained on the NAVSUP Form 1292 (ensure MAA actually is verifying by counting personnel in mass feeding groups).</p>	2306.2e		
<p>i. NAVSUP Form 1292 entries for on-duty food service personnel do not include personnel receiving commuted rations.</p>	2306.3c		
<p>j. NAVSUP Form 1292 entries for contract food service personnel do not contain a number exceeding the actual number of personnel on duty during a meal period.</p>	2306.3e		

**NAVSUP P-486 - Food Service Management**

**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
FOOD SERVICE OPERATIONS**

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
k. The general mess cashier computes and enters the appropriate total number of meals in the "cash sales" (include contract personnel) block of NAVSUP Form 1292. All cashiers that collected cash that day will sign the second signature line of NAVSUP Form 1292.	2304.2b		
l. NAVSUP Form 1292 grand totals and ration credits for each meal are properly computed by the recordskeeper and signed by the recordskeeper on the third signature line certifying the totals.	2304.2c		
m. At the end of each month, a monthly NAVSUP Form 1292 is prepared from the accumulated daily NAVSUP Forms 1291, 1292 and DD Forms 1544.	2305.1		
n. Food Service Officer submits the monthly NAVSUP Form 1292 and DD Forms 1544, along with the daily NAVSUP Forms 1292 with supporting NAVSUP Forms 1291 to the station audit board.	2305.3		
o. Only personnel entitled to rations-in-kind are permitted to eat at government expense.	2000		
p. Only personnel authorized to purchase meals for cash or on a credit basis (contract personnel) are purchasing meals.	2001		
q. Meals furnished to contract food service personnel are properly accounted for.	2303.3		

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**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
FOOD SERVICE OPERATIONS**

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
r. Certification of Rations Issued form is prepared as required when applicable.	2003.1		
s. Certifications are prepared in the proper format.	2003.2		
t. The Food Service Officer is properly advised by the Executive/Personnel Officer of the expected number of rations allowed for all categories of personnel.	2302.2a (1)(2)		
u. Personnel Support Detachment (PERSUPPDET) or command performing personnel and administrative functions is responsible for issue and control of Meal Passes (NAVSUP Form 1105).	2302.1a		
v. Meal Passes (NAVSUP Form 1105) are pre-serialized.	2302.1		
w. Issue procedures for NAVSUP Form 1105 are adequate.	2302.1		
x. Recall and loss procedures for NAVSUP Form 1105 are adequate.	2302.1c		
y. Meal count conversion factors used to determine ration credits agree with the applicable conversion factors contained in NAVSUPNOTE 7300.	2500.1		
<b><u>MONETARY CONTROL PROCEDURES</u></b>			
1. Cash collection and handling procedures will be reviewed to ensure that:			

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**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
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	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
a. On-hand cash funds are current. (Count cash in the presence of the collection agent using the cash verification sheet contained at the end of Part II, Section 1, Appendix I and determine whether the count is in agreement with general mess cash records and the change fund advanced by the Disbursing Officer.)	2202.3,4		
b. Cashiers and collection agents have adequate safekeeping facilities for funds, and they are properly safeguarded.	2202.2b-e		
c. Funds are being deposited properly and deposit records properly certified.	2202.3		
d. Proper signatures are in the Cash Receipt Book (NAVSUP Form 470).	2202.2e		
e. Collections for the sale of bulk food items are received in a timely manner.	6304.2		
f. Collections for the sale of meals on a credit basis are received in a timely manner. A detailed breakdown of all undeposited sales from the last monthly 1359 with age of accounts should be provided.	2201.2c		
g. Daily records are maintained on the sale of meals.	2201.1b (2)-(6)		
h. Overages and shortages in cash are properly administered.	2201.1b(5)		

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**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
FOOD SERVICE OPERATIONS**

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
i. Overages and shortages are investigated and corrective actions taken to prevent reoccurrence.	2201.1b(5)		
j. The change fund is properly administered.	2202.4		
k. Funds are verified and audited at least once each month on different dates and at unannounced times.	2202.4		
2. Review sales procedures to ensure that:			
a. The authority for the sale of food items is properly documented.	6300.1		
b. The authority for sale of meals is properly documented.	6301		
c. The Cash Meal Payment Book (DD Form 1544) is being used to document cash sales of meals.	2201.1b (2)-(5)		
d. When the sale of meals on a credit basis is authorized by NAVSUP, the NAVSUP Form 1046 is properly maintained.	2201.2(b)		
e. Basic charges and surcharges for meals purchased from the general mess are at the rates issued in a Naval message from SUP 51.	2200.1		
f. Sale prices on food items are properly administered.	6305.2		



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**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
FOOD SERVICE OPERATIONS**

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
2. Review and evaluate key handling procedures for food service spaces.			
a. The grand master key for food service spaces is in the custody of the supply officer.	1202.3		
b. The master and duplicate keys are maintained in accordance with existing requirements.	1202.3		
c. Original keys to food service spaces are handled in accordance with existing requirements.	1202.12-2		
<b><u>INTERNAL MANAGEMENT CONTROL</u></b>			
1. Review and evaluate internal management control procedures for issue of food items from storeroom to galley and disposition of prepared and unprepared leftovers.			
a. The NAVSUP Form 1282 is being used for issue and turn-in.	6101		
b. Document number control log is used and breakout documents are pre-serialized.	6101.1		
c. Senior Culinary Specialist on duty prior to issue approves breakout documents.	6101.2		
d. Responsible personnel sign NAVSUP Form 1282 at time of issue or turn-in.	6101.3		

**NAVSUP P-486 - Food Service Management**

**SECTION 1: CHECK-OFF LIST FOR AUDITING AND REVIEWING  
FOOD SERVICE OPERATIONS**

	NAVSUP Pub 486 Reference	DELETE W/P Reference	Comments
e. Unprepared (unopened) food items are returned to storeroom for credit.	6101.3		
f. Food Preparation Worksheet (NAVSUP Form 1090) is properly prepared and document number assigned.	3107		
g. NAVSUP Form 1090 is reviewed by the Food Service Officer and original retained in accountability file.	3107		

NAVSUP P-486 - Food Service Management

CASH VERIFICATION WORKSHEET

In the possession of: \_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title) (Location)

Denomination	No.	Amount	Denomination	No.	Amount
--------------	-----	--------	--------------	-----	--------

Bills: \$100	\$		Coins: \$1.00	\$	
50			.50		
20			.25		
10			.10		
5			.05		
2			.01		
1			Total Value of Coins \$		

Total Value of Bills \$ \_\_\_\_\_ Other: \$ \_\_\_\_\_

**TOTAL CASH COUNT \$** \_\_\_\_\_

I certify that cash in the amount of \$ \_\_\_\_\_, as listed above, was returned to me intact on this date by \_\_\_\_\_ representing the Station Audit Board at \_\_\_\_\_

\_\_\_\_\_  
(Activity)

\_\_\_\_\_  
(Collection Agent)

\_\_\_\_\_  
(Date)

## NAVSUP P-486 - Food Service Management

### SECTION 2: PROCEDURES FOR VERIFICATION OF ENTRIES ON THE NAVSUP FORM 1359

1. Verify that the grand total of rations, line 16 on NAVSUP Form 1359, is the same as total ration credit on the monthly NAVSUP Form 1292.
2. Verify that each of the categories under "Ration Breakdown" on the NAVSUP Form 1359 can be traced to the monthly NAVSUP Form 1292.
3. Verify that under "Ration Breakdown" on NAVSUP Form 1359, the total of lines (2) through 14 equals line 15.
4. Verify that under "Cash Statement" section of Form 1359, undeposited balance fund represents the value of undeposited sales on the preceding month's NAVSUP Form 1359.
5. Verify that under the "Cash Statement" section of NAVSUP Form 1359, other sales of meals includes a total of overage/shortages with a memo on reverse side stating cause.  
**NOTE:** If dollar value exceeds +/- \$5.00 approval must be received from NAVSUP 51.
6. Verify that (cash deposited with D.O.) line under the cash statement section of the 1359 equals cash received by disbursing officer under the "Certification Section," except for rounding.
7. Verify the amounts reflected on the three Lines of "Accounting Classification" section equal the total cash received by the Disbursing Officer under the "Certification" section.  
**NOTE:** The third line of the "Accounting Classification" section replaces DD Form 1131 for surcharge deposits to O&MN appropriation.
8. Verify that on NAVSUP Form 1359, the time period shown in the "Certification" section agrees with the time period shown on the top line of the report.
9. Verify that an audit of cash has been conducted by the Food Service Officer in accordance with para. 2201.1 b(4)(d) of NAVSUP Pub 486.
10. Verify that a copy of the monthly cash audit conducted by the Food Service Officer is filed with the monthly NAVSUP Form 1359.

**NAVSUP P-486 - Food Service Management**

**PART III: END OF MONTH AUDIT SHEET**

The following is provided as required per para 7204, P-486.

END OF MONTH AUDIT SHEET                      MONTH           

<b>1046/7330 verification</b>		<b>1046</b>	<b>7330</b>
Daily meal rate			
Surcharge rate			
<b>1046/338 verification</b>			<b>FSO/LCS initials</b>
Daily head counts from 1046 match 338 daily entries (for manual records only)			
1046 have required columns totaled (for manual records only)			
Mess bills have been computed and delivered with a due date of the 10th			
FSO signs and dates 1046 at the end of the accounting period			
<b>338 verification</b>			<b>FSO/LCS initials</b>
BDFAs on 338 matches NAVSUP Notice 7330			
Special/Supplemental Allowances on 338 matches NAVSUP Notice 7330			
NS 338 BF columns 13,15,17,19 are correct when applicable			
338 columns 7 thru 11 match daily 1090 head counts			
338 column 16 matches daily 1282 cover sheet			
FSO has signed each 1282 cover sheet			
338 Inv. Adj. match actual Inv. Adj.			
Inv. sheets have required signatures			
FSO has signed and dated all Inv. paperwork			
All adjustments over 5% have been researched			
All expensive meals have written explanations			
338 has all required signatures			
<b>1336/Receipt verification (where used)***</b>		<b>RKP initials</b>	<b>FSO/LCS initials</b>
Each receipt total matches 1336 total			
Each receipt signed and dated by J.O.D.			
1336 totals match 367 entries			
Monthly receipt totals match (1336, 367, 1359)			
Certification letters and orders submitted to NAVSUP			___ FSO/LCS
All adjust in excess of 5% have been investigated			___ FSO/LCS
Are all Friday backup disc properly labeled and in FSO's custody?			___ FSO/LCS
Are all system backup disc properly labeled?			___ FSO/LCS
Is one copy of monthly system backup in FSO's custody?			___ FSO/LCS
<b>Receipts</b>			
<b>Inventory</b>	<b>Prev. Month</b>	<b>BOH</b>	<b>BF</b>
Rcpts w/chrg	1336	367	1359
Rcpts w/o chrg	1336	367	1359
<b>Total</b>			
Have all corrected reports from previous month been received at NAVSUP and verified?			___ FSO/LCS init.

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# NAVSUP P-486 - Food Service Management

END OF MONTH AUDIT SHEET

MONTH \_\_\_\_\_

<b>From Current Month's 1359</b>		<b>Days Operated _____</b>		<b>Date: _____</b>	
		<b>Supporting Documents</b>		<b>Corrected Report # _____ Merged Y/N Final Y/N</b>	
Navy Rats Allowed		Mustr Rep		<b>ALLOWANCES</b>	<b>RATIONS RATE VALUE</b>
Other Rats Allowed		Mustr Rep		Basic Allowances	
Total Rats Allowed				Under/Over CF	
<b>RATION BREAKDOWN</b>				99 or less	
Navy Regular		NS 338		100 to 149	
Other (Note 2)		NS1046		Other	
Other (Note 1) (d/)		Cert. (d/)		Other	
Total Other				Other	
Total				Other	
<b>CASH STATEMENT</b>				Total Allowances	
Undeposited BBF		Prev. Mo. 1359		Food Cost	
Sale of Meals		1046		Under/Over Issue	
		1544		% Under/Over Issue (b/)	
Bulk Sales		Bills		% Diff. Bet. Food cost & Stores consumed	
Surcharges		1046		<b>INVENTORY ADJ (from 5% difference listing)</b>	
		1544			
Cash Deposited D.O.		NS470		No. Adjusted _____	Total Carried _____ %
Other Sales/Meals (See Note 3)				Number of Days Since Last Inv	
Undeposited Sales		C/F to next m		<b>LAST FULL PHYSICAL INVENTORY</b>	
<b>RECEIPTS</b>				Date of Last Inventory	
Inventory BBF		Prev. Mo. 1359		Number of Days Since Last Inventory	
Rcpts w/Charge		Rcpts		Inventory Accuracy (c/)	_____ %
Rcpts w/o Charge		Rcpts			
Total					
<b>EXPENDITURES</b>				NS338	
Food Cost		1059		<b>Comments:</b>	
Surveys		DD200			
Loss w/o Survey		NS1334			
Bulk Sales		Bills			
Trans w/Reimb		NS1149			
Trans w/o Reimb		NS1149			
Inv. Bal on hand		Book Inv			
Price Adj. (a/)		Percent			
Total					
<b>DEPOSITS</b>					
Undeposited sales brought forward				1359	
Sale of meals	1046		1544	1359	
Bulk sales	Bills			1359	
Surcharges	1046		1544	1359	
Cash deposited	470			1359	
Certification amount	1359		Voucher number	D.O. SYMBOL	

a/ Review of records must be made if over 10%. Annotate on reverse of NAVSUP Form 1359 or attached memo of findings. (P-486, para 7203.6).

b/ If over issue occurs at the end of the FY, see NAVSUP (P-486, para 7002.11).

c/ Inventory accuracy of not less than 90%. (P-486, para 7101).

d/ Require Certification Letter/Orders Forwarded to NAVSUP

Note 1: Other rations requiring Letter of Certification and Copies of Orders (see Note d above).

Note 2: Other rations not requiring Letter of Certification.

Note 3: Use of Line 4 in excess of \$5.00 requires NAVSUP approval with supporting documents submitted to NAVSUP.

**APPENDIX J  
NUTRITIONAL ANALYSIS OF THE  
ARMED FORCES RECIPES**

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**INTRODUCTION.....J-1**

**PART A: NUTRITIONAL ANALYSIS OF ARMED FORCES RECIPES .....J-2**

**PART B: RECIPES MEETING HEALTHY NAVY OPTION STANDARDS .....J-3**

**PART C: NUTRITIONAL ANALYSIS OF MISCELLANEOUS FOOD ITEMS.....J-4**

**PART D: NEW RECIPES.....J-5**

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## **APPENDIX J**

### **NUTRITIONAL ANALYSIS OF THE ARMED FORCES RECIPES**

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#### **J-1 INTRODUCTION**

This nutritional analysis is based on the ingredients, cooking methodologies and portion sizes specified on the Armed Forces Recipe Service cards. If the portion, ingredients or preparation methods are changed, the nutritional information will be invalid.

This information is provided as a tool to assist the menu planner in the development of a healthy, well-balanced menu. The information may also be used by those persons desiring to develop individual meal plans to meet their own specific nutritional requirements.

Cal = calories per serving

Pro = grams of protein per serving

Fat = grams of fat per serving

Carbs = grams of carbohydrate per serving

Chol = milligrams of cholesterol per serving

Sod = milligrams of sodium per serving

#### **J-2 NUTRITIONAL ANALYSIS OF ARMED FORCES RECIPES (PART A)**

Part A of Appendix J provides a nutritional analysis of all recipes in the current Armed Forces Recipe Service.

#### **J-3 RECIPES MEETING THE HEALTHY NAVY OPTION STANDARDS (PART B)**

Part B of Appendix J provides a list of all recipes meeting the Healthy Navy Option standards:

Entrée ≤ 15 grams fat

Starch ≤ 5 grams fat

Veg ≤ 5 grams fat

Dessert ≤ 5 grams fat

#### **J-4 NUTRITIONAL ANALYSIS OF POPULAR FAST FOOD ITEMS (PART C)**

Part C of Appendix J provides nutritional analysis for a limited number of popular fast food items and assorted single item foods.

## **NAVSUP P-486 – Food Service Management**

### **J-5 NEW RECIPES (PART D)**

Section D of Appendix J lists recipes that have been developed utilizing herbs and spices to provide food with flavor. These recipes were prepared during nutrition training classes and were highly accepted by the Fleet.

**PART A**  
**NUTRITIONAL ANALYSIS**  
**OF ARMED FORCES RECIPES**

**NAVSUP P-486 – Food Service Management**

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Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
B 001 00	CRANBERRY AND ORANGE JUICE COCKTAIL	1/2 Cup	100	69 cal	0 g	0 g	17 g	0.2	0 mg	3 mg	9 mg
B 001 01	CRANBERRY AND APPLE JUICE COCKTAIL	1/2 Cup	100	70 cal	0 g	0 g	17 g	0.1	0 mg	7 mg	7 mg
B 002 00	CHINESE EGG ROLLS (BAKED)	1 Egg Roll	100	140 cal	10 g	5 g	13 g	1	50 mg	247 mg	22 mg
B 002 01	CHINESE EGG ROLLS (FRIED)	1 Egg Roll	100	180 cal	10 g	10 g	13 g	1	50 mg	247 mg	22 mg
B 002 02	PHILIPPINE STYLE EGG ROLLS (BAKED)	1 Egg Roll	100	93 cal	7 g	4 g	8 g	0.6	33 mg	165 mg	15 mg
B 002 03	PHILIPPINE STYLE EGG ROLLS (FRIED)	1 Egg Roll	100	133 cal	7 g	8 g	8 g	0.6	33 mg	165 mg	15 mg
B 003 00	TOMATO JUICE COCKTAIL	1/2 Cup	100	22 cal	1 g	0 g	6 g	0.5	0 mg	457 mg	12 mg
B 003 01	VEGETABLE JUICE COCKTAIL	1/2 Cup	100	24 cal	1 g	0 g	6 g	1	0 mg	340 mg	14 mg
B 003 02	SPICY TOMATO JUICE COCKTAIL	1/2 Cup	100	22 cal	1 g	0 g	6 g	0.5	0 mg	467 mg	12 mg
B 004 00	SHRIMP COCKTAIL	4 Shrimp	100	83 cal	10 g	1 g	12 g	1.9	84 mg	480 mg	43 mg
B 004 01	SPICED SHRIMP	4 Shrimp	100	60 cal	10 g	1 g	5 g	1.8	84 mg	100 mg	56 mg
B 005 00	PIZZA TREATS	1 Slice	100	147 cal	8 g	5 g	17 g	1.2	10 mg	322 mg	158 mg
C 001 00	HOT COCOA	1 Cup	100	112 cal	4 g	0 g	24 g	0	2 mg	112 mg	137 mg
C 001 01	HOT WHIPPED COCOA	3/4 Cup	100	62 cal	5 g	4 g	15 g	9	0 mg	6 mg	35 mg
C 002 00	COFFEE (INSTANT)	1 Cup	100	5 cal	0 g	0 g	1 g	0	0 mg	8 mg	8 mg
C 003 00	COFFEE (AUTOMATIC COFFEE MAKER)	8 Ounces	100	11 cal	1 g	0 g	2 g	0	0 mg	2 mg	6 mg
C 004 00	HOT TEA	1 Cup	100	0 cal	0 g	0 g	0 g	0	0 mg	7 mg	5 mg
C 005 00	COFFEE (AUTOMATIC URN)	1 Cup	100	9 cal	0 g	0 g	2 g	0	0 mg	1 mg	5 mg
C 005 01	COFFEE (MANUAL URN)	1 Cup	100	9 cal	0 g	0 g	2 g	0	0 mg	1 mg	5 mg
C 006 00	FRUIT PUNCH	1-1/4 Cups	100	117 cal	0 g	0 g	30 g	0.1	0 mg	10 mg	15 mg
C 006 01	LIME LEMON PUNCH	1-1/4 Cups	100	130 cal	0 g	0 g	34 g	0.1	0 mg	14 mg	10 mg
C 006 02	CHERRY-ADE	1 Cup	100	90 cal	0 g	0 g	23 g	0	0 mg	7 mg	13 mg
C 006 03	GRAPE-ADE	1 Cup	100	90 cal	0 g	0 g	23 g	0	0 mg	7 mg	13 mg
C 006 04	LEMON-ADE	1 Cup	100	90 cal	0 g	0 g	23 g	0	0 mg	7 mg	13 mg
C 006 05	ORANGE-ADE	1 Cup	100	90 cal	0 g	0 g	23 g	0	0 mg	7 mg	13 mg
C 006 06	STRAWBERRY-ADE	1 Cup	100	90 cal	0 g	0 g	23 g	0	0 mg	7 mg	13 mg
C 007 00	ORANGE AND PINEAPPLE JUICE COCKTAIL	1/2 Cup	100	66 cal	1 g	0 g	16 g	0.3	0 mg	3 mg	17 mg
C 007 01	GRAPEFRUIT AND PINEAPPLE JUICE COCKTAIL	1/2 Cup	100	63 cal	1 g	0 g	15 g	0.2	0 mg	3 mg	18 mg
C 008 00	LEMONADE	1-1/4 Cups	100	126 cal	0 g	0 g	33 g	0	0 mg	11 mg	7 mg
C 008 01	LIMEADE	1-1/4 Cups	100	131 cal	0 g	0 g	34 g	0.1	0 mg	14 mg	10 mg
C 009 00	ICED TEA (INSTANT)	1 Cup	100	6 cal	0 g	0 g	1 g	0.1	0 mg	14 mg	8 mg
C 009 01	ICED TEA (INSTANT FOR DISPENSER)	1-1/4 Cups	100	5 cal	0 g	0 g	1 g	0.1	0 mg	4 mg	2 mg
C 009 02	ICED TEA (INSTANT W/LEMON AND SUGAR FOR DISPENSER)	1-1/4 Cups	100	175 cal	0 g	0 g	44 g	0	0 mg	4 mg	2 mg
C 010 00	ORANGEADE	1-1/4 Cups	100	137 cal	1 g	0 g	34 g	0.3	0 mg	6 mg	15 mg
D 001 00	BAKING POWDER BISCUITS	1 Biscuit	100	148 cal	4 g	4 g	24 g	0.8	0 mg	345 mg	115 mg
D 001 01	BAKING POWDER BISCUITS (BISCUIT MIX)	1 Biscuit	100	153 cal	3 g	6 g	23 g	0.8	1 mg	456 mg	64 mg
D 001 02	CHEESE BISCUITS	1 Biscuit	100	166 cal	5 g	6 g	24 g	0.8	5 mg	373 mg	147 mg
D 001 03	DROP BISCUITS	1 Biscuit	100	148 cal	4 g	4 g	24 g	0.8	0 mg	345 mg	115 mg
D 002 00	IRISH SODA BREAD	2 Slices	100	335 cal	6 g	9 g	59 g	2	44 mg	456 mg	70 mg
D 003 00	SUBMARINE ROLLS (HOAGIE, TORPEDO)	1 Roll	100	389 cal	12 g	5 g	73 g	2.7	0 mg	423 mg	17 mg
D 003 01	SUBMARINE ROLLS (ROLL MIX)	1 Roll	100	340 cal	10 g	7 g	61 g	0.5	0 mg	532 mg	56 mg
D 004 00	FRENCH BREAD	2 Slices	100	189 cal	6 g	2 g	37 g	1.3	0 mg	328 mg	8 mg
D 005 00	RAISIN BREAD	2 Slices	100	201 cal	6 g	2 g	40 g	1.7	0 mg	264 mg	26 mg
D 007 00	TOASTED GARLIC BREAD	2 Slices	100	259 cal	5 g	13 g	31 g	1.8	0 mg	487 mg	48 mg
D 007 01	TOASTED PARMESAN BREAD	2 Slices	100	277 cal	7 g	14 g	31 g	1.8	3 mg	561 mg	103 mg
D 007 02	TEXAS TOAST	2 Slices	100	202 cal	5 g	6 g	31 g	1.8	0 mg	359 mg	44 mg
D 008 00	WHITE BREAD	2 Slices	100	181 cal	6 g	2 g	33 g	1.1	0 mg	334 mg	22 mg
D 009 00	WHITE BREAD (SHORT-TIME FORMULA)	2 Slices	100	184 cal	6 g	2 g	34 g	1.2	0 mg	217 mg	20 mg
D 011 00	PUMPKIN BREAD	1 Slice	100	272 cal	4 g	12 g	40 g	1.3	30 mg	302 mg	23 mg
D 012 00	CRUMB CAKE SNICKERDOODLE	1 Piece	100	303 cal	5 g	12 g	46 g	1.5	36 mg	212 mg	81 mg
D 012 01	CRUMB CAKE SNICKERDOODLE (CK MIX, YELLOW)	1 Piece	100	257 cal	3 g	12 g	36 g	0	11 mg	290 mg	25 mg
D 013 00	BAGELS	1 Bagel	100	242 cal	8 g	2 g	48 g	1.7	0 mg	375 mg	11 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
D 014 00	CORN BREAD	1 Piece	100	212 cal	5 g	8 g	30 g	1.7	30 mg	359 mg	127 mg
D 014 01	CORN MUFFINS	1 Muffin	100	160 cal	4 g	6 g	22 g	1.3	24 mg	252 mg	95 mg
D 014 02	HUSH PUPPIES	3 Each	100	200 cal	5 g	7 g	28 g	1.9	30 mg	359 mg	129 mg
D 014 03	JALAPENO CORN BREAD	1 Piece	100	224 cal	5 g	9 g	30 g	1.8	33 mg	391 mg	143 mg
D 015 00	CORN BREAD (CORN BREAD MIX)	1 Piece	100	218 cal	4 g	7 g	36 g	3.3	1 mg	567 mg	29 mg
D 015 01	CORN MUFFINS (CORN BREAD MIX)	1 Muffin	100	189 cal	3 g	5 g	32 g	2.7	1 mg	454 mg	23 mg
D 015 02	HUSH PUPPIES (CORN BREAD MIX)	3 Pieces	100	257 cal	4 g	11 g	36 g	3.5	1 mg	567 mg	31 mg
D 015 03	JALAPENO CORN BREAD (CORN BREAD MIX)	1 Piece	100	230 cal	4 g	8 g	36 g	3.4	3 mg	599 mg	46 mg
D 016 00	CROUTONS	8 Croutons	100	24 cal	1 g	0 g	4 g	0.2	0 mg	49 mg	10 mg
D 016 01	GARLIC CROUTONS	1/4 Cup	100	49 cal	1 g	3 g	4 g	0.2	8 mg	77 mg	11 mg
D 016 02	PARMESAN CROUTONS	8 Croutons	100	55 cal	1 g	4 g	4 g	0.2	9 mg	105 mg	31 mg
D 017 00	EGG WASH	3 Cups	1	428 cal	36 g	23 g	16 g	0	989 mg	457 mg	458 mg
D 017 01	EGG WHITE WASH	3 Cups	1	81 cal	17 g	0 g	2 g	0	0 mg	280 mg	20 mg
D 018 00	CAKE DOUGHNUTS (HOMEMADE)	1 Doughnut	100	186 cal	3 g	7 g	26 g	0.7	24 mg	197 mg	78 mg
D 018 01	SUGAR COATED DOUGHNUTS	1 Doughnut	100	203 cal	3 g	7 g	31 g	0.7	24 mg	197 mg	78 mg
D 018 02	CAKE DOUGHNUTS (DOUGHNUT MIX)	1 Doughnut	100	199 cal	4 g	7 g	31 g	0	0 mg	323 mg	36 mg
D 018 03	CHOCOLATE DOUGHNUTS	1 Doughnut	100	190 cal	4 g	8 g	27 g	1.3	24 mg	198 mg	80 mg
D 018 04	CINNAMON SUGAR DOUGHNUTS	1 Doughnut	100	154 cal	3 g	3 g	28 g	0.8	24 mg	198 mg	81 mg
D 018 05	GLAZED NUT DOUGHNUTS	1 Doughnut	100	298 cal	5 g	11 g	47 g	1	26 mg	208 mg	82 mg
D 018 06	GLAZED COCONUT DOUGHNUTS	1 Doughnut	100	300 cal	4 g	10 g	49 g	0.9	26 mg	222 mg	79 mg
D 018 07	GLAZED DOUGHNUTS	1 Doughnut	100	217 cal	3 g	8 g	34 g	0.7	25 mg	201 mg	78 mg
D 019 00	RAISED DOUGHNUTS	1 Doughnut	100	191 cal	4 g	8 g	26 g	0.9	11 mg	170 mg	13 mg
D 019 01	BEIGNETS (NEW ORLEANS DOUGHNUTS)	2 Each	100	289 cal	5 g	13 g	38 g	1.2	13 mg	219 mg	17 mg
D 019 02	RAISED DOUGHNUTS (SWEET DOUGH MIX)	1 Doughnut	100	194 cal	6 g	8 g	29 g	3.7	0 mg	323 mg	13 mg
D 019 03	LONGJOHNS	1 Each	100	191 cal	4 g	8 g	26 g	0.9	11 mg	170 mg	13 mg
D 019 04	CRULLERS	1 Doughnut	100	191 cal	4 g	8 g	26 g	0.9	11 mg	170 mg	13 mg
D 020 00	DUMPLINGS	2 Each	100	175 cal	3 g	6 g	26 g	0.9	1 mg	521 mg	73 mg
D 021 00	ENGLISH MUFFINS	1 Muffin	100	281 cal	8 g	8 g	43 g	1.5	20 mg	130 mg	25 mg
D 021 01	CINNAMON RAISIN ENGLISH MUFFINS	1 Muffin	100	321 cal	8 g	8 g	53 g	2.1	20 mg	132 mg	34 mg
D 022 00	FRENCH TOAST	2 Slices	100	206 cal	9 g	6 g	29 g	1.1	148 mg	324 mg	94 mg
D 022 01	FRENCH TOAST (THICK SLICE)	2 Slices	100	305 cal	12 g	6 g	48 g	2.6	147 mg	573 mg	104 mg
D 022 02	ENGLISH MUFFIN FRENCH TOAST	1 Muffin	100	206 cal	9 g	5 g	30 g	1.5	147 mg	319 mg	139 mg
D 022 03	FRENCH TOAST (FROZEN EGGS AND EGG WHITES)	2 Slices	100	186 cal	8 g	4 g	29 g	1.1	69 mg	324 mg	85 mg
D 023 00	FRENCH TOAST PUFF	2 Halves	100	284 cal	7 g	6 g	48 g	1.6	30 mg	570 mg	175 mg
D 024 00	APPLE FRITTERS	2 Fritters	100	248 cal	3 g	12 g	34 g	1	20 mg	273 mg	73 mg
D 025 00	PANCAKES	2 Cakes	100	253 cal	7 g	6 g	41 g	1.2	53 mg	512 mg	207 mg
D 025 01	BUTTERMILK PANCAKES (DRY BUTTERMILK)	2 Cakes	100	281 cal	10 g	7 g	44 g	1.2	60 mg	478 mg	211 mg
D 025 02	BLUEBERRY PANCAKES	2 Cakes	100	265 cal	8 g	7 g	43 g	1.8	53 mg	512 mg	209 mg
D 025 04	BUTTERMILK PANCAKES (PANCAKE MIX)	2 Cakes	100	296 cal	7 g	8 g	48 g	1.8	14 mg	827 mg	164 mg
D 025 05	PANCAKES (PANCAKE MIX)	2 Cakes	100	226 cal	6 g	3 g	42 g	1.6	12 mg	716 mg	142 mg
D 025 06	WAFFLES, FROZEN (BROWN AND SERVE)	2 Each	100	176 cal	4 g	6 g	27 g	1.5	22 mg	524 mg	155 mg
D 025 07	WAFFLES (PANCAKE MIX)	1 Each	100	226 cal	6 g	3 g	42 g	1.6	12 mg	716 mg	142 mg
D 025 08	WAFFLES	1 Each	100	253 cal	7 g	6 g	41 g	1.2	53 mg	512 mg	207 mg
D 025 09	WHOLE WHEAT PANCAKES	2 Cakes	100	236 cal	8 g	7 g	37 g	3	53 mg	513 mg	210 mg
D 025 10	PANCAKES (FROZEN EGGS AND EGG WHITES)	2 Cakes	100	247 cal	7 g	6 g	41 g	1.2	27 mg	513 mg	204 mg
D 025 11	PANCAKES (EGG SUBSTITUTE)	2 Cakes	100	246 cal	8 g	6 g	41 g	1.2	1 mg	518 mg	207 mg
D 026 00	HOT CROSS BUNS	1 Each	100	147 cal	5 g	3 g	28 g	3.5	0 mg	270 mg	17 mg
D 027 00	KOLACHES	1 Roll	100	240 cal	5 g	7 g	39 g	1.3	20 mg	177 mg	21 mg
D 027 01	KOLACHES (SWEET DOUGH MIX)	1 Roll	100	166 cal	6 g	3 g	32 g	3.9	0 mg	325 mg	15 mg
D 028 00	BRAN MUFFINS	1 Muffin	100	173 cal	3 g	4 g	34 g	3.6	12 mg	240 mg	110 mg
D 028 01	RAISIN BRAN MUFFINS	1 Muffin	100	199 cal	4 g	4 g	41 g	3.9	10 mg	240 mg	114 mg
D 028 02	BLUEBERRY BRAN MUFFINS	1 Muffin	100	174 cal	3 g	4 g	34 g	3.6	10 mg	239 mg	110 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
D 028 03	BANANA BRAN MUFFINS	1 Muffin	100	181 cal	3 g	4 g	36 g	3.8	10 mg	239 mg	111 mg
D 028 04	APRICOT BRAN MUFFINS	1 Muffin	100	196 cal	4 g	4 g	40 g	3.6	10 mg	240 mg	114 mg
D 028 05	CRANBERRY BRAN MUFFINS	1 Muffin	100	177 cal	3 g	4 g	35 g	3.9	10 mg	239 mg	111 mg
D 029 00	MUFFINS	1 Muffin	100	178 cal	4 g	5 g	30 g	0.7	34 mg	204 mg	86 mg
D 029 01	BLUEBERRY MUFFINS	1 Muffin	100	187 cal	4 g	5 g	33 g	0.9	34 mg	204 mg	87 mg
D 029 02	RAISIN MUFFINS	1 Muffin	100	204 cal	4 g	5 g	37 g	1.1	34 mg	205 mg	90 mg
D 029 03	BANANA MUFFINS	1 Muffin	100	186 cal	4 g	5 g	32 g	0.9	34 mg	204 mg	87 mg
D 029 04	APPLE MUFFINS	1 Muffin	100	191 cal	4 g	5 g	34 g	1	34 mg	204 mg	87 mg
D 029 05	CINNAMON CRUMB TOP MUFFINS	1 Muffin	100	195 cal	4 g	5 g	33 g	0.8	36 mg	212 mg	90 mg
D 029 06	CRANBERRY MUFFINS	1 Muffin	100	182 cal	4 g	5 g	32 g	1.1	34 mg	204 mg	87 mg
D 029 07	DATE MUFFINS	1 Muffin	100	196 cal	4 g	5 g	35 g	1.2	34 mg	204 mg	88 mg
D 029 08	NUT MUFFINS	1 Muffin	100	272 cal	5 g	14 g	34 g	2	39 mg	169 mg	67 mg
D 029 09	OATMEAL RAISIN MUFFINS	1 Muffin	100	216 cal	5 g	5 g	38 g	1.9	34 mg	205 mg	95 mg
D 030 00	BANANA BREAD	1 Slice	100	258 cal	6 g	12 g	33 g	1.9	37 mg	140 mg	64 mg
D 032 00	HARD ROLLS	2 Rolls	100	259 cal	8 g	3 g	49 g	1.7	0 mg	425 mg	11 mg
D 033 00	HOT ROLLS	2 Rolls	100	325 cal	9 g	7 g	56 g	1.8	0 mg	358 mg	26 mg
D 033 01	HOT ROLLS (BROWN AND SERVE)	2 Rolls	100	325 cal	9 g	7 g	56 g	1.8	0 mg	358 mg	26 mg
D 033 02	HOT ROLLS (ROLL MIX)	2 Rolls	100	264 cal	8 g	5 g	48 g	0.4	0 mg	416 mg	44 mg
D 033 03	OATMEAL ROLLS	2 Rolls	100	300 cal	8 g	9 g	46 g	2.3	0 mg	358 mg	28 mg
D 033 04	CLOVERLEAF OR TWIN ROLLS	2 Rolls	100	357 cal	9 g	11 g	56 g	1.8	5 mg	377 mg	27 mg
D 033 05	FRANKFURTER ROLLS	1 Roll	100	227 cal	6 g	6 g	37 g	1.3	0 mg	239 mg	18 mg
D 033 06	HAMBURGER ROLLS	1 Roll	100	227 cal	6 g	6 g	37 g	1.3	0 mg	239 mg	18 mg
D 033 07	PAN, CLUSTER, OR PULL APART ROLLS	2 Rolls	100	357 cal	9 g	11 g	56 g	1.8	0 mg	380 mg	27 mg
D 033 08	PARKER HOUSE ROLLS	2 Rolls	100	357 cal	9 g	11 g	56 g	1.8	5 mg	377 mg	27 mg
D 033 09	POPPY SEED ROLLS	2 Rolls	100	346 cal	9 g	9 g	56 g	2	0 mg	359 mg	42 mg
D 033 10	SESAME SEED ROLLS	2 Rolls	100	347 cal	9 g	9 g	56 g	2	0 mg	359 mg	28 mg
D 034 00	HOT ROLLS (SHORT-TIME FORMULA)	2 Rolls	100	276 cal	9 g	4 g	51 g	1.8	0 mg	325 mg	30 mg
D 034 01	BROWN AND SERVE ROLLS (SHORT-TIME FORMULA)	2 Rolls	100	284 cal	9 g	5 g	51 g	1.8	3 mg	335 mg	31 mg
D 034 03	WHOLE WHEAT ROLLS (SHORT-TIME FORMULA)	2 Rolls	100	263 cal	8 g	4 g	48 g	1.7	0 mg	325 mg	30 mg
D 035 00	ONION ROLLS	2 Rolls	100	312 cal	8 g	5 g	58 g	2.5	0 mg	428 mg	41 mg
D 035 01	ONION ROLLS (ROLL MIX)	2 Rolls	100	262 cal	7 g	4 g	49 g	1	0 mg	376 mg	58 mg
D 036 00	SWEET DOUGH	1 Roll	100	201 cal	6 g	5 g	32 g	1.3	24 mg	221 mg	16 mg
D 036 01	SWEET DOUGH (SWEET DOUGH MIX)	1 Roll	100	135 cal	6 g	3 g	24 g	3.8	0 mg	323 mg	13 mg
D 036 02	GLAZED ROLLS	1 Roll	100	244 cal	6 g	8 g	38 g	1.3	29 mg	243 mg	17 mg
D 036 03	PECAN ROLLS	1 Roll	100	302 cal	6 g	13 g	40 g	1.9	34 mg	261 mg	25 mg
D 036 04	CINNAMON ROLLS	1 Roll	100	289 cal	6 g	9 g	47 g	1.7	34 mg	265 mg	40 mg
D 036 05	CINNAMON NUT ROLLS	1 Roll	100	306 cal	7 g	15 g	38 g	2.2	34 mg	260 mg	26 mg
D 036 06	CINNAMON RAISIN ROLLS	1 Roll	100	298 cal	6 g	9 g	49 g	1.8	34 mg	265 mg	41 mg
D 036 07	BUTTERFLY ROLLS	1 Roll	100	312 cal	6 g	9 g	52 g	1.3	36 mg	261 mg	19 mg
D 036 08	SUGAR ROLLS	1 Roll	100	335 cal	6 g	10 g	56 g	1.3	36 mg	269 mg	18 mg
D 036 09	STREUSEL COFFEE CAKE	1 Piece	100	319 cal	7 g	10 g	50 g	1.5	39 mg	274 mg	26 mg
D 036 10	SMALL COFFEE CAKE	1 Piece	100	423 cal	6 g	9 g	81 g	2.3	36 mg	270 mg	57 mg
D 036 11	TWIST COFFEE CAKE	1 Piece	100	303 cal	6 g	9 g	51 g	1.8	35 mg	257 mg	29 mg
D 036 12	BEAR CLAWS	1 Roll	100	308 cal	8 g	7 g	53 g	1.6	87 mg	254 mg	48 mg
D 036 13	SNAILS	1 Roll	100	321 cal	6 g	9 g	54 g	1.3	29 mg	266 mg	20 mg
D 036 14	BOWKNOTS, FIGURE 8's, AND S SHAPES	1 Roll	100	288 cal	6 g	6 g	52 g	1.3	29 mg	233 mg	18 mg
D 036 15	CINNAMON TWISTS	1 Roll	100	368 cal	6 g	9 g	66 g	1.7	36 mg	266 mg	41 mg
D 036 16	BUTTERHORNS	1 Roll	100	311 cal	6 g	9 g	52 g	1.3	34 mg	260 mg	18 mg
D 036 17	CRESCENTS	1 Roll	100	311 cal	6 g	9 g	52 g	1.3	34 mg	260 mg	18 mg
D 037 00	QUICK COFFEE CAKE (BISCUIT MIX)	1 Piece	100	276 cal	4 g	9 g	44 g	0.9	24 mg	443 mg	76 mg
D 037 01	QUICK APPLE COFFEE CAKE (BISCUIT MIX)	1 Piece	100	214 cal	4 g	6 g	37 g	1.3	24 mg	405 mg	76 mg
D 037 02	QUICK FRENCH COFFEE CAKE (BISCUIT MIX)	1 Piece	100	343 cal	6 g	12 g	53 g	1.7	24 mg	444 mg	87 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
D 037 03	QUICK CHERRY COFFEE CAKE (BISCUIT MIX)	1 Piece	100	290 cal	4 g	9 g	48 g	1.3	24 mg	443 mg	79 mg
D 037 04	QUICK ORANGE-COCONUT COFFEE CAKE (BISCUIT MIX)	1 Piece	100	405 cal	4 g	20 g	53 g	2	37 mg	519 mg	66 mg
D 037 05	QUICK COFFEE CAKE	1 Piece	100	288 cal	4 g	11 g	45 g	0.7	32 mg	246 mg	68 mg
D 038 00	TEMPURA BATTER	1 Gallon	1	5796 cal	204 g	66 g	1069 g	37.2	2231 mg	27078	3545 mg
D 039 00	DANISH DIAMONDS (DANISH PASTRY DOUGH)	1 Danish	100	228 cal	3 g	14 g	23 g	0.9	5 mg	168 mg	15 mg
D 039 01	BEAR CLAWS (DANISH PASTRY DOUGH)	1 Danish	100	219 cal	3 g	15 g	20 g	0.7	5 mg	162 mg	14 mg
D 039 02	FRUIT TURNOVERS (FROZEN PUFF PASTRY DOUGH)	1 Danish	100	346 cal	4 g	22 g	33 g	1.1	5 mg	155 mg	9 mg
D 039 03	FRUIT PUFFS (FROZEN PUFF PASTRY DOUGH)	1 Danish	100	357 cal	4 g	22 g	37 g	1.1	0 mg	153 mg	7 mg
D 040 00	CORNSTARCH WASH	1 Quart	1	122 cal	0 g	0 g	29 g	0.3	0 mg	31 mg	20 mg
D 041 00	CHERRY FILLING (CORNSTARCH)	3 Quarts	1	7081 cal	23 g	4 g	1816 g	45.8	0 mg	76 mg	358 mg
D 041 01	CHERRY FILLING (PIE FILLING, PREPARED)	3 Quarts	1	3132 cal	14 g	5 g	798 g	16.3	0 mg	245 mg	300 mg
D 041 03	APPLE FILLING (PIE FILLING, PREPARED)	3 Quarts	1	2749 cal	3 g	3 g	713 g	27.2	0 mg	1197 mg	109 mg
D 041 04	BLUEBERRY FILLING (PIE FILLING, PREPARED)	3 Quarts	1	2871 cal	0 g	0 g	754 g	35.9	0 mg	1615 mg	718 mg
D 041 05	RASPBERRY FILLING (PREPARED BAKERY)	3 Quarts	1	2947 cal	0 g	0 g	774 g	36.8	0 mg	1657 mg	737 mg
D 042 00	CINNAMON SUGAR FILLING	4-1/2 Cups	1	1843 cal	1 g	1 g	480 g	14.8	0 mg	191 mg	735 mg
D 042 01	CINNAMON SUGAR NUT FILLING	4-1/2 Cups	1	6933 cal	232 g	433 g	646 g	75.2	0 mg	244 mg	1506 mg
D 042 02	CINNAMON SUGAR RAISIN FILLING	4-1/2 Cups	1	4562 cal	30 g	5 g	1197 g	51	0 mg	300 mg	1179 mg
D 043 00	NUT FILLING	7-1/2 Cups	1	10666 cal	95 g	641 g	1214 g	33.6	1118 mg	4412 mg	970 mg
D 044 00	OAT BRAN RAISIN MUFFINS	1 Muffin	100	196 cal	5 g	7 g	29 g	2.3	40 mg	189 mg	88 mg
D 045 00	SYRUP GLAZE	1 Quart	1	2930 cal	1 g	1 g	790 g	0	0 mg	1106 mg	146 mg
D 046 00	VANILLA GLAZE	2-3/4 Cups	1	3125 cal	0 g	35 g	717 g	0	93 mg	365 mg	22 mg
D 046 01	ALMOND GLAZE	2-3/4 Cups	1	3115 cal	0 g	35 g	717 g	0	93 mg	364 mg	21 mg
D 046 02	RUM GLAZE	2-3/4 Cups	1	3125 cal	0 g	35 g	717 g	0	93 mg	365 mg	22 mg
D 047 01	PINEAPPLE FILLING (CORNSTARCH)	2-1/2 Quarts	1	2942 cal	10 g	36 g	680 g	18.7	93 mg	389 mg	331 mg
D 048 00	ORANGE-COCONUT TOPPING	2-1/4 Quarts	1	9327 cal	42 g	581 g	1063 g	56.2	497 mg	4811 mg	314 mg
D 049 00	STREUSEL TOPPING	3 Quarts	1	9380 cal	83 g	468 g	1242 g	27.6	1242 mg	4892 mg	818 mg
D 049 01	PECAN TOPPING	2-1/2 Quarts	1	8428 cal	56 g	624 g	752 g	63.3	497 mg	2122 mg	816 mg
D 050 00	MAPLE SYRUP	1 Gallon	1	7143 cal	0 g	0 g	1835 g	0.3	0 mg	1364 mg	1612 mg
D 051 00	FRYING BATTER	1 Gallon	1	10896 cal	350 g	114 g	2068 g	67.6	2246 mg	67950	3966 mg
D 052 00	OATMEAL BREAD	2 Slices	100	211 cal	7 g	4 g	37 g	2.2	0 mg	216 mg	21 mg
D 053 00	APPLESAUCE MUFFINS	1 Muffin	100	181 cal	3 g	4 g	33 g	1.1	12 mg	213 mg	73 mg
D 053 01	APPLESAUCE RAISIN MUFFINS	1 Muffin	100	207 cal	4 g	4 g	40 g	1.4	12 mg	214 mg	77 mg
D 053 02	APPLESAUCE ORANGE MUFFINS	1 Muffin	100	191 cal	4 g	4 g	35 g	1	12 mg	213 mg	76 mg
D 054 00	PINEAPPLE CARROT MUFFINS	1 Muffin	100	145 cal	4 g	4 g	24 g	1.1	0 mg	205 mg	99 mg
D 055 00	WHOLE WHEAT BREAD	2 Slices	100	158 cal	5 g	3 g	29 g	2.5	0 mg	288 mg	25 mg
D 056 00	WHOLE WHEAT BREAD (WHOLE WHEAT FLOUR SHRT TM FORM)	2 Slices	100	158 cal	6 g	3 g	29 g	3.6	0 mg	218 mg	24 mg
D 057 00	APPLE COFFEE CAKE	1 Piece	100	206 cal	4 g	5 g	39 g	1.8	0 mg	213 mg	65 mg
D 058 00	OVEN BAKED FRENCH TOAST	2 Slices	100	199 cal	9 g	4 g	31 g	1.3	1 mg	365 mg	99 mg
D 059 00	WHOLE WHEAT ROLLS	2 Rolls	100	261 cal	8 g	4 g	50 g	4.1	0 mg	383 mg	31 mg
D 060 00	OATS AND FRUIT BREAKFAST SQUARES	1 Each	100	254 cal	6 g	8 g	42 g	3.6	0 mg	116 mg	36 mg
D 502 00	PUMPKIN PATCH MUFFINS	1 Muffin	100	154 cal	3 g	5 g	25 g	1.7	0 mg	208 mg	64 mg
D 503 00	DATE NUT BREAD	1 Slice	100	189 cal	3 g	4 g	38 g	2.7	0 mg	189 mg	43 mg
D 507 00	APPLESAUCE CINNAMON CRUMB TOP MUFFIN	1 Muffin	100	204 cal	3 g	5 g	38 g	1.1	0 mg	217 mg	76 mg
D 508 00	APPLESAUCE BLUEBERRY MUFFINS	1 Muffin	100	195 cal	3 g	4 g	36 g	1.4	0 mg	209 mg	75 mg
D 509 00	CRAN-APPLE MUFFINS	1 Muffin	100	201 cal	3 g	4 g	38 g	1.2	10 mg	209 mg	74 mg
D 800 00	BREAD LOAVES (FROZEN DOUGH)	2 Rolls	100	276 cal	10 g	5 g	48 g	2.6	0 mg	261 mg	32 mg
D 801 00	DILL ROLLS (FROZEN DOUGH)	2 Rolls	100	287 cal	10 g	5 g	50 g	2.9	0 mg	263 mg	50 mg
D 802 00	GARLIC HERB ROLLS (FROZEN DOUGH)	2 Rolls	100	301 cal	11 g	5 g	54 g	4.2	0 mg	263 mg	95 mg
D 803 00	HUSH PUPPIES, FROZEN	3 Ounces	100	183 cal	4 g	7 g	25 g	1.5	24 mg	364 mg	151 mg
D 804 00	DINNER ROLLS (FROZEN DOUGH)	2 Rolls	100	285 cal	10 g	5 g	50 g	2.7	0 mg	261 mg	32 mg
D 805 00	POTATO ROLLS (FROZEN DOUGH)	2 Rolls	100	295 cal	10 g	5 g	52 g	2.9	0 mg	264 mg	33 mg
D 806 00	WHOLE WHEAT ROLLS (FROZEN DOUGH)	2 Rolls	100	269 cal	10 g	8 g	47 g	4.3	0 mg	480 mg	32 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
D 807 00	OAT ROLLS (FROZEN DOUGH)	2 Rolls	100	297 cal	11 g	9 g	51 g	5.2	0 mg	480 mg	37 mg
D 808 00	SESAME OR CARAWAY ROLLS (FROZEN DOUGH)	2 Rolls	100	319 cal	11 g	8 g	50 g	3.4	0 mg	264 mg	40 mg
D 809 00	BRAN MUFFINS (WHITE CAKE MIX)	1 Muffin	100	221 cal	2 g	6 g	41 g	0.6	0 mg	306 mg	22 mg
D 810 00	BANANA NUT MUFFINS (WHITE CAKE MIX)	1 Muffin	100	296 cal	3 g	14 g	40 g	1.3	0 mg	279 mg	20 mg
D 811 00	HONEY CINNAMON MUFFINS (WHITE CAKE MIX)	1 Muffin	100	219 cal	2 g	6 g	41 g	0.3	0 mg	279 mg	23 mg
D 812 00	BLUEBERRY MUFFINS (WHITE CAKE MIX)	1 Muffin	100	213 cal	2 g	6 g	38 g	0.4	0 mg	279 mg	17 mg
D 813 00	FRENCH TOAST, FROZEN	2 Slices	100	261 cal	9 g	8 g	39 g	1.4	100 mg	606 mg	131 mg
D 814 00	PANCAKES, BUTTERMILK, FROZEN	2 Cakes	100	280 cal	6 g	4 g	53 g	2.2	11 mg	623 mg	76 mg
D 815 00	MUFFINS, FROZEN, BATTER	4 Ounces	100	442 cal	6 g	25 g	50 g	2.6	37 mg	368 mg	39 mg
D 816 00	MUFFINS, FROZEN	4 Ounces	100	453 cal	7 g	14 g	77 g	2.6	7 mg	693 mg	19 mg
E 001 00	HOT OATMEAL	3/4 Cup	100	106 cal	5 g	2 g	18 g	2.9	0 mg	216 mg	19 mg
E 001 02	HOT FARINA	3/4 Cup	100	104 cal	3 g	0 g	22 g	0.5	0 mg	216 mg	8 mg
E 002 00	HOMINY GRITS	2/3 Cup	100	84 cal	2 g	1 g	16 g	0.3	2 mg	107 mg	4 mg
E 002 01	FRIED HOMINY GRITS	3 Slices	100	164 cal	2 g	10 g	16 g	0.3	2 mg	107 mg	4 mg
E 003 00	BUTTERED HOMINY	1/3 Cup	100	86 cal	1 g	4 g	12 g	2.2	7 mg	208 mg	10 mg
E 003 01	FRIED HOMINY	1/3 Cup	100	134 cal	1 g	9 g	12 g	2.2	0 mg	180 mg	9 mg
E 004 00	BOILED PASTA	1 Cup	100	207 cal	7 g	1 g	41 g	1.3	0 mg	292 mg	16 mg
E 004 01	BUTTERED PASTA	1 Cup	100	239 cal	7 g	5 g	41 g	1.3	10 mg	329 mg	17 mg
E 005 00	STEAMED RICE	3/4 Cup	100	148 cal	3 g	1 g	32 g	0.7	0 mg	214 mg	26 mg
E 005 01	LYONNAISE RICE	3/4 Cup	100	164 cal	3 g	2 g	33 g	1	0 mg	215 mg	29 mg
E 005 02	TOSSED GREEN RICE	3/4 Cup	100	163 cal	3 g	2 g	33 g	1.1	0 mg	217 mg	34 mg
E 005 03	LONG GRAIN AND WILD RICE	3/4 Cup	100	168 cal	7 g	1 g	34 g	2.8	0 mg	7 mg	12 mg
E 005 04	RICE WITH PARMESAN CHEESE	3/4 Cup	100	187 cal	5 g	4 g	32 g	0.7	4 mg	329 mg	95 mg
E 005 05	STEAMED BROWN RICE	3/4 Cup	100	168 cal	4 g	2 g	34 g	1.6	0 mg	216 mg	13 mg
E 006 00	STEAMED RICE (STEAM COOKER METHOD)	3/4 Cup	100	168 cal	4 g	2 g	34 g	1.6	0 mg	216 mg	13 mg
E 007 00	PORK FRIED RICE	3/4 Cup	100	211 cal	8 g	6 g	29 g	1.1	55 mg	462 mg	38 mg
E 007 02	FILIPINO RICE	3/4 Cup	100	250 cal	9 g	10 g	31 g	1.6	59 mg	458 mg	25 mg
E 007 03	SHRIMP FRIED RICE	3/4 Cup	100	234 cal	12 g	7 g	29 g	1.1	90 mg	502 mg	46 mg
E 008 00	RICE PILAF	3/4 Cup	100	201 cal	4 g	4 g	37 g	1.3	4 mg	927 mg	41 mg
E 008 01	ORANGE RICE	3/4 Cup	100	221 cal	4 g	4 g	42 g	1.3	4 mg	812 mg	45 mg
E 009 00	SPANISH RICE	3/4 Cup	100	153 cal	4 g	2 g	31 g	2.7	2 mg	409 mg	55 mg
E 010 00	RED BEANS WITH RICE	1 Cup	100	225 cal	10 g	3 g	41 g	5	3 mg	630 mg	53 mg
E 010 01	HOPPING JOHN (BLACK-EYE PEAS WITH RICE)	2/3 Cup	100	177 cal	8 g	3 g	30 g	4.8	3 mg	430 mg	32 mg
E 011 00	MEXICAN RICE	3/4 Cup	100	193 cal	3 g	5 g	34 g	1.2	0 mg	244 mg	37 mg
E 012 00	NOODLES JEFFERSON	3/4 Cup	100	241 cal	10 g	9 g	29 g	1.1	58 mg	509 mg	143 mg
E 013 00	STEAMED PASTA	1 Cup	100	207 cal	7 g	1 g	41 g	1.3	0 mg	293 mg	17 mg
E 014 00	SPRING GARDEN RICE	3/4 Cup	100	170 cal	7 g	2 g	31 g	2.1	5 mg	302 mg	160 mg
E 015 00	SICILIAN BROWN RICE AND VEGETABLES	3/4 Cup	100	155 cal	6 g	2 g	29 g	3.3	4 mg	542 mg	110 mg
E 016 00	ISLANDER'S RICE	3/4 Cup	100	149 cal	5 g	1 g	31 g	2.7	0 mg	644 mg	43 mg
E 017 00	MEDITERRANEAN BROWN RICE	3/4 Cup	100	226 cal	5 g	4 g	43 g	2.3	0 mg	699 mg	30 mg
E 018 00	SPICY BROWN RICE PILAF	3/4 Cup	100	151 cal	4 g	2 g	30 g	2.2	0 mg	766 mg	36 mg
E 019 00	BROWN RICE WITH TOMATOES	3/4 Cup	100	167 cal	4 g	1 g	35 g	3	0 mg	163 mg	37 mg
E 020 00	GINGER RICE	3/4 Cup	100	183 cal	6 g	2 g	34 g	1.2	73 mg	567 mg	43 mg
E 021 00	NUTTY RICE AND CHEESE	9 Ounces	100	323 cal	22 g	8 g	40 g	2.6	12 mg	835 mg	289 mg
E 022 00	ORZO WITH LEMON AND HERBS	3/4 Cup	100	92 cal	2 g	4 g	12 g	0.7	0 mg	362 mg	19 mg
E 023 00	ORZO, WITH SPINACH, TOMATO, AND ONION	9-1/2 Ounces	100	62 cal	3 g	2 g	10 g	2.5	2 mg	456 mg	104 mg
E 508 00	SOUTHWESTERN RICE	3/4 Cup	100	131 cal	5 g	1 g	25 g	1.2	2 mg	192 mg	64 mg
E 510 00	PASTA PROVENCAL	1 Cup	100	295 cal	16 g	6 g	46 g	4.5	31 mg	1288 mg	212 mg
E 800 00	ORIENTAL RICE	4 Ounces	100	67 cal	3 g	1 g	13 g	1.2	0 mg	694 mg	15 mg
E 801 00	WILD RICE	1/2 Cup	100	37 cal	1 g	0 g	8 g	0.7	0 mg	1 mg	1 mg
E 803 00	AZTEC RICE	3/4 Cup	100	135 cal	5 g	3 g	24 g	4.7	0 mg	123 mg	32 mg
E 804 00	MEXICAN RICE (FIESTA MIX)	1/2 Cup	100	132 cal	4 g	0 g	30 g	1.2	0 mg	385 mg	21 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
E 805 00	RICE PILAF, USING MIX	1/2 Cup	100	47 cal	1 g	1 g	8 g	0	0 mg	158 mg	6 mg
E 806 00	GEORGIA RICE	4 Ounces	100	77 cal	2 g	1 g	16 g	1.1	0 mg	161 mg	19 mg
E 807 00	DIRTY RICE	3/4 Cup	100	51 cal	2 g	1 g	10 g	0.9	0 mg	159 mg	12 mg
F 001 00	BAKED MACARONI AND CHEESE	1 Cup	100	359 cal	17 g	16 g	37 g	1.2	39 mg	721 mg	357 mg
F 002 00	NACHOS	1-1/2 Ounces	100	403 cal	14 g	27 g	28 g	3.8	47 mg	1259 mg	379 mg
F 002 01	NACHOS (RTU CHEESE SAUCE)	1-1/2 Ounces	100	289 cal	5 g	15 g	34 g	3.2	6 mg	1028 mg	112 mg
F 003 00	EGGS AU GRATIN (SCOTCH WOODCOCK)	2/3 Cup	100	223 cal	12 g	16 g	7 g	0.2	243 mg	241 mg	179 mg
F 004 00	COOKED EGGS	2 Each	100	149 cal	12 g	10 g	1 g	0	425 mg	126 mg	49 mg
F 005 00	DEVILED EGGS	2 Halves	100	115 cal	6 g	9 g	2 g	0.1	214 mg	137 mg	26 mg
F 006 00	EGG FOO YOUNG	1 Omelet	100	157 cal	10 g	12 g	4 g	0.3	134 mg	490 mg	27 mg
F 007 00	GRIDDLE FRIED EGGS	2 Each	100	168 cal	12 g	12 g	1 g	0	425 mg	126 mg	49 mg
F 008 00	PLAIN OMELET	1 Omelet	100	139 cal	11 g	10 g	1 g	0	392 mg	121 mg	54 mg
F 008 01	PLAIN OMELET (FROZEN EGGS AND EGG WHITES)	1 Omelet	100	93 cal	10 g	5 g	1 g	0	196 mg	132 mg	30 mg
F 008 03	CHEESE OMELET	1 Omelet	100	198 cal	14 g	15 g	1 g	0	407 mg	212 mg	160 mg
F 008 04	GREEN PEPPER OMELET	1 Omelet	100	152 cal	11 g	10 g	3 g	0.6	392 mg	121 mg	56 mg
F 008 05	HAM OMELET	1 Omelet	100	166 cal	14 g	11 g	1 g	0	401 mg	352 mg	55 mg
F 008 06	HAM AND CHEESE OMELET	1 Omelet	100	180 cal	14 g	13 g	1 g	0	404 mg	278 mg	103 mg
F 008 08	MUSHROOM OMELET	1 Omelet	100	151 cal	11 g	10 g	3 g	0.8	392 mg	258 mg	57 mg
F 008 09	ONION OMELET	1 Omelet	100	150 cal	11 g	10 g	3 g	0.3	392 mg	121 mg	57 mg
F 008 10	WESTERN OMELET	1 Omelet	100	170 cal	13 g	11 g	4 g	0.8	396 mg	237 mg	60 mg
F 008 11	TOMATO OMELET	1 Omelet	100	145 cal	11 g	10 g	2 g	0.3	392 mg	123 mg	55 mg
F 008 12	SPANISH OMELET	1 Omelet	100	183 cal	12 g	11 g	9 g	1.9	392 mg	364 mg	82 mg
F 009 00	POACHED EGGS	2 Each	100	149 cal	12 g	10 g	1 g	0	425 mg	127 mg	49 mg
F 010 00	SCRAMBLED EGGS	1/3 Cup	100	144 cal	11 g	10 g	1 g	0	392 mg	121 mg	54 mg
F 010 01	SCRAMBLED EGGS AND CHEESE	1/3 Cup	100	217 cal	15 g	16 g	1 g	0	411 mg	233 mg	184 mg
F 010 02	SCRAMBLED EGGS AND HAM	1/3 Cup	100	171 cal	14 g	12 g	1 g	0	401 mg	352 mg	55 mg
F 010 03	SCRAMBLED EGGS (DEHYDRATED EGG MIX)	1/3 Cup	100	166 cal	12 g	12 g	1 g	0	451 mg	140 mg	62 mg
F 010 05	SCRAMBLED EGGS (FROZEN EGGS AND EGG WHITES)	1/3 Cup	100	98 cal	10 g	6 g	1 g	0	196 mg	132 mg	30 mg
F 011 00	MUSHROOM QUICHE	4-1/2 Ounces	100	199 cal	11 g	10 g	16 g	1	114 mg	267 mg	231 mg
F 011 01	BROCCOLI QUICHE	4-1/2 Ounces	100	201 cal	12 g	10 g	16 g	1.3	114 mg	194 mg	242 mg
F 011 02	BROCCOLI QUICHE (FROZEN EGGS AND EGG WHITES)	4-1/2 Ounces	100	189 cal	11 g	9 g	16 g	1.3	64 mg	195 mg	236 mg
F 011 03	MUSHROOM QUICHE (FROZEN EGGS AND EGG WHITES)	4-1/2 Ounces	100	187 cal	11 g	9 g	16 g	1	64 mg	269 mg	225 mg
F 012 00	BREAKFAST BURRITO	1 Each	100	302 cal	16 g	14 g	26 g	1.7	167 mg	499 mg	170 mg
F 012 01	BREAKFAST PITA	1 Pita	100	418 cal	21 g	12 g	55 g	2.3	167 mg	801 mg	198 mg
F 013 00	VEGGIE EGG POCKET	1 Serving	100	319 cal	20 g	6 g	45 g	2.5	5 mg	952 mg	172 mg
F 014 00	MONTEREY EGG BAKE	6 Ounces	100	181 cal	19 g	6 g	14 g	1.6	5 mg	473 mg	166 mg
F 015 00	BREAKFAST PIZZA	1 Piece	100	346 cal	24 g	7 g	44 g	1.9	12 mg	930 mg	184 mg
F 015 01	MEXICAN BREAKFAST PIZZA	1 Piece	100	364 cal	26 g	6 g	50 g	3.8	6 mg	880 mg	189 mg
F 015 02	ITALIAN BREAKFAST PIZZA	1 Piece	100	388 cal	27 g	10 g	45 g	2.1	24 mg	798 mg	281 mg
F 800 00	MACARONI AND CHEESE, FROZEN	5 Ounces	100	249 cal	13 g	12 g	22 g	2.7	14 mg	1103 mg	123 mg
F 801 00	BREAKFAST BURRITO, FROZEN	4 Ounces	100	247 cal	11 g	8 g	32 g	1.6	220 mg	464 mg	0 mg
G 002 00	APPLESAUCE CAKE	1 Piece	100	304 cal	3 g	12 g	47 g	1	34 mg	172 mg	43 mg
G 003 00	CHOCOLATE MACARON CAKE (CAKE MIX)	1 Piece	100	332 cal	4 g	13 g	51 g	0.3	30 mg	496 mg	109 mg
G 004 00	CHOCOLATE CHIP FUDGE FROSTING	2-1/2 Quarts	1	13516 cal	89 g	496 g	2295 g	34.3	728 mg	5336 mg	2634 mg
G 005 00	VANILLA FROSTING (ICING MIX, VANILLA, POWDERED)	2-1/2 Quarts	1	7904 cal	6 g	94 g	1808 g	1.9	0 mg	261 mg	65 mg
G 005 01	ORANGE FROSTING (ICING MIX, VANILLA, POWDERED)	2-1/2 Quarts	1	9135 cal	25 g	97 g	2122 g	122.8	0 mg	293 mg	1910 mg
G 006 00	BANANA CAKE (CAKE MIX)	1 Piece	100	216 cal	3 g	5 g	40 g	0.4	11 mg	291 mg	26 mg
G 006 01	BANANA CAKE (BANANA CAKE MIX)	1 Piece	100	289 cal	3 g	9 g	50 g	0	0 mg	304 mg	31 mg
G 007 00	DECORATOR'S FROSTING	1 Quart	1	4494 cal	0 g	138 g	837 g	0	0 mg	12 mg	11 mg
G 008 00	FLORIDA LEMON CAKE	1 Piece	100	417 cal	4 g	22 g	52 g	0.1	53 mg	313 mg	32 mg
G 009 00	CHOCOLATE FROSTING (ICING MIX, CHOCOLATE POWDERED)	2-1/2 Quarts	1	7058 cal	24 g	94 g	1669 g	43.5	0 mg	1393 mg	209 mg
G 009 01	CHOC CHIP FROSTING (ICING MIX, CHOCOLATE POWDERED)	2-1/2 Quarts	1	8803 cal	47 g	199 g	1871 g	55.1	75 mg	1672 mg	859 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
G 009 02	CHOC COCONUT FROST (ICING MIX, CHOCOLATE POWDERED)	2-1/2 Quarts	1	8339 cal	31 g	185 g	1791 g	55.1	0 mg	2063 mg	247 mg
G 009 03	MOCHA CREAM FROST (ICING MIX, CHOCOLATE POWDERED)	2-1/2 Quarts	1	7084 cal	25 g	94 g	1674 g	43.5	0 mg	1397 mg	224 mg
G 010 00	YELLOW CAKE (MIX)	1 Piece	100	331 cal	2 g	14 g	51 g	0.5	1 mg	318 mg	62 mg
G 010 01	ALMOND CAKE (YELLOW MIX)	1 Piece	100	333 cal	2 g	14 g	51 g	0.5	1 mg	318 mg	62 mg
G 010 02	BLACK WALNUT CAKE (YELLOW MIX)	1 Piece	100	333 cal	2 g	14 g	51 g	0.5	1 mg	318 mg	62 mg
G 010 03	LEMON CAKE (YELLOW MIX)	1 Piece	100	309 cal	3 g	7 g	59 g	0	24 mg	363 mg	31 mg
G 010 04	MAPLE NUT CAKE (YELLOW MIX)	1 Piece	100	344 cal	4 g	10 g	60 g	0.4	24 mg	363 mg	35 mg
G 010 05	MARBLE CAKE (MIX)	1 Piece	100	327 cal	3 g	14 g	49 g	0.3	4 mg	347 mg	88 mg
G 010 06	ORANGE CAKE (YELLOW MIX)	1 Piece	100	333 cal	2 g	14 g	51 g	0.5	1 mg	318 mg	62 mg
G 011 00	EASY CHOCOLATE CAKE	1 Piece	100	345 cal	3 g	13 g	56 g	1.6	0 mg	315 mg	9 mg
G 012 00	DEVIL'S FOOD CAKE	1 Piece	100	329 cal	4 g	14 g	49 g	2.2	49 mg	333 mg	32 mg
G 012 01	DEVIL'S FOOD CAKE (CAKE MIX)	1 Piece	100	322 cal	3 g	14 g	48 g	0	7 mg	376 mg	115 mg
G 012 02	GERMAN CHOCOLATE CAKE (MIX)	1 Piece	100	335 cal	5 g	16 g	45 g	0.7	102 mg	363 mg	64 mg
G 013 00	CARROT CAKE (CAKE MIX)	1 Piece	100	308 cal	4 g	11 g	51 g	0	20 mg	311 mg	93 mg
G 014 00	PEANUT BUTTER CREAM FROSTING	3 Quarts	1	11838 cal	182 g	561 g	1652 g	38.9	629 mg	5645 mg	916 mg
G 015 00	CHOCOLATE FUDGE FROSTING	2-1/2 Quarts	1	13454 cal	58 g	632 g	2052 g	76.1	998 mg	6299 mg	749 mg
G 016 00	STRAWBERRY SHORTCAKE (BISCUIT MIX)	1 Piece	100	293 cal	4 g	10 g	47 g	3.9	5 mg	550 mg	106 mg
G 016 01	STRAWBERRY SHORTCAKE (CAKE MIX)	1 Piece	100	265 cal	4 g	5 g	52 g	3	11 mg	304 mg	57 mg
G 017 00	GINGERBREAD	1 Piece	100	265 cal	3 g	10 g	42 g	0.7	24 mg	266 mg	55 mg
G 017 01	GINGERBREAD (GINGERBREAD CAKE MIX)	1 Piece	100	334 cal	3 g	12 g	54 g	1.2	0 mg	449 mg	64 mg
G 018 00	CARAMEL FROSTING	2-1/2 Quarts	1	12575 cal	10 g	416 g	2280 g	0	1121 mg	4576 mg	877 mg
G 019 00	BROWN SUGAR FROSTING	2-1/4 Quarts	1	9496 cal	12 g	185 g	1997 g	0	502 mg	2474 mg	1336 mg
G 020 00	PEANUT BUTTER CRUMB CAKE	1 Piece	100	340 cal	6 g	13 g	52 g	0.7	11 mg	340 mg	30 mg
G 020 01	PEANUT BUTTER CAKE	1 Piece	100	290 cal	6 g	14 g	38 g	0.7	11 mg	345 mg	29 mg
G 021 00	POUND CAKE	1 Slice	100	284 cal	4 g	14 g	35 g	0.5	60 mg	186 mg	31 mg
G 021 01	ALMOND POUND CAKE (POUND CAKE MIX)	1 Piece	100	201 cal	3 g	14 g	15 g	0.2	56 mg	177 mg	29 mg
G 021 02	VELVET POUND CAKE (YELLOW CAKE MIX)	1 Piece	100	289 cal	3 g	12 g	42 g	0	26 mg	398 mg	28 mg
G 021 03	LEMON POUND CAKE (POUND CAKE MIX)	1 Piece	100	206 cal	3 g	15 g	15 g	0.2	54 mg	176 mg	29 mg
G 022 00	BUTTER CREAM FROSTING	2-3/4 Quarts	1	13120 cal	15 g	463 g	2288 g	0	1248 mg	7207 mg	533 mg
G 022 01	ORANGE BUTTER CREAM FROSTING	2-3/4 Quarts	1	13074 cal	7 g	463 g	2302 g	3.9	1242 mg	7042 mg	232 mg
G 022 02	CHOCOLATE BUTTER CREAM FROSTING	2-3/4 Quarts	1	13907 cal	83 g	510 g	2474 g	114.2	1248 mg	7283 mg	976 mg
G 022 03	COCONUT BUTTER CREAM FROSTING	2-3/4 Quarts	1	15100 cal	27 g	603 g	2476 g	17.8	1248 mg	8242 mg	592 mg
G 022 04	LEMON BUTTER CREAM FROSTING	2-3/4 Quarts	1	13075 cal	16 g	463 g	2294 g	2.9	1248 mg	7225 mg	572 mg
G 022 05	MAPLE BUTTER CREAM FROSTING	2-3/4 Quarts	1	13194 cal	15 g	463 g	2291 g	0	1248 mg	7209 mg	536 mg
G 022 06	MOCHA BUTTER CREAM FROSTING	2-3/4 Quarts	1	13206 cal	28 g	478 g	2332 g	38.1	1242 mg	7068 mg	315 mg
G 023 00	EASY VANILLA CAKE	1 Piece	100	356 cal	3 g	13 g	58 g	0.6	0 mg	271 mg	79 mg
G 024 00	CHOCOLATE GLAZE FROSTING	2-1/4 Cups	1	2320 cal	12 g	70 g	450 g	19	166 mg	645 mg	99 mg
G 025 00	SPICE CAKE	1 Piece	100	337 cal	4 g	14 g	50 g	0.8	40 mg	320 mg	76 mg
G 025 01	SPICE CAKE (YELLOW CAKE MIX)	1 Piece	100	273 cal	3 g	7 g	52 g	0.2	11 mg	311 mg	30 mg
G 026 00	CHEESE CAKE	1 Piece	100	357 cal	6 g	24 g	30 g	0.4	98 mg	323 mg	53 mg
G 026 01	CHEESE CAKE (MIX)	1 Piece	100	331 cal	5 g	17 g	41 g	1.8	22 mg	440 mg	138 mg
G 026 02	CHEESE CAKE WITH FRUIT TOPPING	1 Piece	100	432 cal	6 g	24 g	50 g	1.1	98 mg	346 mg	66 mg
G 026 03	CHEESE CAKE MIX WITH FRUIT TOPPING	1 Piece	100	366 cal	5 g	17 g	51 g	2.3	22 mg	460 mg	147 mg
G 026 04	CHEESE CAKE WITH SOUR CREAM TOPPING	1 Piece	100	387 cal	6 g	25 g	35 g	0.4	103 mg	333 mg	72 mg
G 026 05	CHEESE CAKE WITH STRAWBERRIES	1 Piece	100	370 cal	6 g	24 g	34 g	1.2	98 mg	324 mg	59 mg
G 027 00	CREAM CHEESE FROSTING	2-1/2 Quarts	1	12009 cal	137 g	634 g	1484 g	0	1990 mg	5378 mg	1467 mg
G 028 00	STRAWBERRY CAKE (CAKE MIX)	1 Piece	100	209 cal	2 g	5 g	38 g	0.2	0 mg	288 mg	17 mg
G 029 00	PINEAPPLE UPSIDE DOWN CAKE	1 Piece	100	341 cal	4 g	14 g	52 g	1	60 mg	340 mg	93 mg
G 029 01	PINEAPPLE UPSIDE DOWN CAKE (MIX)	1 Piece	100	357 cal	3 g	13 g	60 g	0.6	26 mg	353 mg	47 mg
G 029 02	FRUIT COCKTAIL UPSIDE DOWN CAKE (MIX)	1 Piece	100	278 cal	3 g	12 g	41 g	0.5	11 mg	292 mg	29 mg
G 029 03	FRUIT COCKTAIL UPSIDE DOWN CAKE	1 Piece	100	322 cal	4 g	14 g	47 g	1	60 mg	341 mg	87 mg
G 030 00	WHITE CAKE	1 Piece	100	306 cal	3 g	11 g	49 g	0.5	0 mg	338 mg	89 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
G 030 01	WHITE CAKE (WHITE CAKE MIX)	1 Piece	100	288 cal	2 g	9 g	50 g	0	0 mg	299 mg	16 mg
G 030 02	LEMON FILLED CAKE (WHITE CAKE MIX)	1 Piece	100	361 cal	2 g	11 g	64 g	0.5	12 mg	370 mg	23 mg
G 030 03	RASPBERRY FILLED CAKE (WHITE CAKE MIX)	1 Piece	100	286 cal	3 g	12 g	42 g	0.2	0 mg	299 mg	28 mg
G 030 04	STRAWBERRY FILLED CAKE (WHITE CAKE MIX)	1 Piece	100	313 cal	3 g	12 g	50 g	0.2	0 mg	296 mg	27 mg
G 031 00	COCONUT PECAN FROSTING	3 Quarts	1	14029 cal	152 g	978 g	1269 g	67.3	2326 mg	7540 mg	2852 mg
G 032 00	YELLOW CAKE	1 Piece	100	323 cal	4 g	12 g	50 g	0.6	45 mg	300 mg	75 mg
G 032 01	BANANA-FILLED LAYER CAKE	1 Piece	100	369 cal	4 g	13 g	60 g	0.8	57 mg	352 mg	80 mg
G 032 02	BOSTON CREAM PIE	1 Slice	100	330 cal	4 g	10 g	57 g	0.9	48 mg	457 mg	101 mg
G 032 03	MARBLE CAKE	1 Piece	100	321 cal	4 g	13 g	50 g	1.4	47 mg	329 mg	54 mg
G 032 04	COCONUT CAKE	1 Piece	100	305 cal	4 g	14 g	42 g	0.9	52 mg	330 mg	83 mg
G 032 06	DUTCH APPLE CAKE	1 Piece	100	590 cal	4 g	12 g	120 g	1.1	54 mg	342 mg	79 mg
G 032 07	FILLED CAKE (WASHINGTON PIE)	1 Slice	100	308 cal	4 g	8 g	56 g	0.8	45 mg	290 mg	76 mg
G 032 08	YELLOW CAKE (CRUMBS)	1 Cup	100	223 cal	4 g	8 g	34 g	0.5	45 mg	280 mg	74 mg
G 033 00	JELLY ROLL	1 Slice	100	240 cal	3 g	2 g	53 g	0.7	59 mg	120 mg	32 mg
G 034 00	YELLOW CUPCAKES MIX	1 Cupcake	100	276 cal	3 g	7 g	52 g	0	11 mg	311 mg	26 mg
G 034 01	CHOCOLATE CUPCAKES MIX	1 Cupcake	100	286 cal	3 g	10 g	48 g	0	7 mg	376 mg	115 mg
G 034 02	SPICE CAKE CUPCAKES MIX	1 Cupcake	100	278 cal	3 g	7 g	52 g	0.2	11 mg	311 mg	30 mg
G 034 03	GINGERBREAD CUPCAKES MIX	1 Cupcake	100	298 cal	2 g	10 g	50 g	0.8	0 mg	318 mg	43 mg
G 034 04	VANILLA CUPCAKES	1 Cupcake	100	292 cal	2 g	9 g	50 g	0	0 mg	299 mg	16 mg
G 035 00	CHOCO-LITE CAKE	1 Piece	100	225 cal	5 g	2 g	50 g	2.5	0 mg	234 mg	78 mg
G 036 00	LITE CHEESE CAKE	1 Piece	100	262 cal	9 g	6 g	44 g	0.7	4 mg	424 mg	101 mg
H 001 00	APPLE CAKE BROWNIES	1 Brownie	100	257 cal	4 g	11 g	36 g	1.4	24 mg	246 mg	33 mg
H 001 01	APPLE CAKE BROWNIES (GINGERBREAD CAKE MIX)	1 Brownie	100	261 cal	4 g	10 g	41 g	1.7	0 mg	299 mg	50 mg
H 002 00	BROWNIES	1 Brownie	100	364 cal	6 g	19 g	46 g	3	55 mg	132 mg	45 mg
H 002 01	BROWNIES (CHOCOLATE BROWNIE MIX)	1 Brownie	100	375 cal	3 g	19 g	52 g	0	0 mg	206 mg	13 mg
H 002 02	PEANUT BUTTER BROWNIES	1 Brownie	100	377 cal	10 g	18 g	49 g	3.8	55 mg	195 mg	50 mg
H 003 00	BUTTERSCOTCH BROWNIES	1 Brownie	100	328 cal	6 g	17 g	39 g	1.3	57 mg	287 mg	108 mg
H 004 00	CHEWY NUT BARS	2 Each	100	225 cal	5 g	12 g	25 g	1	63 mg	178 mg	58 mg
H 004 01	CONGO BARS	2 Bars	100	240 cal	4 g	12 g	31 g	0.8	41 mg	175 mg	55 mg
H 005 00	SHORTBREAD COOKIES	2 Cookies	100	269 cal	3 g	15 g	31 g	0.7	40 mg	151 mg	9 mg
H 006 00	CRISP TOFFEE BARS	2 Bars	100	223 cal	4 g	14 g	21 g	1	26 mg	102 mg	27 mg
H 007 00	OATMEAL COOKIES	2 Cookies	100	296 cal	6 g	12 g	43 g	3.1	16 mg	169 mg	48 mg
H 007 01	OATMEAL CHOCOLATE CHIP COOKIES	2 Cookies	100	322 cal	6 g	15 g	42 g	3.1	18 mg	177 mg	63 mg
H 007 02	OATMEAL NUT COOKIES	2 Cookies	100	296 cal	7 g	14 g	37 g	3.1	16 mg	169 mg	47 mg
H 008 00	GINGERBREAD COOKIES (MIX)	2 Cookies	100	222 cal	2 g	9 g	33 g	0.4	0 mg	244 mg	25 mg
H 009 00	OATMEAL COOKIES (OATMEAL COOKIE MIX)	2 Cookies	100	253 cal	3 g	15 g	32 g	3.1	31 mg	63 mg	63 mg
H 009 01	OATMEAL RAISIN BARS (OATMEAL COOKIE MIX)	2 Bars	100	125 cal	2 g	5 g	22 g	1.9	17 mg	34 mg	37 mg
H 009 02	OATMEAL CHOCOLATE CHIP COOKIES (OATMEAL COOKIE MX)	2 Cookies	100	199 cal	2 g	14 g	21 g	1.9	18 mg	39 mg	46 mg
H 009 03	OATMEAL RAISIN COOKIES (OATMEAL COOKIE MIX)	2 Cookies	100	125 cal	2 g	5 g	22 g	1.9	17 mg	34 mg	37 mg
H 009 04	SPICED OATMEAL NUT COOKIES (OATMEAL COOKIE MIX)	2 Cookies	100	172 cal	2 g	10 g	21 g	2.2	17 mg	34 mg	41 mg
H 010 00	CRISP CHOCOLATE COOKIES	2 Cookies	100	338 cal	4 g	16 g	47 g	1.8	34 mg	167 mg	35 mg
H 010 01	CHOCOLATE COOKIES (CHOCOLATE COOKIE MIX)	2 Cookies	100	277 cal	2 g	16 g	35 g	0	0 mg	137 mg	9 mg
H 010 02	DOUBLE CHOCOLATE CHIP BARS (CHOCOLATE COOKIE MIX)	2 Bars	100	254 cal	2 g	10 g	41 g	0.3	2 mg	146 mg	28 mg
H 010 03	DOUBLE CHOCOLATE CHIP COOKIES (CHOC COOKIE MIX)	2 Each	100	254 cal	2 g	10 g	41 g	0.3	2 mg	146 mg	28 mg
H 011 00	PEANUT BUTTER COOKIES	2 Cookies	100	257 cal	5 g	15 g	27 g	1.1	24 mg	211 mg	14 mg
H 011 01	PEANUT BUTTER COOKIES (SUGAR COOKIE MIX)	2 Cookies	100	287 cal	4 g	16 g	34 g	0.7	0 mg	245 mg	12 mg
H 011 02	PEANUT BUTTER BARS (SUGAR COOKIE MIX)	2 Bars	100	287 cal	4 g	16 g	34 g	0.7	0 mg	245 mg	12 mg
H 012 00	CHOCOLATE DROP COOKIES	2 Cookies	100	241 cal	4 g	13 g	30 g	1.7	20 mg	158 mg	27 mg
H 012 01	CHOCOLATE DROP COOKIES (CHOCOLATE BROWNIE MIX)	2 Cookies	100	241 cal	2 g	12 g	35 g	0	0 mg	138 mg	9 mg
H 013 00	SUGAR COOKIES	2 Cookies	100	243 cal	3 g	8 g	40 g	0.6	20 mg	223 mg	63 mg
H 013 01	SUGAR COOKIES (SUGAR COOKIE MIX)	2 Cookies	100	218 cal	1 g	10 g	32 g	0	0 mg	191 mg	8 mg
H 013 02	SNICKERDOODLE COOKIES	2 Cookies	100	246 cal	3 g	8 g	41 g	0.8	20 mg	223 mg	68 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
H 013 03	SNICKERDOODLE COOKIES (SUGAR COOKIE MIX)	2 Cookies	100	231 cal	1 g	10 g	34 g	0.2	0 mg	191 mg	12 mg
H 014 00	COCONUT RAISIN DROP COOKIES	2 Cookies	100	192 cal	3 g	9 g	25 g	1	8 mg	102 mg	43 mg
H 015 00	CRISP DROP COOKIES	2 Each	100	249 cal	3 g	10 g	37 g	0.7	6 mg	233 mg	9 mg
H 016 00	COCONUT CEREAL COOKIES	2 Cookies	100	241 cal	3 g	12 g	31 g	1.1	20 mg	177 mg	12 mg
H 017 00	HERMITS	2 Each	100	229 cal	3 g	7 g	39 g	1	17 mg	50 mg	22 mg
H 018 00	RAISIN NUT BARS	1 Bar	100	275 cal	6 g	12 g	37 g	1.7	18 mg	191 mg	30 mg
H 018 01	GINGER RAISIN BARS (OATMEAL COOKIE & GINGRBRD MIX)	1 Bar	100	100 cal	1 g	3 g	19 g	1.3	8 mg	48 mg	25 mg
H 019 00	GINGER MOLASSES COOKIES (SUGAR COOKIE MIX)	2 Cookies	100	231 cal	1 g	10 g	34 g	0.1	0 mg	192 mg	15 mg
H 019 01	GINGER MOLASSES BARS (SUGAR COOKIE MIX)	2 Bars	100	231 cal	1 g	10 g	34 g	0.1	0 mg	192 mg	15 mg
H 020 00	CHOCOLATE CHIP COOKIES	2 Cookies	100	266 cal	3 g	15 g	30 g	0.8	22 mg	196 mg	29 mg
H 020 01	CHOCOLATE CHIP COOKIES (SUGAR COOKIE MIX)	2 Cookies	100	223 cal	1 g	10 g	32 g	0	0 mg	191 mg	8 mg
H 020 02	CHOCOLATE CHIP BARS (SUGAR COOKIE MIX)	2 Cookies	100	223 cal	1 g	10 g	32 g	0	0 mg	191 mg	8 mg
H 021 00	LEMON COOKIES	2 Cookies	100	310 cal	4 g	16 g	38 g	0.7	52 mg	231 mg	11 mg
H 021 01	ALMOND COOKIES	2 Cookies	100	310 cal	4 g	16 g	38 g	0.7	52 mg	231 mg	11 mg
H 021 02	ORANGE COOKIES	2 Cookies	100	310 cal	4 g	16 g	38 g	0.7	52 mg	231 mg	11 mg
H 021 03	VANILLA COOKIES	2 Cookies	100	310 cal	4 g	16 g	38 g	0.7	52 mg	231 mg	11 mg
H 022 00	FUDGY BROWNIES	1 Brownie	100	232 cal	5 g	4 g	50 g	3.7	0 mg	234 mg	63 mg
H 023 00	CRISPY MARSHMALLOW SQUARES	2 Bars	100	269 cal	2 g	6 g	52 g	0.3	0 mg	364 mg	6 mg
H 024 00	BANANA SPLIT BROWNIES	1 Brownie	100	250 cal	3 g	4 g	53 g	2.2	0 mg	190 mg	16 mg
H 025 00	ABRACADABRA BARS	2 Bars	100	218 cal	3 g	4 g	42 g	1.5	0 mg	205 mg	13 mg
H 800 00	COOKIES, FROZEN, OATMEAL RAISIN	2 Cookies	100	446 cal	5 g	19 g	63 g	0	39 mg	311 mg	43 mg
H 801 00	COOKIES, FROZEN, SNICKERDOODLE	2 Cookies	100	459 cal	4 g	22 g	62 g	0.7	30 mg	440 mg	85 mg
H 802 00	COOKIES, FROZEN, CHOCOLATE CHIP	2 Cookies	100	467 cal	5 g	22 g	64 g	1.6	25 mg	218 mg	26 mg
I 001 00	PIE CRUST	1 Crust	26	995 cal	12 g	64 g	92 g	3.2	0 mg	808 mg	19 mg
I 001 01	PIE CRUST (DOUGH ROLLING MACHINE)	1 Crust	26	982 cal	14 g	65 g	87 g	2.9	0 mg	1260 mg	28 mg
I 001 02	PIE CRUST (MANUAL MIXING METHOD)	1 Crust	26	995 cal	12 g	64 g	92 g	3.2	0 mg	808 mg	19 mg
I 002 00	GRAHAM CRACKER CRUST	1 Crust	13	1181 cal	9 g	65 g	144 g	3.5	0 mg	1380 mg	50 mg
I 002 01	GRAHAM CRACKER CRUST (PREFORMED CRUST)	1 Crust	13	716 cal	5 g	38 g	88 g	1.3	14 mg	313 mg	57 mg
I 003 00	MINCEMEAT PIE	1 Slice	100	330 cal	3 g	17 g	42 g	2.1	0 mg	236 mg	11 mg
I 004 00	EGG AND MILK WASH	1-1/2 Cups	2	91 cal	8 g	5 g	3 g	0	215 mg	96 mg	91 mg
I 004 01	EGG AND WATER WASH	1-1/2 Cups	2	120 cal	10 g	8 g	1 g	0	350 mg	113 mg	51 mg
I 004 02	MILK AND WATER WASH	1-1/2 Cups	2	36 cal	4 g	0 g	5 g	0	2 mg	59 mg	125 mg
I 005 00	MERINGUE	2-1/2 Cups	13	401 cal	9 g	0 g	93 g	0	0 mg	406 mg	6 mg
I 005 01	MERINGUE (DEHYDRATED)	2-1/2 Cups	13	225 cal	2 g	0 g	56 g	0	0 mg	31 mg	74 mg
I 006 00	VANILLA CREAM PIE	1 Slice	100	326 cal	4 g	17 g	38 g	0.5	46 mg	268 mg	49 mg
I 006 01	BANANA CREAM PIE	1 Slice	100	292 cal	4 g	13 g	40 g	1.3	46 mg	265 mg	50 mg
I 007 00	VANILLA CREAM PIE (DESSERT POWDER, INSTANT)	1 Slice	100	301 cal	3 g	13 g	43 g	0.4	1 mg	506 mg	54 mg
I 007 01	STRAWBERRY GLAZED CREAM PIE (INSTANT)	1 Slice	100	335 cal	3 g	13 g	52 g	1.3	1 mg	508 mg	61 mg
I 007 02	COCONUT CREAM PIE (INSTANT)	1 Slice	100	355 cal	4 g	17 g	48 g	0.9	1 mg	535 mg	56 mg
I 007 03	PINEAPPLE CREAM PIE (INSTANT)	1 Slice	100	310 cal	3 g	13 g	45 g	0.6	1 mg	506 mg	56 mg
I 008 01	DUTCH APPLE PIE (CANNED APPLES-CORNSTARCH)	1 Slice	100	358 cal	3 g	16 g	54 g	1.9	18 mg	225 mg	17 mg
I 008 02	FRENCH APPLE PIE (CANNED APPLES-CORNSTARCH)	1 Slice	100	417 cal	3 g	18 g	61 g	2	4 mg	274 mg	10 mg
I 009 00	APPLE PIE (CANNED APPLES-CORNSTARCH)	1 Slice	100	370 cal	3 g	18 g	50 g	2	2 mg	269 mg	10 mg
I 009 01	APPLE PIE (PREPARED PIE FILLING)	1 Slice	100	363 cal	3 g	17 g	51 g	1.9	0 mg	256 mg	9 mg
I 009 02	DUTCH APPLE PIE (PREPARED PIE FILLING)	1 Slice	100	335 cal	3 g	14 g	52 g	1.8	13 mg	204 mg	15 mg
I 010 00	APPLE COBBLER	1 Slice	100	433 cal	4 g	21 g	58 g	2.1	0 mg	311 mg	11 mg
I 010 01	PEACH COBBLER	1 Serving	100	484 cal	4 g	21 g	72 g	2.2	0 mg	299 mg	21 mg
I 010 02	BLUEBERRY COBBLER	1 Piece	100	438 cal	4 g	21 g	60 g	2.5	0 mg	327 mg	35 mg
I 010 03	CHERRY COBBLER	1 Piece	100	449 cal	5 g	21 g	62 g	1.7	0 mg	273 mg	18 mg
I 010 04	STREUSEL-TOPPED APPLE COBBLER	1 Piece	100	492 cal	4 g	22 g	71 g	2.3	25 mg	303 mg	24 mg
I 011 00	CHOCOLATE MOUSSE PIE	1 Slice	100	247 cal	4 g	11 g	33 g	0.9	1 mg	377 mg	50 mg
I 012 00	SWEET POTATO PIE	1 Slice	100	252 cal	4 g	10 g	36 g	1.7	37 mg	221 mg	47 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
I 013 00	PUMPKIN PIE	1 Slice	100	242 cal	4 g	10 g	35 g	2.1	46 mg	370 mg	56 mg
I 014 00	PINEAPPLE PIE (CANNED PINEAPPLE-CORNSTARCH)	1 Slice	100	334 cal	3 g	17 g	43 g	1	0 mg	229 mg	8 mg
I 015 00	BERRY PIE (FROZEN BERRIES-CORNSTARCH)	1 Slice	100	368 cal	4 g	18 g	48 g	2.4	4 mg	260 mg	10 mg
I 015 01	BLUEBERRY PIE (FROZEN BLUEBERRIES)	1 Slice	100	407 cal	4 g	18 g	58 g	2.5	4 mg	261 mg	11 mg
I 017 00	BLUEBERRY PIE (CANNED BLUEBERRIES-CORNSTARCH)	1 Serving	100	446 cal	4 g	17 g	71 g	2.3	0 mg	267 mg	11 mg
I 017 01	BLUEBERRY PIE (PREPARED FILLING)	1 Slice	100	351 cal	3 g	17 g	48 g	2	0 mg	262 mg	28 mg
I 019 00	BUTTERSCOTCH CREAM PIE (DESSERT POWDER, INSTANT)	1 Slice	100	301 cal	3 g	13 g	43 g	0.4	1 mg	492 mg	56 mg
I 020 00	PEACH PIE (FROZEN PEACHES-CORNSTARCH)	1 Slice	100	418 cal	4 g	17 g	64 g	2.5	0 mg	269 mg	9 mg
I 022 00	CHERRY PIE (CANNED CHERRIES-CORNSTARCH)	1 Slice	100	406 cal	4 g	17 g	61 g	2.2	0 mg	265 mg	16 mg
I 022 01	CHERRY PIE (PIE FILLING, PREPARED)	1 Slice	100	377 cal	4 g	17 g	54 g	1.5	0 mg	219 mg	16 mg
I 024 00	PEACH PIE (CANNED PEACHES-CORNSTARCH)	1 Slice	100	374 cal	4 g	17 g	54 g	2	0 mg	262 mg	11 mg
I 024 01	PEACH PIE (PREPARED PIE FILLING)	1 Slice	100	410 cal	4 g	17 g	64 g	1.9	0 mg	245 mg	19 mg
I 026 00	CREAMY COCONUT PIE	1 Slice	100	296 cal	4 g	21 g	23 g	1	23 mg	214 mg	43 mg
I 026 01	CREAMY BANANA COCONUT PIE	1 Slice	100	307 cal	4 g	21 g	26 g	1.4	23 mg	214 mg	44 mg
I 026 02	AMBROSIA PIE	1 Slice	100	314 cal	4 g	21 g	28 g	1.1	23 mg	214 mg	44 mg
I 027 00	CHERRY CRUMBLE PIE	1 Slice	100	456 cal	4 g	16 g	77 g	2.3	0 mg	185 mg	16 mg
I 028 00	CHOCOLATE CREAM PIE	1 Slice	100	333 cal	5 g	16 g	43 g	1.4	31 mg	257 mg	60 mg
I 028 01	CHOCOLATE CREAM PIE (DESSERT POWDER, INSTANT)	1 Slice	100	331 cal	4 g	14 g	50 g	1.4	1 mg	620 mg	64 mg
I 029 00	CHOCOLATE AND VANILLA CREAM PIE (INSTANT)	1 Slice	100	290 cal	4 g	13 g	40 g	0.7	1 mg	446 mg	58 mg
I 030 00	FRIED APPLE PIE	1 Pie	100	366 cal	5 g	16 g	52 g	1.9	0 mg	340 mg	73 mg
I 030 01	FRIED LEMON PIE	1 Pie	100	349 cal	5 g	16 g	47 g	2.2	0 mg	338 mg	76 mg
I 030 02	FRIED CHERRY PIE	1 Pie	100	375 cal	5 g	16 g	54 g	1.6	0 mg	318 mg	78 mg
I 030 03	FRIED PEACH PIE	1 Pie	100	395 cal	5 g	16 g	59 g	1.9	0 mg	333 mg	79 mg
I 030 04	FRIED BLUEBERRY PIE	1 Pie	100	358 cal	5 g	16 g	50 g	1.9	0 mg	344 mg	85 mg
I 031 00	PECAN PIE	1 Slice	100	504 cal	6 g	21 g	77 g	1.5	126 mg	396 mg	25 mg
I 031 01	WALNUT PIE	1 Slice	100	502 cal	6 g	21 g	76 g	1	126 mg	397 mg	32 mg
I 032 00	LEMON CHIFFON PIE	1 Slice	100	216 cal	3 g	10 g	30 g	0.5	0 mg	151 mg	10 mg
I 032 01	PINEAPPLE CHIFFON PIE	1 Slice	100	216 cal	3 g	10 g	30 g	0.5	0 mg	149 mg	10 mg
I 032 02	STRAWBERRY CHIFFON PIE	1 Slice	100	209 cal	3 g	10 g	28 g	0.9	0 mg	145 mg	13 mg
I 033 00	LEMON MERINGUE PIE	1 Slice	100	327 cal	3 g	12 g	53 g	0.6	39 mg	317 mg	11 mg
I 033 01	LEMON MERINGUE PIE (PIE FILLING PREPARED)	1 Slice	100	213 cal	2 g	9 g	33 g	1.9	0 mg	156 mg	11 mg
I 034 00	FRUIT TURNOVERS	1 Turnover	100	315 cal	3 g	17 g	38 g	1.4	0 mg	236 mg	11 mg
I 035 00	FRUIT DUMPLINGS	1 Each	100	378 cal	4 g	21 g	44 g	1.6	0 mg	287 mg	8 mg
I 500 00	KEY LIME PIE	1 Slice	100	337 cal	4 g	10 g	60 g	1.1	73 mg	177 mg	20 mg
I 800 00	PIES, FROZEN	1 Slice	100	84 cal	1 g	5 g	8 g	0.2	0 mg	106 mg	3 mg
I 801 00	ELEPHANT EARS (FROZEN PUFF PASTRY)	2 Cookies	200	75 cal	1 g	4 g	9 g	0.3	0 mg	44 mg	7 mg
J 001 01	APPLE CRISP (PIE FILLING & COOKIE MIX)	1 Piece	100	190 cal	1 g	7 g	34 g	2.1	12 mg	103 mg	30 mg
J 002 00	VANILLA SOFT SERVE ICE CREAM (DEHY)	3/4 Cup	100	166 cal	1 g	0 g	40 g	0	1 mg	71 mg	29 mg
J 002 01	CHOCOLATE SOFT SERVE ICE CREAM (DEHY)	3/4 Cup	100	166 cal	1 g	1 g	40 g	0	1 mg	168 mg	29 mg
J 002 02	CHOCOLATE MILK SHAKE (DEHY MIX)	8 Ounces	100	166 cal	1 g	1 g	40 g	0	1 mg	169 mg	29 mg
J 002 03	STRAWBERRY SOFT SERVE ICE CREAM (DEHY)	3/4 Cup	100	176 cal	1 g	0 g	43 g	0.6	1 mg	71 mg	33 mg
J 002 04	VANILLA MILK SHAKE (DEHY MIX)	1 Cup	100	166 cal	1 g	0 g	40 g	0	1 mg	72 mg	29 mg
J 003 00	BAKED APPLES	1 Serving	100	207 cal	0 g	1 g	51 g	3.5	2 mg	34 mg	11 mg
J 003 01	BAKED APPLES WITH RAISIN NUT FILLING	1 Serving	100	264 cal	1 g	5 g	58 g	4.3	2 mg	35 mg	16 mg
J 003 02	BAKED APPLES WITH RAISIN COCONUT FILLING	1 Serving	100	241 cal	0 g	2 g	58 g	3.9	2 mg	42 mg	14 mg
J 004 00	VANILLA SOFT SERVE ICE CREAM (LIQUID MIX)	3/4 Cup	100	101 cal	3 g	3 g	16 g	0	0 mg	0 mg	84 mg
J 004 01	STRAWBERRY SOFT SERVE ICE CREAM (LIQUID MIX)	3/4 Cup	100	111 cal	3 g	3 g	18 g	0.6	0 mg	1 mg	89 mg
J 004 02	VANILLA MILK SHAKE (LIQUID MIX)	1 Cup	100	115 cal	3 g	4 g	18 g	0	0 mg	1 mg	97 mg
J 004 03	CHOCOLATE MILK SHAKE (LIQUID MIX)	1 Cup	100	130 cal	4 g	4 g	20 g	0	0 mg	0 mg	108 mg
J 004 04	CHOCOLATE SOFT SERVE ICE CREAM (LIQUID MIX)	3/4 Cup	100	101 cal	3 g	3 g	16 g	0	0 mg	0 mg	84 mg
J 005 00	FLUFFY FRUIT CUP	1/2 Cup	100	82 cal	1 g	0 g	20 g	1.6	0 mg	5 mg	20 mg
J 005 01	YOGURT FRUIT CUP	1/2 Cup	100	90 cal	2 g	0 g	21 g	1.6	1 mg	16 mg	50 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
J 006 00	FRUIT CUP	1/2 Cup	100	61 cal	1 g	0 g	16 g	1.9	0 mg	3 mg	15 mg
J 006 01	AMBROSIA	1/2 Cup	100	85 cal	1 g	2 g	18 g	2.1	0 mg	15 mg	16 mg
J 006 02	BANANA FRUIT CUP	1/2 Cup	100	82 cal	1 g	0 g	21 g	2.2	0 mg	1 mg	14 mg
J 006 03	MELON FRUIT CUP	1/2 Cup	100	54 cal	1 g	0 g	14 g	1.8	0 mg	3 mg	14 mg
J 006 04	STRAWBERRY FRUIT CUP	1/2 Cup	100	58 cal	1 g	0 g	14 g	2.3	0 mg	3 mg	21 mg
J 006 05	FRUIT COCKTAIL FRUIT CUP	1/2 Cup	100	58 cal	1 g	0 g	15 g	1.7	0 mg	4 mg	14 mg
J 006 06	SPICED FRUIT CUP	1/2 Cup	100	58 cal	0 g	0 g	15 g	1.7	0 mg	3 mg	18 mg
J 006 07	MANDARIN ORANGE AND PINEAPPLE FRUIT CUP	1/2 Cup	100	74 cal	1 g	0 g	19 g	1.4	0 mg	4 mg	20 mg
J 007 00	FRUIT GELATIN	2/3 Cup	100	116 cal	2 g	0 g	28 g	0.6	0 mg	65 mg	8 mg
J 007 01	BANANA GELATIN	2/3 Cup	100	130 cal	2 g	0 g	32 g	1.1	0 mg	64 mg	6 mg
J 007 02	FRUIT FLAVORED GELATIN	1/2 Cup	100	90 cal	2 g	0 g	21 g	0	0 mg	63 mg	3 mg
J 007 03	FRUIT GELATIN (CRUSHED ICE METHOD)	2/3 Cup	100	116 cal	2 g	0 g	28 g	0.6	0 mg	65 mg	7 mg
J 007 04	STRAWBERRY GELATIN	2/3 Cup	100	117 cal	2 g	0 g	28 g	1.6	0 mg	64 mg	14 mg
J 007 05	PEACH GELATIN	2/3 Cup	100	160 cal	2 g	0 g	39 g	1.3	0 mg	66 mg	4 mg
J 008 00	PEACH CRISP	1 Piece	100	203 cal	2 g	8 g	32 g	1.9	0 mg	211 mg	23 mg
J 008 01	CHERRY CRISP (PIE FILLING COOKIE MIX)	1 Piece	100	215 cal	1 g	6 g	41 g	1.5	8 mg	69 mg	30 mg
J 008 02	CHERRY CRISP	1 Piece	100	232 cal	2 g	8 g	39 g	2.4	0 mg	209 mg	30 mg
J 008 03	PEACH CRISP (PIE FILLING COOKIE MIX)	1 Piece	100	250 cal	1 g	6 g	51 g	2	8 mg	96 mg	33 mg
J 008 04	BLUEBERRY CRISP (PIE FILLING COOKIE MIX)	1 Serving	100	219 cal	1 g	10 g	35 g	2.1	8 mg	158 mg	44 mg
J 010 01	APPLE CRUNCH (APPLE PIE FILLING)	1 Piece	100	231 cal	2 g	7 g	42 g	1	6 mg	236 mg	18 mg
J 010 02	BLUEBERRY CRUNCH (BLUEBERRY PIE FILLING)	1 Serving	100	235 cal	2 g	7 g	43 g	1.3	6 mg	249 mg	36 mg
J 010 03	CHERRY CRUNCH (CHERRY PIE FILLING)	1 Piece	100	243 cal	2 g	7 g	44 g	0.7	6 mg	207 mg	24 mg
J 010 05	PEACH CRUNCH (PEACH PIE FILLING)	1 Piece	100	269 cal	2 g	7 g	52 g	1.1	6 mg	227 mg	26 mg
J 011 00	BANANA SPLIT	1 Each	100	361 cal	5 g	16 g	53 g	1.7	30 mg	110 mg	132 mg
J 012 00	VANILLA SOFT SERVE YOGURT (DEHYDRATED)	3/4 Cup	100	166 cal	1 g	0 g	40 g	0	1 mg	71 mg	29 mg
J 012 01	CHOCOLATE SOFT SERVE YOGURT (DEHYDRATED)	3/4 Cup	100	166 cal	1 g	1 g	40 g	0	1 mg	169 mg	30 mg
J 013 00	TAPIOCA PUDDING	1/2 Cup	100	119 cal	3 g	3 g	21 g	0	36 mg	139 mg	92 mg
J 014 00	VANILLA CREAM PUDDING (INSTANT)	1/2 Cup	100	136 cal	2 g	0 g	32 g	0	1 mg	503 mg	77 mg
J 014 01	BANANA CREAM PUDDING (INSTANT)	1/2 Cup	100	134 cal	2 g	0 g	32 g	0.7	1 mg	403 mg	63 mg
J 014 02	COCONUT CREAM PUDDING (INSTANT)	1/2 Cup	100	178 cal	2 g	3 g	36 g	0.4	1 mg	525 mg	78 mg
J 014 03	PINEAPPLE CREAM PUDDING (INSTANT)	1/2 Cup	100	128 cal	2 g	0 g	31 g	0.3	1 mg	403 mg	66 mg
J 014 04	BUTTERSCOTCH CREAM PUDDING (INSTANT)	1/2 Cup	100	136 cal	2 g	0 g	32 g	0	1 mg	485 mg	79 mg
J 014 05	CHOCOLATE CREAM PUDDING (INSTANT)	1/2 Cup	100	128 cal	3 g	1 g	30 g	0.9	1 mg	465 mg	81 mg
J 015 00	BAKED RICE PUDDING	1/2 Cup	100	173 cal	4 g	4 g	30 g	0.6	48 mg	156 mg	62 mg
J 015 01	BAKED RICE PUDDING (FROZEN EGGS AND EGG WHITES)	1/2 Cup	100	168 cal	4 g	4 g	30 g	0.6	24 mg	157 mg	59 mg
J 016 00	BREAD PUDDING	2/3 Cup	100	205 cal	5 g	6 g	34 g	1	30 mg	310 mg	93 mg
J 016 01	CHOCOLATE CHIP BREAD PUDDING	2/3 Cup	100	218 cal	6 g	9 g	30 g	0.8	32 mg	318 mg	106 mg
J 016 02	COCONUT BREAD PUDDING	2/3 Cup	100	208 cal	5 g	8 g	28 g	0.8	30 mg	331 mg	88 mg
J 017 00	CREAM PUFFS	1 Each	100	139 cal	3 g	10 g	10 g	0.3	90 mg	121 mg	14 mg
J 017 01	ECLAIRS	1 Each	100	139 cal	3 g	10 g	10 g	0.3	90 mg	121 mg	14 mg
J 018 00	VANILLA CREAM PUDDING	1/2 Cup	100	154 cal	3 g	5 g	25 g	0	58 mg	193 mg	58 mg
J 018 01	CHOCOLATE CREAM PUDDING	1/2 Cup	100	181 cal	2 g	4 g	36 g	1.2	11 mg	180 mg	56 mg
J 020 00	CREAMY RICE PUDDING	1/2 Cup	100	170 cal	3 g	4 g	30 g	0.6	49 mg	254 mg	63 mg
J 021 00	FLUFFY PINEAPPLE RICE CUP	1/2 Cup	100	140 cal	2 g	6 g	22 g	0.6	0 mg	56 mg	22 mg
J 022 00	BREAKFAST BREAD PUDDING	2/3 Cup	100	206 cal	7 g	3 g	39 g	2.6	1 mg	300 mg	99 mg
J 023 00	BAKED CINNAMON APPLE SLICES	1/2 Cup	100	106 cal	0 g	1 g	26 g	2.3	0 mg	4 mg	8 mg
J 500 00	BREAD PUDDING WITH HARD SAUCE	1 Piece	100	243 cal	5 g	6 g	43 g	1.1	1 mg	206 mg	54 mg
J 504 00	BAKED BANANAS	1/2 Cup	100	169 cal	1 g	0 g	44 g	2.7	0 mg	4 mg	13 mg
J 800 00	HOT CINNAMON APPLE SAUCE	3 Ounces	100	71 cal	0 g	0 g	19 g	1.3	0 mg	3 mg	9 mg
K 001 00	WHIPPED CREAM	2 Tablespoons	100	72 cal	0 g	7 g	2 g	0	26 mg	7 mg	12 mg
K 002 00	WHIPPED TOPPING (DEHYDRATED)	3 Tablespoons	100	29 cal	0 g	2 g	3 g	0	0 mg	8 mg	7 mg
K 002 01	WHIPPED TOPPING (FROZEN)	3 Tablespoons	100	14 cal	0 g	1 g	1 g	0	0 mg	1 mg	0 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
K 003 00	RUM SAUCE	2 Tablespoons	100	130 cal	0 g	9 g	12 g	0	25 mg	101 mg	18 mg
K 004 00	CHERRY SAUCE	2-1/2 Tablespoons	100	46 cal	0 g	0 g	12 g	0.2	0 mg	4 mg	4 mg
K 005 00	CHOCOLATE SAUCE	2 Tablespoons	100	83 cal	1 g	3 g	16 g	0.9	6 mg	31 mg	19 mg
K 005 01	CHOCOLATE COCONUT SAUCE	2 Tablespoons	100	109 cal	1 g	4 g	18 g	1.1	6 mg	45 mg	20 mg
K 005 02	CHOCOLATE MARSHMALLOW SAUCE	2 Tablespoons	100	97 cal	1 g	3 g	19 g	0.9	6 mg	33 mg	19 mg
K 005 03	CHOCOLATE NUT SAUCE	2 Tablespoons	100	109 cal	2 g	5 g	16 g	1.2	6 mg	32 mg	23 mg
K 005 04	CHOCOLATE MINT SAUCE	2 Tablespoons	100	83 cal	1 g	3 g	16 g	0.9	6 mg	31 mg	19 mg
K 006 00	CHERRY JUBILEE SAUCE	1/4 Cup	100	86 cal	0 g	0 g	22 g	0.9	0 mg	25 mg	6 mg
K 007 00	STRAWBERRY GLAZE TOPPING	2-1/2 Tablespoons	100	36 cal	0 g	0 g	9 g	0.9	0 mg	2 mg	7 mg
K 008 00	VANILLA SAUCE	1/4 Cup	100	69 cal	0 g	2 g	13 g	0	0 mg	47 mg	2 mg
L 001 01	GRILLED OR OVEN FRIED BACON (PRECOOKED BACON)	2 Slices	100	29 cal	2 g	2 g	0 g	0	4 mg	81 mg	1 mg
L 002 00	OVEN FRIED BACON	2 Slices	100	88 cal	5 g	8 g	0 g	0	13 mg	243 mg	2 mg
L 002 02	GRILLED BACON	2 Slices	100	88 cal	5 g	8 g	0 g	0	13 mg	243 mg	2 mg
L 002 03	GRILLED OR OVEN FRIED CANADIAN BACON	2 Slices	100	29 cal	4 g	1 g	0 g	0	9 mg	245 mg	2 mg
L 003 00	CHICKEN ENCHILADAS (CANNED CHICKEN)	2 Enchiladas	100	412 cal	32 g	16 g	34 g	3.6	71 mg	2091 mg	137 mg
L 003 01	CHICKEN ENCHILADAS (COOKED DICED)	2 Enchiladas	100	533 cal	44 g	17 g	48 g	4.5	105 mg	1769 mg	149 mg
L 004 00	ROAST RIB OF BEEF	6 Ounces	100	743 cal	67 g	50 g	0 g	0	222 mg	161 mg	24 mg
L 004 01	STEAMSHIP ROUND OF BEEF (ROUND, BONE-IN)	6 Ounces	100	470 cal	71 g	18 g	0 g	0	216 mg	115 mg	12 mg
L 004 02	STEAMSHIP ROUND OF BEEF (ROUND, BONELESS)	6 Ounces	100	407 cal	62 g	16 g	0 g	0	187 mg	99 mg	10 mg
L 004 03	ROAST RIB OF BEEF (BONELESS RIBEYE ROLL)	6 Ounces	100	675 cal	57 g	48 g	0 g	0	195 mg	137 mg	23 mg
L 005 00	ROAST BEEF	4 Ounces	100	276 cal	39 g	12 g	0 g	0	112 mg	86 mg	11 mg
L 005 01	ROAST BEEF (PRECOOKED)	4 Ounces	100	249 cal	35 g	11 g	0 g	0	101 mg	78 mg	9 mg
L 006 00	SUKIYAKI	1 Cup	100	219 cal	27 g	8 g	9 g	2.2	70 mg	770 mg	48 mg
L 007 00	GRILLED STEAK	1 Steak	100	433 cal	45 g	27 g	0 g	0	144 mg	101 mg	18 mg
L 007 01	GRILLED TENDERLOIN STEAK	1 Steak	100	436 cal	38 g	30 g	0 g	0	129 mg	88 mg	12 mg
L 008 00	TERIYAKI STEAK	1 Steak	100	434 cal	48 g	23 g	6 g	0.5	144 mg	1551 mg	31 mg
L 009 00	SPINACH LASAGNA	9-1/2 Ounces	100	370 cal	25 g	12 g	45 g	6.9	89 mg	1142 mg	425 mg
L 010 00	BEEF POT ROAST	3-1/2 Ounces	100	406 cal	35 g	26 g	6 g	0.4	114 mg	411 mg	18 mg
L 010 01	GINGER POT ROAST	3-1/2 Ounces	100	415 cal	36 g	26 g	8 g	0.5	114 mg	475 mg	27 mg
L 010 02	YANKEE POT ROAST	3-1/2 Ounces	100	419 cal	36 g	26 g	9 g	0.8	114 mg	479 mg	30 mg
L 011 00	SIMMERED BEEF	4 Ounces	100	397 cal	35 g	26 g	4 g	1.2	114 mg	416 mg	34 mg
L 012 00	COUNTRY STYLE STEAK	6-1/2 Ounces	100	393 cal	39 g	19 g	14 g	0.6	137 mg	624 mg	36 mg
L 013 00	PEPPER STEAK	5-1/2 Ounces	100	225 cal	30 g	8 g	7 g	1.3	86 mg	443 mg	16 mg
L 013 01	ORIENTAL PEPPER STEAK	5-1/2 Ounces	100	227 cal	30 g	8 g	8 g	1.5	86 mg	463 mg	18 mg
L 014 00	GROUND BEEF CORDON BLEU	5 Ounces	100	377 cal	36 g	22 g	7 g	0.4	124 mg	766 mg	296 mg
L 015 00	STEAK SMOTHERED WITH ONIONS	3-1/2 Ounces	100	329 cal	37 g	16 g	8 g	1.6	108 mg	297 mg	25 mg
L 015 01	STEAK STRIPS SMOTHERED WITH ONIONS	3/4 Cup	100	291 cal	30 g	15 g	8 g	1.6	86 mg	286 mg	24 mg
L 016 00	SWISS STEAK WITH TOMATO SAUCE	7-1/2 Ounces	100	328 cal	37 g	16 g	8 g	0.5	108 mg	388 mg	27 mg
L 016 01	SWISS STEAK WITH BROWN GRAVY	7-1/2 Ounces	100	329 cal	37 g	16 g	7 g	0.7	108 mg	545 mg	16 mg
L 016 03	SWISS STEAK WITH TOMATO SOUP	7-1/2 Ounces	100	339 cal	37 g	17 g	9 g	0.7	108 mg	489 mg	17 mg
L 016 04	SWISS STEAK WITH MUSHROOM GRAVY	7-1/2 Ounces	100	338 cal	37 g	18 g	6 g	0.5	108 mg	451 mg	25 mg
L 017 00	BRAISED BEEF AND NOODLES	1-1/4 Cups	100	294 cal	26 g	11 g	21 g	1.2	81 mg	716 mg	27 mg
L 017 01	BRAISED BEEF CUBES	6-1/2 Ounces	100	223 cal	24 g	10 g	7 g	0.6	66 mg	428 mg	14 mg
L 018 00	BARBECUED BEEF CUBES	6-1/2 Ounces	100	307 cal	25 g	11 g	29 g	2.5	66 mg	1238 mg	44 mg
L 018 01	BARBECUED BEEF CUBES (CANNED BEEF)	6-1/2 Ounces	100	287 cal	27 g	12 g	18 g	1.5	73 mg	817 mg	29 mg
L 019 00	STUFFED FLOUNDER CREOLE	4-1/2 Ounces	100	306 cal	32 g	6 g	30 g	2.6	97 mg	387 mg	63 mg
L 020 00	BEEF AND CORN PIE	1-1/2 Cups	100	372 cal	33 g	19 g	18 g	2	113 mg	674 mg	46 mg
L 020 01	TURKEY CORN PIE	1-1/2 Cups	100	284 cal	28 g	12 g	18 g	1.9	92 mg	731 mg	66 mg
L 021 00	BEEF POT PIE WITH BISCUIT TOPPING	1 Cup	100	412 cal	28 g	15 g	41 g	3	66 mg	825 mg	141 mg
L 021 01	BEEF POT PIE WITH PIE CRUST TOPPING	1 Cup	100	332 cal	26 g	15 g	24 g	2.4	66 mg	515 mg	28 mg
L 022 00	BEEF STEW	1-1/4 Cups	100	286 cal	25 g	11 g	22 g	3.3	66 mg	593 mg	44 mg
L 022 01	BEEF STEW (CANNED)	1-1/4 Cups	100	286 cal	15 g	16 g	21 g	4.6	49 mg	1240 mg	36 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 022 02	EL RANCHO STEW	1 Cup	100	278 cal	25 g	11 g	20 g	2.9	66 mg	396 mg	26 mg
L 023 00	CARIBBEAN CHICKEN BREAST (BREAST BONELESS)	5 Ounces	100	202 cal	32 g	4 g	7 g	0.5	88 mg	212 mg	24 mg
L 024 00	STUFFED CABBAGE ROLLS	2 Rolls	100	325 cal	27 g	13 g	25 g	4.1	85 mg	751 mg	80 mg
L 024 01	STUFFED CABBAGE ROLLS (TOMATO SOUP)	2 Rolls	100	322 cal	27 g	14 g	23 g	3.2	85 mg	697 mg	75 mg
L 024 02	STUFFED CABBAGE ROLLS (GROUND TURKEY)	2 Rolls	100	258 cal	23 g	8 g	26 g	4.2	68 mg	681 mg	97 mg
L 025 00	LASAGNA	9.5 Ounces	100	403 cal	33 g	14 g	35 g	3.2	131 mg	963 mg	289 mg
L 025 01	LASAGNA (GROUND TURKEY)	9-1/2 Ounces	100	396 cal	33 g	12 g	40 g	4.5	126 mg	1077 mg	320 mg
L 025 02	LASAGNA (FROZEN)	9 Ounces	100	312 cal	21 g	13 g	27 g	3.2	36 mg	760 mg	272 mg
L 025 03	LASAGNA (CANNED PIZZA SAUCE)	9 Ounces	100	454 cal	35 g	16 g	40 g	4.6	136 mg	757 mg	356 mg
L 026 00	BAKED BREADED CLAM STRIPS	3 Ounces	100	285 cal	12 g	14 g	27 g	1.8	13 mg	623 mg	36 mg
L 026 01	FRENCH FRIED BREADED CLAM STRIPS	3 Ounces	100	325 cal	12 g	19 g	27 g	1.8	13 mg	623 mg	36 mg
L 027 00	BEEF BALLS STROGANOFF	3-1/2 Ounces	100	268 cal	23 g	13 g	13 g	1	87 mg	668 mg	59 mg
L 027 01	TURKEY BALLS STROGANOFF	3-1/2 Ounces	100	208 cal	20 g	8 g	13 g	1	72 mg	733 mg	74 mg
L 028 00	CHILI CON CARNE	1 Cup	100	286 cal	24 g	9 g	30 g	7.6	50 mg	912 mg	76 mg
L 028 02	CHILI MACARONI	1-1/4 Cups	100	330 cal	22 g	9 g	42 g	4.1	50 mg	501 mg	61 mg
L 028 03	CHILI CON CARNE (GROUND TURKEY)	1 Cup	100	255 cal	22 g	6 g	30 g	7.1	45 mg	972 mg	85 mg
L 028 04	CHILI MACARONI (GROUND TURKEY)	1-1/4 Cups	100	300 cal	21 g	6 g	42 g	4.1	45 mg	533 mg	72 mg
L 029 00	BEEF PORCUPINES	5 Ounces	100	350 cal	27 g	16 g	23 g	2	85 mg	891 mg	33 mg
L 029 01	TURKEY PORCUPINES	5 Ounces	100	218 cal	21 g	8 g	14 g	0.9	68 mg	596 mg	37 mg
L 030 00	CREAMED GROUND BEEF	5-1/2 Ounces	100	214 cal	21 g	10 g	9 g	0.3	65 mg	283 mg	81 mg
L 030 01	CREAMED GROUND TURKEY	5-1/2 Ounces	100	160 cal	18 g	6 g	10 g	0.3	52 mg	455 mg	93 mg
L 031 00	BEEF RAVIOLI (FROZEN)	8 Ounces	100	330 cal	15 g	12 g	39 g	4.5	81 mg	754 mg	141 mg
L 031 01	CHEESE RAVIOLI (FROZEN)	8 Ounces	100	181 cal	7 g	5 g	27 g	2.6	7 mg	713 mg	113 mg
L 031 02	BEEF RAVIOLI (CANNED IN TOMATO SAUCE)	1 Cup	100	230 cal	8 g	5 g	37 g	3.7	15 mg	1178 mg	20 mg
L 032 00	PARMESAN FISH	4 Ounces	100	212 cal	32 g	8 g	1 g	0.3	88 mg	395 mg	226 mg
L 033 00	ROAST BEEF HASH	1/2 Cup	100	159 cal	15 g	6 g	12 g	1.2	39 mg	315 mg	13 mg
L 033 01	ROAST BEEF HASH (CANNED)	1/2 Cup	100	200 cal	11 g	12 g	12 g	1.8	38 mg	411 mg	22 mg
L 033 02	ROAST BEEF HASH (CANNED BEEF CHUNKS)	1/2 Cup	100	196 cal	17 g	9 g	12 g	1.2	46 mg	322 mg	12 mg
L 034 00	TACOS (GROUND BEEF)	2 Tacos	100	443 cal	32 g	26 g	21 g	3.3	106 mg	810 mg	259 mg
L 034 01	TACOS (GROUND TURKEY)	2 Tacos	100	377 cal	28 g	21 g	21 g	3.3	90 mg	847 mg	273 mg
L 035 00	MEAT LOAF	6 Ounces	100	343 cal	33 g	18 g	11 g	0.7	154 mg	648 mg	48 mg
L 035 01	TURKEY LOAF	6 Ounces	100	253 cal	28 g	11 g	11 g	0.7	132 mg	699 mg	67 mg
L 035 02	TOMATO MEAT LOAF	6 Ounces	100	372 cal	34 g	18 g	16 g	0.8	154 mg	717 mg	51 mg
L 035 03	CAJUN MEAT LOAF	6 Ounces	100	403 cal	35 g	19 g	23 g	2.8	154 mg	989 mg	85 mg
L 036 00	MINCED BEEF	5 Ounces	100	249 cal	23 g	11 g	15 g	2.2	71 mg	301 mg	40 mg
L 037 00	SALISBURY STEAK	4.5 Ounces	100	327 cal	31 g	16 g	12 g	0.8	119 mg	514 mg	49 mg
L 037 02	GRILLED HAMBURGER STEAK	4-1/2 Ounces	100	345 cal	38 g	20 g	0 g	0	133 mg	79 mg	11 mg
L 038 00	SPAGHETTI WITH MEAT SAUCE (GROUND TURKEY)	1 Cup	100	405 cal	25 g	7 g	63 g	4.1	51 mg	1422 mg	102 mg
L 038 01	SPAGHETTI WITH MEAT SAUCE (GROUND BEEF)	1 Cup	100	441 cal	26 g	10 g	63 g	4.1	57 mg	1388 mg	90 mg
L 038 02	SPAGHETTI WITH MEAT SAUCE, RTU (GROUND TURKEY)	1 Cup	100	433 cal	24 g	12 g	55 g	3.8	51 mg	1127 mg	74 mg
L 038 03	SPAGHETTI WITH MEAT SAUCE, RTU (GROUND BEEF)	1 Cup	100	469 cal	26 g	15 g	55 g	3.8	57 mg	1092 mg	62 mg
L 039 00	SPAGHETTI WITH MEATBALLS (GROUND TURKEY)	1 Serving	100	443 cal	28 g	8 g	66 g	4	72 mg	1630 mg	110 mg
L 039 01	SPAGHETTI WITH MEATBALLS (GROUND BEEF)	1 Cup	100	500 cal	31 g	13 g	66 g	4	87 mg	1590 mg	97 mg
L 040 00	STUFFED GREEN PEPPERS (GROUND BEEF)	1 Half	100	342 cal	27 g	15 g	24 g	2.8	85 mg	960 mg	36 mg
L 040 01	STUFFED GREEN PEPPERS (FROZEN)	1 Pepper	100	260 cal	16 g	10 g	26 g	0.9	50 mg	1429 mg	43 mg
L 040 02	STUFFED GREEN PEPPERS (GROUND TURKEY)	1 Half	100	269 cal	23 g	10 g	24 g	2.8	68 mg	1000 mg	51 mg
L 041 00	SWEDISH MEATBALLS (GROUND BEEF)	3-1/2 Ounces	100	244 cal	23 g	12 g	11 g	0.5	84 mg	753 mg	30 mg
L 041 01	SWEDISH MEATBALLS (GROUND TURKEY)	3-1/2 Ounces	100	186 cal	19 g	7 g	11 g	0.5	70 mg	917 mg	48 mg
L 042 00	CHILI CONQUISTADOR (GROUND BEEF)	8-1/2 Ounces	100	462 cal	29 g	18 g	45 g	5.3	86 mg	908 mg	74 mg
L 042 01	CHILI CONQUISTADOR (GROUND TURKEY)	8-1/2 Ounces	100	390 cal	25 g	13 g	45 g	5.3	68 mg	949 mg	89 mg
L 043 00	BEEF FAJITAS (FAJITA STRIPS)	2 Fajitas	100	458 cal	27 g	13 g	59 g	5.3	51 mg	1081 mg	148 mg
L 043 01	CHICKEN FAJITAS (FAJITA STRIPS)	2 Fajitas	100	529 cal	47 g	12 g	56 g	4.6	106 mg	1021 mg	151 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 043 02	TURKEY FAJITAS	2 Fajitas	100	491 cal	30 g	15 g	59 g	4.6	65 mg	1620 mg	170 mg
L 044 00	TURKEY CURRY	7 Ounces	100	250 cal	15 g	10 g	27 g	3.1	39 mg	1475 mg	60 mg
L 045 00	STUFFED BEEF ROLLS	1 Roll	100	373 cal	30 g	16 g	24 g	1.2	76 mg	790 mg	38 mg
L 045 01	BEEF BROGUL	7 Ounces	100	416 cal	35 g	16 g	34 g	4.8	81 mg	1174 mg	153 mg
L 046 00	BEEF AND BEAN TOSTADAS	2 Tostadas	100	539 cal	32 g	26 g	45 g	8.6	102 mg	835 mg	386 mg
L 047 00	BEEF PIE WITH BISCUIT TOPPING (CANNED BEEF)	1 Cup	100	583 cal	42 g	27 g	42 g	3.7	105 mg	625 mg	93 mg
L 048 00	BAKED CHICKEN AND RICE (COOKED DICED)	1 Cup	100	341 cal	28 g	9 g	34 g	0.9	79 mg	1282 mg	69 mg
L 048 01	BAKED CHICKEN AND RICE (CANNED CHICKEN)	1 Cup	100	323 cal	21 g	11 g	34 g	0.9	56 mg	1400 mg	70 mg
L 049 00	TURKEY CUTLET	4-1/2 Ounces	100	319 cal	30 g	12 g	21 g	0.8	81 mg	987 mg	73 mg
L 050 00	CHALUPA	1 Cup	100	380 cal	36 g	14 g	27 g	10.6	98 mg	543 mg	91 mg
L 051 00	CHICKEN PARMESAN (PRECOOKED FILLET)	7 Ounces	100	559 cal	29 g	38 g	25 g	4.1	77 mg	1224 mg	181 mg
L 051 01	CHICKEN PARMESAN (BREAST BONELESS)	5 Ounces	100	261 cal	38 g	8 g	7 g	1.7	100 mg	319 mg	178 mg
L 052 00	CREAMED CHIPPED BEEF	6 Ounces	100	169 cal	13 g	7 g	12 g	0.3	15 mg	1219 mg	110 mg
L 053 00	BEEF STROGANOFF	6 Ounces	100	250 cal	31 g	9 g	8 g	0.9	93 mg	844 mg	48 mg
L 053 01	BEEF STROGANOFF (CREAM OF MUSHROOM SOUP)	3/4 Cup	100	292 cal	31 g	14 g	8 g	0.9	93 mg	570 mg	53 mg
L 053 02	HAMBURGER STROGANOFF	6 Ounces	100	330 cal	32 g	18 g	8 g	0.9	113 mg	862 mg	52 mg
L 053 03	GROUND TURKEY STROGANOFF	6 Ounces	100	244 cal	27 g	11 g	8 g	0.9	91 mg	913 mg	71 mg
L 053 04	BEEF STROGANOFF (FAJITA STRIPS)	6 Ounces	100	291 cal	35 g	12 g	8 g	0.9	103 mg	871 mg	51 mg
L 054 00	STEAK RANCHERO	4-1/2 Ounces	100	296 cal	37 g	10 g	12 g	1.2	108 mg	432 mg	18 mg
L 055 00	BEEF CORDON BLEU	5 Ounces	100	369 cal	32 g	22 g	9 g	0.4	128 mg	727 mg	113 mg
L 056 00	SOUTHERN FRIED CATFISH FILLETS	4 Ounces	100	250 cal	21 g	13 g	10 g	0.8	68 mg	248 mg	11 mg
L 057 00	TAMALE PIE (GROUND BEEF)	9-1/2 Ounces	100	385 cal	24 g	16 g	36 g	5.2	71 mg	514 mg	152 mg
L 057 01	HOT TAMALES WITH CHILI GRAVY	2 Each	100	284 cal	12 g	20 g	16 g	1.5	47 mg	778 mg	51 mg
L 057 02	TAMALE PIZZA	5 Ounces	100	336 cal	22 g	18 g	22 g	3.6	71 mg	676 mg	155 mg
L 058 00	CHILI AND MACARONI (CANNED CHILI CON CARNE)	1-1/2 Cups	100	420 cal	24 g	14 g	49 g	7.9	36 mg	1116 mg	216 mg
L 059 00	CHILI CON CARNE (WITH BEANS)	1 Cup	100	222 cal	16 g	5 g	29 g	8.2	13 mg	866 mg	66 mg
L 060 00	HAMBURGER PARMESAN	5 Ounces	100	334 cal	28 g	17 g	16 g	1.6	101 mg	451 mg	203 mg
L 061 00	TEXAS HASH (GROUND BEEF)	1 Cup	100	325 cal	27 g	13 g	24 g	3.1	85 mg	320 mg	57 mg
L 061 01	TEXAS HASH (GROUND TURKEY)	1 Cup	100	255 cal	23 g	8 g	24 g	3	68 mg	362 mg	73 mg
L 062 00	YAKISOBA (BEEF AND SPAGHETTI)	1 Cup	100	329 cal	30 g	8 g	31 g	1.8	70 mg	1002 mg	27 mg
L 062 01	HAMBURGER YAKISOBA (GROUND BEEF)	1 Cup	100	393 cal	35 g	16 g	24 g	1.6	106 mg	813 mg	28 mg
L 062 02	TURKEY YAKISOBA	1 Cup	100	315 cal	31 g	10 g	24 g	1.6	90 mg	871 mg	47 mg
L 063 00	ENCHILADAS (GROUND BEEF)	2 Enchiladas	100	440 cal	27 g	22 g	34 g	4.6	83 mg	690 mg	246 mg
L 063 01	ENCHILADAS (FROZEN)	2 Enchiladas	100	416 cal	19 g	22 g	37 g	0.2	51 mg	1669 mg	347 mg
L 063 02	ENCHILADAS (GROUND TURKEY)	2 Enchiladas	100	329 cal	23 g	18 g	22 g	3.2	70 mg	692 mg	213 mg
L 064 00	CREOLE MACARONI (GROUND BEEF)	1 Cup	100	267 cal	18 g	8 g	32 g	3	43 mg	869 mg	69 mg
L 064 01	CREOLE MACARONI (GROUND TURKEY)	1 Cup	100	242 cal	16 g	6 g	32 g	3.1	38 mg	646 mg	77 mg
L 065 00	HUNGARIAN GOULASH	6-1/2 Ounces	100	382 cal	30 g	12 g	37 g	2.2	104 mg	637 mg	40 mg
L 066 00	SAUERBRATEN	3-1/2 Ounces	100	467 cal	36 g	27 g	19 g	1.5	114 mg	491 mg	51 mg
L 067 00	GLAZED HAM LOAF	5 Ounces	100	297 cal	28 g	16 g	8 g	0.4	114 mg	1126 mg	47 mg
L 068 00	SCALLOPED HAM AND NOODLES	1 Cup	100	238 cal	22 g	8 g	18 g	0.8	61 mg	1208 mg	71 mg
L 069 00	BAKED HAM	3 Ounces	100	172 cal	22 g	9 g	0 g	0	57 mg	1446 mg	8 mg
L 069 01	GRILLED HAM STEAK	3 Ounces	100	174 cal	22 g	9 g	0 g	0	57 mg	1446 mg	8 mg
L 070 00	BARBECUED HAM STEAK	3 Ounces	100	224 cal	22 g	9 g	13 g	0.8	57 mg	1567 mg	19 mg
L 070 01	BARBECUED HAM STEAK (CANNED HAM)	3 Ounces	100	224 cal	22 g	9 g	13 g	0.8	57 mg	1567 mg	19 mg
L 071 00	BAKED CANNED HAM	3-1/2 Ounces	100	184 cal	22 g	9 g	3 g	0	57 mg	1447 mg	11 mg
L 071 01	BAKED HAM STEAK (CANNED HAM)	3-1/2 Ounces	100	184 cal	22 g	9 g	3 g	0	57 mg	1447 mg	11 mg
L 071 02	GRILLED HAM STEAK (CANNED HAM)	3 Ounces	100	178 cal	17 g	10 g	3 g	0	55 mg	1269 mg	7 mg
L 071 03	GRILLED HAM SLICE (CANNED HAM)	2-1/2 Ounces	100	140 cal	17 g	7 g	0 g	0	45 mg	1157 mg	6 mg
L 072 00	BAKED HAM, MACARONI, AND TOMATOES (CANNED HAM)	1 Cup	100	258 cal	16 g	11 g	25 g	3	36 mg	947 mg	130 mg
L 072 01	BAKED LUNCHEON MEAT, MACARONI, AND CHEESE	1 Cup	100	350 cal	13 g	22 g	26 g	3	38 mg	955 mg	131 mg
L 072 02	BAKED HAM, MACARONI AND TOMATOES (CANNED CHUNKS)	1 Cup	100	327 cal	25 g	14 g	25 g	3	58 mg	1525 mg	133 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 073 00	SCALLOPED HAM AND POTATOES (CANNED HAM)	1 Cup	100	335 cal	23 g	21 g	12 g	0.6	86 mg	1363 mg	153 mg
L 074 00	CHILIES RELLENOS	1 Serving	100	278 cal	7 g	17 g	27 g	3.9	15 mg	582 mg	148 mg
L 075 00	BROCCOLI, CHEESE, AND RICE	1 Cup	100	317 cal	15 g	17 g	28 g	4.5	35 mg	718 mg	346 mg
L 076 00	BEEF MANICOTTI (CANNELLONI)	2 Shells	100	588 cal	27 g	26 g	63 g	6.7	63 mg	1037 mg	212 mg
L 076 01	CHEESE MANICOTTI	2 Shells	100	307 cal	16 g	12 g	34 g	3.3	37 mg	1132 mg	344 mg
L 077 00	SAVORY ROAST LAMB	4 Ounces	100	333 cal	37 g	19 g	1 g	0.2	122 mg	92 mg	29 mg
L 078 00	CHICKEN ADOBO (8 PC)	7 Ounces	100	321 cal	41 g	11 g	14 g	1	119 mg	1091 mg	36 mg
L 079 00	SWEET AND SOUR PORK CHOPS	3 Ounces	100	355 cal	29 g	18 g	18 g	0.4	81 mg	126 mg	12 mg
L 079 01	SWEET AND SOUR CHICKEN (8 PC)	8 Ounces	100	351 cal	39 g	10 g	23 g	0.5	119 mg	198 mg	26 mg
L 079 02	SWEET AND SOUR CHICKEN (COOKED DICED)	8 Ounces	100	420 cal	25 g	6 g	68 g	1.6	73 mg	398 mg	35 mg
L 080 00	PORK CHOP SUEY	1-1/4 Cups	100	384 cal	32 g	18 g	23 g	3	98 mg	859 mg	58 mg
L 080 01	SHRIMP CHOP SUEY	1-1/4 Cups	100	221 cal	19 g	6 g	23 g	2.9	140 mg	1640 mg	79 mg
L 081 00	ROAST PORK	3-1/2 Ounces	100	247 cal	27 g	14 g	0 g	0.1	81 mg	59 mg	20 mg
L 081 01	ROAST PORK TENDERLOIN	4 Ounces	100	186 cal	30 g	6 g	0 g	0.1	93 mg	65 mg	6 mg
L 081 02	BARBECUED PORK LOIN	4 Ounces	100	303 cal	28 g	15 g	14 g	1.3	81 mg	628 mg	39 mg
L 082 00	SWEET AND SOUR PORK	1 Cup	100	348 cal	29 g	13 g	28 g	1.1	98 mg	329 mg	26 mg
L 083 00	CREOLE PORK CHOPS	3 Ounces	100	326 cal	31 g	18 g	9 g	1.8	81 mg	282 mg	33 mg
L 083 01	BARBECUED PORK CHOPS	3 Ounces	100	324 cal	30 g	19 g	6 g	0.6	81 mg	452 mg	15 mg
L 084 00	BAKED STUFFED PORK CHOPS	3 Ounces	100	342 cal	31 g	19 g	10 g	0.8	91 mg	209 mg	29 mg
L 084 01	PORK CHOPS WITH APPLE RINGS	3 Ounces	100	315 cal	29 g	18 g	7 g	0.9	81 mg	45 mg	8 mg
L 085 00	BRAISED PORK CHOPS	3 Ounces	100	286 cal	29 g	18 g	0 g	0	81 mg	184 mg	6 mg
L 085 01	GRILLED PORK CHOPS	3 Ounces	100	286 cal	29 g	18 g	0 g	0	81 mg	44 mg	6 mg
L 085 02	PORK CHOPS WITH MUSHROOM GRAVY	3 Ounces	100	344 cal	30 g	21 g	6 g	0.2	81 mg	343 mg	18 mg
L 086 01	CREOLE PORK STEAKS (FROZEN BREADED PORK STEAKS)	4 Ounces	100	409 cal	25 g	22 g	29 g	2.4	114 mg	484 mg	81 mg
L 086 02	BREADED PORK STEAKS (FROZEN)	6-1/2 Ounces	100	509 cal	33 g	27 g	31 g	1.1	163 mg	401 mg	77 mg
L 086 03	PORK SCHNITZEL (FROZEN BREADED PORK STEAKS)	4 Ounces	100	371 cal	24 g	20 g	23 g	1.5	114 mg	281 mg	63 mg
L 087 00	PORK CHOPS MEXICANA	5 Ounces	100	319 cal	30 g	19 g	7 g	1.3	81 mg	376 mg	22 mg
L 088 00	GRILLED POLISH SAUSAGE	3 Ounces	100	202 cal	9 g	18 g	1 g	0	43 mg	544 mg	7 mg
L 088 01	BAKED ITALIAN SAUSAGE (HOT OR SWEET)	1 Each	100	201 cal	12 g	16 g	1 g	0	48 mg	573 mg	15 mg
L 088 02	GRILLED FRANKFURTERS	2 Each	100	290 cal	10 g	26 g	2 g	0	45 mg	1016 mg	10 mg
L 088 03	GRILLED BRATWURST	1 Each	100	256 cal	12 g	22 g	2 g	0	51 mg	474 mg	37 mg
L 088 05	SIMMERED KNOCKWURST	1 Each	100	279 cal	11 g	25 g	2 g	0	53 mg	916 mg	10 mg
L 089 00	GRILLED SAUSAGE PATTIES	2 Patties	100	197 cal	10 g	17 g	0 g	0	44 mg	690 mg	17 mg
L 089 02	GRILLED SAUSAGE PATTIES (PREFORMED)	1 Patty	100	147 cal	8 g	12 g	0 g	0	33 mg	517 mg	13 mg
L 091 00	GRILLED SAUSAGE LINKS (COOKED PORK AND BEEF)	2 Pieces	100	176 cal	6 g	16 g	1 g	0	38 mg	461 mg	5 mg
L 092 00	BARBECUED SPARERIBS	7 Ounces	100	594 cal	40 g	41 g	16 g	1	161 mg	1022 mg	81 mg
L 093 00	BRAISED SPARERIBS	7 Ounces	100	536 cal	39 g	40 g	2 g	0.5	161 mg	451 mg	68 mg
L 093 01	SPARERIBS AND SAUERKRAUT	7 Ounces	100	548 cal	40 g	40 g	5 g	2.8	161 mg	865 mg	96 mg
L 094 00	SWEET AND SOUR SPARERIBS	7 Ounces	100	607 cal	39 g	40 g	21 g	0.5	161 mg	294 mg	84 mg
L 095 00	CANTONESE SPARERIBS	8 Ounces	100	585 cal	41 g	40 g	13 g	0.3	161 mg	1529 mg	72 mg
L 096 00	ROAST FRESH HAM	4 Ounces	100	247 cal	31 g	12 g	0 g	0	82 mg	2082 mg	11 mg
L 097 00	SHRIMP JAMBALAYA	1-1/2 Cups	100	352 cal	25 g	6 g	49 g	5.1	100 mg	1792 mg	132 mg
L 099 00	PORK ADOBO	5 Ounces	100	262 cal	28 g	13 g	6 g	0.7	98 mg	325 mg	16 mg
L 100 00	SIMMERED PORK HOCKS (HAM HOCKS)	7 Ounces	100	461 cal	33 g	35 g	1 g	0.3	94 mg	2171 mg	27 mg
L 101 00	ITALIAN STYLE VEAL STEAKS	3 Ounces	100	190 cal	13 g	12 g	9 g	1.6	39 mg	471 mg	46 mg
L 102 00	VEAL PAPRIKA STEAK	3 Ounces	100	229 cal	14 g	15 g	9 g	0.9	47 mg	659 mg	46 mg
L 103 00	VEAL PARMESAN	6-1/2 Ounces	100	416 cal	28 g	26 g	17 g	1.4	109 mg	747 mg	146 mg
L 103 01	VEAL STEAK	6-1/2 Ounces	100	358 cal	24 g	24 g	10 g	0.5	96 mg	383 mg	36 mg
L 104 00	JAEGERSCHNITZEL	4-1/2 Ounces	100	408 cal	25 g	26 g	17 g	1.4	99 mg	850 mg	45 mg
L 105 00	VEAL CUBES PARMESAN	5-1/2 Ounces	100	276 cal	29 g	15 g	6 g	1.2	114 mg	568 mg	89 mg
L 106 00	ROAST VEAL	4 Ounces	100	296 cal	34 g	17 g	0 g	0	140 mg	127 mg	26 mg
L 106 01	ROAST VEAL WITH HERBS	4 Ounces	100	296 cal	34 g	17 g	0 g	0.1	140 mg	127 mg	29 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 107 00	BRAISED LIVER WITH ONIONS	4 Ounces	100	268 cal	22 g	13 g	15 g	1	326 mg	480 mg	17 mg
L 107 01	GRILLED LIVER	4 Ounces	100	182 cal	22 g	5 g	12 g	0.4	326 mg	478 mg	9 mg
L 108 00	BREADED LIVER	4-1/2 Ounces	100	337 cal	24 g	18 g	20 g	0.7	357 mg	552 mg	29 mg
L 108 01	BREADED LIVER WITH ONION AND MUSHROOM GRAVY	4-1/2 Ounces	100	414 cal	25 g	23 g	25 g	1	357 mg	917 mg	33 mg
L 109 00	OVEN FRIED CHICKEN FILLETS (3 OZ)	2 Fillets	100	551 cal	28 g	39 g	21 g	3.1	73 mg	1165 mg	49 mg
L 109 01	FRIED CHICKEN FILLETS (3 OZ)	2 Fillets	100	611 cal	28 g	46 g	21 g	3.1	73 mg	1165 mg	49 mg
L 109 02	OVEN FRIED CHICKEN FILLETS (5 OZ)	4-1/2 Ounces	100	470 cal	24 g	33 g	18 g	2.6	62 mg	994 mg	42 mg
L 109 03	FRIED CHICKEN FILLETS (5 OZ)	4 Ounces	100	510 cal	24 g	38 g	18 g	2.6	62 mg	994 mg	42 mg
L 109 04	OVEN FRIED CHICKEN FILLET NUGGETS	10 Each	100	481 cal	24 g	34 g	20 g	1.6	57 mg	1020 mg	53 mg
L 109 05	FRIED CHICKEN FILLET NUGGETS	10 Each	100	521 cal	24 g	39 g	20 g	1.6	57 mg	1020 mg	53 mg
L 110 00	CORNERED BEEF HASH	3-1/2 Ounces	100	208 cal	12 g	13 g	11 g	1.2	58 mg	730 mg	13 mg
L 110 01	CORNERED BEEF HASH (CANNED)	4 Ounces	100	258 cal	12 g	20 g	6 g	1	50 mg	443 mg	0 mg
L 111 00	NEW ENGLAND BOILED DINNER	1 Serving	100	626 cal	36 g	33 g	46 g	8.5	168 mg	2008 mg	130 mg
L 111 01	NEW ENGLAND BOILED DINNER (PRECOOKED FROZEN BEEF)	1 Serving	100	545 cal	30 g	27 g	47 g	8.1	135 mg	2522 mg	134 mg
L 112 00	SIMMERED CORNERED BEEF	4 Ounces	100	431 cal	31 g	33 g	1 g	0	168 mg	1952 mg	18 mg
L 112 01	APPLE GLAZED CORNERED BEEF	4 Ounces	100	467 cal	32 g	33 g	10 g	0.1	168 mg	2038 mg	27 mg
L 112 02	BAKED CORNERED BEEF (PRECOOKED FROZEN)	4 Ounces	100	342 cal	25 g	26 g	1 g	0	133 mg	1543 mg	11 mg
L 113 00	BAKED FRANKFURTERS WITH SAUERKRAUT	2 Each	100	312 cal	11 g	27 g	7 g	2.8	45 mg	1765 mg	44 mg
L 113 01	BAKED KNOCKWURST WITH SAUERKRAUT	1 Each	100	301 cal	12 g	25 g	6 g	2.8	53 mg	1665 mg	44 mg
L 114 00	TERIYAKI CHICKEN (8 PC)	8 Ounces	100	296 cal	42 g	10 g	6 g	0.6	119 mg	1726 mg	34 mg
L 114 01	TERIYAKI CHICKEN (THIGHS)	4 Ounces	100	308 cal	38 g	16 g	1 g	0.1	135 mg	487 mg	20 mg
L 115 00	SPICY BAKED FISH	4-1/2 Ounces	100	191 cal	27 g	5 g	8 g	1.3	72 mg	585 mg	32 mg
L 116 00	MACARONI TUNA SALAD	3/4 Cup	100	201 cal	14 g	10 g	13 g	0.7	66 mg	367 mg	21 mg
L 116 01	CHICKEN ROTINI SALAD (CANNED CHICKEN)	3/4 Cup	100	281 cal	17 g	16 g	16 g	0.8	94 mg	692 mg	28 mg
L 116 02	CHICKEN ROTINI SALAD (COOKED DICED)	3/4 Cup	100	268 cal	19 g	14 g	16 g	0.8	102 mg	403 mg	26 mg
L 117 01	GRILLED LUNCHEON MEAT	3 Ounces	100	407 cal	14 g	38 g	2 g	0	60 mg	1408 mg	10 mg
L 119 00	BAKED FISH	4 Ounces	100	162 cal	26 g	6 g	0 g	0.1	72 mg	364 mg	22 mg
L 119 01	BAKED FISH WITH GARLIC BUTTER	4 Ounces	100	178 cal	26 g	8 g	0 g	0	72 mg	246 mg	22 mg
L 119 02	ONION-LEMON BAKED FISH	4 Ounces	100	166 cal	26 g	6 g	1 g	0.2	72 mg	365 mg	24 mg
L 119 03	LEMON BAKED FISH	4 Ounces	100	154 cal	26 g	5 g	0 g	0.1	72 mg	354 mg	21 mg
L 119 04	HERBED BAKED FISH	4 Ounces	100	162 cal	26 g	6 g	0 g	0	72 mg	364 mg	22 mg
L 119 05	MUSTARD-DILL BAKED FISH	4 Ounces	100	168 cal	26 g	6 g	2 g	0.1	72 mg	183 mg	24 mg
L 119 06	FISH AMANDINE	4 Ounces	100	181 cal	26 g	7 g	1 g	0.4	72 mg	364 mg	29 mg
L 119 07	CAJUN BAKED FISH	4 Ounces	100	163 cal	26 g	6 g	1 g	0.1	72 mg	364 mg	24 mg
L 120 00	BAKED STUFFED FISH	4-1/2 Ounces	100	275 cal	28 g	7 g	22 g	1	85 mg	380 mg	32 mg
L 121 00	SHRIMP SCAMPI	5-1/2 Ounces	100	199 cal	24 g	9 g	6 g	0.8	210 mg	583 mg	61 mg
L 122 00	PAN FRIED FISH	4 Ounces	100	239 cal	27 g	10 g	8 g	0.4	72 mg	309 mg	28 mg
L 122 01	TEMPURA FISH	4 Ounces	100	255 cal	28 g	10 g	11 g	0.4	94 mg	382 mg	55 mg
L 122 02	DEEP FAT FRIED FISH	4 Ounces	100	247 cal	27 g	11 g	8 g	0.4	72 mg	309 mg	28 mg
L 123 00	OVEN FRIED FISH	4 Ounces	100	236 cal	27 g	9 g	9 g	0.4	73 mg	373 mg	50 mg
L 124 00	BAKED FISH PORTIONS	3-1/2 Ounces	100	278 cal	16 g	12 g	24 g	0	114 mg	594 mg	20 mg
L 124 01	BAKED FISH PORTIONS (BATTER DIPPED)	6 Ounces	100	416 cal	24 g	19 g	36 g	0	171 mg	891 mg	31 mg
L 124 02	FRENCH FRIED FISH PORTIONS	3-1/2 Ounces	100	318 cal	16 g	17 g	24 g	0	114 mg	594 mg	20 mg
L 124 03	FRENCH FRIED FISH PORTIONS (BATTER DIP)	6 Ounces	100	503 cal	27 g	25 g	40 g	0	191 mg	990 mg	34 mg
L 124 04	FISH AND CHIPS	6 Ounces	100	701 cal	27 g	35 g	70 g	3	171 mg	902 mg	46 mg
L 124 05	BAKED FISH NUGGETS	4 Ounces	100	262 cal	14 g	14 g	18 g	0.5	54 mg	452 mg	123 mg
L 124 06	FRENCH FRIED FISH NUGGETS	4-1/2 Ounces	100	302 cal	14 g	19 g	18 g	0.5	54 mg	452 mg	123 mg
L 125 00	CHIPPER FISH	4-1/2 Ounces	100	251 cal	29 g	10 g	10 g	0.4	85 mg	406 mg	113 mg
L 126 00	FRIED OYSTERS	6 Each	100	407 cal	16 g	13 g	54 g	1.6	89 mg	457 mg	30 mg
L 126 01	FRIED OYSTERS (BREADED,FROZEN)	6 Each	100	219 cal	8 g	16 g	10 g	0	73 mg	378 mg	56 mg
L 127 00	BOILED LOBSTER, WHOLE	16 Ounces	100	76 cal	16 g	0 g	1 g	0.1	56 mg	930 mg	56 mg
L 127 01	BOILED LOBSTER TAIL, FROZEN	8 Ounces	100	174 cal	36 g	1 g	2 g	0.1	127 mg	957 mg	114 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 127 03	BOILED CRAB LEGS, ALASKAN KING, FROZEN	5 Ounces	100	173 cal	34 g	3 g	0 g	0.1	94 mg	1906 mg	113 mg
L 127 04	BOILED SHRIMP, FROZEN	7 Shrimp	100	49 cal	10 g	0 g	0 g	0	97 mg	112 mg	19 mg
L 128 00	SALMON CAKES	2 Cakes	100	212 cal	21 g	11 g	7 g	0.5	78 mg	319 mg	240 mg
L 129 00	SALMON LOAF	4-1/2 Ounces	100	191 cal	21 g	7 g	9 g	0.6	73 mg	176 mg	244 mg
L 130 00	SCALLOPED SALMON AND PEAS	6-1/2 Ounces	100	273 cal	23 g	13 g	15 g	2.1	55 mg	465 mg	288 mg
L 131 00	CHOPSTICK TUNA	1 Cup	100	387 cal	25 g	21 g	26 g	3.5	20 mg	666 mg	61 mg
L 132 00	TUNA SALAD	3/4 Cup	100	240 cal	22 g	12 g	10 g	1.3	110 mg	526 mg	47 mg
L 132 01	SALMON SALAD (CANNED SALMON)	3/4 Cup	100	264 cal	20 g	16 g	10 g	1.3	118 mg	332 mg	234 mg
L 133 00	BAKED TUNA AND NOODLES	1 Cup	100	305 cal	24 g	12 g	25 g	1.3	45 mg	606 mg	99 mg
L 133 01	BAKED TUNA AND NOODLES (CREAM OF MUSHROOM SOUP)	1 Cup	100	285 cal	23 g	10 g	25 g	1.4	45 mg	1010 mg	75 mg
L 134 00	FRIED SCALLOPS	5 Ounces	100	269 cal	18 g	11 g	24 g	0.9	51 mg	769 mg	44 mg
L 135 00	CREOLE SCALLOPS	1 Cup	100	166 cal	18 g	3 g	18 g	3.3	31 mg	571 mg	80 mg
L 135 01	CREOLE FISH	3-1/2 Ounces	100	360 cal	17 g	18 g	32 g	1.7	114 mg	803 mg	48 mg
L 135 02	CREOLE FISH FILLETS	4-1/2 Ounces	100	167 cal	27 g	3 g	8 g	1.7	72 mg	321 mg	47 mg
L 136 00	CREOLE SHRIMP	8 Ounces	100	319 cal	21 g	4 g	50 g	4.6	140 mg	870 mg	121 mg
L 137 00	FRENCH FRIED SHRIMP	4 Each	100	272 cal	19 g	12 g	22 g	0.9	179 mg	569 mg	51 mg
L 137 01	TEMPURA SHRIMP	4 Shrimp	100	238 cal	18 g	11 g	16 g	0.6	173 mg	567 mg	81 mg
L 137 02	FRENCH FRIED SHRIMP (BREADED, FROZEN)	4 Each	100	332 cal	26 g	19 g	14 g	0.5	214 mg	415 mg	81 mg
L 138 00	SHRIMP CURRY	3/4 Cup	100	191 cal	16 g	9 g	12 g	1.6	140 mg	480 mg	45 mg
L 139 00	SHRIMP SALAD	1/2 Cup	100	124 cal	16 g	5 g	3 g	0.9	143 mg	408 mg	55 mg
L 140 00	SEAFOOD NEWBURG	6 Ounces	100	210 cal	24 g	9 g	7 g	0.2	128 mg	401 mg	91 mg
L 141 00	CRAB CAKES	5 Ounces	100	404 cal	20 g	14 g	48 g	2.2	128 mg	1474 mg	154 mg
L 142 00	HONEY GLAZED ROCK CORNISH HENS	6 Ounces	100	342 cal	25 g	21 g	12 g	0	147 mg	92 mg	22 mg
L 142 01	ROCK CORNISH HENS WITH SYRUP GLAZE	6 Ounces	100	349 cal	25 g	21 g	14 g	0	147 mg	104 mg	16 mg
L 142 02	HERBED CORNISH HENS	6 Ounces	100	295 cal	25 g	20 g	1 g	0.2	147 mg	369 mg	26 mg
L 143 00	BAKED CHICKEN (8 PC)	8 Ounces	100	260 cal	39 g	10 g	0 g	0.1	119 mg	394 mg	21 mg
L 143 01	MEXICAN BAKED CHICKEN (8 PC)	2 Pieces	100	267 cal	39 g	11 g	1 g	0.6	119 mg	403 mg	35 mg
L 143 02	HERBED BAKED CHICKEN (8 PC)	2 Pieces	100	262 cal	39 g	10 g	1 g	0.4	119 mg	395 mg	34 mg
L 143 03	BAKED CHICKEN (BREAST BONELESS)	5 Ounces	100	179 cal	32 g	4 g	0 g	0.1	88 mg	286 mg	16 mg
L 143 04	MEXICAN BAKED CHICKEN (BREAST BONELESS)	5 Ounces	100	184 cal	32 g	5 g	1 g	0.4	88 mg	293 mg	28 mg
L 143 05	HERBED BAKED CHICKEN (BREAST BONELESS)	5 Ounces	100	181 cal	32 g	4 g	0 g	0.3	88 mg	286 mg	25 mg
L 144 00	BAKED TURKEY AND NOODLES	1 Cup	100	277 cal	23 g	10 g	22 g	1.1	74 mg	985 mg	91 mg
L 144 01	BAKED CHICKEN AND NOODLES (CANNED CHICKEN)	1 Cup	100	250 cal	21 g	9 g	20 g	1	62 mg	1401 mg	72 mg
L 144 03	BAKED CHICKEN AND NOODLES (COOKED DICED)	1 Cup	100	284 cal	28 g	9 g	20 g	1	89 mg	1101 mg	74 mg
L 145 00	CHICKEN VEGA (8 PC)	9 Ounces	100	479 cal	45 g	12 g	45 g	1.2	121 mg	1249 mg	131 mg
L 146 00	BARBECUED CHICKEN (8 PC)	8 Ounces	100	324 cal	40 g	11 g	16 g	1	120 mg	981 mg	35 mg
L 146 01	BARBECUED CHICKEN (BREAST BONELESS)	5 Ounces	100	237 cal	33 g	4 g	16 g	1	89 mg	942 mg	31 mg
L 147 00	CHICKEN A LA KING (COOKED DICED)	1 Cup	100	246 cal	27 g	7 g	17 g	1	74 mg	1235 mg	62 mg
L 147 01	CHICKEN A LA KING (CANNED CHICKEN)	1 Cup	100	212 cal	20 g	7 g	17 g	1	47 mg	1325 mg	60 mg
L 147 02	TURKEY A LA KING	1 Cup	100	213 cal	18 g	7 g	19 g	1	46 mg	2278 mg	81 mg
L 148 00	CHICKEN CACCIATORE (8 PC)	8 Ounces	100	348 cal	42 g	11 g	21 g	4.6	119 mg	764 mg	87 mg
L 148 01	CHICKEN CACCIATORE (COOKED DICED)	1-1/4 Cups	100	245 cal	27 g	7 g	21 g	4.6	73 mg	721 mg	81 mg
L 149 00	BAKED CHICKEN AND GRAVY (8 PC)	2 Pieces	100	300 cal	40 g	11 g	7 g	0.3	120 mg	1025 mg	44 mg
L 149 01	BAKED CHICKEN WITH MUSHROOM GRAVY (8 PC)	2 Pieces	100	308 cal	41 g	11 g	9 g	0.5	120 mg	1065 mg	45 mg
L 149 02	BAKED CHICKEN WITH MUSHROOM GRAVY (8 PC CND SOUP)	2 Pieces	100	332 cal	40 g	16 g	5 g	0.3	120 mg	603 mg	40 mg
L 150 00	TURKEY POT PIE	1 Cup	100	368 cal	28 g	10 g	40 g	4.2	65 mg	964 mg	128 mg
L 150 01	CHICKEN POT PIE (CANNED CHICKEN)	1 Cup	100	317 cal	23 g	8 g	38 g	4.2	46 mg	1101 mg	107 mg
L 150 03	CHICKEN POT PIE (COOKED DICED)	1 Cup	100	351 cal	31 g	8 g	38 g	4.2	73 mg	802 mg	109 mg
L 151 00	CHICKEN SALAD (COOKED DICED)	3/4 Cup	100	229 cal	24 g	12 g	4 g	1.2	77 mg	371 mg	43 mg
L 151 01	CHICKEN SALAD (CANNED CHICKEN)	3/4 Cup	100	249 cal	21 g	16 g	5 g	1.4	64 mg	621 mg	48 mg
L 151 02	TURKEY SALAD (BONELESS, FROZEN)	3/4 Cup	100	193 cal	15 g	12 g	6 g	1	49 mg	770 mg	52 mg
L 152 00	CHICKEN TETRAZZINI (CANNED CHICKEN)	1 Cup	100	271 cal	21 g	7 g	28 g	1.6	43 mg	1090 mg	108 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 152 01	TUNA TETRAZZINI (CANNED TUNA)	1 Cup	100	223 cal	21 g	3 g	28 g	1.5	20 mg	950 mg	105 mg
L 152 02	CHICKEN TETRAZZINI (COOKED DICED)	1 Cup	100	270 cal	23 g	6 g	28 g	1.6	52 mg	1028 mg	108 mg
L 153 00	CHINESE FIVE-SPICE CHICKEN (8 PC)	2 Pieces	100	273 cal	40 g	10 g	2 g	0.6	119 mg	760 mg	31 mg
L 154 00	CREOLE CHICKEN (8 PC)	2 Pieces	100	308 cal	41 g	11 g	11 g	2.5	119 mg	420 mg	62 mg
L 154 01	CREOLE CHICKEN (COOKED DICED)	1-1/4 Cups	100	204 cal	26 g	6 g	11 g	2.5	73 mg	375 mg	54 mg
L 155 00	FRIED CHICKEN (8 PC)	8 Ounces	100	496 cal	46 g	27 g	14 g	0.6	144 mg	553 mg	29 mg
L 155 01	SOUTHERN FRIED CHICKEN (8 PC)	2 Pieces	100	496 cal	46 g	27 g	14 g	0.6	144 mg	553 mg	29 mg
L 155 02	FRIED CHICKEN (PRECKD BRDED, FZN FOR DEEP FAT FRY)	2 Pieces	100	664 cal	46 g	44 g	18 g	0	207 mg	569 mg	42 mg
L 156 00	OVEN BAKED CHICKEN (8 PC)	2 Pieces	100	341 cal	41 g	12 g	15 g	0.8	119 mg	487 mg	54 mg
L 156 01	FRIED CHICKEN (PRECKD, BREAD CHIX, FRZ FOR OVEN)	2 Pieces	100	583 cal	46 g	35 g	18 g	0	207 mg	569 mg	42 mg
L 157 00	PINEAPPLE CHICKEN (8 PC)	2 Pieces	100	338 cal	40 g	10 g	20 g	0.8	119 mg	317 mg	38 mg
L 158 00	SAVORY BAKED CHICKEN (8 PC)	2 Pieces	100	269 cal	40 g	10 g	2 g	0.2	119 mg	658 mg	25 mg
L 158 01	SAVORY BAKED CHICKEN (THIGHS)	4 Ounces	100	310 cal	38 g	16 g	2 g	0.2	135 mg	667 mg	22 mg
L 159 00	SZECHWAN CHICKEN (8 PC)	2 Pieces	100	311 cal	40 g	10 g	12 g	0.2	119 mg	751 mg	26 mg
L 159 01	SZECHWAN CHICKEN (BREAST BONELESS)	5 Ounces	100	226 cal	33 g	4 g	12 g	0.2	88 mg	712 mg	21 mg
L 160 00	CHICKEN CHOW MEIN (COOKED DICED)	1 Cup	100	230 cal	28 g	7 g	14 g	2.5	73 mg	1762 mg	68 mg
L 160 01	CHICKEN CHOW MEIN (CANNED CHICKEN)	1 Cup	100	235 cal	24 g	8 g	15 g	2.5	59 mg	2169 mg	69 mg
L 161 00	ROAST TURKEY	4 Ounces	100	172 cal	27 g	7 g	0 g	0	69 mg	901 mg	23 mg
L 162 00	ROAST TURKEY (BONELESS TURKEY)	3-1/2 Ounces	100	257 cal	31 g	12 g	4 g	0	95 mg	1010 mg	55 mg
L 162 01	ROAST TURKEY WITH BARBECUE SAUCE	3-1/2 Ounces	100	309 cal	32 g	13 g	13 g	0.8	95 mg	1581 mg	68 mg
L 163 00	TURKEY NUGGETS	3-1/2 Ounces	100	284 cal	25 g	9 g	23 g	0.9	65 mg	1631 mg	68 mg
L 164 00	ROAST DUCK	7 Ounces	100	657 cal	37 g	55 g	0 g	0	164 mg	115 mg	22 mg
L 164 01	HAWAIIAN BAKED DUCK	7 Ounces	100	677 cal	37 g	55 g	5 g	0.1	164 mg	116 mg	27 mg
L 164 02	ROAST DUCK WITH APPLE JELLY GLAZE	7 Ounces	100	690 cal	37 g	56 g	8 g	0.1	165 mg	145 mg	23 mg
L 164 03	HONEY GLAZED DUCK	7 Ounces	100	701 cal	37 g	55 g	11 g	0.1	164 mg	370 mg	23 mg
L 165 00	PIZZA	1 Slice	100	226 cal	9 g	9 g	28 g	2	16 mg	449 mg	146 mg
L 165 01	PIZZA (THICK CRUST)	4-1/2 Ounces	100	362 cal	14 g	12 g	50 g	2.9	19 mg	607 mg	175 mg
L 165 02	MUSHROOM, GREEN PEPPER AND ONION PIZZA	4 Ounces	100	235 cal	10 g	9 g	31 g	2.7	16 mg	476 mg	150 mg
L 165 03	HAMBURGER PIZZA	4 Ounces	100	300 cal	17 g	13 g	29 g	2.1	44 mg	466 mg	150 mg
L 165 04	PEPPERONI, GREEN PEPPER, AND MUSHROOM PIZZA	3-1/2 Ounces	100	255 cal	10 g	11 g	30 g	2.5	19 mg	568 mg	149 mg
L 165 05	PEPPERONI PIZZA	1 Slice	100	248 cal	10 g	11 g	29 g	2	19 mg	541 mg	147 mg
L 165 06	PIZZA (ROLL MIX)	4 Ounces	100	211 cal	9 g	8 g	27 g	1.3	16 mg	519 mg	161 mg
L 165 07	PORK OR ITALIAN SAUSAGE PIZZA	1 Slice	100	265 cal	11 g	12 g	29 g	2	25 mg	545 mg	160 mg
L 165 08	FRENCH BREAD PIZZA	4 Ounces	100	323 cal	14 g	9 g	46 g	3.5	24 mg	827 mg	245 mg
L 165 09	SAUSAGE, GREEN PEPPER, AND ONION PIZZA	1 Slice	100	266 cal	11 g	11 g	30 g	2.5	23 mg	541 mg	152 mg
L 165 10	PIZZA (POURABLE PIZZA CRUST)	1 Slice	100	260 cal	11 g	7 g	39 g	2.4	16 mg	419 mg	185 mg
L 166 00	PIZZA (12 INCH FROZEN CRUST)	4 Ounces	100	259 cal	11 g	8 g	35 g	2	20 mg	456 mg	203 mg
L 167 00	CHUCK WAGON STEW (BEANS WITH BEEF)	1-1/4 Cups	100	416 cal	28 g	12 g	54 g	14.2	70 mg	1138 mg	141 mg
L 168 00	BAKED SCALLOPS	4-1/2 Ounces	100	124 cal	14 g	5 g	6 g	0.3	37 mg	257 mg	32 mg
L 169 00	BAKED WHOLE TROUT	10 Ounces	100	269 cal	23 g	17 g	6 g	0.3	87 mg	326 mg	94 mg
L 169 01	BAKED TROUT FILLETS	5 Ounces	100	298 cal	32 g	16 g	4 g	0.2	105 mg	247 mg	122 mg
L 170 00	CHILI (WITHOUT BEANS)	1 Cup	100	346 cal	34 g	17 g	16 g	4.5	106 mg	677 mg	70 mg
L 171 00	CHEESE PITA PIZZA	2-1/2 Ounces	100	234 cal	10 g	5 g	37 g	2	15 mg	450 mg	163 mg
L 171 01	MUSHROOM, ONION, AND GREEN PEPPER PITA PIZZA	4 Ounces	100	242 cal	10 g	5 g	38 g	2.5	15 mg	490 mg	167 mg
L 172 00	BEEF STEW (CANNED BEEF CHUNKS)	1-1/4 Cups	100	387 cal	38 g	17 g	19 g	2.6	104 mg	152 mg	39 mg
L 173 00	CHEESE TORTELLINI MARINARA	1 Cup	100	273 cal	13 g	5 g	46 g	3.5	26 mg	1004 mg	205 mg
L 173 01	SPINACH TORTELLINI MARINARA (FROZEN)	1 Cup	100	341 cal	19 g	15 g	33 g	0	111 mg	640 mg	371 mg
L 173 02	CHEESE TORTELLINI MARINARA (DEHYDRATED)	1 Cup	100	272 cal	13 g	5 g	46 g	3.4	26 mg	997 mg	205 mg
L 174 00	RICE FRITTATA	11 Ounces	100	391 cal	24 g	22 g	25 g	2.7	220 mg	805 mg	430 mg
L 175 00	POTATO FRITTATA	12 Ounces	100	243 cal	18 g	7 g	28 g	5.3	213 mg	568 mg	175 mg
L 176 00	VEGETABLE STUFFED PEPPERS	2 Halves	100	368 cal	13 g	15 g	50 g	7.8	21 mg	1163 mg	218 mg
L 177 00	FRY CHICKEN (8 PC)	1 Piece	100	368 cal	39 g	10 g	31 g	0.3	119 mg	119 mg	27 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 177 01	BOMBAY CHICKEN (BREAST BONELESS)	5 Ounces	100	287 cal	32 g	4 g	31 g	0.3	88 mg	81 mg	22 mg
L 178 00	TROPICAL CHICKEN SALAD (COOKED DICED)	1 Cup	100	419 cal	26 g	25 g	24 g	3.2	82 mg	254 mg	43 mg
L 178 01	TROPICAL CHICKEN SALAD (CANNED CHICKEN)	1 Cup	100	434 cal	23 g	27 g	26 g	3.4	69 mg	786 mg	45 mg
L 179 00	HONEY GINGER CHICKEN (BREAST BONELESS)	5 Ounces	100	217 cal	33 g	4 g	11 g	0.3	88 mg	481 mg	21 mg
L 180 00	TURKEY SAUSAGE PATTIES	2 Ounces	100	106 cal	13 g	5 g	3 g	0.3	42 mg	244 mg	30 mg
L 181 00	CHICKEN IN ORANGE SAUCE (BREAST BONELESS)	5 Ounces	100	208 cal	33 g	4 g	8 g	0.3	88 mg	264 mg	22 mg
L 182 00	FIESTA CHICKEN (FAJITA STRIPS)	6 Ounces	100	150 cal	18 g	2 g	14 g	2.1	44 mg	488 mg	38 mg
L 183 00	BUFFALO CHICKEN (8 PC)	8 Ounces	100	421 cal	45 g	23 g	7 g	0.7	144 mg	363 mg	32 mg
L 184 00	GRILLED TURKEY PATTIES (GROUND TURKEY)	4-1/2 Ounces	100	204 cal	23 g	9 g	9 g	0.7	72 mg	313 mg	45 mg
L 185 00	CARIBBEAN CATFISH	4 Ounces	100	229 cal	21 g	12 g	9 g	0.8	68 mg	183 mg	34 mg
L 185 01	CARIBBEAN FLOUNDER	4 Ounces	100	192 cal	27 g	5 g	9 g	0.8	72 mg	210 mg	44 mg
L 186 00	BAKED YOGURT CHICKEN (BREAST BONELESS)	5 Ounces	100	257 cal	35 g	5 g	15 g	0.7	89 mg	230 mg	81 mg
L 187 00	HOT AND SPICY CHICKEN (8 PC)	8 Ounces	100	430 cal	45 g	11 g	35 g	1.7	120 mg	627 mg	85 mg
L 188 00	TURKEY FINGERS	3-1/2 Ounces	100	253 cal	24 g	9 g	18 g	0.6	65 mg	692 mg	43 mg
L 189 00	ITALIAN BROCCOLI PASTA	11 Ounces	100	464 cal	21 g	4 g	90 g	11.9	5 mg	1382 mg	278 mg
L 190 00	CRANBERRY GLAZED CHICKEN (BREAST BONELESS)	5 Ounces	100	254 cal	32 g	4 g	21 g	0.5	88 mg	88 mg	20 mg
L 191 00	CHICKEN & ITALIAN VEGETABLE PASTA (FAJITA STRIPS)	1-1/4 Cups	100	329 cal	24 g	5 g	48 g	5.2	41 mg	665 mg	187 mg
L 192 00	HONEY LEMON CHICKEN BREAST (BREAST BONELESS)	5 Ounces	100	219 cal	32 g	4 g	13 g	0.2	88 mg	88 mg	19 mg
L 193 00	CAJUN ROAST BEEF	4 Ounces	100	280 cal	39 g	12 g	1 g	0.3	112 mg	226 mg	20 mg
L 193 01	CAJUN ROAST TENDERLOIN OF BEEF	4 Ounces	100	292 cal	34 g	16 g	1 g	0.3	104 mg	216 mg	18 mg
L 194 00	TROPICAL BAKED PORK CHOPS	3 Ounces	100	374 cal	40 g	17 g	13 g	0.9	99 mg	172 mg	25 mg
L 195 00	TERIYAKI BEEF STRIPS	5 Ounces	100	213 cal	26 g	8 g	8 g	1.1	70 mg	699 mg	20 mg
L 195 01	TERIYAKI BEEF STRIPS (FAJITA STRIPS)	5 Ounces	100	269 cal	34 g	11 g	8 g	1.1	96 mg	718 mg	22 mg
L 196 00	SOUTHWESTERN SWEET POTATOES, BLACK BEANS, AND CORN	1-1/4 Cups	100	356 cal	15 g	2 g	74 g	15.1	0 mg	197 mg	102 mg
L 196 01	SOUTHWESTERN SWEET POTATOES, BLACK BEAN, CORN (CND)	1-1/4 Cups	100	351 cal	15 g	2 g	74 g	16.3	0 mg	243 mg	82 mg
L 197 00	DIJON BAKED PORK CHOPS	3 Ounces	100	315 cal	33 g	15 g	11 g	1.2	78 mg	422 mg	43 mg
L 198 00	GREEK LEMON TURKEY PASTA	1-1/3 Cups	100	354 cal	23 g	7 g	50 g	3.2	40 mg	1585 mg	127 mg
L 200 00	GRILLED TURKEY SAUSAGE LINKS	2 Ounces	100	82 cal	9 g	4 g	0 g	0	30 mg	176 mg	14 mg
L 201 00	TAMALE PIE (TURKEY)	9-1/2 Ounces	100	305 cal	21 g	9 g	36 g	5.5	48 mg	856 mg	122 mg
L 202 00	ORIENTAL TUNA PATTIES	4-1/2 Ounces	100	225 cal	24 g	5 g	20 g	1.5	105 mg	674 mg	66 mg
L 203 00	VEGETABLE CURRY WITH RICE	2-1/2 Cups	100	458 cal	12 g	3 g	98 g	11.5	0 mg	688 mg	109 mg
L 204 00	TURKEY PEACH PASTA SALAD (ENTREE)	1-1/2 Cups	100	313 cal	22 g	7 g	41 g	4	51 mg	749 mg	111 mg
L 205 00	ITALIAN RICE AND BEEF	9 Ounces	100	342 cal	29 g	15 g	20 g	1.4	92 mg	368 mg	132 mg
L 206 00	BAYOU CHICKEN (BREAST BONELESS)	5 Ounces	100	186 cal	32 g	4 g	3 g	0.5	88 mg	435 mg	27 mg
L 207 00	SOUTHWESTERN SHRIMP LINGUINE	10 Ounces	100	290 cal	24 g	5 g	36 g	1.5	168 mg	656 mg	178 mg
L 208 00	PASTA TOSCANO	9 Ounces	100	447 cal	24 g	24 g	33 g	1.7	85 mg	1341 mg	188 mg
L 209 00	SEAFOOD STEW	1-1/2 Cups	100	247 cal	27 g	2 g	30 g	2.9	101 mg	807 mg	67 mg
L 210 00	SANTE FE GLAZED CHICKEN (BREAST BONELESS)	4 Ounces	100	262 cal	33 g	5 g	21 g	0.4	88 mg	288 mg	27 mg
L 212 00	WHITE BEAN CHICKEN CHILI (COOKED DICED)	1-1/2 Cups	100	350 cal	35 g	8 g	35 g	7.2	73 mg	972 mg	91 mg
L 213 00	CHICKEN BIRYANI (COOKED DICED)	12 Ounces	100	379 cal	29 g	10 g	42 g	2.9	77 mg	882 mg	112 mg
L 216 00	CHEDDAR CHICKEN AND BROCCOLI (COOKED DICED)	10 Ounces	100	302 cal	32 g	10 g	21 g	3.7	83 mg	1035 mg	134 mg
L 217 00	ASIAN BARBECUE TURKEY	4 Ounces	100	184 cal	34 g	2 g	6 g	0.6	89 mg	823 mg	22 mg
L 219 00	LEMON N' HERB TURKEY FILLETS	4 Ounces	100	280 cal	36 g	9 g	12 g	1.1	134 mg	255 mg	58 mg
L 221 00	TURKEY DIVAN	3 Ounces	100	241 cal	38 g	5 g	10 g	3.4	61 mg	2357 mg	140 mg
L 222 00	SPICY ITALIAN PORK CHOPS	4 Ounces	100	471 cal	30 g	35 g	9 g	1	81 mg	605 mg	20 mg
L 223 00	LIME CHICKEN SOFT TACOS (FAJITA STRIPS)	7 Ounces	100	318 cal	31 g	6 g	36 g	5.3	66 mg	854 mg	154 mg
L 224 00	SAUSAGE, BEANS AND GREENS	1-1/2 Cups	100	299 cal	30 g	8 g	27 g	4.5	72 mg	1341 mg	102 mg
L 225 00	ORANGE & ROSEMARY HONEY GLAZED PORK CHOPS	1 Chop	100	458 cal	40 g	20 g	28 g	0.4	99 mg	171 mg	18 mg
L 500 00	RUSSIAN TURKEY STEW	1 Cup	100	327 cal	24 g	8 g	39 g	2.5	79 mg	711 mg	185 mg
L 501 00	PASTA PRIMAVERA	1 Cup	100	288 cal	12 g	4 g	54 g	5.6	2 mg	691 mg	169 mg
L 502 00	FISH FLORENTINE	4 Ounces	100	194 cal	21 g	10 g	5 g	1.1	68 mg	448 mg	50 mg
L 503 00	JAMAICAN RUM CHICKEN (BREAST BONELESS)	5 Ounces	100	212 cal	33 g	4 g	9 g	0.6	88 mg	344 mg	36 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
L 504 00	BAKED FISH SCANDIA	4 Ounces	100	179 cal	28 g	4 g	5 g	0.2	79 mg	192 mg	102 mg
L 506 00	THAI BEEF SALAD	1-1/2 Cups	100	297 cal	29 g	9 g	25 g	2.6	74 mg	631 mg	51 mg
L 507 00	VEGETARIAN BURRITO	2 Burritos	100	521 cal	25 g	20 g	61 g	9.6	40 mg	1060 mg	416 mg
L 508 00	VEGETABLE LASAGNA	8 Ounces	100	292 cal	22 g	7 g	38 g	4	16 mg	1036 mg	242 mg
L 510 00	TUNA PLATE TRIO	1 Plate	100	367 cal	27 g	19 g	24 g	4.2	106 mg	767 mg	89 mg
L 512 00	GRILLED TURKEY SAUSAGE PATTY (PRE-MADE)	1 Patty	100	122 cal	14 g	6 g	0 g	0	45 mg	264 mg	22 mg
L 515 00	OVEN FRIED TURKEY BACON	2 Slices	100	57 cal	4 g	4 g	0 g	0	21 mg	308 mg	9 mg
L 523 00	MAMBO PORK ROAST	4 Ounces	100	358 cal	29 g	15 g	26 g	1.1	81 mg	204 mg	43 mg
L 524 00	WHITE FISH WITH MUSHROOMS	4 Ounces	100	142 cal	27 g	2 g	3 g	1.1	72 mg	409 mg	27 mg
L 800 00	TURKEY POLYNESIAN	3-1/2 Ounces	100	204 cal	24 g	4 g	19 g	0.7	42 mg	1043 mg	27 mg
L 802 00	ANGEL HAIR PASTA, FILIPINO STYLE WITH SHRIMP	12 Ounces	100	212 cal	20 g	3 g	27 g	1.7	152 mg	1792 mg	74 mg
L 803 00	OVEN ROASTED TURKEY, PRECOOKED	4 Ounces	100	152 cal	25 g	4 g	1 g	0	48 mg	715 mg	14 mg
L 804 00	LASAGNA (FROZEN)	9 Ounces	96	430 cal	28 g	18 g	39 g	4	51 mg	1101 mg	377 mg
L 805 00	MEXICAN TURKEY PASTA	1-1/4 Cups	100	360 cal	29 g	4 g	55 g	9.7	42 mg	1038 mg	180 mg
L 806 00	BASIL BAKED FISH PORTIONS	4-1/2 Ounces	100	128 cal	26 g	2 g	0 g	0.2	72 mg	252 mg	27 mg
L 807 00	TUNA NOODLE CASSEROLE, FROZEN	5 Ounces	100	237 cal	14 g	12 g	19 g	0	33 mg	939 mg	122 mg
L 808 00	TURKEY TETRAZZINI, FROZEN	5 Ounces	108	269 cal	13 g	16 g	17 g	0	47 mg	737 mg	85 mg
L 809 00	SHEPHERD'S PIE	12 Ounces	100	556 cal	35 g	22 g	54 g	5.2	129 mg	922 mg	227 mg
L 810 00	BEEF STIR FRY	1/2 Cup	100	230 cal	20 g	9 g	16 g	1.8	51 mg	1101 mg	44 mg
L 811 00	INDONESIAN STYLE BEEF OVER NOODLES	1-1/2 Cups	100	325 cal	32 g	14 g	19 g	0.6	90 mg	1165 mg	29 mg
L 812 00	HOT & SPICY CHICKEN WINGS	5 Pieces	100	662 cal	54 g	38 g	0 g	0	200 mg	154 mg	31 mg
L 813 00	MAMBO PORK ROAST USING PRECOOKED PORK	5 Ounces	100	291 cal	30 g	6 g	28 g	1.1	85 mg	66 mg	29 mg
L 814 00	KIELBASA WITH SAUERKRAUT AND APPLES	4 Ounces	100	188 cal	18 g	9 g	8 g	1.6	58 mg	591 mg	25 mg
L 816 00	TARRAGON CHICKEN & RICE (FAJITA STRIPS)	6 Ounces	100	332 cal	34 g	4 g	40 g	3.1	71 mg	686 mg	69 mg
L 817 00	CAJUN ROAST BEEF (PRECOOKED ROAST BEEF)	4-1/2 Ounces	100	314 cal	41 g	13 g	6 g	0.3	117 mg	712 mg	19 mg
L 818 00	BAKED TANDOORI CHICKEN (BREAST BONELESS)	4 Ounces	100	219 cal	34 g	5 g	8 g	0.2	90 mg	260 mg	76 mg
L 819 00	BAKED HAM AND SPAGHETTI PIE	2 Cups	100	499 cal	28 g	21 g	48 g	2.8	58 mg	2231 mg	252 mg
L 820 00	CANTONESE BBQ PORK RIBS, PRECOOKED	9.5 Ounces	100	605 cal	61 g	34 g	9 g	0.2	211 mg	1137 mg	92 mg
L 821 00	HERB TURKEY ROAST W/TOMATO GRAVY PRECOOKED TURKEY	4 Ounces	100	195 cal	35 g	1 g	9 g	0.5	94 mg	382 mg	43 mg
L 822 00	BEEF AND BEAN BURRITOS, FROZEN	4 Ounces	100	276 cal	11 g	8 g	40 g	5.9	14 mg	920 mg	137 mg
L 825 00	CORNEB BEEF AND CABBAGE (PRECOOKED CORNEB BEEF)	9 Ounces	100	153 cal	21 g	1 g	14 g	3.1	48 mg	1980 mg	88 mg
L 826 00	SAVORY BAKED CHICKEN (BREAST BONELESS)	4 Ounces	100	215 cal	34 g	4 g	9 g	0.3	88 mg	1643 mg	52 mg
L 827 00	SPAGHETTI & MEAT SAUCE (PRECOOKED GROUND BEEF)	1-1/2 Cups	100	542 cal	29 g	22 g	54 g	1.5	73 mg	1278 mg	120 mg
L 827 01	SPAGHETTI & MEAT BALLS (PRECOOKED MEATBALLS)	1-1/2 Cups	100	747 cal	27 g	45 g	60 g	4.1	67 mg	2274 mg	167 mg
L 828 00	BAKED FLOUNDER FILLETS WITH LEMON PEPPER	4-1/2 Ounces	100	153 cal	26 g	4 g	1 g	0.5	72 mg	113 mg	27 mg
L 829 00	HUNTER STYLE TURKEY STEW	1-1/2 Cups	100	269 cal	37 g	5 g	18 g	2.7	94 mg	754 mg	47 mg
L 831 00	BEEF STROGANOFF, FROZEN	5 Ounces	100	311 cal	24 g	20 g	9 g	0	87 mg	1219 mg	52 mg
L 832 00	HONEY GLAZED CHICKEN (BREAST BONELESS)	4 Ounces	100	196 cal	32 g	4 g	6 g	0	88 mg	77 mg	16 mg
L 833 00	ROSEMARY TURKEY ROAST	4 Ounces	100	155 cal	31 g	2 g	1 g	0.4	56 mg	2513 mg	22 mg
L 834 00	SWEDISH MEATBALLS (PRECOOKED MEATBALLS)	1 Cup	100	424 cal	20 g	34 g	12 g	3	67 mg	1576 mg	60 mg
L 835 00	MEXICAN PEPPER STEAK	3/4 Cup	100	278 cal	34 g	12 g	7 g	1.7	95 mg	311 mg	45 mg
L 836 00	ST LOUIS STYLE BBQ PORK RIBS, PRECOOKED	9.5 Ounces	100	580 cal	61 g	34 g	3 g	0.2	211 mg	229 mg	70 mg
L 837 00	MEATLOAF (PRECOOKED)	6 Ounces	100	355 cal	31 g	17 g	19 g	0.2	95 mg	1770 mg	50 mg
L 837 01	CAJUN MEATLOAF (PRECOOKED)	6 Ounces	100	357 cal	32 g	17 g	20 g	0.3	95 mg	1826 mg	52 mg
L 838 00	PORK TENDERLOIN, PRECOOKED	6 Ounces	100	228 cal	34 g	7 g	4 g	0.1	107 mg	78 mg	7 mg
L 839 00	CHICKEN CORDON BLEU	1 Each	100	567 cal	29 g	44 g	14 g	0	158 mg	1343 mg	22 mg
L 840 00	BLACKENED FISH	5-1/2 Ounces	100	156 cal	30 g	2 g	3 g	0.7	90 mg	1245 mg	77 mg
L 841 00	MANICOTTI, FROZEN	5 Ounces	100	433 cal	24 g	21 g	35 g	0	996 mg	664 mg	389 mg
L 842 00	SALISBURY STEAK IN GRAVY, FROZEN	5 Ounces	108	472 cal	32 g	36 g	5 g	0	79 mg	680 mg	110 mg
L 843 00	CABBAGE ROLLS, STUFFED, FROZEN	5 Ounces	108	216 cal	9 g	8 g	26 g	4.9	15 mg	1000 mg	70 mg
L 844 00	JERKED ROAST TURKEY	4 Ounces	100	210 cal	34 g	6 g	3 g	0.4	86 mg	554 mg	41 mg
L 845 00	LEMON PEPPER CATFISH	4-1/2 Ounces	100	171 cal	20 g	9 g	1 g	0.5	68 mg	87 mg	17 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
M 001 00	APPLE, CELERY, AND PINEAPPLE SALAD	1/2 Cup	100	86 cal	0 g	5 g	12 g	1.9	3 mg	68 mg	24 mg
M 001 01	CABBAGE, APPLE, AND CELERY SALAD	1/2 Cup	100	73 cal	1 g	5 g	8 g	2.1	3 mg	77 mg	35 mg
M 001 02	CABBAGE, APPLE, AND RAISIN SALAD	1/2 Cup	100	105 cal	1 g	5 g	17 g	2.4	3 mg	66 mg	35 mg
M 002 00	SPINACH SALAD	1 Cup	100	49 cal	4 g	3 g	3 g	1.4	32 mg	99 mg	43 mg
M 002 01	SPINACH AND APPLE SALAD	1-1/3 Cups	100	60 cal	2 g	0 g	15 g	2.5	0 mg	30 mg	45 mg
M 002 02	SPINACH AND MUSHROOM SALAD	1-3/4 Cups	100	18 cal	2 g	0 g	3 g	1.5	0 mg	30 mg	39 mg
M 003 00	RED WINE VINAIGRETTE DRESSING	1 Tablespoon	100	50 cal	0 g	5 g	1 g	0.1	0 mg	0 mg	3 mg
M 004 00	FRIJOLE SALAD	3/4 Cup	100	63 cal	2 g	2 g	12 g	2.1	0 mg	247 mg	30 mg
M 005 00	CARROT SALAD	1/2 Cup	100	109 cal	1 g	6 g	15 g	2.2	4 mg	214 mg	38 mg
M 005 01	CARROT AND PINEAPPLE SALAD	1/2 Cup	100	96 cal	1 g	6 g	11 g	2	4 mg	204 mg	33 mg
M 005 02	CARROT, CELERY, AND APPLE SALAD	1/2 Cup	100	95 cal	1 g	6 g	11 g	2.3	4 mg	210 mg	33 mg
M 006 00	PIMIENTO CHEESE STUFFED CELERY	2 Pieces	100	57 cal	3 g	4 g	2 g	0.5	11 mg	101 mg	84 mg
M 006 01	COTTAGE CHEESE STUFFED CELERY	2 Pieces	100	14 cal	1 g	0 g	1 g	0.5	1 mg	68 mg	17 mg
M 006 02	PEANUT BUTTER STUFFED CELERY	2 Pieces	100	50 cal	2 g	3 g	6 g	0.8	0 mg	48 mg	13 mg
M 006 03	CREAM CHEESE STUFFED CELERY	2 Pieces	100	37 cal	1 g	3 g	1 g	0.5	10 mg	51 mg	18 mg
M 007 00	CHEF'S SALAD	1 Cup	100	102 cal	9 g	5 g	5 g	1.6	71 mg	228 mg	130 mg
M 007 01	CHEF'S SALAD (ENTREE)	1-1/2 Cups	100	193 cal	16 g	11 g	8 g	2.3	92 mg	363 mg	320 mg
M 008 00	COLE SLAW	1/2 Cup	100	115 cal	1 g	9 g	9 g	1.3	6 mg	258 mg	26 mg
M 008 01	MEXICAN COLE SLAW	1/2 Cup	100	121 cal	1 g	9 g	10 g	1.5	6 mg	268 mg	23 mg
M 009 00	COLE SLAW WITH CREAMY DRESSING	1/2 Cup	100	75 cal	1 g	5 g	8 g	1.4	3 mg	188 mg	35 mg
M 009 01	COLE SLAW WITH VINEGAR DRESSING	1/2 Cup	100	47 cal	1 g	0 g	12 g	1.4	0 mg	127 mg	29 mg
M 009 02	CABBAGE AND CARROT SLAW WITH CREAMY DRESSING	1/2 Cup	100	78 cal	1 g	5 g	9 g	1.5	3 mg	190 mg	33 mg
M 009 03	PINEAPPLE COLE SLAW	1/2 Cup	100	87 cal	1 g	5 g	12 g	1.3	3 mg	184 mg	33 mg
M 009 04	PINEAPPLE MARSHMALLOW COLE SLAW	2/3 Cup	100	106 cal	1 g	5 g	16 g	1.4	3 mg	186 mg	33 mg
M 009 05	VEGETABLE SLAW WITH CREAMY DRESSING	1/2 Cup	100	79 cal	1 g	5 g	9 g	1.5	3 mg	189 mg	33 mg
M 010 00	HONEY MUSTARD DRESSING	1 Tablespoon	100	27 cal	0 g	0 g	7 g	0.1	0 mg	36 mg	4 mg
M 011 00	LOW CALORIE YOGURT DRESSING	2 Tablespoons	100	25 cal	2 g	0 g	4 g	0.1	2 mg	93 mg	57 mg
M 012 00	COTTAGE CHEESE SALAD	1/4 Cup	100	62 cal	7 g	3 g	2 g	0.4	8 mg	229 mg	46 mg
M 013 00	COTTAGE CHEESE AND PEACH SALAD	1/4 Cup	100	102 cal	8 g	3 g	12 g	2.3	8 mg	233 mg	52 mg
M 013 01	COTTAGE CHEESE AND APRICOT SALAD	1/4 Cup	100	91 cal	8 g	3 g	10 g	1.3	8 mg	232 mg	54 mg
M 013 02	COTTAGE CHEESE AND PEAR SALAD	1/4 Cup	100	107 cal	8 g	3 g	14 g	1.8	8 mg	233 mg	54 mg
M 013 03	COTTAGE CHEESE AND PINEAPPLE SALAD	1/4 Cup	100	98 cal	8 g	3 g	12 g	1.1	8 mg	230 mg	56 mg
M 014 00	COTTAGE CHEESE AND TOMATO SALAD	1/4 Cup	100	74 cal	8 g	3 g	5 g	1	8 mg	234 mg	49 mg
M 015 00	CUCUMBER AND ONION SALAD	1/2 Cup	100	30 cal	0 g	0 g	8 g	0.6	0 mg	118 mg	11 mg
M 016 00	LOW CALORIE THOUSAND ISLAND DRESSING	2 Tablespoons	100	29 cal	2 g	1 g	4 g	0.3	2 mg	242 mg	57 mg
M 017 00	FRUIT SALAD	1/2 Cup	100	79 cal	1 g	0 g	19 g	2.5	1 mg	10 mg	53 mg
M 018 00	GARDEN COTTAGE CHEESE SALAD	1/2 Cup	100	56 cal	6 g	2 g	3 g	0.8	7 mg	191 mg	46 mg
M 019 00	GARDEN VEGETABLE SALAD	3/4 Cup	100	12 cal	1 g	0 g	3 g	1.1	0 mg	18 mg	15 mg
M 020 00	MARINATED CARROTS	1/2 Cup	100	135 cal	1 g	5 g	24 g	2.6	0 mg	109 mg	28 mg
M 021 00	LOW CALORIE TANGY TARRAGON DRESSING	2 Tablespoons	100	20 cal	0 g	0 g	6 g	0.1	0 mg	117 mg	5 mg
M 021 01	LOW CALORIE BASIL DRESSING	2 Tablespoons	100	20 cal	0 g	0 g	6 g	0.1	0 mg	117 mg	6 mg
M 022 00	TANGY YOGURT SALAD DRESSING	1 Tablespoon	100	18 cal	1 g	0 g	3 g	0	1 mg	13 mg	28 mg
M 023 00	JELLIED CRANBERRY AND ORANGE SALAD	4 Ounces	100	106 cal	2 g	0 g	26 g	1.3	0 mg	50 mg	21 mg
M 023 01	JELLIED CRANBERRY AND ORANGE SALAD (CANNED)	4 Ounces	100	112 cal	2 g	0 g	27 g	0.8	0 mg	59 mg	19 mg
M 024 00	JELLIED CRANBERRY AND PINEAPPLE SALAD	5-1/2 Ounces	100	149 cal	2 g	2 g	33 g	1.1	0 mg	54 mg	23 mg
M 025 00	JELLIED FRUIT SALAD	5 Ounces	100	105 cal	2 g	0 g	26 g	1.3	0 mg	47 mg	19 mg
M 025 01	JELLIED ORANGE SALAD	5 Ounces	100	107 cal	2 g	0 g	26 g	1.3	0 mg	43 mg	31 mg
M 025 02	JELLIED PEAR SALAD	5 Ounces	100	93 cal	2 g	0 g	23 g	1.3	0 mg	46 mg	20 mg
M 025 03	JELLIED PINEAPPLE, PEAR, AND BANANA SALAD	5 Ounces	100	120 cal	2 g	0 g	30 g	1.3	0 mg	47 mg	22 mg
M 025 04	JELLIED STRAWBERRY SALAD	4-1/2 Ounces	100	90 cal	2 g	0 g	22 g	1.3	0 mg	44 mg	21 mg
M 025 05	JELLIED BANANA SALAD	5 Ounces	100	93 cal	2 g	0 g	22 g	1.1	0 mg	44 mg	16 mg
M 026 00	JELLIED FRUIT COCKTAIL SALAD	4-1/2 Ounces	100	125 cal	3 g	3 g	23 g	1.3	0 mg	48 mg	25 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
M 027 00	GERMAN COLE SLAW	1/2 Cup	100	60 cal	1 g	4 g	5 g	1.5	0 mg	153 mg	29 mg
M 028 00	TACO SALAD	1-1/2 Cups	100	307 cal	18 g	14 g	29 g	6.3	41 mg	908 mg	187 mg
M 029 00	ITALIAN STYLE PASTA SALAD	1/2 Cup	100	157 cal	6 g	8 g	15 g	0.9	13 mg	380 mg	93 mg
M 030 00	COBB SALAD	1 Cup	100	213 cal	9 g	17 g	8 g	1.9	57 mg	351 mg	85 mg
M 031 00	KIDNEY BEAN SALAD	1/2 Cup	100	152 cal	5 g	8 g	16 g	2.7	47 mg	404 mg	28 mg
M 032 00	FRUIT MEDLEY SALAD	1/2 Cup	100	101 cal	1 g	4 g	16 g	2.1	0 mg	23 mg	31 mg
M 033 00	LETTUCE AND TOMATO SALAD	3-1/2 Ounces	100	24 cal	1 g	0 g	5 g	1.4	0 mg	11 mg	17 mg
M 034 00	MACARONI SALAD	1/2 Cup	100	141 cal	3 g	6 g	20 g	0.9	26 mg	217 mg	14 mg
M 035 00	MIXED FRUIT SALAD	1/2 Cup	100	79 cal	1 g	0 g	20 g	1.2	0 mg	3 mg	41 mg
M 036 00	PERFECTION SALAD	3 Ounces	100	72 cal	2 g	0 g	17 g	0.8	0 mg	56 mg	22 mg
M 036 01	GOLDEN GLOW SALAD	3-1/2 Ounces	100	92 cal	2 g	0 g	22 g	1.1	0 mg	52 mg	23 mg
M 036 02	JELLIED SPRING SALAD	3 Ounces	100	70 cal	2 g	0 g	16 g	0.5	0 mg	47 mg	16 mg
M 037 00	PICKLED BEET AND ONION SALAD	1/2 Cup	100	71 cal	1 g	0 g	18 g	1.7	0 mg	417 mg	25 mg
M 038 00	PASTA SALAD	1/2 Cup	100	172 cal	5 g	10 g	17 g	1.5	3 mg	300 mg	79 mg
M 039 00	CORN RELISH	2-1/2 Tablespoons	100	27 cal	1 g	0 g	6 g	0.6	0 mg	95 mg	4 mg
M 040 00	POTATO SALAD	2/3 Cup	100	209 cal	3 g	13 g	22 g	1.9	45 mg	571 mg	19 mg
M 040 01	DEVILED POTATO SALAD	2/3 Cup	100	234 cal	4 g	15 g	22 g	1.9	48 mg	650 mg	21 mg
M 040 02	POTATO SALAD WITH VINEGAR DRESSING	2/3 Cup	100	130 cal	2 g	0 g	31 g	2.3	0 mg	455 mg	18 mg
M 041 00	POTATO SALAD (DEHYDRATED SLICED POTATOES)	2/3 Cup	100	133 cal	2 g	10 g	10 g	0.8	41 mg	500 mg	17 mg
M 042 00	HOT POTATO SALAD	2/3 Cup	100	168 cal	3 g	6 g	26 g	2.1	7 mg	355 mg	17 mg
M 043 00	HOT POTATO SALAD (DEHYDRATED SLICED POTATOES)	2/3 Cup	100	104 cal	2 g	5 g	14 g	0.6	6 mg	364 mg	9 mg
M 044 00	SPRING SALAD	3/4 Cup	100	16 cal	1 g	0 g	4 g	1.2	0 mg	7 mg	27 mg
M 045 00	THREE BEAN SALAD	1/3 Cup	100	120 cal	2 g	7 g	15 g	1.4	0 mg	366 mg	16 mg
M 045 01	PICKLED GREEN BEAN SALAD	1/3 Cup	100	113 cal	1 g	7 g	14 g	1.7	0 mg	435 mg	24 mg
M 046 00	TOSSED LETTUCE, CUCUMBER AND TOMATO SALAD	1 Cup	100	13 cal	1 g	0 g	3 g	1.1	0 mg	6 mg	30 mg
M 046 01	TOSSED GARDEN SALAD	1 Cup	100	17 cal	1 g	0 g	4 g	1.4	0 mg	16 mg	32 mg
M 046 02	TOSSED CALICO GARDEN SALAD	1 Cup	100	16 cal	1 g	0 g	3 g	1.3	0 mg	11 mg	31 mg
M 046 03	TOSSED ROMAINE, CUCUMBER AND TOMATO SALAD	1 Cup	100	12 cal	1 g	0 g	2 g	1	0 mg	5 mg	18 mg
M 046 04	TOSSED RED LEAF LETTUCE, CUCUMBER AND TOMATO SALAD	1 Cup	100	13 cal	1 g	0 g	3 g	1.1	0 mg	6 mg	30 mg
M 046 05	GREEN LEAF LETTUCE, CUCUMBER AND TOMATO SALAD	1 Cup	100	13 cal	1 g	0 g	3 g	1.1	0 mg	6 mg	30 mg
M 047 00	TOSSED GREEN SALAD	1 Cup	100	8 cal	1 g	0 g	2 g	1	0 mg	6 mg	28 mg
M 048 00	TOSSED VEGETABLE SALAD	1 Cup	100	19 cal	1 g	0 g	4 g	1.5	0 mg	19 mg	34 mg
M 048 01	TOSSED CALICO VEGETABLE SALAD	1 Cup	100	48 cal	2 g	0 g	11 g	2.1	0 mg	20 mg	56 mg
M 049 00	VEGETABLE SALAD	1/2 Cup	100	45 cal	2 g	0 g	9 g	2.1	0 mg	282 mg	26 mg
M 050 00	WALDORF SALAD	1/2 Cup	100	119 cal	1 g	9 g	10 g	1.9	4 mg	83 mg	27 mg
M 050 01	APPLE, CELERY, AND RAISIN SALAD	1/2 Cup	100	115 cal	1 g	6 g	17 g	2.1	4 mg	87 mg	28 mg
M 051 00	CRANBERRY ORANGE RELISH	5-1/4 Quarts	1	8987 cal	19 g	5 g	2315 g	107.7	0 mg	37 mg	670 mg
M 052 00	GUACAMOLE	2 Tablespoons	100	67 cal	1 g	6 g	3 g	1.4	2 mg	101 mg	4 mg
M 053 00	GERMAN STYLE TOMATO SALAD	1/3 Cup	100	68 cal	1 g	5 g	5 g	0.9	5 mg	171 mg	9 mg
M 053 01	COUNTRY STYLE TOMATO SALAD	1/2 Cup	100	53 cal	1 g	2 g	8 g	1.1	0 mg	119 mg	9 mg
M 054 00	TOMATO FRENCH DRESSING	1 Tablespoon	100	29 cal	0 g	2 g	2 g	0.1	0 mg	53 mg	2 mg
M 055 00	VINAIGRETTE DRESSING	1 Tablespoon	100	42 cal	0 g	4 g	1 g	0.1	0 mg	117 mg	3 mg
M 056 00	QUICK FRUIT DRESSING	1 Tablespoon	100	16 cal	1 g	0 g	3 g	0	1 mg	8 mg	21 mg
M 057 00	ZERO SALAD DRESSING	2 Tablespoons	100	7 cal	0 g	0 g	2 g	0.2	0 mg	184 mg	4 mg
M 058 00	FRENCH DRESSING	1 Tablespoon	100	41 cal	0 g	4 g	2 g	0.1	0 mg	113 mg	2 mg
M 058 01	LOW CALORIE FRENCH DRESSING	2 Tablespoons	100	14 cal	0 g	0 g	3 g	0.2	0 mg	490 mg	4 mg
M 059 00	BLUE CHEESE DRESSING	1 Tablespoon	100	19 cal	1 g	1 g	1 g	0	3 mg	47 mg	40 mg
M 060 00	GARLIC FRENCH DRESSING	1 Tablespoon	100	40 cal	0 g	4 g	2 g	0.1	0 mg	53 mg	3 mg
M 061 00	TANGY SALAD DRESSING	1 Tablespoon	100	41 cal	0 g	4 g	2 g	0.1	0 mg	167 mg	2 mg
M 062 00	MEXICAN POTATO SALAD	3/4 Cup	100	162 cal	3 g	8 g	20 g	2.7	0 mg	115 mg	28 mg
M 063 00	THOUSAND ISLAND DRESSING	1 Tablespoon	100	63 cal	0 g	6 g	3 g	0.1	10 mg	150 mg	1 mg
M 064 00	CREAMY ITALIAN DRESSING	1 Tablespoon	100	69 cal	0 g	7 g	2 g	0.2	5 mg	82 mg	7 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
M 065 00	CREAMY HORSERADISH DRESSING	1 Tablespoon	100	59 cal	0 g	5 g	4 g	0.1	3 mg	103 mg	2 mg
M 066 00	LOW CALORIE TOMATO DRESSING	2 Tablespoons	100	26 cal	1 g	0 g	6 g	0.2	0 mg	196 mg	4 mg
M 067 00	RUSSIAN DRESSING	1 Tablespoon	100	72 cal	0 g	7 g	3 g	0.1	5 mg	106 mg	1 mg
M 068 00	SOUR CREAM DRESSING	1 Tablespoon	100	39 cal	0 g	3 g	2 g	0	6 mg	89 mg	19 mg
M 068 01	BLUE CHEESE AND SOUR CREAM DRESSING	1 Tablespoon	100	54 cal	1 g	4 g	2 g	0	9 mg	146 mg	41 mg
M 069 00	VINEGAR AND OIL DRESSING	1 Tablespoon	100	40 cal	0 g	4 g	0 g	0	0 mg	117 mg	1 mg
M 070 00	ZESTY ROTINI PASTA SALAD	1/2 Cup	100	106 cal	4 g	2 g	18 g	1.2	1 mg	382 mg	37 mg
M 071 00	SALSA PASTA SALAD	1/2 Cup	100	98 cal	4 g	1 g	19 g	2.3	0 mg	221 mg	18 mg
M 072 00	CONFETTI RICE SALAD	1/2 Cup	100	97 cal	2 g	2 g	18 g	0.9	2 mg	250 mg	44 mg
M 072 01	CREAMY CUCUMBER RICE SALAD	1/2 Cup	100	105 cal	3 g	2 g	18 g	0.8	3 mg	260 mg	75 mg
M 073 00	KIWI FRUIT SALAD	1/2 Cup	100	106 cal	2 g	1 g	25 g	3	1 mg	22 mg	79 mg
M 074 00	MARINATED BLACK BEAN SALAD	3/4 Cup	100	179 cal	10 g	1 g	36 g	10.1	0 mg	149 mg	53 mg
M 504 00	BROCCOLI SALAD	1/2 Cup	100	266 cal	4 g	15 g	33 g	3.2	6 mg	129 mg	51 mg
M 801 00	SALAD BAR	1 Cup	100	325 cal	7 g	26 g	17 g	2.8	22 mg	655 mg	145 mg
N 001 01	BACON, LETTUCE, AND TOMATO SANDWICH	1 Sandwich	100	281 cal	10 g	14 g	29 g	2.1	17 mg	573 mg	74 mg
N 002 00	GYROS	1 Sandwich	100	447 cal	37 g	11 g	49 g	4.3	79 mg	725 mg	244 mg
N 002 01	GYROS (RTU)	1 Sandwich	100	520 cal	37 g	17 g	54 g	4.4	79 mg	916 mg	198 mg
N 003 00	STEAK AND CHEESE SUBMARINE	1 Sandwich	100	475 cal	32 g	29 g	20 g	1.2	102 mg	468 mg	218 mg
N 003 01	STEAK, CHEESE AND ONION SUBMARINE	1 Sandwich	100	510 cal	33 g	29 g	27 g	2.8	102 mg	471 mg	236 mg
N 003 02	STEAK AND ONION SUBMARINE	1 Sandwich	100	403 cal	26 g	20 g	27 g	2.8	75 mg	287 mg	61 mg
N 004 00	ROAST BEEF SANDWICH	1 Sandwich	100	368 cal	31 g	14 g	29 g	2.9	76 mg	430 mg	81 mg
N 004 01	ROAST PORK SANDWICH	1 Sandwich	100	411 cal	29 g	19 g	31 g	3.3	72 mg	451 mg	86 mg
N 004 02	ROAST TURKEY SANDWICH	1 Sandwich	100	343 cal	23 g	13 g	33 g	3.4	55 mg	959 mg	109 mg
N 004 05	TURKEY CROISSANT	1 Sandwich	100	414 cal	22 g	22 g	30 g	1.8	93 mg	1056 mg	57 mg
N 005 00	SAUSAGE AND BISCUIT	1 Sandwich	100	242 cal	9 g	12 g	24 g	0.8	22 mg	690 mg	123 mg
N 005 01	HAM AND BISCUIT	1 Sandwich	100	196 cal	9 g	7 g	24 g	0.8	14 mg	707 mg	117 mg
N 006 00	GRILLED CHEESE SANDWICH	1 Sandwich	100	411 cal	17 g	27 g	26 g	1.1	74 mg	713 mg	405 mg
N 006 01	GERMAN STYLE HAMWICH	1 Sandwich	100	418 cal	16 g	28 g	26 g	1.4	61 mg	1032 mg	244 mg
N 006 03	GRILLED HAM AND CHEESE SANDWICH	1 Sandwich	100	391 cal	21 g	22 g	25 g	1.1	76 mg	1251 mg	235 mg
N 007 00	ENGLISH MUFFIN WITH BACON, EGG AND CHEESE	1 Sandwich	100	345 cal	18 g	18 g	27 g	1.5	228 mg	601 mg	301 mg
N 007 01	ENGLISH MUFFIN WITH HAM, EGG, AND CHEESE	1 Sandwich	100	355 cal	22 g	17 g	27 g	1.5	237 mg	871 mg	302 mg
N 007 02	ENGLISH MUFFIN WITH CANADIAN BACON, EGG, & CHEESE	1 Sandwich	100	356 cal	22 g	17 g	28 g	1.5	237 mg	909 mg	303 mg
N 007 03	ENGLISH MUFFIN WITH SAUSAGE, EGG, AND CHEESE	1 Sandwich	100	459 cal	24 g	27 g	28 g	1.5	256 mg	1026 mg	313 mg
N 008 00	CHICKEN SALAD SANDWICH	1 Sandwich	100	364 cal	28 g	14 g	30 g	2.5	78 mg	650 mg	102 mg
N 008 01	CHICKEN SALAD SANDWICH (CANNED CHICKEN)	1 Sandwich	100	385 cal	26 g	17 g	31 g	2.7	65 mg	901 mg	107 mg
N 008 02	TURKEY SALAD SANDWICH	1 Sandwich	100	331 cal	20 g	14 g	31 g	2.5	50 mg	1058 mg	116 mg
N 009 00	CORNED BEEF SANDWICH	1 Sandwich	100	358 cal	19 g	16 g	33 g	4.4	71 mg	1359 mg	73 mg
N 009 01	CORNED BEEF AND CHEESE SANDWICH	1 Sandwich	100	464 cal	27 g	24 g	34 g	4.4	97 mg	1433 mg	345 mg
N 010 00	EGG SALAD SANDWICH	1 Sandwich	100	335 cal	14 g	17 g	32 g	1.8	323 mg	578 mg	108 mg
N 010 01	NEW YORK EGG SALAD SANDWICH (EGG AND TOMATO)	1 Sandwich	100	345 cal	14 g	17 g	34 g	2.3	323 mg	582 mg	110 mg
N 011 00	HAM SANDWICH	1 Sandwich	100	304 cal	22 g	9 g	32 g	4.4	43 mg	1620 mg	73 mg
N 011 01	FRIED HAM SANDWICH	1 Sandwich	100	344 cal	22 g	14 g	32 g	4.4	43 mg	1620 mg	73 mg
N 011 02	HAM AND CHEESE SANDWICH	1 Sandwich	100	368 cal	25 g	15 g	33 g	4.4	54 mg	1333 mg	343 mg
N 011 03	HAM AND TOMATO SANDWICH	1 Sandwich	100	315 cal	23 g	9 g	35 g	4.9	43 mg	1625 mg	75 mg
N 012 00	GRILLED HAMBURGER (BEEF PATTIES)	1 Burger	100	294 cal	19 g	14 g	22 g	1.2	50 mg	277 mg	66 mg
N 012 01	CHEESEBURGER (BEEF PATTIES)	1 Burger	100	400 cal	25 g	23 g	22 g	1.2	77 mg	461 mg	240 mg
N 012 02	CHEESY BACONBURGER (BEEF PATTIES)	1 Burger	100	444 cal	28 g	26 g	22 g	1.2	83 mg	582 mg	241 mg
N 012 03	DOUBLE DECKER CHEESEBURGER (BEEF PATTIES)	1 Burger	100	683 cal	47 g	43 g	24 g	1.5	153 mg	863 mg	424 mg
N 012 04	CHILIBURGER (BEEF PATTIES)	1 Burger	100	329 cal	22 g	15 g	25 g	2.3	53 mg	419 mg	75 mg
N 012 05	DELUXE HAMBURGER (BEEF PATTIES)	1 Burger	100	329 cal	20 g	14 g	30 g	2.5	50 mg	700 mg	81 mg
N 012 06	PIZZABURGER (BEEF PATTIES)	1 Burger	100	389 cal	25 g	20 g	27 g	2.2	70 mg	464 mg	216 mg
N 012 07	DELUXE CHEESEBURGER (BEEF PATTIES)	1 Burger	100	435 cal	26 g	23 g	30 g	2.5	77 mg	884 mg	255 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
N 013 00	HAM SALAD SANDWICH	1 Sandwich	100	347 cal	20 g	16 g	31 g	1.6	116 mg	1338 mg	80 mg
N 014 00	PEANUT BUTTER AND JELLY SANDWICH	1 Sandwich	100	376 cal	12 g	18 g	44 g	3.2	1 mg	426 mg	68 mg
N 015 00	TUNA SALAD SANDWICH	1 Sandwich	100	339 cal	20 g	13 g	35 g	2.4	102 mg	702 mg	98 mg
N 015 01	GRILLED TUNA AND CHEESE SANDWICH	1 Sandwich	100	470 cal	23 g	27 g	33 g	1.6	48 mg	902 mg	243 mg
N 015 02	SALMON SALAD SANDWICH (CANNED SALMON)	1 Sandwich	100	397 cal	24 g	18 g	35 g	2.4	118 mg	601 mg	288 mg
N 015 03	TUNA AND TOMATO SANDWICH	1 Sandwich	100	342 cal	20 g	14 g	35 g	2.5	102 mg	663 mg	90 mg
N 016 00	CREAM CHEESE BAGEL	1 Bagel	100	346 cal	12 g	12 g	48 g	2	32 mg	561 mg	89 mg
N 016 01	CREAM CHEESE AND TOMATO BAGEL	1 Bagel	100	357 cal	12 g	12 g	51 g	2.6	32 mg	565 mg	92 mg
N 016 02	CREAM CHEESE AND OLIVE BAGEL	1 Bagel	100	350 cal	12 g	12 g	49 g	2.2	32 mg	602 mg	93 mg
N 017 00	COLD CUT SANDWICH	1 Sandwich	100	332 cal	17 g	16 g	31 g	2.2	44 mg	1104 mg	79 mg
N 017 01	COLD CUT SANDWICH WITH CHEESE	1 Sandwich	100	365 cal	20 g	18 g	30 g	2.1	55 mg	1004 mg	217 mg
N 018 00	WESTERN SANDWICH (DENVER)	1 Sandwich	100	245 cal	15 g	8 g	26 g	1.6	165 mg	750 mg	90 mg
N 019 00	SUBMARINE SANDWICH	1 Sandwich	100	519 cal	33 g	31 g	26 g	2	90 mg	1642 mg	481 mg
N 019 01	ITALIAN STYLE SUBMARINE	1 Sandwich	100	537 cal	33 g	33 g	26 g	2.3	87 mg	1588 mg	491 mg
N 020 00	GRILLED REUBEN SANDWICH	1 Sandwich	100	608 cal	27 g	39 g	37 g	4.2	130 mg	1699 mg	334 mg
N 020 02	GRILLED PASTRAMI REUBEN SANDWICH	1 Sandwich	100	679 cal	26 g	46 g	39 g	4.2	126 mg	1767 mg	335 mg
N 021 00	BAKED CHICKEN FILLET SANDWICH (BREADED)	1 Sandwich	100	460 cal	18 g	27 g	36 g	3.4	40 mg	891 mg	98 mg
N 021 01	DEEP FAT FRIED CHICKEN FILLET SANDWICH (BREADED)	5-1/2 Ounces	100	460 cal	18 g	27 g	36 g	3.4	40 mg	891 mg	98 mg
N 021 02	CHICKEN FILLET AND CHEESE SANDWICH (BREADED)	1 Sandwich	100	505 cal	21 g	31 g	36 g	3.4	52 mg	969 mg	172 mg
N 021 03	GRILLED CHICKEN FILLET SANDWICH (UNBREADED)	1 Sandwich	100	350 cal	29 g	14 g	25 g	1.8	79 mg	381 mg	86 mg
N 022 00	CANNONBALL SANDWICH (MEATBALL)	1 Sandwich	100	417 cal	28 g	15 g	40 g	5.1	92 mg	980 mg	150 mg
N 022 01	HOT ITALIAN SAUSAGE SANDWICH	1 Sandwich	100	400 cal	20 g	20 g	35 g	4.7	54 mg	1127 mg	144 mg
N 022 02	CANNONBALL SANDWICH (CANNED MEATBALLS)	1 Sandwich	100	481 cal	23 g	26 g	38 g	5	66 mg	915 mg	142 mg
N 023 00	HOT PASTRAMI SANDWICH	1 Sandwich	100	426 cal	18 g	24 g	34 g	4	67 mg	1425 mg	61 mg
N 024 00	BARBECUED BEEF SANDWICH (CANNED)	1 Sandwich	100	457 cal	40 g	19 g	30 g	2.2	104 mg	486 mg	79 mg
N 024 01	BARBECUED BEEF SANDWICH (DICED BEEF)	1 Sandwich	100	346 cal	27 g	13 g	30 g	2.2	66 mg	456 mg	77 mg
N 025 00	MONTE CRISTO SANDWICH	1 Sandwich	100	439 cal	26 g	25 g	27 g	1.1	154 mg	905 mg	360 mg
N 026 00	ITALIAN VEAL CUTLET SUBMARINE	1 Sandwich	100	496 cal	31 g	24 g	37 g	3.6	103 mg	833 mg	175 mg
N 027 00	BARBECUED BEEF SANDWICH (SLOPPY JOE)	1 Sandwich	100	352 cal	24 g	12 g	36 g	2.2	66 mg	881 mg	82 mg
N 027 01	BARBECUED PORK SANDWICH (PORK BUTT)	1 Sandwich	100	328 cal	19 g	14 g	32 g	1.9	53 mg	624 mg	89 mg
N 027 02	BARBECUED PORK SANDWICH (FROZEN BARBECUED PORK)	1 Sandwich	100	246 cal	14 g	8 g	30 g	1.2	27 mg	674 mg	70 mg
N 027 03	TURKEY BARBECUE SANDWICH	1 Sandwich	100	303 cal	21 g	9 g	36 g	2.2	56 mg	918 mg	95 mg
N 028 00	ITALIAN PEPPER BEEF SANDWICH	1 Sandwich	100	520 cal	35 g	13 g	63 g	4.4	70 mg	987 mg	99 mg
N 030 00	SIMMERED FRANKFURTER ON ROLL	1 Each	100	262 cal	9 g	15 g	22 g	1.1	22 mg	732 mg	65 mg
N 030 01	GRILLED POLISH SAUSAGE SANDWICH	1 Sandwich	100	325 cal	12 g	20 g	23 g	1.2	43 mg	785 mg	67 mg
N 030 02	SIMMERED KNOCKWURST ON ROLL	1 Each	100	385 cal	14 g	26 g	23 g	1.2	49 mg	1101 mg	70 mg
N 030 03	SIMMERED QUARTER POUND FRANKFURTER	1 Each	100	462 cal	17 g	34 g	21 g	1.2	69 mg	1396 mg	58 mg
N 030 05	GRILLED FRANKFURTER WITH FRIED PEPPERS AND ONIONS	1 Each	100	274 cal	9 g	15 g	25 g	1.8	22 mg	731 mg	69 mg
N 031 00	MONTE CARLO SANDWICH (OPEN-FACED TURKEY AND HAM)	1 Sandwich	100	511 cal	20 g	36 g	27 g	2.8	131 mg	1543 mg	48 mg
N 032 00	FISHWICH	1 Sandwich	100	498 cal	20 g	24 g	49 g	1.2	118 mg	940 mg	81 mg
N 032 01	CHEESE FISHWICH	1 Sandwich	100	472 cal	22 g	25 g	40 g	1.7	72 mg	815 mg	248 mg
N 032 03	FISHWICH (BATTER DIPPED)	1 Sandwich	100	496 cal	20 g	24 g	49 g	1.2	118 mg	936 mg	81 mg
N 033 00	HOT ROAST TURKEY SANDWICH	1 Sandwich	100	376 cal	23 g	16 g	34 g	1.4	54 mg	1720 mg	97 mg
N 034 00	CORN DOG	1 Sandwich	100	258 cal	8 g	16 g	20 g	1.1	35 mg	674 mg	49 mg
N 034 01	CORN DOG (CORN BREAD MIX)	1 Sandwich	100	256 cal	7 g	17 g	19 g	1.8	23 mg	792 mg	24 mg
N 035 00	HOT ROAST BEEF SANDWICH (OVEN ROAST)	1 Sandwich	100	453 cal	31 g	20 g	35 g	1.5	74 mg	1022 mg	67 mg
N 035 01	HOT ROAST BEEF SANDWICH (PRECOOKED ROAST BEEF)	1 Sandwich	100	453 cal	31 g	20 g	35 g	1.5	74 mg	1022 mg	67 mg
N 036 00	HOT ROAST PORK SANDWICH	1 Sandwich	100	485 cal	29 g	25 g	35 g	1.5	71 mg	1016 mg	77 mg
N 036 01	HOT ROAST PORK SANDWICH (FRESH HAM)	1 Sandwich	100	425 cal	25 g	20 g	35 g	1.5	51 mg	2242 mg	67 mg
N 037 00	GRILLED HAM, EGG AND CHEESE SANDWICH	1 Sandwich	100	344 cal	21 g	18 g	23 g	1.2	237 mg	847 mg	263 mg
N 037 01	GRILLED BACON, EGG, AND CHEESE SANDWICH	1 Sandwich	100	389 cal	20 g	24 g	23 g	1.2	236 mg	729 mg	263 mg
N 037 02	GRILLED HAM AND EGG SANDWICH	1 Sandwich	100	237 cal	14 g	9 g	22 g	1.2	210 mg	663 mg	88 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
N 037 03	GRILLED SAUSAGE, EGG, AND CHEESE SANDWICH	1 Sandwich	100	448 cal	23 g	29 g	23 g	1.2	256 mg	1003 mg	274 mg
N 038 00	MOROCCAN POCKETS	1 Serving	100	429 cal	24 g	9 g	66 g	7.2	46 mg	587 mg	208 mg
N 039 00	CHEESE DELI SANDWICH	1 Sandwich	100	434 cal	19 g	25 g	35 g	4	57 mg	756 mg	422 mg
N 040 00	TACO BURGER	1 Sandwich	100	348 cal	24 g	16 g	27 g	2.6	70 mg	580 mg	168 mg
N 041 00	CHILI DOG WITH CHEESE AND ONIONS	1 Sandwich	100	342 cal	14 g	20 g	26 g	2.4	36 mg	948 mg	145 mg
N 041 01	CHILI DOG (CANNED CHILI CON CARNE)	1 Sandwich	100	297 cal	11 g	16 g	26 g	2.3	25 mg	874 mg	74 mg
N 041 02	CHILI DOG	1 Sandwich	100	350 cal	15 g	21 g	25 g	1.8	46 mg	890 mg	144 mg
N 042 00	BEEF FAJITA PITA	1/2 Pita	100	389 cal	35 g	11 g	37 g	3.2	87 mg	881 mg	78 mg
N 042 01	CHICKEN FAJITA PITA	1/2 Pita	100	293 cal	29 g	4 g	33 g	2.3	65 mg	758 mg	68 mg
N 043 00	CHICKEN PITA POCKET SANDWICH	1 Sandwich	100	294 cal	30 g	4 g	32 g	2	67 mg	337 mg	119 mg
N 044 00	GRILLED CHICKEN BREAST SANDWICH	1 Sandwich	100	363 cal	36 g	12 g	26 g	2	92 mg	386 mg	83 mg
N 045 00	CHICKEN CAESAR ROLLUP SANDWICH	1 Sandwich	100	316 cal	26 g	6 g	41 g	4.8	52 mg	718 mg	181 mg
N 046 00	GARDEN VEGETABLE WRAP	1 Sandwich	100	212 cal	6 g	2 g	44 g	6.2	0 mg	403 mg	116 mg
N 047 00	ROAST BEEF & CHEESE ROLLUP SANDWICH	1 Sandwich	100	335 cal	29 g	9 g	35 g	5.3	54 mg	1020 mg	226 mg
N 047 01	HOT ROAST BEEF & CHEESE ROLLUP SANDWICH	1 Sandwich	100	335 cal	29 g	9 g	35 g	5.3	54 mg	1020 mg	226 mg
N 048 00	JAMAICAN JERK CHICKEN SANDWICH	1 Sandwich	100	387 cal	38 g	7 g	41 g	3.1	88 mg	623 mg	91 mg
N 049 00	MEXICAN BEEF WRAP	1 Each	100	399 cal	30 g	14 g	40 g	5.9	74 mg	734 mg	177 mg
N 049 01	MEXICAN TURKEY WRAP	1 Each	100	329 cal	28 g	6 g	41 g	3.5	52 mg	509 mg	159 mg
N 050 00	CRUNCHY VEGETABLE BURRITO	1 Burrito	100	280 cal	14 g	3 g	50 g	6.5	4 mg	753 mg	234 mg
N 051 00	VEGETARIAN HEARTY BURGER	1 Burger	100	409 cal	21 g	13 g	52 g	6	11 mg	647 mg	244 mg
N 052 00	CAJUN CHICKEN SANDWICH	6 Ounces	100	389 cal	39 g	7 g	41 g	3.2	88 mg	600 mg	96 mg
N 502 00	BAKED TURKEY MELT	1 Sandwich	100	363 cal	30 g	13 g	32 g	2.1	80 mg	622 mg	194 mg
N 800 00	MEATBALL HOAGIE USING PRECOOKED MEATBALLS	4 Ounces	100	591 cal	26 g	38 g	41 g	9.1	72 mg	1660 mg	186 mg
N 803 00	BLACK BEAN BURGERS/VEGETABLE BURGERS	4 Ounces	100	292 cal	24 g	8 g	32 g	7.8	0 mg	761 mg	160 mg
N 805 00	DOUBLE DECKER BEEF & TURKEY SANDWICH	1 Sandwich	100	495 cal	37 g	11 g	63 g	3	73 mg	886 mg	118 mg
O 001 00	WHITE SAUCE	1 Ounce	100	41 cal	1 g	3 g	3 g	0.1	8 mg	110 mg	27 mg
O 001 01	CHEESE SAUCE	1 Ounce	100	61 cal	2 g	4 g	3 g	0.1	13 mg	142 mg	64 mg
O 002 00	BARBECUE SAUCE	1/4 Cup	100	56 cal	1 g	0 g	14 g	1.2	0 mg	569 mg	19 mg
O 003 00	CHERRY SAUCE (FOR MEAT)	3 Tablespoons	100	69 cal	0 g	0 g	17 g	0.5	1 mg	6 mg	4 mg
O 004 00	MARINARA SAUCE	3/4 Cup	100	93 cal	4 g	1 g	21 g	4.5	0 mg	891 mg	66 mg
O 004 01	MARINARA SAUCE WITH CLAMS	3/4 Cup	100	95 cal	4 g	1 g	21 g	4.5	2 mg	1013 mg	74 mg
O 005 00	CREOLE SAUCE	1/3 Cup	100	43 cal	1 g	1 g	8 g	1.7	0 mg	212 mg	28 mg
O 005 01	SPANISH SAUCE	1/3 Cup	100	45 cal	2 g	1 g	8 g	1.9	0 mg	247 mg	29 mg
O 005 02	CAJUN CREOLE SAUCE	1/3 Cup	100	45 cal	2 g	1 g	8 g	1.9	0 mg	212 mg	35 mg
O 006 00	MUSTARD SAUCE	2 Tablespoons	100	19 cal	0 g	1 g	3 g	0.2	1 mg	221 mg	6 mg
O 007 00	TACO SAUCE	2 Tablespoons	100	12 cal	0 g	0 g	3 g	0.6	0 mg	225 mg	11 mg
O 007 01	SALSA	2 Tablespoons	100	13 cal	1 g	0 g	3 g	0.7	0 mg	228 mg	12 mg
O 008 00	SWEET AND SOUR SAUCE	2 Tablespoons	100	94 cal	0 g	0 g	25 g	0.4	0 mg	46 mg	8 mg
O 009 00	PINEAPPLE SAUCE	1/4 Cup	100	71 cal	0 g	0 g	18 g	0.3	0 mg	2 mg	5 mg
O 009 01	RAISIN SAUCE	3 Tablespoons	100	49 cal	0 g	0 g	13 g	0.4	0 mg	4 mg	10 mg
O 010 00	SZECHWAN SAUCE	1/3 Cup	100	130 cal	1 g	9 g	13 g	0.2	0 mg	569 mg	5 mg
O 011 00	SEAFOOD COCKTAIL SAUCE	2 Tablespoons	100	32 cal	0 g	0 g	8 g	0.5	0 mg	357 mg	7 mg
O 012 00	PIZZA SAUCE	2-1/2 Tablespoons	100	23 cal	1 g	0 g	5 g	1.2	0 mg	221 mg	20 mg
O 012 01	PIZZA SAUCE (CANNED)	2 Tablespoons	100	20 cal	1 g	0 g	3 g	0.8	1 mg	67 mg	23 mg
O 013 00	TARTAR SAUCE	2 Tablespoons	100	103 cal	0 g	9 g	6 g	0.2	6 mg	189 mg	1 mg
O 014 00	TERIYAKI SAUCE	2-1/2 Ounces	100	89 cal	4 g	4 g	9 g	0.4	0 mg	1934 mg	15 mg
O 015 00	TOMATO SAUCE	1/4 Cup	100	47 cal	1 g	2 g	7 g	0.9	0 mg	263 mg	9 mg
O 016 00	BROWN GRAVY	1/4 Cup	100	73 cal	1 g	5 g	5 g	0.2	0 mg	363 mg	3 mg
O 016 02	CHICKEN OR TURKEY GRAVY	1/4 Cup	100	47 cal	1 g	3 g	3 g	0.1	0 mg	414 mg	6 mg
O 016 03	CHILI GRAVY	1/4 Cup	100	54 cal	1 g	4 g	5 g	0.6	0 mg	421 mg	9 mg
O 016 04	GIBLET GRAVY	1/4 Cup	100	87 cal	3 g	6 g	5 g	0.2	32 mg	402 mg	7 mg
O 016 05	MUSHROOM GRAVY	1/4 Cup	100	77 cal	1 g	6 g	6 g	0.4	0 mg	404 mg	4 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
O 016 06	ONION GRAVY	1/4 Cup	100	84 cal	1 g	6 g	6 g	0.4	0 mg	363 mg	5 mg
O 016 07	QUICK ONION GRAVY	1/4 Cup	100	78 cal	1 g	5 g	7 g	0.5	0 mg	307 mg	7 mg
O 016 08	VEGETABLE GRAVY	1/4 Cup	100	85 cal	1 g	6 g	7 g	0.6	0 mg	365 mg	6 mg
O 016 09	ONION AND MUSHROOM GRAVY	1/4 Cup	100	81 cal	1 g	6 g	6 g	0.4	0 mg	380 mg	5 mg
O 017 00	CREAM GRAVY	1/4 Cup	100	53 cal	2 g	3 g	5 g	0.1	1 mg	230 mg	44 mg
O 017 01	CREAM ONION GRAVY	1/4 Cup	100	59 cal	2 g	3 g	6 g	0.4	1 mg	230 mg	47 mg
O 018 00	NATURAL PAN GRAVY (AU JUS)	2 Tablespoons	100	3 cal	0 g	0 g	0 g	0	0 mg	251 mg	2 mg
O 019 00	TOMATO GRAVY	1/4 Cup	100	50 cal	1 g	3 g	4 g	0.3	0 mg	315 mg	5 mg
O 020 00	CORN BREAD DRESSING	3-1/2 Ounces	100	175 cal	5 g	6 g	25 g	1.7	35 mg	611 mg	97 mg
O 021 00	BREAD DRESSING	3-1/2 Ounces	100	142 cal	4 g	3 g	24 g	1.4	1 mg	682 mg	63 mg
O 021 01	APPLE BREAD DRESSING	3-1/2 Ounces	100	151 cal	4 g	3 g	27 g	1.8	1 mg	517 mg	60 mg
O 021 02	SAUSAGE BREAD DRESSING	3-1/2 Ounces	100	191 cal	7 g	7 g	24 g	1.4	12 mg	759 mg	66 mg
O 021 03	OYSTER BREAD DRESSING	3-1/2 Ounces	100	173 cal	8 g	4 g	26 g	1.4	22 mg	496 mg	63 mg
O 022 00	CHINESE MUSTARD SAUCE	1 Teaspoon	100	17 cal	1 g	1 g	1 g	0.5	0 mg	0 mg	19 mg
O 023 00	HORSERADISH SAUCE	1 Tablespoon	100	40 cal	0 g	3 g	2 g	0.2	3 mg	62 mg	12 mg
O 024 00	YOGURT-CUCUMBER SAUCE	3 Tablespoons	100	22 cal	2 g	0 g	3 g	0.2	2 mg	21 mg	59 mg
O 025 00	HERBED MAYONNAISE	2 Tablespoons	100	141 cal	0 g	14 g	4 g	0.1	10 mg	170 mg	4 mg
O 026 00	ORIENTAL SWEET AND SOUR SAUCE	2 Tablespoons	100	35 cal	0 g	0 g	9 g	0.1	0 mg	41 mg	3 mg
O 027 00	DILL SAUCE	2 Tablespoons	100	31 cal	1 g	1 g	3 g	0	6 mg	22 mg	52 mg
O 028 00	HORSERADISH DIJON SAUCE	2 Tablespoons	100	34 cal	1 g	2 g	2 g	0.2	9 mg	39 mg	38 mg
O 029 00	HONEY MUSTARD SAUCE	2 Tablespoons	100	74 cal	1 g	0 g	19 g	0.5	0 mg	169 mg	13 mg
O 030 00	TROPICAL FRUIT SALSA	1/4 Cup	100	26 cal	0 g	0 g	6 g	0.8	0 mg	1 mg	5 mg
O 030 01	PINEAPPLE SALSA	1/4 Cup	100	27 cal	0 g	0 g	7 g	1	0 mg	2 mg	7 mg
O 030 02	TROPICAL FRUIT SALSA (CANNED)	1/4 Cup	100	50 cal	0 g	0 g	13 g	0.9	0 mg	2 mg	9 mg
O 031 00	SHRIMP SAUCE	3/4 Cup	100	178 cal	19 g	6 g	10 g	0.4	130 mg	387 mg	188 mg
O 801 00	DRESSING, TRADITIONAL MIX	4 Ounces	100	73 cal	1 g	4 g	9 g	1.2	0 mg	222 mg	13 mg
O 801 01	DRESSING, CORNBREAD MIX	4 Ounces	100	159 cal	4 g	2 g	31 g	5.8	0 mg	524 mg	32 mg
P 001 00	BEEF RICE SOUP	1 Cup	100	71 cal	4 g	2 g	11 g	0.5	4 mg	1702 mg	21 mg
P 001 01	BEEF BARLEY SOUP	1 Cup	100	80 cal	4 g	2 g	13 g	2.2	4 mg	1703 mg	19 mg
P 001 02	BEEF NOODLE SOUP	1 Cup	100	55 cal	4 g	2 g	6 g	0.4	9 mg	1702 mg	17 mg
P 002 00	CHICKEN RICE SOUP	1 Cup	100	73 cal	4 g	2 g	9 g	0.4	7 mg	1997 mg	35 mg
P 002 01	CHICKEN NOODLE SOUP	1 Cup	100	62 cal	4 g	2 g	6 g	0.4	7 mg	1997 mg	31 mg
P 003 00	CREOLE SOUP	1 Cup	100	69 cal	3 g	2 g	10 g	0.9	1 mg	1535 mg	17 mg
P 004 00	ONION SOUP	1 Cup	100	107 cal	2 g	8 g	8 g	1	1 mg	1271 mg	19 mg
P 004 01	FRENCH ONION SOUP	1 Cup	100	163 cal	3 g	11 g	13 g	1.2	9 mg	1377 mg	51 mg
P 005 00	TOMATO BOUILLON	1 Cup	100	35 cal	2 g	0 g	7 g	1	0 mg	974 mg	25 mg
P 006 00	TOMATO SOUP	1 Cup	100	61 cal	2 g	1 g	12 g	0.3	0 mg	1028 mg	46 mg
P 006 01	TOMATO RICE SOUP	1 Cup	100	86 cal	2 g	1 g	17 g	0.6	0 mg	1089 mg	48 mg
P 007 00	VEGETABLE SOUP	1 Cup	100	57 cal	3 g	1 g	10 g	2	1 mg	1278 mg	45 mg
P 007 01	MINESTRONE SOUP	1 Cup	100	75 cal	3 g	1 g	14 g	2	1 mg	1157 mg	38 mg
P 008 00	NAVY BEAN SOUP	1 Cup	100	122 cal	8 g	0 g	23 g	4.7	1 mg	582 mg	78 mg
P 008 01	BEAN SOUP WITH SMOKED, CURED HAM HOCKS	1 Cup	100	140 cal	9 g	2 g	23 g	4.7	4 mg	650 mg	79 mg
P 008 02	KNICKERBOCKER SOUP (BEAN, TOMATO AND BACON)	1 Cup	100	143 cal	8 g	1 g	26 g	5.6	2 mg	446 mg	89 mg
P 008 03	OLD FASHIONED BEAN SOUP	1 Cup	100	130 cal	8 g	0 g	25 g	5.3	1 mg	535 mg	88 mg
P 009 00	BEEF WITH VEGETABLES AND BARLEY SOUP (CANNED)	1 Cup	100	86 cal	6 g	2 g	12 g	0	9 mg	1005 mg	2 mg
P 009 01	BEAN WITH BACON SOUP (CANNED)	1 Cup	100	166 cal	9 g	3 g	26 g	6.5	4 mg	1046 mg	2 mg
P 009 02	BEEF NOODLE SOUP (CANNED)	1 Cup	100	95 cal	6 g	4 g	10 g	0.9	6 mg	1079 mg	19 mg
P 009 03	CHICKEN NOODLE SOUP (CANNED)	1 Cup	100	86 cal	5 g	3 g	11 g	0.9	7 mg	1076 mg	18 mg
P 009 04	CHICKEN WITH RICE SOUP (CANNED)	1 Cup	100	69 cal	4 g	2 g	8 g	0.7	7 mg	946 mg	22 mg
P 009 05	MANHATTAN CLAM CHOWDER (CANNED)	1 Cup	100	79 cal	4 g	2 g	11 g	1.7	9 mg	594 mg	42 mg
P 009 06	MINESTRONE SOUP (CANNED)	1 Cup	100	96 cal	5 g	3 g	13 g	1.1	1 mg	1058 mg	42 mg
P 009 07	SPLIT PEA SOUP WITH HAM (CANNED)	1 Cup	100	200 cal	11 g	5 g	30 g	2.4	9 mg	1066 mg	25 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
P 009 08	TOMATO SOUP (CANNED)	1 Cup	100	96 cal	2 g	2 g	19 g	0.6	0 mg	788 mg	18 mg
P 009 09	VEGETABLE SOUP (CANNED)	1 Cup	100	84 cal	2 g	2 g	14 g	0.7	0 mg	956 mg	26 mg
P 009 10	VEGETABLE WITH BEEF SOUP (CANNED)	1 Cup	100	89 cal	6 g	2 g	12 g	2.3	6 mg	898 mg	21 mg
P 010 00	CHICKEN GUMBO SOUP	1 Cup	100	117 cal	5 g	5 g	14 g	0.7	7 mg	1376 mg	49 mg
P 010 01	SHRIMP GUMBO	1 Cup	100	115 cal	5 g	5 g	14 g	0.7	22 mg	1397 mg	53 mg
P 011 00	CORN CHOWDER	1 Cup	100	136 cal	5 g	3 g	25 g	1.6	2 mg	761 mg	102 mg
P 011 01	CHICKEN CORN CHOWDER	1 Cup	100	179 cal	6 g	8 g	25 g	2	9 mg	1088 mg	37 mg
P 012 00	MANHATTAN CLAM CHOWDER	1 Cup	100	80 cal	3 g	1 g	17 g	2.8	2 mg	442 mg	51 mg
P 013 00	NEW ENGLAND FISH CHOWDER	1 Cup	100	168 cal	12 g	6 g	15 g	1	39 mg	348 mg	95 mg
P 013 01	NEW ENGLAND CLAM CHOWDER	1 Cup	100	128 cal	4 g	6 g	15 g	1	16 mg	333 mg	94 mg
P 014 00	CREAM OF MUSHROOM SOUP	1 Cup	100	153 cal	5 g	8 g	14 g	1.1	22 mg	1316 mg	115 mg
P 014 01	CREAM OF BROCCOLI SOUP	1 Cup	100	128 cal	6 g	6 g	14 g	1.7	16 mg	1156 mg	117 mg
P 015 00	CREAM OF POTATO SOUP (DEHYDRATED SLICED POTATOES)	1 Cup	100	63 cal	4 g	1 g	10 g	0.7	2 mg	1162 mg	96 mg
P 015 01	CREAM OF POTATO SOUP (FRESH WHITE POTATOES)	1 Cup	100	138 cal	5 g	1 g	28 g	2.3	2 mg	1034 mg	101 mg
P 016 00	CREAM OF POTATO SOUP (INSTANT POTATOES)	1 Cup	100	51 cal	3 g	1 g	8 g	0.5	2 mg	768 mg	89 mg
P 017 00	SPANISH SOUP (DEHYDRATED ONION SOUP)	1 Cup	100	88 cal	4 g	4 g	10 g	1	11 mg	1087 mg	37 mg
P 017 01	ONION SOUP (DEHYDRATED MIX)	1 Cup	100	27 cal	1 g	0 g	5 g	0.9	0 mg	820 mg	18 mg
P 017 02	MEXICAN ONION CORN SOUP (DEHYDRATED MIX)	1 Cup	100	76 cal	3 g	1 g	16 g	2.2	0 mg	951 mg	20 mg
P 018 00	TOMATO VEGETABLE SOUP (DEHYDRATED)	1 Cup	100	65 cal	2 g	2 g	12 g	0.3	1 mg	609 mg	39 mg
P 018 01	BEEF NOODLE SOUP WITH VEGETABLES (DEHYDRATED)	1 Cup	100	52 cal	3 g	1 g	8 g	0.4	2 mg	1342 mg	12 mg
P 018 02	CHICKEN NOODLE SOUP (DEHYDRATED)	1 Cup	100	74 cal	4 g	2 g	10 g	0.6	3 mg	1815 mg	50 mg
P 018 03	CHICKEN NOODLE SOUP WITH VEGETABLES (DEHYDRATED)	1 Cup	100	89 cal	5 g	2 g	14 g	1.6	3 mg	1826 mg	55 mg
P 019 00	PEPPER POT SOUP	1 Cup	100	97 cal	3 g	5 g	11 g	0.9	1 mg	1228 mg	38 mg
P 020 00	CHICKEN VEGETABLE (MULLIGATAWNY) SOUP	1 Cup	100	80 cal	4 g	3 g	9 g	1.3	11 mg	1521 mg	37 mg
P 021 00	ZESTY BEAN SOUP	1 Cup	100	110 cal	6 g	1 g	20 g	4.2	0 mg	1211 mg	61 mg
P 021 01	ZESTY BEAN SOUP (DRY BEANS)	1 Cup	100	127 cal	8 g	1 g	23 g	6.2	1 mg	1058 mg	78 mg
P 022 00	CHICKEN MUSHROOM SOUP (CANNED)	1 Cup	100	154 cal	4 g	10 g	13 g	0.4	7 mg	1080 mg	88 mg
P 022 01	DOUBLY GOOD CHICKEN SOUP (CANNED)	1 Cup	100	106 cal	4 g	5 g	10 g	0.5	10 mg	1047 mg	48 mg
P 022 02	LOGGING SOUP (CANNED)	1 Cup	100	129 cal	8 g	3 g	19 g	4.4	5 mg	980 mg	11 mg
P 022 03	TOMATO NOODLE SOUP (CANNED)	1 Cup	100	96 cal	4 g	3 g	15 g	0.7	3 mg	941 mg	19 mg
P 022 04	VEGETABLE BEEF SUPREME SOUP (CANNED)	1 Cup	100	94 cal	4 g	2 g	15 g	1.4	3 mg	850 mg	19 mg
P 023 00	SPLIT PEA SOUP WITH HAM	1 Cup	100	150 cal	11 g	1 g	24 g	9.4	5 mg	585 mg	30 mg
P 023 01	PUREE MONGOLE	1 Cup	100	113 cal	6 g	2 g	20 g	4.9	3 mg	609 mg	23 mg
P 024 00	CREAM OF BROCCOLI SOUP (CANNED)	1 Cup	100	235 cal	7 g	16 g	14 g	2.2	34 mg	825 mg	170 mg
P 024 01	CREAM OF CHICKEN SOUP (CANNED)	1 Cup	100	149 cal	6 g	8 g	13 g	0.3	12 mg	1143 mg	99 mg
P 024 02	CREAM OF MUSHROOM SOUP (CANNED)	1 Cup	100	163 cal	4 g	11 g	13 g	0.4	2 mg	1010 mg	98 mg
P 025 00	TEXAS TORTILLA SOUP	1 Cup	100	135 cal	6 g	4 g	22 g	1.9	8 mg	1256 mg	129 mg
P 026 00	TORTELLINI SOUP	1 Cup	100	140 cal	7 g	4 g	20 g	0.8	14 mg	1309 mg	133 mg
P 027 00	LENTIL VEGETABLE SOUP	1 Cup	100	113 cal	7 g	0 g	22 g	8.1	0 mg	432 mg	54 mg
P 028 00	CURRIED VEGETABLE SOUP	1 Cup	100	66 cal	2 g	1 g	14 g	2.1	0 mg	197 mg	26 mg
P 029 00	TURKEY VEGETABLE SOUP	1 Cup	100	91 cal	7 g	3 g	10 g	1.8	13 mg	1475 mg	45 mg
P 500 00	ASIAN STIR FRY SOUP	6 Ounces	100	112 cal	7 g	5 g	10 g	2	16 mg	842 mg	86 mg
P 800 00	CARROT SOUP	8 Ounces	100	70 cal	2 g	1 g	14 g	2.6	0 mg	285 mg	30 mg
P 801 00	VELVET CORN SOUP	8 Ounces	100	145 cal	6 g	2 g	30 g	2	9 mg	1136 mg	15 mg
P 802 00	NUTTY SPLIT PEA SOUP	1 Cup	100	255 cal	12 g	9 g	34 g	3.9	0 mg	1077 mg	35 mg
P 803 00	EGG DROP SOUP	8-1/2 Ounces	100	51 cal	3 g	1 g	7 g	0.1	1 mg	1611 mg	22 mg
P 804 00	MIDWESTERN TOMATO RICE SOUP	8 Ounces	100	68 cal	2 g	1 g	14 g	1.7	0 mg	691 mg	30 mg
Q 001 01	BROCCOLI COMBO	3/4 Cup	100	106 cal	4 g	4 g	17 g	3.8	0 mg	74 mg	40 mg
Q 001 02	BEAN COMBO	3/4 Cup	100	113 cal	4 g	4 g	17 g	5	0 mg	83 mg	53 mg
Q 001 03	CAULIFLOWER COMBO	3/4 Cup	100	93 cal	4 g	4 g	13 g	4.4	0 mg	130 mg	35 mg
Q 001 04	BRUSSELS SPROUTS COMBO	3/4 Cup	100	114 cal	4 g	4 g	18 g	4.4	0 mg	73 mg	25 mg
Q 001 05	GREEN BEAN COMBO	3/4 Cup	100	77 cal	2 g	4 g	10 g	3.8	0 mg	81 mg	54 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
Q 001 06	CORN COMBO	3/4 Cup	100	107 cal	3 g	4 g	18 g	3.7	0 mg	66 mg	36 mg
Q 002 00	BAKED BEANS (CANNED)	1/2 Cup	100	172 cal	8 g	3 g	32 g	7.8	11 mg	672 mg	79 mg
Q 002 01	BAKED BEANS (KIDNEY BEANS, CANNED)	1/2 Cup	100	139 cal	7 g	1 g	26 g	4.6	1 mg	543 mg	43 mg
Q 002 02	BAKED BEANS (PINTO BEANS, CANNED)	1/2 Cup	100	147 cal	7 g	2 g	27 g	6.1	1 mg	483 mg	64 mg
Q 003 00	BOSTON BAKED BEANS	1/2 Cup	100	179 cal	10 g	2 g	32 g	10.2	1 mg	204 mg	83 mg
Q 003 01	SAVORY BAKED BEANS	1/2 Cup	100	195 cal	10 g	2 g	36 g	10.4	1 mg	374 mg	85 mg
Q 004 00	ITALIAN-STYLE BAKED BEANS	1/2 Cup	100	133 cal	8 g	2 g	23 g	8.3	1 mg	424 mg	79 mg
Q 004 01	ITALIAN-STYLE BAKED BEANS (CANNED BEANS)	1/2 Cup	100	117 cal	7 g	2 g	20 g	4.7	1 mg	741 mg	62 mg
Q 005 00	SIMMERED DRY BEANS WITH BACON	2/3 Cup	100	137 cal	10 g	2 g	22 g	9.2	2 mg	195 mg	57 mg
Q 005 01	SAVORY STYLE BEANS	2/3 Cup	100	126 cal	9 g	0 g	23 g	9.4	0 mg	21 mg	61 mg
Q 005 02	SIMMERED DRY BEANS	2/3 Cup	100	123 cal	9 g	0 g	22 g	9.2	0 mg	154 mg	57 mg
Q 006 00	SPANISH STYLE BEANS	1/2 Cup	100	161 cal	9 g	1 g	32 g	10.1	0 mg	468 mg	63 mg
Q 007 00	LYONNAISE GREEN OR WAX BEANS	1/2 Cup	100	54 cal	2 g	3 g	7 g	2.3	7 mg	102 mg	35 mg
Q 007 01	GREEN BEANS CREOLE	1/2 Cup	100	54 cal	2 g	1 g	11 g	3.2	0 mg	221 mg	51 mg
Q 007 02	GREEN BEANS WITH MUSHROOMS	1/2 Cup	100	52 cal	2 g	3 g	6 g	2.4	7 mg	170 mg	34 mg
Q 007 03	GREEN BEANS NICOISE	1/2 Cup	100	59 cal	2 g	3 g	8 g	2.6	7 mg	144 mg	44 mg
Q 007 04	GREEN BEANS SOUTHERN STYLE	1/2 Cup	100	41 cal	2 g	2 g	6 g	2	2 mg	24 mg	32 mg
Q 008 00	HARVARD BEETS	3/4 Cup	100	100 cal	1 g	2 g	20 g	2.2	0 mg	538 mg	25 mg
Q 008 01	BEETS IN ORANGE-LEMON SAUCE	3/4 Cup	100	103 cal	2 g	2 g	21 g	2.2	0 mg	539 mg	26 mg
Q 009 00	HOT SPICED BEETS	3/4 Cup	100	129 cal	2 g	2 g	28 g	2.3	0 mg	542 mg	36 mg
Q 010 00	BROCCOLI POLONAISE	3 Ounces	100	60 cal	4 g	3 g	7 g	2.8	24 mg	188 mg	55 mg
Q 010 01	BRUSSELS SPROUTS POLONAISE	1/2 Cup	100	73 cal	4 g	3 g	10 g	3.8	24 mg	187 mg	31 mg
Q 010 02	CAULIFLOWER POLONAISE	1/2 Cup	100	52 cal	2 g	3 g	6 g	2.5	24 mg	182 mg	24 mg
Q 011 00	SPROUTS SUPERBA	1/2 Cup	100	71 cal	4 g	3 g	10 g	3.6	0 mg	304 mg	34 mg
Q 012 00	FRIED CABBAGE	1/2 Cup	100	47 cal	1 g	3 g	5 g	2.1	7 mg	184 mg	44 mg
Q 012 01	CALICO CABBAGE	1/2 Cup	100	53 cal	1 g	3 g	7 g	2.3	7 mg	187 mg	46 mg
Q 012 02	FRIED CABBAGE WITH BACON	1/2 Cup	100	61 cal	2 g	4 g	5 g	2.1	10 mg	155 mg	44 mg
Q 013 00	SCALLOPED SWEET POTATOES AND APPLES	1/2 Cup	100	166 cal	1 g	3 g	35 g	3.5	0 mg	168 mg	31 mg
Q 014 00	ORANGE CARROTS AMANDINE	1/2 Cup	100	76 cal	2 g	4 g	9 g	3	0 mg	119 mg	40 mg
Q 015 00	ORIENTAL STIR-FRY CABBAGE	3/4 Cup	100	56 cal	3 g	0 g	12 g	3.5	0 mg	384 mg	61 mg
Q 016 00	CARROT AND CELERY AMANDINE	1/2 Cup	100	37 cal	1 g	3 g	2 g	1.1	0 mg	213 mg	26 mg
Q 017 00	LYONNAISE CARROTS	1/2 Cup	100	58 cal	1 g	2 g	10 g	3	5 mg	186 mg	33 mg
Q 017 01	GLAZED CARROTS	1/2 Cup	100	73 cal	1 g	2 g	14 g	2.5	5 mg	166 mg	25 mg
Q 018 00	CAULIFLOWER AU GRATIN	1/2 Cup	100	125 cal	5 g	8 g	9 g	2.6	23 mg	226 mg	105 mg
Q 019 00	GERMAN POTATO GRIDDLE CAKES (DEHY)	2 Cakes	100	114 cal	3 g	6 g	12 g	0.6	46 mg	244 mg	49 mg
Q 020 00	FRENCH FRIED CAULIFLOWER	3-1/2 Ounces	100	159 cal	6 g	7 g	19 g	3	27 mg	382 mg	86 mg
Q 020 01	FRENCH FRIED OKRA	3/4 Cup	100	196 cal	5 g	11 g	21 g	2.4	3 mg	356 mg	125 mg
Q 021 00	CORN FRITTERS	2 Fritters	100	208 cal	5 g	8 g	30 g	1.2	44 mg	565 mg	148 mg
Q 021 01	CORN FRITTERS (PANCAKE MIX)	2 Fritters	100	177 cal	4 g	6 g	27 g	1.2	6 mg	460 mg	75 mg
Q 022 00	RATATOUILLE	1/2 Cup	100	45 cal	2 g	0 g	10 g	3	0 mg	407 mg	34 mg
Q 023 00	SCALLOPED CREAM STYLE CORN	1/2 Cup	100	148 cal	3 g	5 g	26 g	1.5	9 mg	447 mg	23 mg
Q 023 01	SCALLOPED WHOLE KERNEL CORN	1/2 Cup	100	125 cal	3 g	4 g	21 g	2	9 mg	340 mg	22 mg
Q 024 00	BROCCOLI PARMESAN	2 Stalks	100	77 cal	7 g	2 g	10 g	3.4	5 mg	222 mg	167 mg
Q 024 01	BRUSSELS SPROUTS PARMESAN	3/4 Cup	100	92 cal	8 g	2 g	13 g	4.6	5 mg	221 mg	138 mg
Q 024 02	CAULIFLOWER PARMESAN	3/4 Cup	100	67 cal	5 g	2 g	8 g	3.1	5 mg	216 mg	130 mg
Q 025 00	VEGETABLE STIR FRY	1/2 Cup	100	55 cal	1 g	4 g	6 g	1.8	0 mg	108 mg	27 mg
Q 026 00	HERBED GREEN BEANS	3/4 Cup	100	58 cal	2 g	2 g	9 g	3.5	0 mg	484 mg	60 mg
Q 027 00	CALICO CORN	3/4 Cup	100	114 cal	4 g	2 g	24 g	2.7	1 mg	301 mg	7 mg
Q 027 01	CORN O'BRIEN	3/4 Cup	100	136 cal	4 g	4 g	26 g	3.1	1 mg	302 mg	10 mg
Q 027 02	MEXICAN CORN	3/4 Cup	100	117 cal	4 g	2 g	25 g	2.9	2 mg	288 mg	8 mg
Q 028 00	EGGPLANT PARMESAN	6-1/2 Ounces	100	201 cal	9 g	5 g	34 g	4.7	31 mg	1209 mg	167 mg
Q 029 00	SOUTHERN STYLE GREENS (FRESH COLLARDS)	1/2 Cup	100	98 cal	7 g	6 g	5 g	2.7	15 mg	290 mg	118 mg

Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
Q 029 01	SOUTHERN STYLE GREENS (FROZEN)	1/2 Cup	100	107 cal	8 g	6 g	7 g	2.7	15 mg	542 mg	201 mg
Q 029 02	SWEET SOUR GREENS	1/2 Cup	100	137 cal	7 g	6 g	14 g	2.8	16 mg	295 mg	121 mg
Q 029 03	SOUTHERN STYLE GREENS (FRESH KALE)	1/2 Cup	100	119 cal	8 g	6 g	10 g	2	15 mg	322 mg	134 mg
Q 030 00	SAUTEED MUSHROOMS	2 Tablespoons	100	21 cal	0 g	2 g	1 g	0.4	5 mg	98 mg	3 mg
Q 030 01	SAUTEED MUSHROOMS AND ONIONS	2 Ounces	100	67 cal	1 g	6 g	4 g	1.1	15 mg	137 mg	11 mg
Q 031 00	OKRA AND TOMATO GUMBO	1/2 Cup	100	100 cal	3 g	4 g	14 g	2.7	9 mg	391 mg	71 mg
Q 032 00	SOUTHERN FRIED OKRA	1/3 Cup	100	184 cal	2 g	13 g	15 g	2.3	0 mg	212 mg	57 mg
Q 033 00	PARSLEY BUTTERED POTATOES	4 Pieces	100	170 cal	3 g	4 g	32 g	2.9	10 mg	609 mg	19 mg
Q 033 01	PAPRIKA BUTTERED POTATOES	4 Pieces	100	170 cal	3 g	4 g	32 g	2.9	10 mg	608 mg	18 mg
Q 033 02	PARSLEY BUTTERED POTATOES (CANNED)	4 Pieces	100	95 cal	2 g	5 g	12 g	1.7	13 mg	302 mg	48 mg
Q 033 03	PAPRIKA BUTTERED POTATOES (CANNED)	4 Pieces	100	95 cal	2 g	5 g	12 g	1.7	13 mg	301 mg	47 mg
Q 034 00	SPANISH ONIONS	1/2 Cup	100	97 cal	2 g	5 g	13 g	3	0 mg	446 mg	44 mg
Q 035 00	FRENCH FRIED ONION RINGS	2-1/2 Ounces	100	274 cal	7 g	10 g	40 g	2.7	1 mg	656 mg	75 mg
Q 035 01	FRENCH FRIED ONION RINGS (FROZEN)	3 Ounces	100	333 cal	4 g	20 g	35 g	2	0 mg	279 mg	52 mg
Q 035 02	TEMPURA FRIED ONION RINGS	2-1/2 Ounces	100	190 cal	5 g	6 g	29 g	2.4	45 mg	547 mg	91 mg
Q 036 00	FRIED ONIONS	1/4 Cup	100	101 cal	1 g	7 g	10 g	2	0 mg	3 mg	23 mg
Q 037 00	SMOTHERED ONIONS (DEHYDRATED ONIONS)	1/2 Cup	100	117 cal	2 g	4 g	19 g	2.1	0 mg	358 mg	61 mg
Q 038 00	REFRIED BEANS WITH CHEESE	1/2 Cup	100	145 cal	8 g	6 g	15 g	4.7	14 mg	382 mg	142 mg
Q 038 01	REFRIED BEANS (CANNED BEANS)	1/2 Cup	100	107 cal	6 g	2 g	17 g	5.8	9 mg	325 mg	38 mg
Q 038 02	REFRIED BEANS WITH CHEESE (CANNED BEANS)	1/2 Cup	100	164 cal	10 g	6 g	18 g	6.1	23 mg	426 mg	139 mg
Q 039 00	GREEN BEANS WITH CORN (FROZEN BEANS)	1/2 Cup	100	63 cal	2 g	1 g	13 g	2.2	1 mg	220 mg	26 mg
Q 039 01	GREEN BEANS WITH CORN (CANNED BEANS)	1/2 Cup	100	58 cal	2 g	1 g	12 g	1.9	1 mg	368 mg	23 mg
Q 040 00	TURNIPS AND BACON	1/2 Cup	100	30 cal	1 g	1 g	5 g	1.5	1 mg	217 mg	26 mg
Q 041 00	PEAS WITH MUSHROOMS (FROZEN)	3/4 Cup	100	126 cal	7 g	2 g	21 g	7.4	0 mg	216 mg	38 mg
Q 041 01	PEAS WITH CARROTS (FROZEN)	3/4 Cup	100	133 cal	6 g	2 g	23 g	8.2	0 mg	215 mg	56 mg
Q 041 02	PEAS WITH CELERY (FROZEN)	3/4 Cup	100	111 cal	6 g	2 g	18 g	6.6	0 mg	148 mg	53 mg
Q 041 03	PEAS WITH ONIONS	3/4 Cup	100	130 cal	7 g	2 g	22 g	7.3	0 mg	96 mg	40 mg
Q 041 04	PEAS WITH MUSHROOMS (CANNED PEAS)	3/4 Cup	100	47 cal	2 g	2 g	6 g	2.1	0 mg	252 mg	12 mg
Q 042 00	GREEN BEANS PARISIENNE (CANNED)	1/2 Cup	100	64 cal	2 g	4 g	6 g	1.4	6 mg	384 mg	54 mg
Q 042 01	GREEN BEANS PARISIENNE (FROZEN BEANS)	1/2 Cup	100	75 cal	3 g	4 g	9 g	2.2	6 mg	216 mg	68 mg
Q 043 00	RED CABBAGE WITH SWEET AND SOUR SAUCE	1/2 Cup	100	81 cal	1 g	5 g	10 g	2	12 mg	337 mg	48 mg
Q 044 00	BAKED POTATOES	1 Each	100	146 cal	3 g	0 g	34 g	3.1	0 mg	9 mg	14 mg
Q 044 01	QUICK BAKED POTATO HALVES	2 Halves	100	151 cal	3 g	1 g	34 g	3.1	0 mg	9 mg	14 mg
Q 045 00	FRENCH FRIED POTATOES	3-1/2 Ounces	100	265 cal	3 g	14 g	34 g	3	0 mg	11 mg	15 mg
Q 045 01	FRENCH FRIED POTATOES (FROZEN)	3-1/2 Ounces	100	288 cal	4 g	14 g	39 g	4.8	0 mg	37 mg	10 mg
Q 045 02	FRENCH FRIED POTATOES (FROZEN, OVEN METHOD)	3-1/2 Ounces	100	252 cal	4 g	10 g	39 g	4.8	0 mg	37 mg	10 mg
Q 045 03	FRENCH FRIED SHOESTRING POTATOES (FROZEN)	3-1/2 Ounces	100	252 cal	3 g	13 g	33 g	4.1	0 mg	31 mg	8 mg
Q 045 04	FRENCH FRIED SHOESTRING POTATOES (FROZEN, OVEN)	3-1/2 Ounces	100	217 cal	3 g	8 g	33 g	4.1	0 mg	31 mg	8 mg
Q 045 05	FRENCH FRIED POTATOES (DEHYDRATED MIX)	3-1/2 Ounces	100	209 cal	3 g	9 g	30 g	2.5	0 mg	39 mg	9 mg
Q 045 06	BAKED POTATO ROUNDS (PRECOOKED)	3/4 Cup	100	88 cal	3 g	0 g	20 g	1.4	0 mg	28 mg	9 mg
Q 046 00	HASHED BROWN POTATOES	2/3 Cup	100	175 cal	2 g	6 g	28 g	2.5	0 mg	242 mg	13 mg
Q 046 01	COTTAGE FRIED POTATOES	2/3 Cup	100	175 cal	2 g	6 g	28 g	2.5	0 mg	242 mg	13 mg
Q 046 02	HASHED BROWN POTATOES (FROZEN, SHREDDED, 3 OZ)	1/2 Cup	100	121 cal	2 g	7 g	14 g	1.2	0 mg	227 mg	8 mg
Q 046 03	LYONNAISE POTATOES	2/3 Cup	100	204 cal	3 g	6 g	35 g	3.2	0 mg	218 mg	15 mg
Q 046 04	HASHED BROWN POTATOES (FROZEN, SHREDDED, 2.5 OZ)	1 Patty	100	60 cal	2 g	0 g	13 g	1	0 mg	16 mg	7 mg
Q 047 00	HOME FRIED POTATOES	2/3 Cup	100	214 cal	3 g	9 g	32 g	2.9	0 mg	217 mg	13 mg
Q 048 00	MASHED POTATOES	1/2 Cup	100	105 cal	2 g	2 g	20 g	1.8	0 mg	172 mg	20 mg
Q 048 01	GRILLED POTATO PATTIES	2 Patties	100	124 cal	3 g	2 g	23 g	1.9	18 mg	203 mg	26 mg
Q 049 00	O'BRIEN POTATOES	2/3 Cup	100	175 cal	3 g	6 g	29 g	2.8	0 mg	194 mg	13 mg
Q 050 00	OVEN BROWNEED POTATOES	1/2 Cup	100	126 cal	2 g	4 g	22 g	2	0 mg	234 mg	10 mg
Q 050 01	FRANCONIA POTATOES	1/2 Cup	100	126 cal	2 g	4 g	22 g	2	10 mg	231 mg	12 mg
Q 050 02	OVEN-GLO POTATOES	1/2 Cup	100	130 cal	2 g	4 g	23 g	2.2	10 mg	268 mg	14 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
Q 050 03	OVEN-GLO POTATOES (CANNED)	3/4 Cup	100	87 cal	2 g	4 g	12 g	1.8	0 mg	516 mg	49 mg
Q 050 04	OVEN BROWNED POTATOES (CANNED)	3/4 Cup	100	95 cal	2 g	5 g	12 g	1.7	0 mg	447 mg	47 mg
Q 051 00	POTATOES AU GRATIN	2/3 Cup	100	228 cal	6 g	10 g	30 g	2.3	28 mg	444 mg	103 mg
Q 051 01	POTATOES AU GRATIN (DEHYDRATED, SLICES)	2/3 Cup	100	152 cal	4 g	10 g	12 g	0.7	28 mg	517 mg	107 mg
Q 052 00	RISSOLE POTATOES	2/3 Cup	100	217 cal	3 g	9 g	32 g	2.9	0 mg	8 mg	13 mg
Q 053 00	SCALLOPED POTATOES	2/3 Cup	100	152 cal	4 g	3 g	28 g	2.2	1 mg	339 mg	64 mg
Q 053 01	SCALLOPED POTATOES AND ONIONS	2/3 Cup	100	155 cal	4 g	3 g	29 g	2.4	1 mg	336 mg	60 mg
Q 054 00	HASHED BROWN POTATOES (DEHYDRATED, SLICED)	2/3 Cup	100	77 cal	1 g	5 g	7 g	0.7	0 mg	288 mg	8 mg
Q 054 01	LYONNAISE POTATOES (DEHYDRATED)	2/3 Cup	100	82 cal	1 g	5 g	8 g	0.8	0 mg	288 mg	12 mg
Q 054 02	O'BRIEN POTATOES (DEHYDRATED, SLICED)	2/3 Cup	100	78 cal	1 g	5 g	8 g	0.8	0 mg	289 mg	8 mg
Q 054 03	HASHED BROWN POTATOES (DEHYDRATED, SHREDDED)	1/2 Cup	100	58 cal	0 g	4 g	5 g	0.5	0 mg	354 mg	5 mg
Q 054 04	HASHED BROWN POTATOES (DEHYDRATED, DICED)	2/3 Cup	100	75 cal	1 g	5 g	7 g	0.6	0 mg	288 mg	8 mg
Q 055 00	SCALLOPED POTATOES AND ONIONS (DEHYDRATED, SLICED)	2/3 Cup	100	95 cal	2 g	5 g	11 g	0.7	12 mg	286 mg	71 mg
Q 055 01	SCALLOPED POTATOES (DEHYDRATED, SLICED)	2/3 Cup	100	89 cal	2 g	5 g	10 g	0.6	12 mg	285 mg	65 mg
Q 055 02	SCALLOPED POTATOES (DEHYDRATED, DICED)	2/3 Cup	100	88 cal	2 g	5 g	9 g	0.5	12 mg	285 mg	64 mg
Q 056 00	GOLDEN POTATO BALLS (INSTANT)	3 Each	100	123 cal	2 g	9 g	9 g	0.6	0 mg	226 mg	25 mg
Q 057 00	MASHED POTATOES (INSTANT)	1/2 Cup	100	150 cal	4 g	2 g	30 g	2.5	5 mg	185 mg	31 mg
Q 057 01	GRILLED POTATO CAKES	1 Cake	100	79 cal	2 g	3 g	10 g	0.6	31 mg	193 mg	29 mg
Q 058 00	STEWED TOMATOES	1/2 Cup	100	23 cal	1 g	0 g	5 g	1.2	0 mg	172 mg	35 mg
Q 058 01	STEWED TOMATOES WITH CROUTONS	1/2 Cup	100	57 cal	2 g	2 g	9 g	1.4	5 mg	227 mg	43 mg
Q 059 00	GERMAN SAUERKRAUT	1/2 Cup	100	36 cal	1 g	1 g	7 g	2.6	1 mg	583 mg	31 mg
Q 060 00	CLUB SPINACH	1/2 Cup	100	163 cal	9 g	8 g	14 g	3	19 mg	682 mg	265 mg
Q 061 00	BAKED HUBBARD SQUASH	3-1/2 Ounces	100	97 cal	3 g	4 g	14 g	0	10 mg	118 mg	23 mg
Q 062 00	CREOLE SUMMER SQUASH	2/3 Cup	100	44 cal	2 g	1 g	8 g	2.6	0 mg	252 mg	33 mg
Q 063 00	TANGY SPINACH	1/2 Cup	100	31 cal	3 g	1 g	5 g	2.6	0 mg	187 mg	122 mg
Q 064 00	LOUISIANA STYLE SMOTHERED SQUASH	1/2 Cup	100	57 cal	1 g	3 g	8 g	2.3	7 mg	241 mg	25 mg
Q 064 01	SAVORY SUMMER SQUASH	1/2 Cup	100	35 cal	1 g	1 g	7 g	2.3	0 mg	212 mg	26 mg
Q 065 00	HERBED BROCCOLI	1/2 Cup	100	27 cal	3 g	0 g	5 g	2.8	0 mg	23 mg	52 mg
Q 066 00	BAKED SWEET POTATOES	1 Each	100	191 cal	3 g	0 g	44 g	5.4	0 mg	24 mg	40 mg
Q 067 00	CANDIED SWEET POTATOES	1/2 Cup	100	179 cal	1 g	4 g	34 g	2.8	10 mg	253 mg	29 mg
Q 067 01	GLAZED SWEET POTATOES	1/2 Cup	100	176 cal	1 g	4 g	34 g	2.8	10 mg	253 mg	27 mg
Q 067 02	GLAZED SWEET POTATOES (SYRUP)	1/2 Cup	100	226 cal	1 g	4 g	47 g	2.8	10 mg	280 mg	23 mg
Q 068 00	TEMPURA VEGETABLES	3-1/2 Ounces	100	143 cal	5 g	6 g	19 g	2.1	36 mg	420 mg	72 mg
Q 069 00	MASHED SWEET POTATOES	1/2 Cup	100	158 cal	2 g	3 g	32 g	3.5	5 mg	227 mg	35 mg
Q 069 01	SWEET POTATOES SOUTHERN STYLE	1/2 Cup	100	156 cal	2 g	2 g	33 g	3.6	4 mg	223 mg	39 mg
Q 069 02	MARSHMALLOW SWEET POTATOES	1/2 Cup	100	172 cal	2 g	3 g	36 g	3.5	5 mg	229 mg	35 mg
Q 070 00	GARLIC ROASTED POTATO WEDGES	4 Wedges	100	105 cal	2 g	1 g	23 g	2.2	0 mg	192 mg	12 mg
Q 071 00	ROSEMARY ROASTED POTATO WEDGES	4 Wedges	100	112 cal	2 g	1 g	25 g	2.3	0 mg	193 mg	23 mg
Q 072 00	SESAME GLAZED GREEN BEANS	3/4 Cup	100	90 cal	4 g	3 g	14 g	4.1	0 mg	412 mg	62 mg
Q 073 00	JAPANESE VEGETABLE STIR FRY	3/4 Cup	100	81 cal	4 g	2 g	13 g	4.3	0 mg	475 mg	63 mg
Q 074 00	SQUASH AND CARROT MEDLEY (FRESH)	3/4 Cup	100	42 cal	2 g	0 g	9 g	3.2	0 mg	132 mg	38 mg
Q 074 01	SQUASH AND CARROT MEDLEY (FROZEN)	3/4 Cup	100	40 cal	2 g	0 g	8 g	3	0 mg	140 mg	40 mg
Q 075 00	DEVILED OVEN FRIES	4 Pieces	100	113 cal	2 g	1 g	24 g	2.7	0 mg	227 mg	19 mg
Q 076 00	SOUTH OF THE BORDER BROCCOLI	2/3 Cup	100	40 cal	4 g	0 g	7 g	2.9	0 mg	421 mg	57 mg
Q 076 01	SOUTH OF THE BORDER MEDLEY	2/3 Cup	100	33 cal	2 g	0 g	6 g	2.5	0 mg	417 mg	37 mg
Q 077 00	BAKED POTATO PANCAKES (FROZEN SHREDDED POTATO)	1 Cake	100	129 cal	6 g	2 g	22 g	1.8	30 mg	230 mg	54 mg
Q 077 01	BAKED POTATO PANCAKES	1 Cake	100	107 cal	5 g	2 g	18 g	1.7	30 mg	208 mg	50 mg
Q 078 00	POTATOES AND HERBS	2/3 Cup	100	132 cal	3 g	0 g	31 g	3	0 mg	57 mg	21 mg
Q 079 00	HACIENDA POTATOES	3/4 Cup	100	145 cal	4 g	1 g	33 g	4.4	0 mg	498 mg	46 mg
Q 080 00	HACIENDA CORN AND BLACK BEANS	3/4 Cup	100	160 cal	7 g	1 g	34 g	7.1	0 mg	484 mg	46 mg
Q 081 00	HACIENDA GREEN BEANS	3/4 Cup	100	87 cal	4 g	1 g	20 g	5.4	0 mg	494 mg	81 mg
Q 082 00	HONEY DIJON VEGETABLES	3/4 Cup	100	62 cal	3 g	0 g	14 g	4.5	0 mg	121 mg	38 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
Q 083 00	CORN AND GREEN BEAN CASSEROLE	3/4 Cup	100	361 cal	8 g	25 g	29 g	4.1	19 mg	431 mg	120 mg
Q 084 00	GARLIC-LEMON ROASTED POTATO WEDGES	4 Wedges	100	146 cal	3 g	1 g	33 g	3.1	0 mg	183 mg	18 mg
Q 100 00	ASPARAGUS (FROZEN)	3/4 Cup	100	23 cal	2 g	0 g	4 g	1.3	0 mg	74 mg	20 mg
Q 100 01	ASPARAGUS (CANNED)	3/4 Cup	100	22 cal	3 g	0 g	4 g	1.4	0 mg	409 mg	22 mg
Q 100 02	ASPARAGUS (FRESH)	4 Spears	100	21 cal	2 g	0 g	4 g	1.9	0 mg	73 mg	20 mg
Q 101 00	BEANS, GREEN (FROZEN)	3/4 Cup	100	36 cal	2 g	0 g	8 g	3	0 mg	76 mg	47 mg
Q 101 01	BEANS, GREEN (CANNED)	3/4 Cup	100	26 cal	1 g	0 g	6 g	2.6	0 mg	443 mg	41 mg
Q 101 02	BEANS, WAX (CANNED)	3/4 Cup	100	26 cal	1 g	0 g	6 g	2.6	0 mg	443 mg	41 mg
Q 101 03	BEANS, FRENCH STYLE CUT (FROZEN)	3/4 Cup	100	36 cal	2 g	0 g	8 g	3	0 mg	76 mg	47 mg
Q 101 04	BEANS, WAX (FROZEN)	3/4 Cup	100	30 cal	2 g	0 g	7 g	3.3	0 mg	82 mg	55 mg
Q 102 00	BEANS, LIMA (FROZEN)	3/4 Cup	100	162 cal	9 g	0 g	31 g	7.3	0 mg	136 mg	45 mg
Q 102 01	BEANS, LIMA (CANNED)	3/4 Cup	100	126 cal	7 g	0 g	24 g	6.4	0 mg	449 mg	50 mg
Q 103 01	BEANS, WHITE IN TOMATO SAUCE (CANNED)	3/4 Cup	100	198 cal	10 g	3 g	37 g	10.3	13 mg	775 mg	99 mg
Q 104 01	BEETS (CANNED)	3/4 Cup	100	50 cal	1 g	0 g	12 g	2.1	0 mg	446 mg	23 mg
Q 105 00	BROCCOLI (FROZEN)	3/4 Cup	100	38 cal	4 g	0 g	7 g	4.1	0 mg	105 mg	71 mg
Q 105 02	BROCCOLI (FRESH)	3 Stalks	100	38 cal	4 g	0 g	7 g	4.1	0 mg	112 mg	69 mg
Q 106 00	BRUSSELS SPROUTS (FROZEN)	3/4 Cup	100	57 cal	5 g	0 g	11 g	5.6	0 mg	104 mg	34 mg
Q 107 02	CABBAGE (FRESH)	4-1/2 Ounces	100	33 cal	2 g	0 g	7 g	3.1	0 mg	99 mg	67 mg
Q 108 00	CARROT SLICES (FROZEN)	3/4 Cup	100	53 cal	2 g	0 g	12 g	4.4	0 mg	152 mg	45 mg
Q 108 01	CARROT SLICES (CANNED)	3/4 Cup	100	41 cal	1 g	0 g	10 g	3.2	0 mg	427 mg	55 mg
Q 108 02	CARROTS (1/4 INCH SLICES) (FRESH)	3/4 Cup	100	59 cal	1 g	0 g	14 g	4.1	0 mg	121 mg	39 mg
Q 108 03	CARROT STRIPS (FRESH)	3/4 Cup	100	53 cal	1 g	0 g	12 g	3.7	0 mg	117 mg	36 mg
Q 109 00	CAULIFLOWER (FROZEN)	3/4 Cup	100	26 cal	2 g	0 g	5 g	3.7	0 mg	98 mg	26 mg
Q 109 02	CAULIFLOWER (FRESH)	5 Flowerets	100	34 cal	3 g	0 g	7 g	3.4	0 mg	116 mg	33 mg
Q 110 00	CORN, WHOLE KERNEL (FROZEN)	3/4 Cup	100	108 cal	4 g	1 g	26 g	2.9	0 mg	75 mg	6 mg
Q 110 01	CORN, WHOLE KERNEL (CANNED)	3/4 Cup	100	115 cal	4 g	1 g	28 g	3.1	0 mg	384 mg	7 mg
Q 111 00	CORN ON THE COB (FROZEN)	1 Ear	100	123 cal	4 g	1 g	29 g	3.5	0 mg	83 mg	10 mg
Q 111 02	CORN ON THE COB (FRESH)	1 Each	100	148 cal	5 g	2 g	34 g	3.8	0 mg	100 mg	7 mg
Q 112 01	CREAM STYLE CORN (CANNED)	3/4 Cup	100	130 cal	3 g	1 g	33 g	2.2	0 mg	514 mg	5 mg
Q 113 00	GREENS, COLLARD (FROZEN)	3/4 Cup	100	88 cal	7 g	1 g	17 g	6.9	0 mg	774 mg	517 mg
Q 113 02	GREENS, COLLARD (FRESH)	3/4 Cup	100	35 cal	3 g	0 g	7 g	3.8	0 mg	85 mg	164 mg
Q 113 03	GREENS, KALE (FRESH)	3/4 Cup	100	41 cal	3 g	1 g	8 g	1.6	0 mg	106 mg	111 mg
Q 114 00	OKRA (FROZEN)	3/4 Cup	100	37 cal	2 g	0 g	8 g	2.7	0 mg	75 mg	100 mg
Q 114 01	OKRA (CANNED)	3/4 Cup	100	35 cal	1 g	0 g	8 g	4.2	0 mg	556 mg	111 mg
Q 115 01	ONIONS (CANNED)	3/4 Cup	100	33 cal	2 g	0 g	7 g	2.1	0 mg	635 mg	77 mg
Q 115 02	ONIONS (FRESH)	3/4 Cup	100	52 cal	2 g	0 g	12 g	2.4	0 mg	79 mg	31 mg
Q 116 00	PEAS (FROZEN)	3/4 Cup	100	103 cal	7 g	0 g	19 g	6.7	0 mg	76 mg	35 mg
Q 116 01	PEAS (CANNED)	3/4 Cup	100	95 cal	6 g	0 g	18 g	5.7	0 mg	448 mg	32 mg
Q 117 01	BLACK-EYED PEAS (CANNED)	3/4 Cup	100	139 cal	8 g	1 g	25 g	5.9	0 mg	539 mg	36 mg
Q 118 01	POTATOES, SWEET (CANNED)	3/4 Cup	100	161 cal	2 g	0 g	38 g	4.5	0 mg	80 mg	27 mg
Q 118 02	POTATOES, SWEET (FRESH)	3 Pieces	100	164 cal	3 g	0 g	38 g	4.7	0 mg	95 mg	38 mg
Q 119 01	POTATOES, WHITE (CANNED)	3/4 Cup	100	76 cal	2 g	0 g	17 g	2.4	0 mg	376 mg	68 mg
Q 119 02	POTATOES, WHITE (FRESH)	3/4 Cup	100	137 cal	3 g	0 g	32 g	2.9	0 mg	83 mg	16 mg
Q 120 01	SAUERKRAUT (CANNED)	3/4 Cup	100	32 cal	2 g	0 g	7 g	4.2	0 mg	1113 mg	51 mg
Q 121 00	SPINACH (FROZEN)	3/4 Cup	100	34 cal	4 g	0 g	6 g	3.7	0 mg	176 mg	179 mg
Q 121 01	SPINACH (CANNED)	3/4 Cup	100	32 cal	4 g	1 g	5 g	2.7	0 mg	532 mg	138 mg
Q 121 02	SPINACH (FRESH)	3/4 Cup	100	27 cal	4 g	0 g	4 g	3.3	0 mg	167 mg	122 mg
Q 122 00	SQUASH, SUMMER (FROZEN)	3/4 Cup	100	46 cal	3 g	0 g	10 g	3.5	0 mg	76 mg	49 mg
Q 122 02	SQUASH, SUMMER (FRESH)	3/4 Cup	100	33 cal	2 g	0 g	7 g	3.1	0 mg	73 mg	33 mg
Q 123 02	SQUASH, FALL AND WINTER (FRESH)	3/4 Cup	100	54 cal	3 g	1 g	12 g	0	0 mg	81 mg	20 mg
Q 124 00	SUCCOTASH (FROZEN)	3/4 Cup	100	114 cal	5 g	1 g	24 g	4.9	0 mg	127 mg	21 mg
Q 125 01	TOMATOES (CANNED)	3/4 Cup	100	33 cal	2 g	0 g	8 g	1.7	0 mg	257 mg	52 mg

Recipe Number	Recipe Name	Portion	Yield	Calories	Protein	Fat	Carbs	Fiber	Choles	Sodium	Calcium
Q 126 00	MIXED VEGETABLES (FROZEN)	3/4 Cup	100	78 cal	4 g	1 g	16 g	4.9	0 mg	130 mg	32 mg
Q 127 00	PEAS AND CARROTS (FROZEN)	3/4 Cup	100	65 cal	4 g	1 g	14 g	4.2	0 mg	169 mg	35 mg
Q 128 00	RUTABAGAS (FRESH)	3/4 Cup	100	49 cal	2 g	0 g	11 g	3.4	0 mg	98 mg	65 mg
Q 129 00	TURNIPS (FRESH)	3/4 Cup	100	37 cal	1 g	0 g	8 g	2.4	0 mg	162 mg	42 mg
Q 500 00	GARLIC CHEESE POTATOES	1/2 Cup	100	121 cal	4 g	2 g	23 g	2	3 mg	234 mg	81 mg
Q 500 01	GARLIC CHEESE POTATOES (INSTANT)	1/2 Cup	100	117 cal	4 g	3 g	19 g	1.5	8 mg	244 mg	82 mg
Q 502 00	ITALIAN ROASTED POTATOES	1/2 Cup	100	129 cal	3 g	1 g	29 g	3	0 mg	237 mg	26 mg
Q 503 00	OKRA MELANGE	1/2 Cup	100	47 cal	2 g	1 g	10 g	2.6	0 mg	196 mg	73 mg
Q 504 00	ROASTED PEPPER POTATOES	2/3 Cup	100	103 cal	2 g	2 g	19 g	1.9	0 mg	170 mg	19 mg
Q 504 01	ROASTED PEPPER POTATOES (INSTANT)	2/3 Cup	100	104 cal	2 g	2 g	19 g	1.7	0 mg	174 mg	30 mg
Q 800 00	OKRA, FROZEN, BREADED	3 Ounces	100	27 cal	2 g	0 g	6 g	2	0 mg	3 mg	73 mg
Q 801 00	CAJUN OVEN FRIES	4 Each	100	108 cal	2 g	1 g	24 g	2.3	0 mg	139 mg	17 mg
Q 803 00	CAULIFLOWER WITH CHEESE SAUCE	4 Ounces	100	96 cal	3 g	5 g	11 g	2.4	6 mg	469 mg	59 mg
Q 804 00	MUSHROOMS, FROZEN, BREADED	4 Ounces	100	140 cal	3 g	10 g	11 g	2.3	0 mg	301 mg	25 mg
Q 808 00	POTATOES AU GRATIN USING PREPARED SAUCE	5-1/2 Ounces	100	204 cal	4 g	6 g	33 g	2.1	8 mg	751 mg	70 mg
Q 809 00	VEGETABLE STIR FRY USING FROZEN VEGETABLES	1/2 Cup	100	121 cal	3 g	4 g	19 g	2.2	0 mg	1069 mg	44 mg

**PART B**  
**RECIPES MEETING**  
**HEALTHY NAVY OPTION STANDARDS**

**NAVSUP P-486 – Food Service Management**

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Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
<b>BREAKFAST ENTREES ≤ 15 gm Fat</b>			
F 004 00	COOKED EGGS	2 Each	10 g
F 006 00	EGG FOO YOUNG	1 Omelet	12 g
F 007 00	GRIDDLE FRIED EGGS	2 Each	12 g
F 008 00	PLAIN OMELET	1 Omelet	10 g
F 008 01	PLAIN OMELET (FROZEN EGGS AND EGG WHITES)	1 Omelet	5 g
F 008 03	CHEESE OMELET	1 Omelet	15 g
F 008 04	GREEN PEPPER OMELET	1 Omelet	10 g
F 008 05	HAM OMELET	1 Omelet	11 g
F 008 06	HAM AND CHEESE OMELET	1 Omelet	13 g
F 008 08	MUSHROOM OMELET	1 Omelet	10 g
F 008 09	ONION OMELET	1 Omelet	10 g
F 008 10	WESTERN OMELET	1 Omelet	11 g
F 008 11	TOMATO OMELET	1 Omelet	10 g
F 008 12	SPANISH OMELET	1 Omelet	11 g
F 009 00	POACHED EGGS	2 Each	10 g
F 010 00	SCRAMBLED EGGS	1/3 Cup	10 g
F 010 02	SCRAMBLED EGGS AND HAM	1/3 Cup	12 g
F 010 03	SCRAMBLED EGGS (DEHYDRATED EGG MIX)	1/3 Cup	12 g
F 010 05	SCRAMBLED EGGS (FROZEN EGGS AND EGG WHITES)	1/3 Cup	6 g
F 011 00	MUSHROOM QUICHE	4-1/2 Ounces	10 g
F 011 01	BROCCOLI QUICHE	4-1/2 Ounces	10 g
F 011 02	BROCCOLI QUICHE (FROZEN EGGS AND EGG WHITES)	4-1/2 Ounces	9 g
F 011 03	MUSHROOM QUICHE (FROZEN EGGS AND EGG WHITES)	4-1/2 Ounces	9 g
F 012 00	BREAKFAST BURRITO	1 Each	14 g
F 012 01	BREAKFAST PITA	1 Pita	12 g
F 013 00	VEGGIE EGG POCKET	1 Serving	6 g
F 014 00	MONTEREY EGG BAKE	6 Ounces	6 g
F 015 00	BREAKFAST PIZZA	1 Piece	7 g
F 015 01	MEXICAN BREAKFAST PIZZA	1 Piece	6 g
F 015 02	ITALIAN BREAKFAST PIZZA	1 Piece	10 g
F 800 00	MACARONI AND CHEESE, FROZEN	5 Ounces	12 g
F 801 00	BREAKFAST BURRITO, FROZEN	4 Ounces	8 g

Recipes Meeting Healthy Navy Option Standards

≤ 15gm Fat Entree

≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
<b>ENTREES (MAIN COURSE) ≤ 15 gm Fat</b>			
L 001 01	GRILLED OR OVEN FRIED BACON (PRECOOKED BACON)	2 Slices	2 g
L 002 00	OVEN FRIED BACON	2 Slices	8 g
L 002 02	GRILLED BACON	2 Slices	8 g
L 002 03	GRILLED OR OVEN FRIED CANADIAN BACON	2 Slices	1 g
L 005 00	ROAST BEEF	4 Ounces	12 g
L 005 01	ROAST BEEF (PRECOOKED)	4 Ounces	11 g
L 006 00	SUKIYAKI	1 Cup	8 g
L 009 00	SPINACH LASAGNA	9-1/2 Ounces	12 g
L 013 00	PEPPER STEAK	5-1/2 Ounces	8 g
L 013 01	ORIENTAL PEPPER STEAK	5-1/2 Ounces	8 g
L 015 01	STEAK STRIPS SMOTHERED WITH ONIONS	3/4 Cup	15 g
L 017 00	BRAISED BEEF AND NOODLES	1-1/4 Cups	11 g
L 017 01	BRAISED BEEF CUBES	6-1/2 Ounces	10 g
L 018 00	BARBECUED BEEF CUBES	6-1/2 Ounces	11 g
L 018 01	BARBECUED BEEF CUBES (CANNED BEEF)	6-1/2 Ounces	12 g
L 019 00	STUFFED FLOUNDER CREOLE	4-1/2 Ounces	6 g
L 020 01	TURKEY CORN PIE	1-1/2 Cups	12 g
L 021 00	BEEF POT PIE WITH BISCUIT TOPPING	1 Cup	15 g
L 021 01	BEEF POT PIE WITH PIE CRUST TOPPING	1 Cup	15 g
L 022 00	BEEF STEW	1-1/4 Cups	11 g
L 022 02	EL RANCHO STEW	1 Cup	11 g
L 023 00	CARIBBEAN CHICKEN BREAST (BREAST BONELESS)	5 Ounces	4 g
L 024 00	STUFFED CABBAGE ROLLS	2 Rolls	13 g
L 024 01	STUFFED CABBAGE ROLLS (TOMATO SOUP)	2 Rolls	14 g
L 024 02	STUFFED CABBAGE ROLLS (GROUND TURKEY)	2 Rolls	8 g
L 025 00	LASAGNA	9.5 Ounces	14 g
L 025 01	LASAGNA (GROUND TURKEY)	9-1/2 Ounces	12 g
L 025 02	LASAGNA (FROZEN)	9 Ounces	13 g
L 026 00	BAKED BREADED CLAM STRIPS	3 Ounces	14 g
L 027 00	BEEF BALLS STROGANOFF	3-1/2 Ounces	13 g
L 027 01	TURKEY BALLS STROGANOFF	3-1/2 Ounces	8 g
L 028 00	CHILI CON CARNE	1 Cup	9 g
L 028 02	CHILI MACARONI	1-1/4 Cups	9 g
L 028 03	CHILI CON CARNE (GROUND TURKEY)	1 Cup	6 g
L 028 04	CHILI MACARONI (GROUND TURKEY)	1-1/4 Cups	6 g
L 029 01	TURKEY PORCUPINES	5 Ounces	8 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 030 00	CREAMED GROUND BEEF	5-1/2 Ounces	10 g
L 030 01	CREAMED GROUND TURKEY	5-1/2 Ounces	6 g
L 031 00	BEEF RAVIOLI (FROZEN)	8 Ounces	12 g
L 031 01	CHEESE RAVIOLI (FROZEN)	8 Ounces	5 g
L 031 02	BEEF RAVIOLI (CANNED IN TOMATO SAUCE)	1 Cup	5 g
L 032 00	PARMESAN FISH	4 Ounces	8 g
L 033 00	ROAST BEEF HASH	1/2 Cup	6 g
L 033 01	ROAST BEEF HASH (CANNED)	1/2 Cup	12 g
L 033 02	ROAST BEEF HASH (CANNED BEEF CHUNKS)	1/2 Cup	9 g
L 035 01	TURKEY LOAF	6 Ounces	11 g
L 036 00	MINCED BEEF	5 Ounces	11 g
L 038 00	SPAGHETTI WITH MEAT SAUCE (GROUND TURKEY)	1 Cup	7 g
L 038 01	SPAGHETTI WITH MEAT SAUCE (GROUND BEEF)	1 Cup	10 g
L 038 02	SPAGHETTI WITH MEAT SAUCE, RTU (GROUND TURKEY)	1 Cup	12 g
L 038 03	SPAGHETTI WITH MEAT SAUCE, RTU (GROUND BEEF)	1 Cup	15 g
L 039 00	SPAGHETTI WITH MEATBALLS (GROUND TURKEY)	1 Serving	8 g
L 039 01	SPAGHETTI WITH MEATBALLS (GROUND BEEF)	1 Cup	13 g
L 040 00	STUFFED GREEN PEPPERS (GROUND BEEF)	1 Half	15 g
L 040 01	STUFFED GREEN PEPPERS (FROZEN)	1 Pepper	10 g
L 040 02	STUFFED GREEN PEPPERS (GROUND TURKEY)	1 Half	10 g
L 041 00	SWEDISH MEATBALLS (GROUND BEEF)	3-1/2 Ounces	12 g
L 041 01	SWEDISH MEATBALLS (GROUND TURKEY)	3-1/2 Ounces	7 g
L 042 01	CHILI CONQUISTADOR (GROUND TURKEY)	8-1/2 Ounces	13 g
L 043 00	BEEF FAJITAS (FAJITA STRIPS)	2 Fajitas	13 g
L 043 01	CHICKEN FAJITAS (FAJITA STRIPS)	2 Fajitas	12 g
L 043 02	TURKEY FAJITAS	2 Fajitas	15 g
L 044 00	TURKEY CURRY	7 Ounces	10 g
L 048 00	BAKED CHICKEN AND RICE (COOKED DICED)	1 Cup	9 g
L 048 01	BAKED CHICKEN AND RICE (CANNED CHICKEN)	1 Cup	11 g
L 049 00	TURKEY CUTLET	4-1/2 Ounces	12 g
L 050 00	CHALUPA	1 Cup	14 g
L 051 01	CHICKEN PARMESAN (BREAST BONELESS)	5 Ounces	8 g
L 052 00	CREAMED CHIPPED BEEF	6 Ounces	7 g
L 053 00	BEEF STROGANOFF	6 Ounces	9 g
L 053 01	BEEF STROGANOFF (CREAM OF MUSHROOM SOUP)	3/4 Cup	14 g
L 053 03	GROUND TURKEY STROGANOFF	6 Ounces	11 g
L 053 04	BEEF STROGANOFF (FAJITA STRIPS)	6 Ounces	12 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 054 00	STEAK RANCHERO	4-1/2 Ounces	10 g
L 056 00	SOUTHERN FRIED CATFISH FILLETS	4 Ounces	13 g
L 058 00	CHILI AND MACARONI (CANNED CHILI CON CARNE)	1-1/2 Cups	14 g
L 059 00	CHILI CON CARNE (WITH BEANS)	1 Cup	5 g
L 061 00	TEXAS HASH (GROUND BEEF)	1 Cup	13 g
L 061 01	TEXAS HASH (GROUND TURKEY)	1 Cup	8 g
L 062 00	YAKISOBA (BEEF AND SPAGHETTI)	1 Cup	8 g
L 062 02	TURKEY YAKISOBA	1 Cup	10 g
L 064 00	CREOLE MACARONI (GROUND BEEF)	1 Cup	8 g
L 064 01	CREOLE MACARONI (GROUND TURKEY)	1 Cup	6 g
L 065 00	HUNGARIAN GOULASH	6-1/2 Ounces	12 g
L 068 00	SCALLOPED HAM AND NOODLES	1 Cup	8 g
L 069 00	BAKED HAM	3 Ounces	9 g
L 069 01	GRILLED HAM STEAK	3 Ounces	9 g
L 070 00	BARBECUED HAM STEAK	3 Ounces	9 g
L 070 01	BARBECUED HAM STEAK (CANNED HAM)	3 Ounces	9 g
L 071 00	BAKED CANNED HAM	3-1/2 Ounces	9 g
L 071 01	BAKED HAM STEAK (CANNED HAM)	3-1/2 Ounces	9 g
L 071 02	GRILLED HAM STEAK (CANNED HAM)	3 Ounces	10 g
L 071 03	GRILLED HAM SLICE (CANNED HAM)	2-1/2 Ounces	7 g
L 072 00	BAKED HAM, MACARONI, AND TOMATOES (CANNED HAM)	1 Cup	11 g
L 072 02	BAKED HAM, MACARONI AND TOMATOES (CANNED CHUNKS)	1 Cup	14 g
L 076 01	CHEESE MANICOTTI	2 Shells	12 g
L 078 00	CHICKEN ADOBO (8 PC)	7 Ounces	11 g
L 079 01	SWEET AND SOUR CHICKEN (8 PC)	8 Ounces	10 g
L 079 02	SWEET AND SOUR CHICKEN (COOKED DICED)	8 Ounces	6 g
L 080 01	SHRIMP CHOP SUEY	1-1/4 Cups	6 g
L 081 00	ROAST PORK	3-1/2 Ounces	14 g
L 081 01	ROAST PORK TENDERLOIN	4 Ounces	6 g
L 081 02	BARBECUED PORK LOIN	4 Ounces	15 g
L 082 00	SWEET AND SOUR PORK	1 Cup	13 g
L 089 02	GRILLED SAUSAGE PATTIES (PREFORMED)	1 Patty	12 g
L 096 00	ROAST FRESH HAM	4 Ounces	12 g
L 097 00	SHRIMP JAMBALAYA	1-1/2 Cups	6 g
L 099 00	PORK ADOBO	5 Ounces	13 g
L 101 00	ITALIAN STYLE VEAL STEAKS	3 Ounces	12 g
L 102 00	VEAL PAPRIKA STEAK	3 Ounces	15 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 105 00	VEAL CUBES PARMESAN	5-1/2 Ounces	15 g
L 107 00	BRAISED LIVER WITH ONIONS	4 Ounces	13 g
L 107 01	GRILLED LIVER	4 Ounces	5 g
L 110 00	CORNED BEEF HASH	3-1/2 Ounces	13 g
L 114 00	TERIYAKI CHICKEN (8 PC)	8 Ounces	10 g
L 115 00	SPICY BAKED FISH	4-1/2 Ounces	5 g
L 116 00	MACARONI TUNA SALAD	3/4 Cup	10 g
L 116 02	CHICKEN ROTINI SALAD (COOKED DICED)	3/4 Cup	14 g
L 119 00	BAKED FISH	4 Ounces	6 g
L 119 01	BAKED FISH WITH GARLIC BUTTER	4 Ounces	8 g
L 119 02	ONION-LEMON BAKED FISH	4 Ounces	6 g
L 119 03	LEMON BAKED FISH	4 Ounces	5 g
L 119 04	HERBED BAKED FISH	4 Ounces	6 g
L 119 05	MUSTARD-DILL BAKED FISH	4 Ounces	6 g
L 119 06	FISH AMANDINE	4 Ounces	7 g
L 119 07	CAJUN BAKED FISH	4 Ounces	6 g
L 120 00	BAKED STUFFED FISH	4-1/2 Ounces	7 g
L 121 00	SHRIMP SCAMPI	5-1/2 Ounces	9 g
L 122 00	PAN FRIED FISH	4 Ounces	10 g
L 122 01	TEMPURA FISH	4 Ounces	10 g
L 122 02	DEEP FAT FRIED FISH	4 Ounces	11 g
L 123 00	OVEN FRIED FISH	4 Ounces	9 g
L 124 00	BAKED FISH PORTIONS	3-1/2 Ounces	12 g
L 124 05	BAKED FISH NUGGETS	4 Ounces	14 g
L 125 00	CHIPPER FISH	4-1/2 Ounces	10 g
L 126 00	FRIED OYSTERS	6 Each	13 g
L 127 00	BOILED LOBSTER, WHOLE	16 Ounces	0 g
L 127 01	BOILED LOBSTER TAIL, FROZEN	8 Ounces	1 g
L 127 03	BOILED CRAB LEGS, ALASKAN KING, FROZEN	5 Ounces	3 g
L 127 04	BOILED SHRIMP, FROZEN	7 Shrimp	0 g
L 128 00	SALMON CAKES	2 Cakes	11 g
L 129 00	SALMON LOAF	4-1/2 Ounces	7 g
L 130 00	SCALLOPED SALMON AND PEAS	6-1/2 Ounces	13 g
L 132 00	TUNA SALAD	3/4 Cup	12 g
L 133 00	BAKED TUNA AND NOODLES	1 Cup	12 g
L 133 01	BAKED TUNA AND NOODLES (CREAM OF MUSHROOM SOUP)	1 Cup	10 g
L 134 00	FRIED SCALLOPS	5 Ounces	11 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 135 00	CREOLE SCALLOPS	1 Cup	3 g
L 135 02	CREOLE FISH FILLETS	4-1/2 Ounces	3 g
L 136 00	CREOLE SHRIMP	8 Ounces	4 g
L 137 00	FRENCH FRIED SHRIMP	4 Each	12 g
L 137 01	TEMPURA SHRIMP	4 Shrimp	11 g
L 138 00	SHRIMP CURRY	3/4 Cup	9 g
L 139 00	SHRIMP SALAD	1/2 Cup	5 g
L 140 00	SEAFOOD NEWBURG	6 Ounces	9 g
L 141 00	CRAB CAKES	5 Ounces	14 g
L 143 00	BAKED CHICKEN (8 PC)	8 Ounces	10 g
L 143 01	MEXICAN BAKED CHICKEN (8 PC)	2 Pieces	11 g
L 143 02	HERBED BAKED CHICKEN (8 PC)	2 Pieces	10 g
L 143 03	BAKED CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 143 04	MEXICAN BAKED CHICKEN (BREAST BONELESS)	5 Ounces	5 g
L 143 05	HERBED BAKED CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 144 00	BAKED TURKEY AND NOODLES	1 Cup	10 g
L 144 01	BAKED CHICKEN AND NOODLES (CANNED CHICKEN)	1 Cup	9 g
L 144 03	BAKED CHICKEN AND NOODLES (COOKED DICED)	1 Cup	9 g
L 145 00	CHICKEN VEGA (8 PC)	9 Ounces	12 g
L 146 00	BARBECUED CHICKEN (8 PC)	8 Ounces	11 g
L 146 01	BARBECUED CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 147 00	CHICKEN A LA KING (COOKED DICED)	1 Cup	7 g
L 147 01	CHICKEN A LA KING (CANNED CHICKEN)	1 Cup	7 g
L 147 02	TURKEY A LA KING	1 Cup	7 g
L 148 00	CHICKEN CACCIATORE (8 PC)	8 Ounces	11 g
L 148 01	CHICKEN CACCIATORE (COOKED DICED)	1-1/4 Cups	7 g
L 149 00	BAKED CHICKEN AND GRAVY (8 PC)	2 Pieces	11 g
L 149 01	BAKED CHICKEN WITH MUSHROOM GRAVY (8 PC)	2 Pieces	11 g
L 150 00	TURKEY POT PIE	1 Cup	10 g
L 150 01	CHICKEN POT PIE (CANNED CHICKEN)	1 Cup	8 g
L 150 03	CHICKEN POT PIE (COOKED DICED)	1 Cup	8 g
L 151 00	CHICKEN SALAD (COOKED DICED)	3/4 Cup	12 g
L 151 02	TURKEY SALAD (BONELESS, FROZEN)	3/4 Cup	12 g
L 152 00	CHICKEN TETRAZZINI (CANNED CHICKEN)	1 Cup	7 g
L 152 01	TUNA TETRAZZINI (CANNED TUNA)	1 Cup	3 g
L 152 02	CHICKEN TETRAZZINI (COOKED DICED)	1 Cup	6 g
L 153 00	CHINESE FIVE-SPICE CHICKEN (8 PC)	2 Pieces	10 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 154 00	CREOLE CHICKEN (8 PC)	2 Pieces	11 g
L 154 01	CREOLE CHICKEN (COOKED DICED)	1-1/4 Cups	6 g
L 156 00	OVEN BAKED CHICKEN (8 PC)	2 Pieces	12 g
L 157 00	PINEAPPLE CHICKEN (8 PC)	2 Pieces	10 g
L 158 00	SAVORY BAKED CHICKEN (8 PC)	2 Pieces	10 g
L 159 00	SZECHWAN CHICKEN (8 PC)	2 Pieces	10 g
L 159 01	SZECHWAN CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 160 00	CHICKEN CHOW MEIN (COOKED DICED)	1 Cup	7 g
L 160 01	CHICKEN CHOW MEIN (CANNED CHICKEN)	1 Cup	8 g
L 161 00	ROAST TURKEY	4 Ounces	7 g
L 162 00	ROAST TURKEY (BONELESS TURKEY)	3-1/2 Ounces	12 g
L 162 01	ROAST TURKEY WITH BARBECUE SAUCE	3-1/2 Ounces	13 g
L 163 00	TURKEY NUGGETS	3-1/2 Ounces	9 g
L 165 00	PIZZA	1 Slice	9 g
L 165 01	PIZZA (THICK CRUST)	4-1/2 Ounces	12 g
L 165 02	MUSHROOM, GREEN PEPPER AND ONION PIZZA	4 Ounces	9 g
L 165 03	HAMBURGER PIZZA	4 Ounces	13 g
L 165 04	PEPPERONI, GREEN PEPPER, AND MUSHROOM PIZZA	3-1/2 Ounces	11 g
L 165 05	PEPPERONI PIZZA	1 Slice	11 g
L 165 06	PIZZA (ROLL MIX)	4 Ounces	8 g
L 165 07	PORK OR ITALIAN SAUSAGE PIZZA	1 Slice	12 g
L 165 08	FRENCH BREAD PIZZA	4 Ounces	9 g
L 165 09	SAUSAGE, GREEN PEPPER, AND ONION PIZZA	1 Slice	11 g
L 165 10	PIZZA (POURABLE PIZZA CRUST)	1 Slice	7 g
L 166 00	PIZZA (12 INCH FROZEN CRUST)	4 Ounces	8 g
L 167 00	CHUCK WAGON STEW (BEANS WITH BEEF)	1-1/4 Cups	12 g
L 168 00	BAKED SCALLOPS	4-1/2 Ounces	5 g
L 171 00	CHEESE PITA PIZZA	2-1/2 Ounces	5 g
L 171 01	MUSHROOM, ONION, AND GREEN PEPPER PITA PIZZA	4 Ounces	5 g
L 173 00	CHEESE TORTELLINI MARINARA	1 Cup	5 g
L 173 01	SPINACH TORTELLINI MARINARA (FROZEN)	1 Cup	15 g
L 173 02	CHEESE TORTELLINI MARINARA (DEHYDRATED)	1 Cup	5 g
L 175 00	POTATO FRITTATA	12 Ounces	7 g
L 176 00	VEGETABLE STUFFED PEPPERS	2 Halves	15 g
L 177 00	BOMBAY CHICKEN (8 PC)	1 Piece	10 g
L 177 01	BOMBAY CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 179 00	HONEY GINGER CHICKEN (BREAST BONELESS)	5 Ounces	4 g

Recipes Meeting Healthy Navy Option Standards

≤ 15gm Fat Entree

≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 180 00	TURKEY SAUSAGE PATTIES	2 Ounces	5 g
L 181 00	CHICKEN IN ORANGE SAUCE (BREAST BONELESS)	5 Ounces	4 g
L 182 00	FIESTA CHICKEN (FAJITA STRIPS)	6 Ounces	2 g
L 184 00	GRILLED TURKEY PATTIES (GROUND TURKEY)	4-1/2 Ounces	9 g
L 185 00	CARIBBEAN CATFISH	4 Ounces	12 g
L 185 01	CARIBBEAN FLOUNDER	4 Ounces	5 g
L 186 00	BAKED YOGURT CHICKEN (BREAST BONELESS)	5 Ounces	5 g
L 187 00	HOT AND SPICY CHICKEN (8 PC)	8 Ounces	11 g
L 188 00	TURKEY FINGERS	3-1/2 Ounces	9 g
L 189 00	ITALIAN BROCCOLI PASTA	11 Ounces	4 g
L 190 00	CRANBERRY GLAZED CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 191 00	CHICKEN & ITALIAN VEGETABLE PASTA (FAJITA STRIPS)	1-1/4 Cups	5 g
L 192 00	HONEY LEMON CHICKEN BREAST (BREAST BONELESS)	5 Ounces	4 g
L 193 00	CAJUN ROAST BEEF	4 Ounces	12 g
L 195 00	TERIYAKI BEEF STRIPS	5 Ounces	8 g
L 195 01	TERIYAKI BEEF STRIPS (FAJITA STRIPS)	5 Ounces	11 g
L 196 00	SOUTHWESTERN SWEET POTATOES, BLACK BEANS, AND CORN	1-1/4 Cups	2 g
L 196 01	SOUTHWESTERN SWEET POTATOES, BLACK BEAN, CORN (CND)	1-1/4 Cups	2 g
L 197 00	DIJON BAKED PORK CHOPS	3 Ounces	15 g
L 198 00	GREEK LEMON TURKEY PASTA	1-1/3 Cups	7 g
L 200 00	GRILLED TURKEY SAUSAGE LINKS	2 Ounces	4 g
L 201 00	TAMALE PIE (TURKEY)	9-1/2 Ounces	9 g
L 202 00	ORIENTAL TUNA PATTIES	4-1/2 Ounces	5 g
L 203 00	VEGETABLE CURRY WITH RICE	2-1/2 Cups	3 g
L 204 00	TURKEY PEACH PASTA SALAD (ENTREE)	1-1/2 Cups	7 g
L 205 00	ITALIAN RICE AND BEEF	9 Ounces	15 g
L 206 00	BAYOU CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 207 00	SOUTHWESTERN SHRIMP LINGUINE	10 Ounces	5 g
L 209 00	SEAFOOD STEW	1-1/2 Cups	2 g
L 210 00	SANTE FE GLAZED CHICKEN (BREAST BONELESS)	4 Ounces	5 g
L 212 00	WHITE BEAN CHICKEN CHILI (COOKED DICED)	1-1/2 Cups	8 g
L 213 00	CHICKEN BRIYANI (COOKED DICED)	12 Ounces	10 g
L 216 00	CHEDDAR CHICKEN AND BROCCOLI (COOKED DICED)	10 Ounces	10 g
L 217 00	ASIAN BARBECUE TURKEY	4 Ounces	2 g
L 219 00	LEMON N' HERB TURKEY FILLETS	4 Ounces	9 g
L 221 00	TURKEY DIVAN	3 Ounces	5 g
L 223 00	LIME CHICKEN SOFT TACOS (FAJITA STRIPS)	7 Ounces	6 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 224 00	SAUSAGE, BEANS AND GREENS	1-1/2 Cups	8 g
L 500 00	RUSSIAN TURKEY STEW	1 Cup	8 g
L 501 00	PASTA PRIMAVERA	1 Cup	4 g
L 502 00	FISH FLORENTINE	4 Ounces	10 g
L 503 00	JAMAICAN RUM CHICKEN (BREAST BONELESS)	5 Ounces	4 g
L 504 00	BAKED FISH SCANDIA	4 Ounces	4 g
L 506 00	THAI BEEF SALAD	1-1/2 Cups	9 g
L 508 00	VEGETABLE LASAGNA	8 Ounces	7 g
L 512 00	GRILLED TURKEY SAUSAGE PATTY (PRE-MADE)	1 Patty	6 g
L 515 00	OVEN FRIED TURKEY BACON	2 Slices	4 g
L 523 00	MAMBO PORK ROAST	4 Ounces	15 g
L 524 00	WHITE FISH WITH MUSHROOMS	4 Ounces	2 g
L 800 00	TURKEY POLYNESIAN	3-1/2 Ounces	4 g
L 802 00	ANGEL HAIR PASTA, FILIPINO STYLE WITH SHRIMP	12 Ounces	3 g
L 803 00	OVEN ROASTED TURKEY, PRECOOKED	4 Ounces	4 g
L 805 00	MEXICAN TURKEY PASTA	1-1/4 Cups	4 g
L 806 00	BASIL BAKED FISH PORTIONS	4-1/2 Ounces	2 g
L 807 00	TUNA NOODLE CASSEROLE, FROZEN	5 Ounces	12 g
L 810 00	BEEF STIR FRY	1/2 Cup	9 g
L 811 00	INDONESIAN STYLE BEEF OVER NOODLES	1-1/2 Cups	14 g
L 813 00	MAMBO PORK ROAST USING PRECOOKED PORK	5 Ounces	6 g
L 814 00	KIELBASA WITH SAUERKRAUT AND APPLES	4 Ounces	9 g
L 816 00	TARRAGON CHICKEN & RICE (FAJITA STRIPS)	6 Ounces	4 g
L 817 00	CAJUN ROAST BEEF (PRECOOKED ROAST BEEF)	4-1/2 Ounces	13 g
L 818 00	BAKED TANDOORI CHICKEN (BREAST BONELESS)	4 Ounces	5 g
L 821 00	HERB TURKEY ROAST W/TOMATO GRAVY PRECOOKED TURKEY	4 Ounces	1 g
L 822 00	BEEF AND BEAN BURRITOS, FROZEN	4 Ounces	8 g
L 825 00	CORNED BEEF AND CABBAGE (PRECOOKED CORNED BEEF)	9 Ounces	1 g
L 826 00	SAVORY BAKED CHICKEN (BREAST BONELESS)	4 Ounces	4 g
L 828 00	BAKED FLOUNDER FILLETS WITH LEMON PEPPER	4-1/2 Ounces	4 g
L 829 00	HUNTER STYLE TURKEY STEW	1-1/2 Cups	5 g
L 832 00	HONEY GLAZED CHICKEN (BREAST BONELESS)	4 Ounces	4 g
L 833 00	ROSEMARY TURKEY ROAST	4 Ounces	2 g
L 835 00	MEXICAN PEPPER STEAK	3/4 Cup	12 g
L 838 00	PORK TENDERLOIN, PRECOOKED	6 Ounces	7 g
L 840 00	BLACKENED FISH	5-1/2 Ounces	2 g
L 843 00	CABBAGE ROLLS, STUFFED, FROZEN	5 Ounces	8 g

Recipes Meeting Healthy Navy Option Standards  
≤ 15gm Fat Entree  
≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
L 844 00	JERKED ROAST TURKEY	4 Ounces	6 g
L 845 00	LEMON PEPPER CATFISH	4-1/2 Ounces	9 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
<b>SANDWICHES ≤ 15 gm Fat</b>			
N 001 01	BACON, LETTUCE, AND TOMATO SANDWICH	1 Sandwich	14 g
N 002 00	GYROS	1 Sandwich	11 g
N 004 00	ROAST BEEF SANDWICH	1 Sandwich	14 g
N 004 02	ROAST TURKEY SANDWICH	1 Sandwich	13 g
N 005 00	SAUSAGE AND BISCUIT	1 Sandwich	12 g
N 005 01	HAM AND BISCUIT	1 Sandwich	7 g
N 008 00	CHICKEN SALAD SANDWICH	1 Sandwich	14 g
N 008 02	TURKEY SALAD SANDWICH	1 Sandwich	14 g
N 011 00	HAM SANDWICH	1 Sandwich	9 g
N 011 01	FRIED HAM SANDWICH	1 Sandwich	14 g
N 011 02	HAM AND CHEESE SANDWICH	1 Sandwich	15 g
N 011 03	HAM AND TOMATO SANDWICH	1 Sandwich	9 g
N 012 00	GRILLED HAMBURGER (BEEF PATTIES)	1 Burger	14 g
N 012 04	CHILIBURGER (BEEF PATTIES)	1 Burger	15 g
N 012 05	DELUXE HAMBURGER (BEEF PATTIES)	1 Burger	14 g
N 015 00	TUNA SALAD SANDWICH	1 Sandwich	13 g
N 015 03	TUNA AND TOMATO SANDWICH	1 Sandwich	14 g
N 016 00	CREAM CHEESE BAGEL	1 Bagel	12 g
N 016 01	CREAM CHEESE AND TOMATO BAGEL	1 Bagel	12 g
N 016 02	CREAM CHEESE AND OLIVE BAGEL	1 Bagel	12 g
N 018 00	WESTERN SANDWICH (DENVER)	1 Sandwich	8 g
N 021 03	GRILLED CHICKEN FILLET SANDWICH (UNBREADED)	1 Sandwich	14 g
N 022 00	CANNONBALL SANDWICH (MEATBALL)	1 Sandwich	15 g
N 024 01	BARBECUED BEEF SANDWICH (DICED BEEF)	1 Sandwich	13 g
N 027 00	BARBECUED BEEF SANDWICH (SLOPPY JOE)	1 Sandwich	12 g
N 027 01	BARBECUED PORK SANDWICH (PORK BUTT)	1 Sandwich	14 g
N 027 02	BARBECUED PORK SANDWICH (FROZEN BARBECUED PORK)	1 Sandwich	8 g
N 027 03	TURKEY BARBECUE SANDWICH	1 Sandwich	9 g
N 028 00	ITALIAN PEPPER BEEF SANDWICH	1 Sandwich	13 g
N 030 00	SIMMERED FRANKFURTER ON ROLL	1 Each	15 g
N 030 05	GRILLED FRANKFURTER WITH FRIED PEPPERS AND ONIONS	1 Each	15 g
N 037 02	GRILLED HAM AND EGG SANDWICH	1 Sandwich	9 g
N 038 00	MOROCCAN POCKETS	1 Serving	9 g
N 042 00	BEEF FAJITA PITA	1/2 Pita	11 g
N 042 01	CHICKEN FAJITA PITA	1/2 Pita	4 g
N 043 00	CHICKEN PITA POCKET SANDWICH	1 Sandwich	4 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
N 044 00	GRILLED CHICKEN BREAST SANDWICH	1 Sandwich	12 g
N 045 00	CHICKEN CAESAR ROLLUP SANDWICH	1 Sandwich	6 g
N 046 00	GARDEN VEGETABLE WRAP	1 Sandwich	2 g
N 047 00	ROAST BEEF & CHEESE ROLLUP SANDWICH	1 Sandwich	9 g
N 047 01	HOT ROAST BEEF & CHEESE ROLLUP SANDWICH	1 Sandwich	9 g
N 048 00	JAMAICAN JERK CHICKEN SANDWICH	1 Sandwich	7 g
N 049 00	MEXICAN BEEF WRAP	1 Each	14 g
N 049 01	MEXICAN TURKEY WRAP	1 Each	6 g
N 050 00	CRUNCHY VEGETABLE BURRITO	1 Burrito	3 g
N 051 00	VEGETARIAN HEARTY BURGER	1 Burger	13 g
N 052 00	CAJUN CHICKEN SANDWICH	6 Ounces	7 g
N 502 00	BAKED TURKEY MELT	1 Sandwich	13 g
N 803 00	BLACK BEAN BURGERS/VEGETABLE BURGERS	4 Ounces	8 g
N 805 00	DOUBLE DECKER BEEF & TURKEY SANDWICH	1 Sandwich	11 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
<b>SALADS ≤ 15 gm Fat</b>			
M 001 00	APPLE, CELERY, AND PINEAPPLE SALAD	1/2 Cup	5 g
M 001 01	CABBAGE, APPLE, AND CELERY SALAD	1/2 Cup	5 g
M 001 02	CABBAGE, APPLE, AND RAISIN SALAD	1/2 Cup	5 g
M 002 00	SPINACH SALAD	1 Cup	3 g
M 002 01	SPINACH AND APPLE SALAD	1-1/3 Cups	0 g
M 002 02	SPINACH AND MUSHROOM SALAD	1-3/4 Cups	0 g
M 003 00	RED WINE VINAIGRETTE DRESSING	1 Tablespoon	5 g
M 004 00	FRIJOLE SALAD	3/4 Cup	2 g
M 005 00	CARROT SALAD	1/2 Cup	6 g
M 005 01	CARROT AND PINEAPPLE SALAD	1/2 Cup	6 g
M 005 02	CARROT, CELERY, AND APPLE SALAD	1/2 Cup	6 g
M 006 00	PIMIENTO CHEESE STUFFED CELERY	2 Pieces	4 g
M 006 01	COTTAGE CHEESE STUFFED CELERY	2 Pieces	0 g
M 006 02	PEANUT BUTTER STUFFED CELERY	2 Pieces	3 g
M 006 03	CREAM CHEESE STUFFED CELERY	2 Pieces	3 g
M 007 00	CHEF'S SALAD	1 Cup	5 g
M 007 01	CHEF'S SALAD (ENTREE)	1-1/2 Cups	11 g
M 008 00	COLE SLAW	1/2 Cup	9 g
M 008 01	MEXICAN COLE SLAW	1/2 Cup	9 g
M 009 00	COLE SLAW WITH CREAMY DRESSING	1/2 Cup	5 g
M 009 01	COLE SLAW WITH VINEGAR DRESSING	1/2 Cup	0 g
M 009 02	CABBAGE AND CARROT SLAW WITH CREAMY DRESSING	1/2 Cup	5 g
M 009 03	PINEAPPLE COLE SLAW	1/2 Cup	5 g
M 009 04	PINEAPPLE MARSHMALLOW COLE SLAW	2/3 Cup	5 g
M 009 05	VEGETABLE SLAW WITH CREAMY DRESSING	1/2 Cup	5 g
M 012 00	COTTAGE CHEESE SALAD	1/4 Cup	3 g
M 013 00	COTTAGE CHEESE AND PEACH SALAD	1/4 Cup	3 g
M 013 01	COTTAGE CHEESE AND APRICOT SALAD	1/4 Cup	3 g
M 013 02	COTTAGE CHEESE AND PEAR SALAD	1/4 Cup	3 g
M 013 03	COTTAGE CHEESE AND PINEAPPLE SALAD	1/4 Cup	3 g
M 014 00	COTTAGE CHEESE AND TOMATO SALAD	1/4 Cup	3 g
M 015 00	CUCUMBER AND ONION SALAD	1/2 Cup	0 g
M 017 00	FRUIT SALAD	1/2 Cup	0 g
M 018 00	GARDEN COTTAGE CHEESE SALAD	1/2 Cup	2 g
M 019 00	GARDEN VEGETABLE SALAD	3/4 Cup	0 g
M 020 00	MARINATED CARROTS	1/2 Cup	5 g

Recipes Meeting Healthy Navy Option Standards

≤ 15gm Fat Entree

≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
M 023 00	JELLIED CRANBERRY AND ORANGE SALAD	4 Ounces	0 g
M 023 01	JELLIED CRANBERRY AND ORANGE SALAD (CANNED)	4 Ounces	0 g
M 024 00	JELLIED CRANBERRY AND PINEAPPLE SALAD	5-1/2 Ounces	2 g
M 025 00	JELLIED FRUIT SALAD	5 Ounces	0 g
M 025 01	JELLIED ORANGE SALAD	5 Ounces	0 g
M 025 02	JELLIED PEAR SALAD	5 Ounces	0 g
M 025 03	JELLIED PINEAPPLE, PEAR, AND BANANA SALAD	5 Ounces	0 g
M 025 04	JELLIED STRAWBERRY SALAD	4-1/2 Ounces	0 g
M 025 05	JELLIED BANANA SALAD	5 Ounces	0 g
M 026 00	JELLIED FRUIT COCKTAIL SALAD	4-1/2 Ounces	3 g
M 027 00	GERMAN COLE SLAW	1/2 Cup	4 g
M 028 00	TACO SALAD	1-1/2 Cups	14 g
M 029 00	ITALIAN STYLE PASTA SALAD	1/2 Cup	8 g
M 031 00	KIDNEY BEAN SALAD	1/2 Cup	8 g
M 032 00	FRUIT MEDLEY SALAD	1/2 Cup	4 g
M 033 00	LETTUCE AND TOMATO SALAD	3-1/2 Ounces	0 g
M 034 00	MACARONI SALAD	1/2 Cup	6 g
M 035 00	MIXED FRUIT SALAD	1/2 Cup	0 g
M 036 00	PERFECTION SALAD	3 Ounces	0 g
M 036 01	GOLDEN GLOW SALAD	3-1/2 Ounces	0 g
M 036 02	JELLIED SPRING SALAD	3 Ounces	0 g
M 037 00	PICKLED BEET AND ONION SALAD	1/2 Cup	0 g
M 038 00	PASTA SALAD	1/2 Cup	10 g
M 040 00	POTATO SALAD	2/3 Cup	13 g
M 040 01	DEVILED POTATO SALAD	2/3 Cup	15 g
M 040 02	POTATO SALAD WITH VINEGAR DRESSING	2/3 Cup	0 g
M 041 00	POTATO SALAD (DEHYDRATED SLICED POTATOES)	2/3 Cup	10 g
M 042 00	HOT POTATO SALAD	2/3 Cup	6 g
M 043 00	HOT POTATO SALAD (DEHYDRATED SLICED POTATOES)	2/3 Cup	5 g
M 044 00	SPRING SALAD	3/4 Cup	0 g
M 045 00	THREE BEAN SALAD	1/3 Cup	7 g
M 045 01	PICKLED GREEN BEAN SALAD	1/3 Cup	7 g
M 046 00	TOSSED LETTUCE, CUCUMBER AND TOMATO SALAD	1 Cup	0 g
M 046 01	TOSSED GARDEN SALAD	1 Cup	0 g
M 046 02	TOSSED CALICO GARDEN SALAD	1 Cup	0 g
M 046 03	TOSSED ROMAINE, CUCUMBER AND TOMATO SALAD	1 Cup	0 g
M 046 04	TOSSED RED LEAF LETTUCE, CUCUMBER AND TOMATO SALAD	1 Cup	0 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
M 046 05	GREEN LEAF LETTUCE, CUCUMBER AND TOMATO SALAD	1 Cup	0 g
M 047 00	TOSSED GREEN SALAD	1 Cup	0 g
M 048 00	TOSSED VEGETABLE SALAD	1 Cup	0 g
M 048 01	TOSSED CALICO VEGETABLE SALAD	1 Cup	0 g
M 049 00	VEGETABLE SALAD	1/2 Cup	0 g
M 050 00	WALDORF SALAD	1/2 Cup	9 g
M 050 01	APPLE, CELERY, AND RAISIN SALAD	1/2 Cup	6 g
M 053 00	GERMAN STYLE TOMATO SALAD	1/3 Cup	5 g
M 053 01	COUNTRY STYLE TOMATO SALAD	1/2 Cup	2 g
M 062 00	MEXICAN POTATO SALAD	3/4 Cup	8 g
M 070 00	ZESTY ROTINI PASTA SALAD	1/2 Cup	2 g
M 071 00	SALSA PASTA SALAD	1/2 Cup	1 g
M 072 00	CONFETTI RICE SALAD	1/2 Cup	2 g
M 072 01	CREAMY CUCUMBER RICE SALAD	1/2 Cup	2 g
M 073 00	KIWI FRUIT SALAD	1/2 Cup	1 g
M 074 00	MARINATED BLACK BEAN SALAD	3/4 Cup	1 g
M 504 00	BROCCOLI SALAD	1/2 Cup	15 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
<b>STARCHES ≤ 5 gm Fat</b>			
E 001 00	HOT OATMEAL	3/4 Cup	2 g
E 001 02	HOT FARINA	3/4 Cup	0 g
E 002 00	HOMINY GRITS	2/3 Cup	1 g
E 003 00	BUTTERED HOMINY	1/3 Cup	4 g
E 004 00	BOILED PASTA	1 Cup	1 g
E 004 01	BUTTERED PASTA	1 Cup	5 g
E 005 00	STEAMED RICE	3/4 Cup	1 g
E 005 01	LYONNAISE RICE	3/4 Cup	2 g
E 005 02	TOSSED GREEN RICE	3/4 Cup	2 g
E 005 03	LONG GRAIN AND WILD RICE	3/4 Cup	1 g
E 005 04	RICE WITH PARMESAN CHEESE	3/4 Cup	4 g
E 005 05	STEAMED BROWN RICE	3/4 Cup	2 g
E 006 00	STEAMED RICE (STEAM COOKER METHOD)	3/4 Cup	2 g
E 008 00	RICE PILAF	3/4 Cup	4 g
E 008 01	ORANGE RICE	3/4 Cup	4 g
E 009 00	SPANISH RICE	3/4 Cup	2 g
E 010 00	RED BEANS WITH RICE	1 Cup	3 g
E 010 01	HOPPING JOHN (BLACK-EYE PEAS WITH RICE)	2/3 Cup	3 g
E 011 00	MEXICAN RICE	3/4 Cup	5 g
E 013 00	STEAMED PASTA	1 Cup	1 g
E 014 00	SPRING GARDEN RICE	3/4 Cup	2 g
E 015 00	SICILIAN BROWN RICE AND VEGETABLES	3/4 Cup	2 g
E 016 00	ISLANDER'S RICE	3/4 Cup	1 g
E 017 00	MEDITERRANEAN BROWN RICE	3/4 Cup	4 g
E 018 00	SPICY BROWN RICE PILAF	3/4 Cup	2 g
E 019 00	BROWN RICE WITH TOMATOES	3/4 Cup	1 g
E 020 00	GINGER RICE	3/4 Cup	2 g
E 022 00	ORZO WITH LEMON AND HERBS	3/4 Cup	4 g
E 023 00	ORZO, WITH SPINACH, TOMATO, AND ONION	9-1/2 Ounces	2 g
E 508 00	SOUTHWESTERN RICE	3/4 Cup	1 g
E 800 00	ORIENTAL RICE	4 Ounces	1 g
E 801 00	WILD RICE	1/2 Cup	0 g
E 803 00	AZTEC RICE	3/4 Cup	3 g
E 804 00	MEXICAN RICE (FIESTA MIX)	1/2 Cup	0 g
E 805 00	RICE PILAF, USING MIX	1/2 Cup	1 g
E 806 00	GEORGIA RICE	4 Ounces	1 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
E 807 00	DIRTY RICE	3/4 Cup	1 g
O 021 00	BREAD DRESSING	3-1/2 Ounces	3 g
O 021 01	APPLE BREAD DRESSING	3-1/2 Ounces	3 g
O 021 03	OYSTER BREAD DRESSING	3-1/2 Ounces	4 g
O 801 00	DRESSING, TRADITIONAL MIX	4 Ounces	4 g
O 801 01	DRESSING, CORNBREAD MIX	4 Ounces	2 g
Q 044 00	BAKED POTATOES	1 Each	0 g
Q 044 01	QUICK BAKED POTATO HALVES	2 Halves	1 g
Q 045 06	BAKED POTATO ROUNDS (PRECOOKED)	3/4 Cup	0 g
Q 046 04	HASHED BROWN POTATOES (FROZEN, SHREDDED, 2.5 OZ)	1 Patty	0 g
Q 048 00	MASHED POTATOES	1/2 Cup	2 g
Q 048 01	GRILLED POTATO PATTIES	2 Patties	2 g
Q 050 01	FRANCONIA POTATOES	1/2 Cup	4 g
Q 054 00	HASHED BROWN POTATOES (DEHYDRATED, SLICED)	2/3 Cup	5 g
Q 054 01	LYONNAISE POTATOES (DEHYDRATED)	2/3 Cup	5 g
Q 054 03	HASHED BROWN POTATOES (DEHYDRATED, SHREDDED)	1/2 Cup	4 g
Q 054 04	HASHED BROWN POTATOES (DEHYDRATED, DICED)	2/3 Cup	5 g
Q 057 00	MASHED POTATOES (INSTANT)	1/2 Cup	2 g
Q 057 01	GRILLED POTATO CAKES	1 Cake	3 g
Q 070 00	GARLIC ROASTED POTATO WEDGES	4 Wedges	1 g
Q 071 00	ROSEMARY ROASTED POTATO WEDGES	4 Wedges	1 g
Q 075 00	DEVILED OVEN FRIES	4 Pieces	1 g
Q 077 00	BAKED POTATO PANCAKES (FROZEN SHREDDED POTATO)	1 Cake	2 g
Q 077 01	BAKED POTATO PANCAKES	1 Cake	2 g
Q 078 00	POTATOES AND HERBS	2/3 Cup	0 g
Q 079 00	HACIENDA POTATOES	3/4 Cup	1 g
Q 084 00	GARLIC-LEMON ROASTED POTATO WEDGES	4 Wedges	1 g
Q 119 01	POTATOES, WHITE (CANNED)	3/4 Cup	0 g
Q 119 02	POTATOES, WHITE (FRESH)	3/4 Cup	0 g
Q 500 00	GARLIC CHEESE POTATOES	1/2 Cup	2 g
Q 500 01	GARLIC CHEESE POTATOES (INSTANT)	1/2 Cup	3 g
Q 502 00	ITALIAN ROASTED POTATOES	1/2 Cup	1 g
Q 801 00	CAJUN OVEN FRIES	4 Each	1 g

Recipes Meeting Healthy Navy Option Standards

≤ 15gm Fat Entree

≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
<b>VEGETABLES ≤ 5 gm Fat</b>			
Q 001 01	BROCCOLI COMBO	3/4 Cup	4 g
Q 001 02	BEAN COMBO	3/4 Cup	4 g
Q 001 03	CAULIFLOWER COMBO	3/4 Cup	4 g
Q 001 04	BRUSSELS SPROUTS COMBO	3/4 Cup	4 g
Q 001 05	GREEN BEAN COMBO	3/4 Cup	4 g
Q 001 06	CORN COMBO	3/4 Cup	4 g
Q 002 00	BAKED BEANS (CANNED)	1/2 Cup	3 g
Q 002 01	BAKED BEANS (KIDNEY BEANS, CANNED)	1/2 Cup	1 g
Q 002 02	BAKED BEANS (PINTO BEANS, CANNED)	1/2 Cup	2 g
Q 003 00	BOSTON BAKED BEANS	1/2 Cup	2 g
Q 003 01	SAVORY BAKED BEANS	1/2 Cup	2 g
Q 004 00	ITALIAN-STYLE BAKED BEANS	1/2 Cup	2 g
Q 004 01	ITALIAN-STYLE BAKED BEANS (CANNED BEANS)	1/2 Cup	2 g
Q 005 00	SIMMERED DRY BEANS WITH BACON	2/3 Cup	2 g
Q 005 01	SAVORY STYLE BEANS	2/3 Cup	0 g
Q 005 02	SIMMERED DRY BEANS	2/3 Cup	0 g
Q 006 00	SPANISH STYLE BEANS	1/2 Cup	1 g
Q 007 00	LYONNAISE GREEN OR WAX BEANS	1/2 Cup	3 g
Q 007 01	GREEN BEANS CREOLE	1/2 Cup	1 g
Q 007 02	GREEN BEANS WITH MUSHROOMS	1/2 Cup	3 g
Q 007 03	GREEN BEANS NICOISE	1/2 Cup	3 g
Q 007 04	GREEN BEANS SOUTHERN STYLE	1/2 Cup	2 g
Q 008 00	HARVARD BEETS	3/4 Cup	2 g
Q 008 01	BEETS IN ORANGE-LEMON SAUCE	3/4 Cup	2 g
Q 009 00	HOT SPICED BEETS	3/4 Cup	2 g
Q 010 00	BROCCOLI POLONAISE	3 Ounces	3 g
Q 010 01	BRUSSELS SPROUTS POLONAISE	1/2 Cup	3 g
Q 010 02	CAULIFLOWER POLONAISE	1/2 Cup	3 g
Q 011 00	SPROUTS SUPERBA	1/2 Cup	3 g
Q 012 00	FRIED CABBAGE	1/2 Cup	3 g
Q 012 01	CALICO CABBAGE	1/2 Cup	3 g
Q 012 02	FRIED CABBAGE WITH BACON	1/2 Cup	4 g
Q 013 00	SCALLOPED SWEET POTATOES AND APPLES	1/2 Cup	3 g
Q 014 00	ORANGE CARROTS AMANDINE	1/2 Cup	4 g
Q 015 00	ORIENTAL STIR-FRY CABBAGE	3/4 Cup	0 g
Q 016 00	CARROT AND CELERY AMANDINE	1/2 Cup	3 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
Q 017 00	LYONNAISE CARROTS	1/2 Cup	2 g
Q 017 01	GLAZED CARROTS	1/2 Cup	2 g
Q 022 00	RATATOUILLE	1/2 Cup	0 g
Q 023 00	SCALLOPED CREAM STYLE CORN	1/2 Cup	5 g
Q 023 01	SCALLOPED WHOLE KERNEL CORN	1/2 Cup	4 g
Q 024 00	BROCCOLI PARMESAN	2 Stalks	2 g
Q 024 01	BRUSSELS SPROUTS PARMESAN	3/4 Cup	2 g
Q 024 02	CAULIFLOWER PARMESAN	3/4 Cup	2 g
Q 025 00	VEGETABLE STIR FRY	1/2 Cup	4 g
Q 026 00	HERBED GREEN BEANS	3/4 Cup	2 g
Q 027 00	CALICO CORN	3/4 Cup	2 g
Q 027 01	CORN O'BRIEN	3/4 Cup	4 g
Q 027 02	MEXICAN CORN	3/4 Cup	2 g
Q 028 00	EGGPLANT PARMESAN	6-1/2 Ounces	5 g
Q 030 00	SAUTEED MUSHROOMS	2 Tablespoons	2 g
Q 031 00	OKRA AND TOMATO GUMBO	1/2 Cup	4 g
Q 033 00	PARSLEY BUTTERED POTATOES	4 Pieces	4 g
Q 033 01	PAPRIKA BUTTERED POTATOES	4 Pieces	4 g
Q 033 02	PARSLEY BUTTERED POTATOES (CANNED)	4 Pieces	5 g
Q 033 03	PAPRIKA BUTTERED POTATOES (CANNED)	4 Pieces	5 g
Q 034 00	SPANISH ONIONS	1/2 Cup	5 g
Q 037 00	SMOTHERED ONIONS (DEHYDRATED ONIONS)	1/2 Cup	4 g
Q 038 01	REFRIED BEANS (CANNED BEANS)	1/2 Cup	2 g
Q 039 00	GREEN BEANS WITH CORN (FROZEN BEANS)	1/2 Cup	1 g
Q 039 01	GREEN BEANS WITH CORN (CANNED BEANS)	1/2 Cup	1 g
Q 040 00	TURNIPS AND BACON	1/2 Cup	1 g
Q 041 00	PEAS WITH MUSHROOMS (FROZEN)	3/4 Cup	2 g
Q 041 01	PEAS WITH CARROTS (FROZEN)	3/4 Cup	2 g
Q 041 02	PEAS WITH CELERY (FROZEN)	3/4 Cup	2 g
Q 041 03	PEAS WITH ONIONS	3/4 Cup	2 g
Q 041 04	PEAS WITH MUSHROOMS (CANNED PEAS)	3/4 Cup	2 g
Q 042 00	GREEN BEANS PARISIENNE (CANNED)	1/2 Cup	4 g
Q 042 01	GREEN BEANS PARISIENNE (FROZEN BEANS)	1/2 Cup	4 g
Q 043 00	RED CABBAGE WITH SWEET AND SOUR SAUCE	1/2 Cup	5 g
Q 050 00	OVEN BROWNED POTATOES	1/2 Cup	4 g
Q 050 02	OVEN-GLO POTATOES	1/2 Cup	4 g
Q 050 03	OVEN-GLO POTATOES (CANNED)	3/4 Cup	4 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
Q 050 04	OVEN BROWNED POTATOES (CANNED)	3/4 Cup	5 g
Q 053 00	SCALLOPED POTATOES	2/3 Cup	3 g
Q 053 01	SCALLOPED POTATOES AND ONIONS	2/3 Cup	3 g
Q 054 02	O'BRIEN POTATOES (DEHYDRATED, SLICED)	2/3 Cup	5 g
Q 055 00	SCALLOPED POTATOES AND ONIONS (DEHYDRATED, SLICED)	2/3 Cup	5 g
Q 055 01	SCALLOPED POTATOES (DEHYDRATED, SLICED)	2/3 Cup	5 g
Q 055 02	SCALLOPED POTATOES (DEHYDRATED, DICED)	2/3 Cup	5 g
Q 058 00	STEWED TOMATOES	1/2 Cup	0 g
Q 058 01	STEWED TOMATOES WITH CROUTONS	1/2 Cup	2 g
Q 059 00	GERMAN SAUERKRAUT	1/2 Cup	1 g
Q 061 00	BAKED HUBBARD SQUASH	3-1/2 Ounces	4 g
Q 062 00	CREOLE SUMMER SQUASH	2/3 Cup	1 g
Q 063 00	TANGY SPINACH	1/2 Cup	1 g
Q 064 00	LOUISIANA STYLE SMOTHERED SQUASH	1/2 Cup	3 g
Q 064 01	SAVORY SUMMER SQUASH	1/2 Cup	1 g
Q 065 00	HERBED BROCCOLI	1/2 Cup	0 g
Q 066 00	BAKED SWEET POTATOES	1 Each	0 g
Q 067 00	CANDIED SWEET POTATOES	1/2 Cup	4 g
Q 067 01	GLAZED SWEET POTATOES	1/2 Cup	4 g
Q 067 02	GLAZED SWEET POTATOES (SYRUP)	1/2 Cup	4 g
Q 069 00	MASHED SWEET POTATOES	1/2 Cup	3 g
Q 069 01	SWEET POTATOES SOUTHERN STYLE	1/2 Cup	2 g
Q 069 02	MARSHMALLOW SWEET POTATOES	1/2 Cup	3 g
Q 072 00	SESAME GLAZED GREEN BEANS	3/4 Cup	3 g
Q 073 00	JAPANESE VEGETABLE STIR FRY	3/4 Cup	2 g
Q 074 00	SQUASH AND CARROT MEDLEY (FRESH)	3/4 Cup	0 g
Q 074 01	SQUASH AND CARROT MEDLEY (FROZEN)	3/4 Cup	0 g
Q 076 00	SOUTH OF THE BORDER BROCCOLI	2/3 Cup	0 g
Q 076 01	SOUTH OF THE BORDER MEDLEY	2/3 Cup	0 g
Q 080 00	HACIENDA CORN AND BLACK BEANS	3/4 Cup	1 g
Q 081 00	HACIENDA GREEN BEANS	3/4 Cup	1 g
Q 082 00	HONEY DIJON VEGETABLES	3/4 Cup	0 g
Q 100 00	ASPARAGUS (FROZEN)	3/4 Cup	0 g
Q 100 01	ASPARAGUS (CANNED)	3/4 Cup	0 g
Q 100 02	ASPARAGUS (FRESH)	4 Spears	0 g
Q 101 00	BEANS, GREEN (FROZEN)	3/4 Cup	0 g
Q 101 01	BEANS, GREEN (CANNED)	3/4 Cup	0 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
Q 101 02	BEANS, WAX (CANNED)	3/4 Cup	0 g
Q 101 03	BEANS, FRENCH STYLE CUT (FROZEN)	3/4 Cup	0 g
Q 101 04	BEANS, WAX (FROZEN)	3/4 Cup	0 g
Q 102 00	BEANS, LIMA (FROZEN)	3/4 Cup	0 g
Q 102 01	BEANS, LIMA (CANNED)	3/4 Cup	0 g
Q 103 01	BEANS, WHITE IN TOMATO SAUCE (CANNED)	3/4 Cup	3 g
Q 104 01	BEETS (CANNED)	3/4 Cup	0 g
Q 105 00	BROCCOLI (FROZEN)	3/4 Cup	0 g
Q 105 02	BROCCOLI (FRESH)	3 Stalks	0 g
Q 106 00	BRUSSELS SPROUTS (FROZEN)	3/4 Cup	0 g
Q 107 02	CABBAGE (FRESH)	4-1/2 Ounces	0 g
Q 108 00	CARROT SLICES (FROZEN)	3/4 Cup	0 g
Q 108 01	CARROT SLICES (CANNED)	3/4 Cup	0 g
Q 108 02	CARROTS (1/4 INCH SLICES) (FRESH)	3/4 Cup	0 g
Q 108 03	CARROT STRIPS (FRESH)	3/4 Cup	0 g
Q 109 00	CAULIFLOWER (FROZEN)	3/4 Cup	0 g
Q 109 02	CAULIFLOWER (FRESH)	5 Flowerets	0 g
Q 110 00	CORN, WHOLE KERNEL (FROZEN)	3/4 Cup	1 g
Q 110 01	CORN, WHOLE KERNEL (CANNED)	3/4 Cup	1 g
Q 111 00	CORN ON THE COB (FROZEN)	1 Ear	1 g
Q 111 02	CORN ON THE COB (FRESH)	1 Each	2 g
Q 112 01	CREAM STYLE CORN (CANNED)	3/4 Cup	1 g
Q 113 00	GREENS, COLLARD (FROZEN)	3/4 Cup	1 g
Q 113 02	GREENS, COLLARD (FRESH)	3/4 Cup	0 g
Q 113 03	GREENS, KALE (FRESH)	3/4 Cup	1 g
Q 114 00	OKRA (FROZEN)	3/4 Cup	0 g
Q 114 01	OKRA (CANNED)	3/4 Cup	0 g
Q 115 01	ONIONS (CANNED)	3/4 Cup	0 g
Q 115 02	ONIONS (FRESH)	3/4 Cup	0 g
Q 116 00	PEAS (FROZEN)	3/4 Cup	0 g
Q 116 01	PEAS (CANNED)	3/4 Cup	0 g
Q 117 01	BLACK-EYED PEAS (CANNED)	3/4 Cup	1 g
Q 118 01	POTATOES, SWEET (CANNED)	3/4 Cup	0 g
Q 118 02	POTATOES, SWEET (FRESH)	3 Pieces	0 g
Q 120 01	SAUERKRAUT (CANNED)	3/4 Cup	0 g
Q 121 00	SPINACH (FROZEN)	3/4 Cup	0 g
Q 121 01	SPINACH (CANNED)	3/4 Cup	1 g

Recipes Meeting Healthy Navy Option Standards  
 ≤ 15gm Fat Entree  
 ≤ 5gm Fat Starch, Vegetable, Dessert

Recipe #	Recipe Name	Portion	Fat
Q 121 02	SPINACH (FRESH)	3/4 Cup	0 g
Q 122 00	SQUASH, SUMMER (FROZEN)	3/4 Cup	0 g
Q 122 02	SQUASH, SUMMER (FRESH)	3/4 Cup	0 g
Q 123 02	SQUASH, FALL AND WINTER (FRESH)	3/4 Cup	1 g
Q 124 00	SUCCOTASH (FROZEN)	3/4 Cup	1 g
Q 125 01	TOMATOES (CANNED)	3/4 Cup	0 g
Q 126 00	MIXED VEGETABLES (FROZEN)	3/4 Cup	1 g
Q 127 00	PEAS AND CARROTS (FROZEN)	3/4 Cup	1 g
Q 128 00	RUTABAGAS (FRESH)	3/4 Cup	0 g
Q 129 00	TURNIPS (FRESH)	3/4 Cup	0 g
Q 503 00	OKRA MELANGE	1/2 Cup	1 g
Q 504 00	ROASTED PEPPER POTATOES	2/3 Cup	2 g
Q 504 01	ROASTED PEPPER POTATOES (INSTANT)	2/3 Cup	2 g
Q 800 00	OKRA, FROZEN, BREADED	3 Ounces	0 g
Q 803 00	CAULIFLOWER WITH CHEESE SAUCE	4 Ounces	5 g
Q 809 00	VEGETABLE STIR FRY USING FROZEN VEGETABLES	1/2 Cup	4 g

**PART C**  
**NUTRITIONAL ANALYSIS**  
**OF FAST FOOD AND**  
**MISCELLANEOUS FOOD ITEMS**

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Recipe #	Recipe Name	Portion	Cal	Pro	Fat	Carbs	Chol	Sod
<b>FAST FOOD</b>								
<b>TACO BELL</b>								
	SOFT TACO	3.5 Ounces	210	12	10	20	30	530
	BIG BEEF BEAN BURRITO SUPREME	10.25 Ounces	520	24	23	54	55	1520
	TACO SALAD WITH SALSA	19 Ounces	840	32	52	49	70	1670
	STEAK FAJITA WRAP	7.75 Ounces	460	20	21	48	40	1130
	NACHOS BELL GRANDE	10.75 Ounces	740	16	39	66	35	1200
	TACO SUPREME	4 Ounces	220	11	13	13	40	290
	CHICKEN QUESADILLA	5.75 Ounces	420	24	22	33	75	1020
<b>PIZZA HUT</b>								
	PEPPERONI THIN 'N CRISPY	1 Slice	215	11	10	21	14	627
	PEPPERONI PAN PIZZA	1 Slice	265	11	12	28	14	569
<b>KENTUCKY FRIED CHICKEN</b>								
	ORIGINAL RECIPE CHICKEN SANDWICH	7.3 Ounces	497	29	22	46	52	1213
	ORIGINAL RECIPE BREAST	5.4 Ounces	400	29	24	16	96	1116
	ORIGINAL RECIPE DRUMSTICK	2.2 Ounces	140	13	9	4	81	422
	ORIGINAL RECIPE WING	1.6 Ounces	140	9	10	5	67	414
	6 NUGGETS	3.4 Ounces	284	16	18	15	72	865
	EXTRA CRISPY BREAST	5.9 Ounces	470	31	28	25	160	930
	EXTRA CRISPY DRUMSTICK	2.4 Ounces	190	13	11	8	77	260
	EXTRA CRISPY WING	1.9 Ounces	200	10	13	10	55	290
	TENDER ROAST BREAST (W/SKIN)	4.9 Ounces	251	37	11	1	151	830
	TENDER ROAST BREAST (W/O SKIN)	4.2 Ounces	169	32	4	1	112	797
	TENDER ROAST DRUMSTICK (W/SKIN)	1.9 Ounces	97	15	4	<1	85	271
	TENDER ROAST DRUMSTICK (W/O SKIN)	1.2 Ounces	67	11	2	<1	63	259
	TENDER ROAST WING (W/SKIN)	1.8 Ounces	121	12	8	1	74	331
<b>BURGER KING</b>								
	CHEESEBURGER	4.8 Ounces	380	23	19	28	48	770
	WHOPPER WITH CHEESE	10.1 Ounces	730	33	46	46	90	1350
	FRIES MEDIUM	3.6 Ounces	340	0	17	43	14	680
	BK BROILER	8.7 Ounces	550	30	29	41	90	480
	BK BIG FISH SANDWICH	8.9 Ounces	700	26	41	56	50	980

Recipe #	Recipe Name	Portion	Cal	Pro	Fat	Carbs	Chol	Sod
	BISCUIT WITH BACON, EGG, AND CHEESE	6 Ounces	510	19	31	39	225	1530
<b>SUBWAY (SUBS DO NOT INCLUDE MAYO, CHEESE OR ANY OTHER CONDIMENT)</b>								
	MEATBALL SUB	6 Inch	419	19	16	51	56	1046
	STEAK AND CHEESE SUB	6 Inch	398	30	10	47	37	1117
	CLASSIC ITALIAN BMT SUB	6 Inch	460	21	22	45	56	1664
	TUNA SUB	6 Inch	542	19	32	44	42	886
	TURKEY SUB	6 Inch	289	18	4	46	20	1403
<b>WENDY'S</b>								
	FRIES MEDIUM	4.6 Ounces	380	5	19	42	20	120
	5 PIECE CHICKEN NUGGETS	2.6 Ounces	210	14	14	7	55	460
	GRILLED CHICKEN SANDWICH	6.6 Ounces	310	27	8	35	55	780
	SINGLE HAMBURGER W/EVERYTHING	7.7 Ounces	420	26	20	37	80	810
	BROCCOLI AND CHEESE POTATO	14.5 Ounces	470	9	14	71	22	470
	CHILI (SMALL)	8 Ounces	210	15	7	16	25	800
	GRILLED CHICKEN SALAD	12 Ounces	200	25	8	10	55	690
	GARDEN RANCH CHICKEN PITA	10 Ounces	480	32	17	44	70	1170
	TACO SALAD	7.4 Ounces	590	29	30	43	65	1230
<b>MCDONALDS</b>								
	CHEESEBURGER	4.2 Ounces	320	15	13	35	41	820
	QUARTERPOUNDER W/CHEESE	7 Ounces	530	28	30	38	107	1290
	FRIES LARGE	5.1 Ounces	200	6	22	52	9	290
	BIG MAC	7.6 Ounces	560	26	31	45	83	1070
	BACON EGG AND CHEESE BISCUIT	5 Ounces	440	17	26	33	250	1310
<b>MISCELLANEOUS ITEMS</b>								
<b>BEVERAGES - MILK/SODA</b>								
	1% MILK	8 Ounces	102	8	3	12	10	123
	2% MILK	8 Ounces	120	8	5	12	18	122
	SKIM MILK	8 Ounces	90	8	0	12	4	126
	SODA, COLA	12 Ounces	144	0	0	38	0	14
	WHOLE MILK	8 Ounces	150	8	8	12	35	122

Recipe #	Recipe Name	Portion	Cal	Pro	Fat	Carbs	Chol	Sod
<b>BREAKFAST</b>								
	DOUGHNUTS, GLAZED	1 Each	230	2	12	30	11	200
	ENGLISH MUFFIN	1 Whole	150	5	1	30	0	450
	POP TARTS	2 Pop Tarts	420	6	12	70	0	380
	YOGURT LOW FAT	8 Ounces	127	13	0	7	4	174
	YOGURT REGULAR	8 Ounces	139	8	7	11	29	105
<b>CEREALS W/O MILK</b>								
	GENERAL MILLS CHEERIOS	1-1/4 Cup (1 Ounce)	111	4	2	20	0	290
	KELLOGG'S RAISIN BRAN	3/4 Cup (1.3 Ounce)	115	4	1	28	0	269
	KELLOGG'S SPECIAL K	1-1/3 Cup (1 Ounce)	111	6	0	21	0	265
	KELLOGG'S RICE KRISPIES	1 Cup (1 Ounce)	112	2	0	25	0	340
	POST GRANOLA	1/4 Cup (1 Ounce)	127	2	4	21	0	76
	KELLOGG'S FROSTED FLAKES	3/4 Cup (1 Ounce)	108	1	0	26	0	230
	QUAKER CAPTAIN CRUNCH	3/4 Cup (1 Ounce)	121	1	3	23	0	172
	KELLOGG'S BRAN FLAKES	3/4 Cup (1 Ounce)	93	4	1	22	0	264
	QUAKER SHREDDED WHEAT	1 Ounce	102	3	1	23	0	3
	FRUIT LOOPS, KELLOGG'S	1 Cup (1 Ounce)	111	2	1	25	0	145
	LUCKY CHARMS, GENERAL MILLS	1 Cup (1 Ounce)	110	3	1	23	0	180
<b>CONDIMENTS</b>								
	BUTTER	1 TSP	36	0	4	0	11	41
	CREAM CHEESE	2 TBSP	98	2	9	1	28	86
	MARGARINE	1 TSP	34	0	4	0	0	37
	MAYONNAISE	1 TBSP	100	0	11	0	7	80
	OIL, VEGETABLE	1 TSP	120	0	14	0	0	0
	PEANUT BUTTER	2 TBSP	186	9	16	5	0	157
	SALAD DRESSING, BLUE CHEESE	1 TBSP	77	1	8	1	0	0
	SALAD DRESSING, FRENCH	1 TBSP	67	0	6	3	1	214
	SALAD DRESSING, ITALIAN	1 TBSP	69	0	7	2	0	116
	SALAD DRESSING, THOUSAND ISLAND	1 TBSP	59	0	6	2	0	109
<b>FRUIT</b>								
	APPLE	1 Medium	81	0	1	21	0	1
	BANANA	1 Medium (4-6")	105	0	1	26	0	1

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Recipe #	Recipe Name	Portion	Cal	Pro	Fat	Carbs	Chol	Sod
	GRAPES	1 Cup	58	0	0	15	0	2
	ORANGE	1 Medium	65	0	0	14	0	1
	PEACH	1 Medium	37	0	0	9	0	0
	PEAR	1 Medium	98	0	1	25	0	1
	PLUM	1 Medium	36	0	0	8	0	0
	STRAWBERRIES	1 Cup	45	0	1	10	0	2

# **PART D**

# **NEW RECIPES**

**NAVSUP P-486 – Food Service Management**

<b>NEW RECIPES</b>	
C 006 02	CHERRY-ADE
C 006 03	GRAPE-ADE
C 006 04	LEMON-ADE
C 006 05	ORANGE-ADE
C 006 06	STRAWBERRY-ADE
D 001 00	BAKING POWDER BISCUITS
D 001 01	BAKING POWDER BISCUITS (BISCUIT MIX)
D 001 02	CHEESE BISCUITS
D 001 03	DROP BISCUITS
D 002 00	IRISH SODA BREAD
D 003 00	SUBMARINE ROLLS (HOAGIE, TORPEDO)
D 003 01	SUBMARINE ROLLS (ROLL MIX)
D 004 00	FRENCH BREAD
D 005 00	RAISIN BREAD
D 007 00	TOASTED GARLIC BREAD
D 007 01	TOASTED PARMESAN BREAD
D 007 02	TEXAS TOAST
D 008 00	WHITE BREAD
D 009 00	WHITE BREAD (SHORT-TIME FORMULA)
D 011 00	PUMPKIN BREAD
D 012 00	CRUMB CAKE SNICKERDOODLE
D 012 01	CRUMB CAKE SNICKERDOODLE (CAKE MIX, YELLOW)
D 013 00	BAGELS
D 014 00	CORN BREAD
D 014 01	CORN MUFFINS
D 014 02	HUSH PUPPIES
D 014 03	JALAPENO CORN BREAD
D 015 00	CORN BREAD (CORN BREAD MIX)
D 015 01	CORN MUFFINS (CORN BREAD MIX)
D 015 02	HUSH PUPPIES (CORN BREAD MIX)
D 015 03	JALAPENO CORN BREAD (CORN BREAD MIX)
D 016 00	CROUTONS
D 016 01	GARLIC CROUTONS
D 016 02	PARMESAN CROUTONS
D 017 00	EGG WASH
D 017 01	EGG WHITE WASH
D 018 00	CAKE DOUGHNUTS (HOMEMADE)
D 018 01	SUGAR COATED DOUGHNUTS

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<b>NEW RECIPES</b>	
D 018 02	CAKE DOUGHNUTS (DOUGHNUT MIX)
D 018 03	CHOCOLATE DOUGHNUTS
D 018 04	CINNAMON SUGAR DOUGHNUTS
D 018 05	GLAZED NUT DOUGHNUTS
D 018 06	GLAZED COCONUT DOUGHNUTS
D 018 07	GLAZED DOUGHNUTS
D 019 00	RAISED DOUGHNUTS
D 019 01	BEIGNETS (NEW ORLEANS DOUGHNUTS)
D 019 02	RAISED DOUGHNUTS (SWEET DOUGH MIX)
D 019 03	LONGJOHNS
D 019 04	CRULLERS
D 020 00	DUMPLINGS
D 021 00	ENGLISH MUFFINS
D 021 01	CINNAMON RAISIN ENGLISH MUFFINS
D 022 00	FRENCH TOAST
D 022 01	FRENCH TOAST (THICK SLICE)
D 022 02	ENGLISH MUFFIN FRENCH TOAST
D 022 03	FRENCH TOAST (FROZEN EGGS AND EGG WHITES)
D 023 00	FRENCH TOAST PUFF
D 024 00	APPLE FRITTERS
D 029 00	MUFFINS
D 029 09	OATMEAL RAISIN MUFFINS
D 800 00	BREAD LOAVES (FROZEN DOUGH)
D 801 00	DILL ROLLS (FROZEN DOUGH)
D 802 00	GARLIC HERB ROLLS (FROZEN DOUGH)
D 803 00	HUSH PUPPIES, FROZEN
D 804 00	DINNER ROLLS (FROZEN DOUGH)
D 805 00	POTATO ROLLS (FROZEN DOUGH)
D 806 00	WHOLE WHEAT ROLLS (FROZEN DOUGH)
D 807 00	OAT ROLLS (FROZEN DOUGH)
D 808 00	SESAME OR CARAWAY ROLLS (FROZEN DOUGH)
D 809 00	BRAN MUFFINS (WHITE CAKE MIX)
D 810 00	BANANA NUT MUFFINS (WHITE CAKE MIX)
D 811 00	HONEY CINNAMON MUFFINS (WHITE CAKE MIX)
D 812 00	BLUEBERRY MUFFINS (WHITE CAKE MIX)
D 813 00	FRENCH TOAST, FROZEN
D 814 00	PANCAKES, BUTTERMILK, FROZEN
D 815 00	MUFFINS, FROZEN, BATTER
D 816 00	MUFFINS, FROZEN

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<b>NEW RECIPES</b>	
E 022 00	ORZO WITH LEMON AND HERBS
E 023 00	ORZO, WITH SPINACH, TOMATO, AND ONION
E 800 00	ORIENTAL RICE
E 801 00	WILD RICE
E 803 00	AZTEC RICE
E 804 00	MEXICAN RICE (FIESTA MIX)
E 805 00	RICE PILAF, USING MIX
E 806 00	GEORGIA RICE
E 807 00	DIRTY RICE
F 800 00	MACARONI AND CHEESE, FROZEN
F 801 00	BREAKFAST BURRITO, FROZEN
H 800 00	COOKIES, FROZEN, OATMEAL RAISIN
H 801 00	COOKIES, FROZEN, SNICKERDOODLE
H 802 00	COOKIES, FROZEN, CHOCOLATE CHIP
I 800 00	PIES, FROZEN
I 801 00	ELEPHANT EARS (FROZEN PUFF PASTRY)
J 800 00	HOT CINNAMON APPLE SAUCE
L 205 00	ITALIAN RICE AND BEEF
L 206 00	BAYOU CHICKEN (BREAST BONELESS)
L 207 00	SOUTHWESTERN SHRIMP LINGUINE
L 208 00	PASTA TOSCANO
L 209 00	SEAFOOD STEW
L 210 00	SANTE FE GLAZED CHICKEN (BREAST BONELESS)
L 212 00	WHITE BEAN CHICKEN CHILI (COOKED DICED)
L 213 00	CHICKEN BIRYANI (COOKED DICED)
L 216 00	CHEDDAR CHICKEN AND BROCCOLI (COOKED DICED)
L 217 00	ASIAN BARBECUE TURKEY
L 219 00	LEMON N' HERB TURKEY FILLETS
L 221 00	TURKEY DIVAN
L 222 00	SPICY ITALIAN PORK CHOPS
L 223 00	LIME CHICKEN SOFT TACOS (FAJITA STRIPS)
L 224 00	SAUSAGE, BEANS AND GREENS
L 225 00	ORANGE & ROSEMARY HONEY GLAZED PORK CHOPS
L 502 00	FISH FLORENTINE
L 800 00	TURKEY POLYNESIAN
L 802 00	ANGEL HAIR PASTA, FILIPINO STYLE WITH SHRIMP
L 803 00	OVEN ROASTED TURKEY, PRECOOKED
L 804 00	LASAGNA (FROZEN)
L 805 00	MEXICAN TURKEY PASTA

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**NEW RECIPES**

L 806 00	BASIL BAKED FISH PORTIONS
L 807 00	TUNA NOODLE CASSEROLE, FROZEN
L 808 00	TURKEY TETRAZZINI, FROZEN
L 809 00	SHEPHERD'S PIE
L 810 00	BEEF STIR FRY
L 811 00	INDONESIAN STYLE BEEF OVER NOODLES
L 812 00	HOT & SPICY CHICKEN WINGS
L 813 00	MAMBO PORK ROAST USING PRECOOKED PORK
L 814 00	KIELBASA WITH SAUERKRAUT AND APPLES
L 816 00	TARRAGON CHICKEN & RICE (FAJITA STRIPS)
L 817 00	CAJUN ROAST BEEF (PRECOOKED ROAST BEEF)
L 818 00	BAKED TANDOORI CHICKEN (BREAST BONELESS)
L 819 00	BAKED HAM AND SPAGHETTI PIE
L 820 00	CANTONESE BBQ PORK RIBS, PRECOOKED
L 821 00	HERB TURKEY ROAST W/TOMATO GRAVY PRECOOKED TURKEY
L 822 00	BEEF AND BEAN BURRITOS, FROZEN
L 825 00	CORNERED BEEF AND CABBAGE (PRECOOKED CORNERED BEEF)
L 826 00	SAVORY BAKED CHICKEN (BREAST BONELESS)
L 827 00	SPAGHETTI & MEAT SAUCE (PRECOOKED GROUND BEEF)
L 827 01	SPAGHETTI & MEAT BALLS (PRECOOKED MEATBALLS)
L 828 00	BAKED FLOUNDER FILLETS WITH LEMON PEPPER
L 829 00	HUNTER STYLE TURKEY STEW
L 831 00	BEEF STROGANOFF, FROZEN
L 832 00	HONEY GLAZED CHICKEN (BREAST BONELESS)
L 833 00	ROSEMARY TURKEY ROAST
L 834 00	SWEDISH MEATBALLS (PRECOOKED MEATBALLS)
L 835 00	MEXICAN PEPPER STEAK
L 836 00	ST LOUIS STYLE BBQ PORK RIBS, PRECOOKED
L 837 00	MEATLOAF (PRECOOKED)
L 837 01	CAJUN MEATLOAF (PRECOOKED)
L 838 00	PORK TENDERLOIN, PRECOOKED
L 839 00	CHICKEN CORDON BLEU
L 840 00	BLACKENED FISH
L 841 00	MANICOTTI, FROZEN
L 842 00	SALISBURY STEAK IN GRAVY, FROZEN
L 843 00	CABBAGE ROLLS, STUFFED, FROZEN
L 844 00	JERKED ROAST TURKEY
L 845 00	LEMON PEPPER CATFISH
M 801 00	SALAD BAR

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<b>NEW RECIPES</b>	
N 012 03	DOUBLE DECKER CHEESEBURGER (BEEF PATTIES)
N 012 07	DELUXE CHEESEBURGER (BEEF PATTIES)
N 800 00	MEATBALL HOAGIE USING PRECOOKED MEATBALLS
N 803 00	BLACK BEAN BURGERS/VEGETABLE BURGERS
N 805 00	DOUBLE DECKER BEEF & TURKEY SANDWICH
O 801 00	DRESSING, TRADITIONAL MIX
O 801 01	DRESSING, CORNBREAD MIX
P 001 00	BEEF RICE SOUP
P 001 01	BEEF BARLEY SOUP
P 001 02	BEEF NOODLE SOUP
P 002 00	CHICKEN RICE SOUP
P 002 01	CHICKEN NOODLE SOUP
P 800 00	CARROT SOUP
P 801 00	VELVET CORN SOUP
P 802 00	NUTTY SPLIT PEA SOUP
P 803 00	EGG DROP SOUP
P 804 00	MIDWESTERN TOMATO RICE SOUP
Q 001 01	BROCCOLI COMBO
Q 001 02	BEAN COMBO
Q 001 03	CAULIFLOWER COMBO
Q 001 04	BRUSSELS SPROUTS COMBO
Q 001 05	GREEN BEAN COMBO
Q 001 06	CORN COMBO
Q 029 00	SOUTHERN STYLE GREENS (FRESH COLLARDS)
Q 029 01	SOUTHERN STYLE GREENS (FROZEN)
Q 029 02	SWEET SOUR GREENS
Q 029 03	SOUTHERN STYLE GREENS (FRESH KALE)
Q 033 02	PARSLEY BUTTERED POTATOES (CANNED)
Q 033 03	PAPRIKA BUTTERED POTATOES (CANNED)
Q 041 00	PEAS WITH MUSHROOMS (FROZEN)
Q 041 01	PEAS WITH CARROTS (FROZEN)
Q 041 02	PEAS WITH CELERY (FROZEN)
Q 041 03	PEAS WITH ONIONS
Q 041 04	PEAS WITH MUSHROOMS (CANNED PEAS)
Q 050 03	OVEN-GLO POTATOES (CANNED)
Q 050 04	OVEN BROWNED POTATOES (CANNED)
Q 058 00	STEWED TOMATOES
Q 058 01	STEWED TOMATOES WITH CROUTONS
Q 061 00	BAKED HUBBARD SQUASH

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<b>NEW RECIPES</b>	
Q 062 00	CREOLE SUMMER SQUASH
Q 064 00	LOUISIANA STYLE SMOTHERED SQUASH
Q 064 01	SAVORY SUMMER SQUASH
Q 067 00	CANDIED SWEET POTATOES
Q 067 01	GLAZED SWEET POTATOES
Q 067 02	GLAZED SWEET POTATOES (SYRUP)
Q 069 00	MASHED SWEET POTATOES
Q 069 01	SWEET POTATOES SOUTHERN STYLE
Q 069 02	MARSHMALLOW SWEET POTATOES
Q 074 00	SQUASH AND CARROT MEDLEY (FRESH)
Q 074 01	SQUASH AND CARROT-MEDLEY (FROZEN)
Q 084 00	GARLIC-LEMON ROASTED POTATO WEDGES
Q 100 00	ASPARAGUS (FROZEN)
Q 100 01	ASPARAGUS (CANNED)
Q 100 02	ASPARAGUS (FRESH)
Q 101 00	BEANS, GREEN (FROZEN)
Q 101 01	BEANS, GREEN (CANNED)
Q 101 02	BEANS, WAX (CANNED)
Q 101 03	BEANS, FRENCH STYLE CUT (FROZEN)
Q 101 04	BEANS, WAX (FROZEN)
Q 102 00	BEANS, LIMA (FROZEN)
Q 102 01	BEANS, LIMA (CANNED)
Q 103 01	BEANS, WHITE IN TOMATO SAUCE (CANNED)
Q 104 01	BEETS (CANNED)
Q 105 00	BROCCOLI (FROZEN)
Q 105 02	BROCCOLI (FRESH)
Q 106 00	BRUSSELS SPROUTS (FROZEN)
Q 107 02	CABBAGE (FRESH)
Q 108 00	CARROT SLICES (FROZEN)
Q 108 01	CARROT SLICES (CANNED)
Q 108 02	CARROTS (1/4 INCH SLICES) (FRESH)
Q 108 03	CARROT STRIPS (FRESH)
Q 109 00	CAULIFLOWER (FROZEN)
Q 109 02	CAULIFLOWER (FRESH)
Q 110 00	CORN, WHOLE KERNEL (FROZEN)
Q 110 01	CORN, WHOLE KERNEL (CANNED)
Q 111 00	CORN ON THE COB (FROZEN)
Q 111 02	CORN ON THE COB (FRESH)
Q 112 01	CREAM STYLE CORN (CANNED)

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<b>NEW RECIPES</b>	
Q 113 00	GREENS, COLLARD (FROZEN)
Q 113 02	GREENS, COLLARD (FRESH)
Q 113 03	GREENS, KALE (FRESH)
Q 114 00	OKRA (FROZEN)
Q 114 01	OKRA (CANNED)
Q 115 01	ONIONS (CANNED)
Q 115 02	ONIONS (FRESH)
Q 116 00	PEAS (FROZEN)
Q 116 01	PEAS (CANNED)
Q 117 01	BLACK-EYED PEAS (CANNED)
Q 118 01	POTATOES, SWEET (CANNED)
Q 118 02	POTATOES, SWEET (FRESH)
Q 119 01	POTATOES, WHITE (CANNED)
Q 119 02	POTATOES, WHITE (FRESH)
Q 120 01	SAUERKRAUT (CANNED)
Q 121 00	SPINACH (FROZEN)
Q 121 01	SPINACH (CANNED)
Q 121 02	SPINACH (FRESH)
Q 122 00	SQUASH, SUMMER (FROZEN)
Q 122 02	SQUASH, SUMMER (FRESH)
Q 123 02	SQUASH, FALL AND WINTER (FRESH)
Q 124 00	SUCCOTASH (FROZEN)
Q 125 01	TOMATOES (CANNED)
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Q 127 00	PEAS AND CARROTS (FROZEN)
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Q 129 00	TURNIPS (FRESH)
Q 800 00	OKRA, FROZEN, BREADED
Q 801 00	CAJUN OVEN FRIES
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Q 808 00	POTATOES AU GRATIN USING PREPARED SAUCE
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# MESS DECK MASTER-AT-ARMS HANDBOOK

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## APPENDIX K

# MESS DECK MASTER-AT-ARMS HANDBOOK

---

### SECTION 1: INTRODUCTION

Upon being assigned to the food service division, you have assumed an extremely important and a most demanding leadership responsibility as MDMAA (Mess Deck Master-at-Arms). One commanding officer recently summed it up this way: "The Mess Deck Master-at-Arms is the most demanding leadership responsibility a petty officer will ever face due to the fact that most food service attendants have just begun their enlistment, and are not only adapting to a new job, but to a new way of life. Many "eyes" will be watching you and, to a large degree, the health and well-being of the crew members will depend on how efficiently you perform your job." Food service is one of the most important morale factors effecting our sailors. It can either be positive or negative. Regardless of how well the food is prepared, if the dining patrons are not provided with clean, dry dinnerware, the food is not properly served, the dining area is not clean and orderly, and good sanitation practices are not enforced, it will have a negative affect on the crew's morale. Always strive to provide the excellent services that you would desire and expect if you were the dining patron. That's the positive approach.

This handbook is designed to provide you with step-by-step procedures for performing your duties, and for training and supervising food service attendants. If you are designated as Mess Deck Master-at-Arms, you will find this handbook a very helpful and easy-to-follow reference. Think of this handbook as a road map. By following the plotted charts and directions, you will arrive at your destination on schedule. There are no known shortcuts; don't look for any at your activity either.

You will find your assignment offers challenges, rewards, and personal satisfaction for doing your part to achieve excellence in food service. The reward, though often intangible, is significant - the health, well-being and respect of your shipmates.

#### K-1-1 RESPONSIBILITIES

The Mess Deck Master-at-Arms serves as the command's official host to the patrons of the food service facility. You are directly responsible to the food service officer or a designated representative who normally is the leading culinary specialist. Your duties and responsibilities are as follows:

1. In charge of all spaces and equipment in the dining area, serving line, scullery and waste handling areas, except the equipment or areas under the cognizance of the leading culinary specialist.
2. In coordination with the leading culinary specialist, assign food service attendants to the service of food, maintenance and cleanliness of the dining area and equipment, operation of the scullery, and handling and disposal of food waste.
3. Muster food service attendants daily, and thoroughly inspect for personal neatness and cleanliness.
4. Supervise the cleaning of the dining area, serving line, scullery, dinnerware and silverware.

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5. Ensure that all assigned equipment is operated in accordance with current instructions.
6. Inventory and maintain adequate dinnerware and silverware to ensure that sufficient quantities will be available throughout the serving period.
7. In conjunction with the medical department, administer a training program to food service attendants in sanitation, scullery operation, and food handling.
8. Maintain order and discipline in assigned areas. Ashore, your duties will be slightly different, and will be covered more specifically in Section 2.

### **K-1-2 CHAIN OF COMMAND**

The Mess Deck Master-at-Arms should ensure that the Leading MS, or a designated representative, is informed of any problems or changes in procedures. Communication with superiors promotes good working relationships and eliminates the possibility of misunderstanding. Remember, over-informing is better than under-informing.

## SECTION 2: HOW TO BE AN EFFECTIVE MESS DECK MASTER-AT-ARMS

### K-2-1 GENERAL GUIDELINES (AFLOAT)

As Mess Deck Master-at-Arms, it is necessary that you demonstrate good leadership and supervisory qualities since many of the food service attendants have just recently enlisted in the Navy. Demonstrating such qualities will have a lasting effect on their military enlistment or career. Remember that the young sailors look to their supervisor for guidance and direction. As Mess Deck Master-at-Arms, you can excel as a supervisor and can earn respect and cooperation of superiors, peers, and food service attendants by:

1. Knowing your job and performing it effectively.
2. Leading and guiding food service attendants, not driving them.
3. Being a fair, but also firm, leader.
4. Being courteous, cooperative, and helpful to food service attendants and to the patrons of the food service facility.
5. Setting a good example, e.g. having the right attitude.
6. Listening attentively and sincerely to patrons' and food service attendants' complaints and suggestions.
7. Striving constantly to make food service attendants aware of their responsibilities to the crew members.
8. Respecting the right of all food service attendants to dignity and self-respect.

Afloat activities are required to take an actual count of personnel who consume a meal during inport periods. As Mess Deck Master-at-Arms, you are responsible for ensuring that an accurate count is taken. One acceptable method is using a hand reciprocating counter (clicker).

Upon securing the serving line, the number of personnel who consumed the meal should be submitted to the Watch Captain.

### K-2-2 GENERAL GUIDELINES (ASHORE)

As Mess Deck Master-at-Arms at an ashore food service facility, where civilian contract services are utilized, your responsibilities should be more defined but are just as important. The following guidelines will assist you in performing your duties:

#### **Contract specifications:**

1. The serving of food and cleaning of food service equipment and dining areas ashore is normally contracted to civilian companies. A contract is initiated covering the services to be provided by the contractor.
2. The food service officer or a designated representative will be appointed as the Contracting Officer's Technical Representative (COTR). The COTR is responsible for all matters pertaining

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to administering the contract. However, you may be delegated by the Food Service Officer or COTR to conduct sanitation inspections.

3. You should become thoroughly familiar with the contract and the services that the contractor is responsible for providing. Remember that the supervision of the contract employees is the responsibility of the contractor.

### **Head count procedures:**

1. A signature head count procedure is used at most ashore enlisted dining facilities. Personnel receiving a meal should sign (in ink) a Meal Signature Record, NAVSUP Form 1291.
2. You are responsible for ensuring that only authorized personnel are permitted to eat in the food service facility. Personnel receiving rations in kind are authorized to eat at government expense. These personnel should exhibit a valid Meal Pass, NAVSUP Form 1105, and also their identification card, if in civilian attire.
3. Prior to the meal, you should ensure that the Meal Signature Record, NAVSUP Form 1291, is serialized and the headings filled out to preclude loss or misuse of signature sheets.
4. During the meal, you should direct personnel to the correct signature sheet, determined by branch of service or cash sales, and ensure that they insert first initial and surname, and Meal Pass number or command/unit for transient personnel. All entries should be legible.
5. Immediately upon securing the serving line, you should assemble the NAVSUP Forms 1291 in sequence by category, and draw an ink line horizontally below the last name on each form. Determine the total number of signatures for each category and enter the total on the Recapitulation of Meal Record, NAVSUP Form 1292.
  - a. Prepare NAVSUP Form 1292 in duplicate (original and one copy).
  - b. Use one NAVSUP Form 1292 to recap breakfast, lunch and dinner.
  - c. Mess Deck Master-at-Arms signs the first signature line on the NAVSUP Form 1292 and delivers the completed form to the food service office.

### **K-2-3 SUPERVISORY AND MANAGEMENT TOOLS**

To clarify the concept of supervisory responsibilities to food service attendants and host responsibilities to food service facility patrons, the following guidelines are furnished:

1. Work in close coordination with the leading culinary specialist.
2. Observe, know and enforce the objectives, policies, standards and procedures of the command and the food service division (treat "customers" courteously and respectfully).
3. Study and analyze the jobs for which you are responsible (learn everything about the job or equipment and be able to apply your knowledge effectively).
4. Use previous food service facility records to determine trends and anticipate workloads and changes; schedule food service attendants to meet work demands.
5. Ensure in advance the availability of needed materials and equipment.
6. Balance the workload among food service attendants in their work assignments.

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7. Give special attention to new food service attendants. Acquaint them with their jobs and their fellow workers (fully explain the policies, working conditions, and expected standards).
8. Maintain discipline and good conduct, and ensure strict adherence to established standards.
9. Keep your supervisor (Leading CS or designated representative) informed as to activities, progress, problems, etc.
10. Keep food service attendants fully informed as to how they are doing, what they do well, and where improvement is needed.
11. Plan and conduct meetings with food service attendants to share information and ideas in order to promote enthusiasm and teamwork, thus creating a positive atmosphere.
12. Encourage good health habits and personal hygiene standards. Ensure proper grooming and strict conformance with uniform standards at all times.
13. Pursue an aggressive training program. Training pays good dividends and will definitely earn you the respect of the food service attendants.
14. Be conscious of wasted time, materials, equipment. Seek solutions to prevent waste.
15. Review your area of responsibility periodically and make carefully planned recommendations for improvement.
16. Accompany inspectors on sanitation inspections.

### **K-2-4 DUTIES OF FOOD SERVICE ATTENDANTS**

Food service attendants are junior enlisted members detailed to the food service facility for duty in any of the following capacities:

1. Serving of food on the serving line.
2. Cleaning and sanitation of the spaces and equipment.
3. Operation of the scullery and the handling and disposal of food waste.
4. Loading and unloading supplies for the food service facility.
5. Vegetable preparation.
6. Night watch standing duties.
7. Stateroom/Wardroom duties.

In addition, food service attendants work unusually long hours and perform non-skilled work which is not a part of a Navy rating. Their performance, however, is critical to the effective operation of the food service division and an essential factor relating to the health and morale of the crew. These circumstances, combined with the fact that the food service attendant's duties involve continuous cleaning of the same areas and equipment, make your job as a leader and supervisor unusually demanding. Unlike some assignments, there is never a lull in your duties; your performance and the performance of those you supervise must be at a peak at all times.

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### **K-2-5 ASSIGNMENTS OF FOOD SERVICE ATTENDANTS**

Up to this point, we have discussed responsibilities and supervision. Now, let's start with the first assignment of the food service attendants and the correct procedures to be followed while assigned to the food service division.

Personnel are detailed by the executive officer to perform food service duties (usually for a 90-day period). Figure 2-1 is a recommended check-in/out format. Table V contains proposed instructions and a questionnaire for reporting food service attendants, to be completed during an indoctrination period. Figure 2-2 is a proposed format to be used to indicate that indoctrination has been completed. Figures 2-1 and 2-2 should be used to establish minimum requirements. They can be tailored to the unique needs of your ship/station. Don't be tempted to skip the indoctrination and leave the food service attendants to learn for themselves. A good indoctrination program is an essential management tool to ensure new personnel are properly indoctrinated to Navy standards.

Due to the long working hours while assigned to food service duty, it is recommended that the food service attendants be divided into two sections (port and starboard) to allow sufficient time off and still ensure full coverage for all meal periods. Figure 2-3 is a normal in-port routine for food service attendants. For example, the "port section" would report for work at 0530 hours (one hour prior to serving breakfast) and the "starboard section" would report for work at 0630 hours. At approximately 1400 hours (after all areas and equipment have been cleaned from the lunch meal) the port section would commence liberty and the starboard section would remain on duty until secured by the Mess Deck Master-at-Arms or galley lead cook after the evening meal and all cleaning has been properly completed. The port and starboard sections' work schedule would be reversed each day.

### **K-2-6 MUSTER AND INSPECTION**

The importance of personal hygiene cannot be overemphasized in food service. Personnel should be physically clean and wear clean clothing. Paper food service hats or hair nets should be worn to prevent hair from falling on food or falling where food is to be served or eaten. Ball caps are not authorized for use in food service spaces. Fingernails will be cleaned and closely trimmed, free of polish or acrylic finishes. Upon completion of food service duties individuals may comply with grooming standards contained in Chapter 2 of Navy Uniform Regulations, NAVPERS 156651. Emphasize the need for clean hands and the necessity for washing hands frequently, especially after visiting the toilet facilities.

Food service attendants should be mustered and inspected prior to commencing work. At this time, any noted discrepancies should be corrected prior to handling food or eating utensils. The food service attendants should always present a neat, "squared away" appearance to the dining patrons.

### **K-2-7 PRIOR TO INSPECTION**

You should set the example for good grooming standards. Your appearance should be interpreted as your standard. Inspect yourself prior to reporting to work to ensure that you present that "squared away" appearance. Remember that the food service attendants look to you for guidance and direction; you cannot expect a food service attendant to conform to Navy grooming standards if you do not adhere to those same standards.

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Ensure that there are sufficient food service uniforms and disposable food service hats available to permit food service attendants to change daily. A laundry schedule for food service uniforms should be established by the Food Service Officer. This schedule should provide for trousers, aprons, etc., to be the first items washed that day. You should ensure that separate laundry bags are available for trousers and dungarees and that food service attendants utilize them. It is often found that the reason for food service attendants not having clean uniforms is not the fault of the laundry, but that the food service attendants do not place them in the correct laundry bag, or they fail to turn in/pickup the laundry on schedule. Lastly, ensure that rubber aprons, arm length rubber gloves, rubber boots and ear protection (for scullery operation) are available for the food service attendants assigned to the scullery and the utensil washroom.

Figure 2-4 provides a useful daily checksheet to use when mustering and inspecting food service attendants. Maintain a file, after being initialed by the food service officer/leading culinary specialist, to provide you with reference on any recurring appearance or tardiness problems.

### K-2-8 INSPECTION PROCEDURES

The following are some suggested inspection techniques:

1. Muster food service attendants at the designated time(s).

Follow military procedures; ensure that food service attendants line up in ranks; do not hesitate to give them commands, such as: ATTENTION, UNCOVER, PARADE REST, AT EASE, etc. This will not only make your job easier, but will gain you the respect of the food service attendants.

2. Inspect each person to ensure that:

- a. Clothing is clean and neat.
- b. Food service hats are correctly worn to prevent hair from falling on the food. Do not permit personnel assigned to food service and food preparation areas to wear ball caps as they are not cleaned daily and are unsanitary.
- c. Hair conforms to navy grooming standards.
- d. When facial hair is authorized for medical reasons, it is kept clean, trimmed to no longer than  $\frac{3}{4}$  inch in length and covered with an appropriate mask while performing food service functions.
- e. Shoes are shined.
- f. Hands are clean and free of open lesions, cuts, scabs, etc. If any cuts or lesions are noticed, instruct the person to report to medical.
- g. Fingernails are clean and closely trimmed, free of polish or acrylic finishes.
- h. Jewelry, as well as watches and bracelets, are prohibited from food service spaces. This does not apply to a plain ring, such as a wedding band.

### K-2-9 WRITTEN INSTRUCTIONS

The food service attendants have received written instructions during the indoctrination period in the form of Table V, food service attendants' reporting instructions. This should be

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supplemented with frequent oral and written instructions on personal hygiene and grooming standards. Signs instructing food service personnel to wash hands prior to returning to work shall be conspicuously posted at all entrances to food service and toilet areas.

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CHECK IN/OUT FORMAT FOR FOOD SERVICE ATTENDANTS

Date

From: Executive Officer, \_\_\_\_\_

To: \_\_\_\_\_

Name

Division

Subj: FOOD SERVICE ATTENDANT DUTIES; ASSIGNMENT TO \_\_\_\_\_

Encl: (1) Food Service Attendant Reporting Instructions (Table V, NAVSUP P-486, Vol. 1, Appendix K )

(2) Food Service Attendant Questionnaire (Table V, NAVSUP P-486, Vol. 1, Appendix K)

1. You are assigned to food service duties for this command to relieve \_\_\_\_\_ on \_\_\_\_\_ Check out and check in with the following personnel:

CHECK OUT

LCPO \_\_\_\_\_  
Division Officer \_\_\_\_\_  
Department Head \_\_\_\_\_  
Postal Clerk \_\_\_\_\_  
Medical representative (with slip showing that medical check has been made) \_\_\_\_\_

CHECK IN

Mess Deck Master-at-Arms \_\_\_\_\_  
Leading MS \_\_\_\_\_  
Food Service Officer \_\_\_\_\_  
Personnel Office \_\_\_\_\_

2. For planning purposes, you will be relieved on \_\_\_\_\_

3. Upon completion of the above, return this form to the Food Service Officer. Enclosures (1) and (2) will be completed during the indoctrination period.

Executive Officer

Figure 2-1

## FOOD SERVICE ATTENDANT INDOCTRINATION CERTIFICATION

NAME \_\_\_\_\_ RATE \_\_\_\_\_ DATE \_\_\_\_\_

Purpose: This sheet is designed to ensure that prior to commencing duty as a food service attendant, an individual has received proper training in order to perform the duties with the necessary skills. Upon completion of training, an individual should be able to correctly answer the questions in enclosure (2) (Table V, NAVSUP P-486, Vol. 1, Appendix K).

1. I certify that this individual has passed a medical inspection and has been instructed in the following:

- a. The causes and dangers of food poisoning and contamination.
- b. Personal hygiene when handling food – both in serving of meals, and in disposal of waste and scraps, including a review of pertinent sections of General Sanitation Instructions.
- c. Oral hygiene.

---

Senior Medical Representative

2. I certify that this person has been instructed in the following:

- a. All pertinent supply instructions covering general Supply Department procedures and duties of food service attendants.
- b. The proper care and cleaning of the dishwashing machine and other food service equipment.
- c. Proper serving techniques for all types of food.
- d. Proper disposal of waste and scraps.
- e. Duties and performance, both professional and military, expected while assigned to the food service division.
- f. Mustering time and location for quarters, General Quarters station, and other watch, quarter and station bill assignments.

---

Leading Culinary Specialist

Figure 2-2

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3. I certify that this person has received an assignment of duties, and has had all instructions and safety precautions explained. Assigned to liberty section

---

Mess Deck Master-at-Arms

4. I have received and understand the above instructions, have read the recommended readings, and have successfully completed enclosure (2), Appendix K, NAVSUP P-486.

---

Reporting Food Service Attendant

5. Interview (by division officer).

---

Food Service Officer

**Figure 2-2 cont'd**

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### NORMAL IN-PORT ROUTINE FOR FOOD SERVICE ATTENDANTS

(All times to be adjusted to ship's routine/policy)

0500	Awake oncoming section (port or starboard).
0530	Report to dining area for muster and inspection; commence preparation for breakfast.
0600*	Breakfast for food service attendants. Awaken oncoming section (port or starboard).
0625	Duty section (port or starboard) at their assigned duty stations.
0630	Breakfast for the crew. Oncoming section (port or starboard) report to dining area for muster and inspection.
0715	Secure breakfast; commence clean up.
0730	All food service attendants will muster for quarters instruction and inspection.
1015	Commence preparation for the lunch meal.
1045*	Lunch for food service attendants.
1125	All food service attendants at their assigned duty stations.
1130	Lunch for the crew.
1230	Secure lunch; commence cleanup.
1400**	One section (port or starboard) secured from duty (provided all areas and equipment are clean).
1530	Commence preparation for the dinner meal.
1600*	Dinner for food service attendants.
1640	Duty section (port or starboard) at their assigned duty stations.
1645	Dinner for the crew.
1730	Secure dinner; commence cleanup.
1830	Duty section (port or starboard) secured from duty (provided all areas and equipment are clean).

#### NOTE

\* Ensure food service attendants eat at the prescribed times in order to be at their duty stations during the serving of the meal and to commence cleanup as soon as the meal secures.

\*\* The Mess Deck Master-at-Arms will decide when to secure the food service attendants after notifying the Leading MS.

#### AT-SEA ROUTINE

At-Sea routine will be much the same with the possible exception of weekends.

Figure 2-3



## **SECTION 3: DINING AREA AND ASSOCIATED EQUIPMENT**

Sections 3 through 7 discuss the food service areas and associated equipment which usually come under the cognizance of the Mess Deck Master-at-Arms.

### **K-3-1 SAFETY PRECAUTIONS**

You should be thoroughly familiar with the operation and safety precautions pertaining to the equipment in your area. Ensure that the following safety and operating precautions are observed:

1. Operating instructions and safety precautions should be attached to each piece of equipment or posted adjacent to it. Food service attendants should read, understand and comply with posted operating instructions and safety precautions.
2. Disconnect the electric power prior to cleaning equipment.
3. Food or liquid spilled on the deck is cleaned up immediately to prevent falls.
4. Exercise caution when handling hot pans, serving line inserts, etc., to prevent burns. Utilize hot pads or pan holders.
5. Personnel should wear full arm length rubber gloves (not electric safety gloves) when cleaning with hot water or strong detergents.
6. Loose fitting clothing will not be worn.
7. It is recommended use of hair pieces be avoided to preclude entanglement and flammable hazards.

### **K-3-2 PRE-SERVICE SET-UP**

The following items should be accomplished prior to serving the meal:

1. Clean all areas and equipment.
2. Post/update the current menu at the entrance to the serving line.
3. If tablecloths are to be used, they should be placed on the tables evenly.
4. Set the tables with napkin dispensers, salt and pepper shakers, sugar dispensers, and other condiments which will be used for the meal.
  - a. Items should be arranged on the tables in a uniform manner.
  - b. Ensure all condiments/dispensers are clean and full.
5. Place clean, dry dinnerware and silverware in the prospective positions for service.
6. Fill the non-carbonated beverage dispenser with pre-chilled beverage for juice.
7. Check the refrigerated milk dispensing machine to ensure that:
  - a. Milk containers are filled and dispensing tubes are cut properly.

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b. Bowls or catch trays are in place to collect spillage.

c. A portable thermometer should be kept inside the milk dispenser to register the internal temperature. Ensure the thermometer is not lost during the changing of milk containers.

### K-3-3 DURING THE MEAL

This is the timeframe in which all of your efforts and preparation should come together. If you have planned properly, and the food service attendants have been effectively trained, the next hour or so should go smoothly. On the other hand, it could be a time of complete confusion if you haven't "gotten organized." Assignments of food service attendants should have already been made and each person should know precisely what is to be done. You might want to review the topics discussed in Sections 1 and 2 which will be very beneficial to you during this time. During the meal period, both you and the food service attendants will be extremely busy. Your area of responsibility is indeed large and will require great organizational ability. Not only will you be required to maintain good order and discipline and be a good host, but you, as Mess Deck Master-at-Arms, are responsible for ensuring that:

1. "Customers" are treated courteously at all times. Your function as "host" is extremely important.
2. Only authorized personnel receive head-of-the-line and early meal privileges.
3. An accurate head count is taken of all personnel consuming a meal.
4. The flow of personnel through the serving line is regulated to suit the seating capacity of the dining area.
5. Personnel are wearing the correct uniform or civilian attire and that all articles of clothing are worn correctly. Greasy, dirty uniforms or coveralls should not be permitted.
  - a. Personnel should be informed of any uniform/clothing discrepancies and corrective action should be taken prior to entering the serving line.
  - b. Any uniform/clothing discrepancy that is discovered after the patron has already been permitted to enter the serving line should be dealt with individually as the patron is leaving the dining area, not while the patron is eating.
6. Food service attendants are at their assigned duty stations at least 5 minutes prior to serving time.
7. Tables, chairs, and benches are cleaned during the meal. This not only ensures the dining patron a clean area to eat, but aids in cleanup after the meal.
8. Any spillage on the deck or serving lines is cleaned up immediately.
9. Milk and beverage dispensing machines are refilled as needed and any spillage is cleaned up immediately.
10. The scullery operation is arranged to permit the dining patron to place the soiled dinnerware (tray) in the appropriate scullery opening to be scraped and sorted by the food service attendant. Never permit the trash/garbage container to be left outside the scullery to indicate that the patron should empty their tray.

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11. The dining area is secured for cleaning at the conclusion of the meal hour after all patrons have finished eating.

### K-3-4 CLEANING PROCEDURES

Correct cleaning procedures cannot be overemphasized in food service. The use of strong detergents, salt water, scalding water or abrasive cleaners may damage or dull the surface of some areas or equipment. Throughout this handbook, reference will be made to the “two-pan” method for general cleaning of items such as tables, chairs, bulkheads and most equipment exteriors. The “two-pan” method is described below:

1. One pan containing 2 tablespoons of liquid detergent to each gallon of hot water.
2. The second pan contains hot, clear water or a sanitizing solution.

Pan One of the “two-pan” method will ensure a thorough cleaning, particularly in cracks, crevices, and hard-to-get-at areas. Pan Two will ensure that dirt removed by Pan One and all traces of detergent are removed. You should ensure that the contents of the “two pans” are changed as the water becomes dirty. A separate clean towel will be utilized in each pan to prevent the possibility of cross-contamination.

For hard-to-remove dirt and baked-on food deposits, the following solution is recommended:

Two tablespoons of liquid detergent and four tablespoons of Type I or Type II dishwashing machine detergent to each gallon of hot water.

You should read the label carefully on all cleaning products and ensure that they are not combined with any product containing bleach.

An example of a “daily and weekly” work schedule for cleaning areas and equipment in the dining area is illustrated in Figure 3-1. This schedule, combined with the cleaning instructions in this section, will ensure proper cleaning at the prescribed time and will assist you in supervising and assigning jobs to food service attendants.

### K-3-5 TABLE CONDIMENTS

1. Napkin dispensers, salt and pepper shakers, sugar dispensers, and condiment bottles such as catsup, hot sauce, steak sauce, etc., should be cleaned and refilled after each meal and refilled during the meal, as necessary. The following procedure should be used for cleaning:

a. Remove the tops (covers) and place them in a container of hot water. Tops (covers) may be placed in perforated dish rack and placed in the dishwashing machine.

b. Thoroughly clean the exterior of the containers with a mild detergent and water solution using a clean soft cloth or disposable wiping cloth. Special attention should be given to the necks of the condiment bottles and the bottom and edges of the napkin dispensers.

c. After the tops (covers) have been cleaned and air-dried, or dried with a clean disposable cloth, replace the tops and store the containers in a clean storage cabinet. Condiments that require refrigeration must be refrigerated until the next meal to prevent spoilage.

2. The following procedure should be accomplished weekly:

a. Empty the salt and pepper shakers and the sugar dispensers into clean containers.

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- b. Remove the napkins and the interior section (spring) from the napkin dispenser.
- c. Prewash the shakers, dispensers and covers in detergent and water using a nylon-bristled brush for hard-to-clean areas such as napkin holder edges and bottoms.
- d. Place the empty salt and pepper shakers, sugar dispensers, exterior of the napkin dispensers, and all tops (covers) into the dishwashing machine.
- e. Allow the shakers, dispensers, and tops to air-dry; refill and store them in a clean storage cabinet.

### K-3-6 DINING TABLES, CHAIRS AND BENCHES

1. During the meal, tables and seating areas should be cleaned using a mild detergent, water solution, as soon as each patron has finished eating and left the table.
2. Before breakfast and after each meal:
  - a. Remove loose dirt, papers, food particles, etc., from table tops, chairs and benches.
  - b. Using the “two-pan” method, thoroughly clean and rinse all surfaces. Particular emphasis should be placed on the table edges and around metal rims.
3. Using the “two-pan” method, thoroughly clean and rinse the underside and legs of tables, chairs and benches. Special attention should be given to the table bottoms, the base of chair legs, table stanchions, and metal seams.

### K-3-7 BULKHEADS

1. Daily, bulkheads adjacent to the serving line should be cleaned and rinsed using the “two-pan” method.
2. Weekly, painted, Formica, tile and paneled surfaces should be cleaned and rinsed using the “two-pan” method. Special attention should be placed on seams, cracks, crevices, and hard-to-get-at areas. Surfaces may be wiped with a clean, dry cloth after rinsing, to prevent spotting.
3. As necessary, some areas, such as borders, door openings, around beverage islands, etc., may require more frequent cleaning.

### K-3-8 OVERHEADS

1. Weekly (for areas without false overheads):
  - a. Pipes, ventilation ducts, wire ways, etc., should first be cleared of all loose materials and dust. This may be accomplished by:
    - (1) Vacuuming;
    - (2) Blowing down with low pressure air;
    - (3) Sweeping with a small bristle brush.
  - b. Overheads should be cleaned first so that dust particles do not fall on previously cleaned areas.

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- c. Cover or remove equipment and food, as necessary, to protect from falling dust particles.
  - d. Clean all areas with a mild detergent and water solution.
  - e. Clean and change filters in accordance with planned maintenance schedules.
2. Weekly (for areas with false overheads):
- a. Acoustic tile and other porous surfaces should be vacuumed or brushed to remove loose dust and dirt.
  - b. Accumulations of grease or dirt may be removed by careful wiping with a strong detergent and water solution.
  - c. Light covers should be removed and cleaned.
  - d. Ventilation supply/exhaust openings should be cleaned.

### K-3-9 DECKS

Decks should not be swept during the serving or preparation of food as dust particles rise in the air and will fall on food and tables.

Decks in the dining area at afloat activities should be swept and cleaned before breakfast in addition to after each meal. Usually, the ship's dining area is utilized by crew members in the evening as a crew's lounge. Decks in other food service areas should be cleaned after each meal. Spillage on the decks should be cleaned up immediately to prevent falls.

Food service decks usually have coverings that will withstand heavy-duty wear if good maintenance is practiced. Improper cleaning materials and methods such as strong, caustic base detergents, salt water, rough abrasives or scalding water will dull colors and cause surfaces to become porous.

The following deck coverings are normally found in food service areas throughout the Navy:

1. Vinyl floor covering (linoleum)
2. Vinyl and vinyl asbestos tile
3. Ceramic tile
4. Quarry tile (normally found in the galley and scullery)
5. Terrazzo
6. Rubber terrazzo
7. Magnesite
8. Perma-deck
9. Terra cotta
10. Stratica (normally found in dining areas and passageways)

The following method of cleaning is recommended for the above listed deck coverings:

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1. Prepare the cleaning solution: Two tablespoons of general purpose liquid detergent to each gallon of warm (not hot) and fresh (not salt) water.
2. Scrub: Use a scrubbing machine with circular brush or stiff bristle push brush. Apply solution and scrub well to loosen dirt. Special attention should be placed on hard-to-get-at areas such as under equipment, around deck drains, behind and under piping, etc.
3. Rinse: Use clean, fresh water and a clean mop. Mop up cleaning solution and dirt.
  - a. Change the rinse water frequently as it becomes dirty.
  - b. Areas which have deck drains, such as the scullery, food waste area, utensil washroom, galley, etc., may be flushed with clean water to rinse. Caution should be exercised during underway periods not to waste fresh water.
4. Dry: Remove remaining water with a clean mop until surface is barely damp and allow to air dry.

Terrazzo, magnesite, and perma-deck surfaces should be resealed when the surface becomes dull, porous and difficult to clean.

### K-3-10 CARPETING

Many of our dining facilities ashore have carpeting in the dining area. Some officer and Chief Petty Officer dining areas afloat also have carpeting. Carpeting requires daily care which will keep the carpeting looking clean and bright. The following pointers will assist you in prolonging the life of your expensive carpeting:

1. Place a heavy-duty mat at all entrances for personnel to remove rough soil from their shoes.
2. Cover heavily-traveled areas with runners made from the same fabric as the carpet or from rubber or plastic.
3. Vacuum or sweep carpets after each meal. In areas where there is very heavy traffic, such as doorways, it may be necessary to vacuum several times a day. This will prolong the life of the carpet as abrasion from embedded sand or grit causes excessive wear.
4. Clean up spills promptly. The longer spills remain on the carpet, the more likelihood of stains, and the spilled material will be tracked to other areas of the carpet.
5. When stains do appear, try a dry cleaning solvent. If this doesn't work, use a detergent solvent that dries to a powder and can be removed with a vacuum cleaner.
6. If wax or chewing gum or similar material is stuck to the carpet, try placing a plastic bag filled with ice cubes on the material until it is frozen. Scrape it off with a plastic instrument not used for food preparation.

When a thorough cleaning is necessary, rotary brush shampoo or dry foam methods should be satisfactory for normally soiled carpets. Steam cleaning is the best technique and is recommended for heavily soiled carpets. Follow the carpet manufacturer's directions and recommendations and cleaning equipment operating instructions. In addition, be sure to read warning labels on cleaning solution containers; some of these can be hazardous.

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### K-3-11 STAINLESS STEEL SURFACES

Stainless steel is being extensively used in food service areas at afloat activities, not only for equipment, but also for bulkheads and overheads. Stainless steel is easy to maintain. If properly cared for, it presents a very impressive appearance and will shine like a mirror. The following cleaning procedures are recommended:

1. Stainless steel surfaces should be cleaned daily to prevent the buildup of dirt and grease deposits which, if permitted to remain for a lengthy period, will harm the finish. Stainless steel requires exposure to air in order to remain bright and shiny.
2. Use the "two-pan" method for cleaning and rinsing. Stainless steel has a polishing line or a "grain" like wood; clean in the direction of this "grain," not against it. Ensure that strong cleaning agents or rough abrasives are not used as they will scratch the surface.
3. Do not permit the cleaning solution or a sanitizing solution to remain on the stainless steel for long periods as it will cause discoloration.
4. Stainless steel surfaces should be wiped dry with a soft, dry cloth after cleaning and rinsing.
5. A silicone base polish is recommended for polishing stainless steel. Before ordering stainless steel cleaners, ensure that they meet the shipboard HAZMAT (Hazardous Material) requirements. Stainless steel polishes will be used in accordance with Material Safety Data Sheets (MSDS). Stainless steel polishes shall not be utilized on food contact surfaces.

### K-3-12 SALAD BARS

1. Non-refrigerated salad bar and refrigerated salad bars:

- a. Salad bars may be set up on a self-serve basis and must be equipped with a sneeze shield. To assure all salad bar items remain below 41° F., they must be pre-chilled in a refrigerator and placed in pans or trays which are located on a bed of ice or on an electrically refrigerated salad bar unit. Proper drainage is essential when ice is used. The top sections of a refrigerated salad bar is normally controlled by a separate valve or switch. In order to ensure all salad bar items remain below 41° F. these units should be turned on approximately one hour prior to placing the salads on it.

- b. Refrigerated salad bars should be defrosted and thoroughly cleaned after each meal. Turn off the switch/valve of the top unit and allow it to defrost freely. Do not use any metal objects to remove the ice as it may puncture the coils and will scratch the surface.

Cleaning procedures after each meal:

1. Remove all inserts of salads and dressings and return them to the vegetable preparation room/galley supervisor.
2. Discard the ice or defrost the salad bar.
3. Using the "two-pan" method, clean and rinse the salad bar and allow it to air dry.
  - a. Special attention should be given to the drain to ensure that it is free of food particles and draining properly.
  - b. Clean the sneeze shield, the top and bottom of the refrigerated tier shelves, and the legs and metal frames.

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4. Most refrigerated salad bars have a bottom section for the storage of salads and dressings. This should also be cleaned after each meal. Ensure that the drain and the gaskets around the doors are thoroughly cleaned.
5. If the exterior of the salad bar is made of stainless steel, follow the cleaning procedures for stainless steel surfaces.

### K-3-13 REFRIGERATED MILK DISPENSERS

1. Before each meal:
  - a. Check the temperature utilizing the installed external gauge and the internal portable thermometer. Temperature range should be 32° – 41° F.
  - b. Fill the milk dispensers. Wipe the bottom of containers or cans before placing them in the dispenser. Do not reuse disposable cardboard milk containers.
  - c. Cut milk dispensing tubes with a clean, sanitized instrument at a point ¼ inch below the dispensing valve opening. Surgical scissors, stainless steel paring knives, or disposable plastic knives are recommended. Scissors and paring knives should be sanitized after each use. Plastic knives should be of the type which are individually wrapped and should be used only once and discarded.
2. During the meal:
  - a. Replenish milk containers as necessary.
  - b. Keep bowls or catch trays clean; empty as necessary.
  - c. Wipe up spills immediately.
3. After each meal:
  - a. Clean the exterior; follow the procedure for cleaning stainless steel surfaces. You should ensure that the base of the machine, around the legs, metal seams, and the edge under the dispenser opening and door are thoroughly cleaned.
  - b. Remove and disassemble the metal dispensing valve. Place all stainless steel parts in the dishwashing machine.
4. Defrosting procedures:
  - a. Defrost when the ice reaches a thickness of 1/4 inch. Remove milk containers and place under refrigeration while defrosting. Turn off the electric power supply; open the door and allow the machine to defrost freely. Do not use metal objects to dislodge ice.
  - b. After defrosting, clean the interior of the machine using the “two-pan” method. Special attention should be given to the door gaskets.
  - c. After defrosting, cleaning, and wiping dry with a clean cloth, turn on the electric power supply.

### K-3-14 NON-CARBONATED BEVERAGE DISPENSERS

Non-carbonated beverage dispensers are usually located in the dining area to dispense fruit juices, lemonade, iced tea and other popular beverages. These dispensers have a self-contained refrigeration unit and a recirculating pump to keep the beverages thoroughly mixed and promote uniform cooling. The beverages are dispensed from a clear plastic tank. Operation of the equipment is as follows:

1. Fill the dispensing tank well in advance of the meal to ensure a properly chilled beverage. Beverages should be prepared in advance and pre-chilled.
2. Empty and clean the drip pans as necessary and wipe up any spillage immediately.
3. Turn off the refrigeration unit and recirculating pump when the machine is not in use or the tank is empty.

The dispenser should be disassembled and thoroughly cleaned after each meal/use. The following procedure should be followed:

1. Turn off the electric power supply to the machine.
2. Drain the beverage from the dispenser and check with the galley lead cook in regard to future use. Do not discard the beverage unless directed.
3. Disassemble the dispenser in the following manner:
  - a. Remove the dispensing valves from the beverage tank.
  - b. Remove the cover, drip pan, re-circulating spray tubes and magnetized agitators.
  - c. Remove the beverage tank from the machine.
  - d. Clean the exterior of the exposed dispenser using the "two-pan" method. Areas that are often overlooked are the base of the dispenser (legs), and the dispensing valve openings.
  - e. Wash the removed items in warm detergent and water, rinse with clear water to remove all traces of detergent, place in a sanitizing solution and allow to air dry. Use dishwashing compound, hand, for detergent. **DO NOT** use any abrasive cleaners and **DO NOT** place in the dishwashing machine (remember the removable parts are of plastic material).
  - f. Reassemble the dispenser after it has air dried.

The base of the dispenser should have an extensive cleaning weekly, or more often if necessary.

The following procedure should be followed:

1. Disconnect the electric power supply.
2. Remove the stainless steel cover from the front of the dispenser.
3. Remove the side panels and screens.
4. Wash and rinse all removed items (be careful not to lose the metal screws).
5. Vacuum the exposed area of the dispenser and wipe with a damp cloth.

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6. Reassemble the dispenser immediately.

### K-3-15 CARBONATED BEVERAGE DISPENSERS

Many activities have carbonated beverage dispensers for dispensing soda. These beverages are highly acceptable to the patrons and are especially good for morale.

The following procedure is recommended for cleaning:

1. After each meal:
  - a. Remove the beverage dispensing nozzles, clean in hot water, and replace.
  - b. Remove the front stainless steel cover and clean; clean the exposed interior section and replace cover.
  - c. Pour hot water into the drain pan to flush all carbonated syrup from the drains.
  - d. Disconnect the electric power and CO<sup>2</sup> supply when the dispenser is not in use.
2. Syrup containers: Containers should be checked and refilled prior to serving the meal. Wash, rinse and sanitize containers before refilling. Detachable hoses should be dipped in hot water prior to replacing to remove beverage syrup and clean O-ring seals.
3. Weekly:
  - a. Disconnect the electric power.
  - b. Remove the top cover to the dispenser. Clean the cover with detergent and water, rinse, and air dry.
  - c. Vacuum or brush the compressor coils and the area around the compressor.
  - d. Reassemble the dispenser.

### K-3-16 COFFEE URNS

Good coffee is an asset to all food service operations. The following guidelines will assist you:

1. Prepare coffee in small quantities; use the exact amounts of coffee grounds and hot water prescribed by the leading culinary specialist.
2. Coffee should be used within 30 minutes and held no longer than one hour at 185° F. After 1 hour coffee loses its good aroma and becomes bitter.
3. Remove and dispose of used coffee grounds immediately after preparing coffee.
4. If a cloth urn bag is used, it should be rinsed in clear hot water and placed in clean, cold water until the next use.
  - a. This prolongs the life of the urn bag and prevents absorption of foreign odors.
  - b. Disposable paper filters are highly recommended.

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One of the most important factors in preparing good coffee is a clean coffee urn. The following procedures should be followed:

1. Daily
  - a. Clean the urn immediately after the coffee has been used.
  - b. Rinse with enough water to remove sediment and old coffee from the bottom of the urn liner, drain lines and faucet.
  - c. Add approximately 1 gallon of hot water to the urn liner and brush the sides carefully with a clean bristle brush. A long-handled bowl brush is recommended. The brush should be "labeled" and used only for this purpose.
  - d. Drain and flush with hot water until the water runs clear. It is now ready for the next batch of coffee.

After the dinner meal (daily):

1. Follow the above procedure and then proceed with the following cleaning method.
2. Add an accurately measured solution of 1 ounce dishwashing machine compound completely dissolved in 1 gallon of hot water to the urn liner. Use only thoroughly mixed solution of dishwashing machine compound and hot water. Do not place solid cleaning agents in the urn liner as they may become entrapped in the drain line or faucet.
3. Thoroughly brush the coffee urn liner and using a small "pipette" brush clean the gauge glass. Clean the lid (cover) also as it is exposed to coffee vapors.
4. Rinse thoroughly to remove all traces of the cleaning solution. Flush the urn liner, gauge glass, and faucet with hot, clear water (180°F.) to ensure that these items are sanitized.
5. Place approximately 1 gallon of clean water in the urn liner when it is not in use and leave the lid (cover) ajar. This will prevent the bottom of the urn liner from becoming burned and will permit the steam to escape.
6. Remember to drain the water from the urn liner prior to preparing coffee.

The coffee urn should be de-stained at least weekly, and more frequently if the urn liner becomes badly stained. The following procedures should be followed:

1. Be sure the urn water jacket is  $\frac{3}{4}$  full and the urn is turned on.
2. Fill the urn liner with hot water to the coffee line. Add the de-staining compound in accordance with the instructions on the container.
3. Allow the solution to remain in the urn liner approximately 60 minutes. Drain off some of the solution through the drain line and faucet and pour back into the urn liner. Place a warning "DO NOT USE" sign on the coffee during the de-staining process.
4. Drain and thoroughly rinse until all traces of the de-staining solution have been removed.
5. Place approximately 1 gallon of clean water in the urn liner and leave the lid ajar until the next use.

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### K-3-17 FREEZE-DRIED COFFEE DISPENSERS

Many activities have freeze-dried coffee dispensers which provide a fresh cup of coffee each time the dispensing button is pushed. There is also a dispensing button for hot water which patrons may use to prepare hot tea or cocoa. You should be familiar with the following:

1. The freeze-dried coffee is placed in a container which attaches to the funnel dispensing assembly. This should be firmly secured to prevent the entrance of moisture which will prevent the dispenser from operating properly.
2. The funnel assembly should be cleaned in accordance with the manufacturer's instructions, as deemed necessary by the leading culinary specialist, or if moisture enters the assembly. Empty the freeze-dried coffee, wash and rinse the funnel assembly, and dry the assembly parts under a heat lamp. DO NOT dry with a cloth.
3. For instructions on adjusting the amount of freeze-dried coffee dispensed and other maintenance information, refer to the manufacturer's operating and maintenance manual.

Dispensers for iced tea and hot chocolate are basically operated in the same manner as the freeze-dried coffee dispenser. See the manufacturer's operating and maintenance manual for specific cleaning and operating instructions.

### K-3-18 BULK ICE MAKING MACHINE

This machine requires little maintenance by food service personnel, but should be closely monitored. Ice is easily contaminated; therefore, the following measures should be taken:

1. Only authorized personnel should have access to the machine. From a sanitation viewpoint, the ice bin should be locked.
2. The ice scoop should be stored dry outside the ice bin (handle up) or inside the bin at such a height as to preclude the possibility of being covered with ice.
3. If the ice is to be served, it should be placed in clean glasses by the food service attendant.

Serving tongs should be used for ice cubes and a small spoon for crushed ice. Patrons should not be permitted to serve themselves.

The following cleaning procedures should be followed:

1. Daily:
  - a. Clean the exterior of the machine using the "two-pan" method.
  - b. Wipe the inside of the ice bin cover.
2. Monthly:
  - a. Disconnect the electric power supply and remove the ice from the bin.
  - b. Thoroughly clean the interior of the bin with a mild detergent and water solution using a nylon bristle brush.
  - c. Flush with clean water until all traces of detergent have been removed.
  - d. Reconnect the electric power supply.

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The machinery and the internal workings of the ice machine are the responsibility of the engineering/public works department. Any problems relating to this equipment should be referred to the responsible personnel.

### **K-3-19 ICE DISPENSING MACHINES**

These machines are highly appreciated by the dining patrons, particularly during the hot months of the year. The only cleaning involved by food service attendants is the exterior of the machine, which should be cleaned daily using the "two-pan" method. Any problems relating to the machinery and internal workings of the ice dispensing machine should be referred to the engineering/public works department.

It is recommended that the machine not be used to furnish ice except during meals. If the machine becomes empty during service, it should be immediately disconnected to prevent damage to the dispensing assembly.

### **K-3-20 SOFT-SERVE ICE CREAM MACHINE**

This machine is usually located in the dining area and the patrons serve themselves. You should be familiar with the cleaning and sanitizing procedures.

After each use:

1. Remove the hopper cover and mix feed assembly; move the switch to the "wash" position and draw off all remaining ice cream.
2. Rinse hopper and freezer with cold water, draw off, and move the switch to the "off" position.
3. Place 1 gallon of detergent and water (140° F.) solution into the hopper. Move the switch to the "wash" position and operate for 2 minutes. Draw off detergent and water solution. Use hand dishwashing compound for detergent.
4. Rinse the machine interior with clean water.
5. Remove all detachable parts: freezer door assembly and draw-off plunger, beater, blades and beater drive shaft, mix feed assembly and hopper cover assembly.
6. Wash all parts in detergent and water, rinse, place in sanitizing solution, remove and air dry.
  - a. Use hand dishwashing compound for detergent.
  - b. Store all sanitized parts in a clean area until the next use.

Prior to use:

- a. Reassemble the machine.
- b. Dip each part in sanitizing solution prior to assembly.
- c. Place remainder of sanitizing solution in the hopper, move the switch to the "wash" position and run for one minute. Drain completely; the soft-serve ice cream machine is now ready for use.

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### **K-3-21 BUTTER DISPENSERS**

There are two types of butter dispensers. One is electrically refrigerated and the other is refrigerated by filling the rear compartment with ice or a refrigerant packet which is stored in the freezer between uses. Both types should maintain the temperature below 41° F. This temperature will prevent the butter from melting, but will keep it soft enough for easy spreading.

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Prior to the meal:

1. Connect the electric power supply (if electric unit) or fill with ice or place refrigerant packet in place (if non-electric unit).
2. Fill the dispenser with trayed butter pats.

During each use:

1. Replenish butter pats as needed.
2. Clean up spills immediately.

After the meal:

1. Remove butter pats and place under refrigeration.
2. Electric unit: Disconnect power supply; wipe the exterior with a soft, damp cloth. **DO NOT IMMERSE IN WATER.**
3. Non-electric unit: Discard ice or remove refrigerant packet and place in freezer; wash dispenser in detergent and warm water solution, rinse, sanitize, and wipe exterior with dry cloth. Use hand dishwashing compound for detergent.

### **K-3-22 TRAY, BOWL, CUP AND GLASS LOWERATORS**

These dispensers are self-leveling. The cabinets are made of stainless steel with a spring platform which pushes the trays and dinnerware to the surface as they are used. The spring tension may be adjusted according to the weight of the item being dispensed.

Daily:

1. The stainless steel should be cleaned, rinsed and dried. Follow the procedures for cleaning stainless steel surfaces.
2. Some tray and bowl dispensers are combined in one unit.
  - a. The bowl dispensers should be removed from the unit and the interior vacuumed and cleaned.
  - b. Clean the unit exterior following the procedures for cleaning stainless steel surfaces.

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## EXAMPLE

DAILY AND WEEKLY WORK SCHEDULE	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	BEFORE BREAKFAST	AFTER EACH MEAL
SPACE: <u>DINING AREA</u>									
1. Table condiments cleaned and refilled.									X
2. Salt/pepper/sugar/napkin dispensers put through dishwashing machine.		X							
3. Table tops and chairs cleaned using the two-pan method.								X	X
4. Table bottoms, stanchions and chair bottoms and legs cleaned.	X								
5. Decks swept, scrubbed and rinsed.								X	X
6. Decks stripped and waxed.						X			
7. Overheads dusted and cleaned.			X						
8. Bulkheads cleaned.				X					
9. Bulkheads adjacent to the serving line cleaned.									X
10. Ladders leading to the dining area cleaned.	X	X	X	X	X	X	X		
11. Doors leading to the dining area cleaned.	X	X	X	X	X	X	X		
12. Ventilation supply/exhaust openings cleaned.	X			X			X		
13. Refrigerated salad bar cleaned and defrosted.									X
14. Refrigerated milk dispenser cleaned.									X
15. Refrigerated milk dispenser defrosted.	When ice reaches 1/4 inch thickness								
16. Non-carbonated beverage dispenser disassembled and cleaned.	X	X	X	X	X	X	X	OR	X
17. Carbonated beverage dispenser cleaned.									X
18. Soft-serve ice cream machine cleaned and sanitized.	Before and after each use								
19. Coffee urn cleaned.	X	X	X	X	X	X	X		
20. Coffee urn destained.					X				
21. Butter dispenser cleaned.									X
22. Bulk ice machine ice removed and bin thoroughly cleaned and rinsed.							X	Monthly	
23. All serving table tops, bottoms, and legs cleaned.									X
24. All stainless steel surfaces cleaned and polished.	X	X	X	X	X	X	X		
25. All cleaning gear thoroughly cleaned and sanitized.	X	X	X	X	X	X	X		
26. Tray/bowl/cup/glass lowerators cleaned.									X
TO BE USED IN CONJUNCTION WITH CLEANING INSTRUCTIONS									

**Figure 3-1**

## SECTION 4: SERVING LINE AND ASSOCIATED EQUIPMENT

### K-4-1 BACKGROUND

The serving line is one of the keys to good service. Extensive planning is required to ensure that all food items are properly arranged and easily accessible to the patrons. Upon securing the serving line, preparation should commence for the serving of the next meal. The serving line opens and closes at least three times a day, 1,095 times a year.

Pre-service setup, supervising the serving line operation and cleaning the serving line in the galley are normally the responsibility of the culinary specialist; however, the Mess Deck Master-at-Arms may occasionally assume this responsibility. A sample daily and weekly work schedule is illustrated in Figure 4-1 to assist in cleaning the serving line and associated equipment. The following information will provide assistance with serving line operations.

### K-4-2 ELECTRIC HOT FOOD TABLE

1. If the food table is designed for “wet operation,” add water to cover the bottom of each unit. Some units are designed for “dry operation,” without water.
2. Ensure that hot food placed on the electric hot food table is maintained at 140° F. or above.

The following procedure should be followed when placing food items on the hot food table prior to opening the serving line:

1. Arrange the food items as determined by the lead cook to expedite service.
2. Do not overfill food inserts; use hot pads and exercise care when handling hot pans.
3. Instruct and demonstrate correct serving techniques and procedures normally accomplished by the lead cook.
4. Always check with the lead cook to ensure that all food items are in position and properly arranged; and that personnel are present to serve food items prior to opening the serving line.

### K-4-3 GENERAL OPERATIONS

During the period the serving line is open, particular attention should be directed towards:

1. Cleaning food spills immediately.
2. Replenishing food items (do not wait until the food insert is empty).
3. Ensuring that personnel assigned to serving food items are courteous and follow serving instructions.

Upon closing of the serving line, the following procedure should be followed:

1. Check with the lead cook as to the disposition of food items.
2. Turn off the heat source.
  - a. Close the steam valve on steam table.

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b. Turn the temperature control dials to the “off” position on the electric table.

3. Open the drain valve(s).

After the hot food table has cooled, the following procedure should be followed for cleaning:

1. Remove all loose food particles. Particular attention should be given to the drains.
2. Using the “two-pan” method, thoroughly clean the interior and exterior of the hot food table. DO NOT use abrasive materials or cleaners.

### K-4-4 DESCALING

**NOTE: STRICT ADHERENCE TO SAFETY PRECAUTIONS MUST BE FOLLOWED WHEN DESCALING.**

#### Steam table:

Depending on the geographical location and the mineral content of the fresh water supply, the steam table may require scheduled descaling. This will remove rust, lime, and scale deposits and allow the unit to operate at maximum efficiency. It is recommended that descaling be accomplished after the evening meal. The following procedures should be followed for descaling:

1. Fill the steam table with water to cover the coils and mineral deposits.
2. Open the steam supply valve and bring the water to a boil.
3. Turn off the steam supply valve and add the descaling compound as per the directions on the container.
4. Allow the solution to remain in the steam table overnight.
5. Brush the interior of the steam table with a nylon bristle brush.
6. Drain and rinse with clear water to remove all loosened particles and descaling solution.

A stronger detergent solution may be required to thoroughly clean the interior of the steam table on a daily basis. The following cleaning solution is recommended: four tablespoons of dishwashing machine detergent and two tablespoons of general purpose detergent to each gallon of hot water.

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### Electric table:

If the electric hot food table is designed for “dry” operation, the bottom of each receptacle may take on a straw-colored appearance. The discoloration of the stainless steel surface is due to the intense heat from the unit.

If the unit is designed for “wet” operation, descaling may be accomplished by following the basic procedures for the steam table. Some electric tables designed for “wet” operation have a drain line installed for each unit making cleaning and descaling procedures easier. Other tables do not have drains installed and the water/solutions should be removed with a ladle or by wiping dry. If this is the case, personnel should wear rubber gloves and exercise caution to prevent being burned or coming into contact with the descaling solution.

The temperature control dials should be cleaned frequently. The following procedures should be followed:

1. Pull outward to remove dial.
2. Wash with mild detergent and water solution, rinse, and dry with a soft cloth.
3. Replace dials immediately to avoid possible damage or loss.

### K-4-5 SNEEZE SHIELD AND TRAY SLIDE RAIL

The sneeze shield and tray slide rail are an important part of the serving line and should be thoroughly cleaned after every meal. Cleaning should be accomplished using the “two-pan” method giving particular attention to cracks, crevices, and the underside of the tray slide rail. The following items should be observed during the cleaning procedure:

1. Follow the procedure for cleaning stainless steel surfaces for areas adjacent to the serving line.
2. Exercise care not to scratch the glass/plastic glass surfaces of the sneeze shield.

DO NOT use abrasive materials or cleaners.

### K-4-6 BREAD DISPENSER

Bread dispensers are of two types; the self-leveling dispenser, and the counter-top dispenser.

#### Self-leveling dispenser:

The cabinet is made of stainless steel with a coil spring platform which raises the bread as it is used. The spring tension may be adjusted according to the weight of the item being dispensed. The self-leveling bread dispenser is usually recessed in the top of the serving line and should be cleaned after each use in the following manner:

1. Remove dispenser and disassemble. Remove platform and spring.
2. Wash, rinse, sanitize and reassemble.

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### Counter-top dispenser:

Bread is dispensed by lifting a lever which dispenses one slice at a time onto a tray. The dispenser should be cleaned after each use in the following manner:

1. Using a clean brush remove all bread crumbs.
2. Wipe the interior and exterior with a clean cloth using a mild detergent and water solution.
3. Wipe all areas using a clean cloth and clear water.
4. Wipe with a clean, dry soft cloth.

**Note:** Check with the lead cook for instructions on the disposition of bread prior to cleaning the dispenser.

### K-4-7 ROTARY TOASTER

Rotary toasters are usually located on the serving line. The following procedures should be followed when the toaster is utilized:

1. Turn on electrical power approximately 15 minutes prior to using.
2. Prepare toast as needed; ensure that it is hot and fresh for the patrons.
3. Keep hands dry when preparing toast to avoid possible electric shock.
4. Do not use metal objects to dislodge jammed toast. Turn off the machine and remove toast by hand.

After each use:

1. Disconnect the electric power supply and allow the toaster to cool.
2. Remove the catch tray and wash/rinse in the utensil wash sink; catch tray may be placed in the dishwashing machine.
3. Wipe down exposed surfaces with a damp cloth, and brush all crumbs out of the inside of the toaster and from around the base.
4. Do not allow water or cleaning solution to come in contact with the conveyor chains as they will rust.
5. Remove the bread baskets and clean thoroughly. Bread baskets may be placed in the dishwashing machine. To remove baskets:
  - a. Move each basket in turn to a position midway to the front of the machine.
  - b. Press the left conveyor chain to the left and the pins will slip out of the holes in the basket.

When replacing baskets, be sure holes on each side are properly aligned with the pins on the conveyors so the basket will not be slanted when it goes through the toaster.

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### **K-4-8 CEREAL DISPENSER**

The cereal dispenser is usually located at an area adjacent to the serving line. You should ensure that food service attendants:

1. Fill the cereal dispenser prior to the meal if cereal is to be served.
2. Replenish cereal as required, providing maximum variety.
3. Check for damaged cereal boxes and deliver these damaged boxes to the lead cook for disposition.
4. Rotate stock; oldest date of pack should be used first.

The cereal dispenser should be cleaned daily. Remove the cereal boxes and wipe with a clean cloth using a mild detergent and water solution.

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**EXAMPLE**

<p><b>DAILY AND WEEKLY WORK SCHEDULE</b></p> <p>SPACE: <u>SERVING LINE</u></p>	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	BEFORE BREAKFAST	AFTER EACH MEAL
	1. Rotary toaster; cleaned	After each use							
2. Serving line; cleaned								X	
3. Steam table; descaled	X	Or as necessary							
4. Sneeze shield; cleaned									X
5. Bread dispenser; cleaned									X
6. Plastic fruits, vegetables, and greens; cleaned		X	Or as necessary						
7. Cleaning gear; cleaned and sanitized	After each use								
8. Cereal dispenser; cleaned									X
9. Tray slide rail; cleaned									X
TO BE USED IN CONJUNCTION WITH CLEANING INSTRUCTIONS									

**Figure 4-1**

## SECTION 5: SCULLERY OPERATIONS

### K-5-1 BACKGROUND

The scullery is one of the most important operations in food service. All dinnerware, silverware, and some food preparation equipment pass through this area for washing and sanitizing. It is essential that the scullery be scrupulously clean and the highest sanitation procedures be followed to prevent the growth of harmful bacteria which could cause serious illness. The sample "Daily/Weekly Work Schedule," Figures 5-1 and 5-2, will assist you in ensuring that the scullery and associated spaces and equipment are thoroughly cleaned. You should be familiar with the operation and maintenance of scullery equipment and ensure that food service attendants follow the instructions and procedures outlined in this section.

Sufficient food service attendants should be assigned to the scullery to permit dining patrons to place the soiled dinnerware and silverware in the designated scullery opening. Food service attendants should remove food particles, paper, etc., and sort the dinnerware and silverware. The garbage/trash container should never be positioned outside the scullery to indicate that the patrons are required to empty their own tray.

### K-5-2 SAFETY PRECAUTIONS FOR THE DISHWASHING MACHINE

All food service attendants assigned to the scullery should be thoroughly familiar with the safety and operating instructions for the dishwashing machine. These instructions should be attached to the machine or posted to an area adjacent to it. The following precautions should be observed during operation of the dishwashing machine:

1. Exercise caution. Personnel must keep their mind on the job.
2. Ensure that protective covers are in place on all external moving parts of the machine.
3. Ensure that the side doors of the machine are closed.
4. Do not put hands into the machine while the steam is turned on or the machine is operating.
5. If a dish rack becomes jammed on the conveyor chain, disconnect the electric power and steam supply prior to removing the rack.
6. Personnel should wear arm length rubber gloves (not electrical gloves) and rubber aprons to prevent burns.
7. Any machine malfunctions should be reported per established local procedures. Do not try to fix the problem yourself.
8. Wear hearing protection when the dishwashing machine is operating.

During your daily inspection of the scullery you should ensure that:

1. The ventilation exhaust openings are operating properly.
2. All lights are operating.
3. The protective rubber covers for electric on/off switches are in place and are not damaged.

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### K-5-3 PREPARING SOILED DINNERWARE AND SILVERWARE FOR MACHINE WASHING

It is important that all items be prewashed prior to being placed in the dishwashing machine. This will ensure that all articles are clean and also prevent food particles/paper from entering the wash section and clogging the spray arms which would reduce the machine efficiency. The following procedures should be followed:

1. Sort soiled dinnerware and silverware by type and size.
2. Scrape off food particles with a plastic nylon bristle brush with handle or a rubber spatula. DO NOT HIT trays, dinnerware, etc. (especially plastic dinnerware) AGAINST THE SIDE OF TRASH CANS. This will break or damage the dinnerware. Replacement items are extremely costly.
3. Prewash either by using a fine, warm water spray or placing the items in the utensil wash sink.
  - a. Hand dishwashing detergent should be used in the utensil wash sink.
  - b. The water in the wash sink should be changed as it becomes dirty and more detergent should be added.
4. Silverware should be soaked in warm water (120°-125°) containing 3 ounces of hand dishwashing compound per gallon of water as soon as possible after it is collected. Scrub each piece with a nylon bristle brush, paying special attention to the spaces between the tines of the forks.
5. Dish racks for machine washing should be loaded in the following manner:
  - a. Dishes and trays should be stacked vertically in the openings provided, ensuring that they do not overlap.
  - b. Cups, glasses, bowls should be placed bottom side up in a single layer.
  - c. Silverware should be placed eating end up in cylinders (a maximum of fifteen pieces in each cylinder). Use separate cylinders for knives, forks, and spoons.

This will ensure that water reaches all surfaces when the racks are placed in the dishwashing machine.

6. If time and space permit, it is recommended that articles be washed in the following order: Glassware, silverware, dishes, cups, bowls, and trays.

### K-5-4 OPERATING INSTRUCTIONS FOR SINGLE-TANK DISHWASHING MACHINES

Some enlisted dining facilities, officer dining facilities, and chief petty officer dining facilities have single-tank dishwashing machines installed. The procedures listed below should be followed when operating the single-tank dishwashing machine:

1. Close the drain valve.
2. Open the hot water and steam valves to the rinse mixing valve and adjust the valve handle to the "hot" position. Some machines have a hot water booster heater installed. If this is the case, open the hot water and steam valves to the booster heater.

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3. Fill the tank with hot water to the top of the overflow pipe or the “full” mark on the water level indicator.
4. Check the following:
  - a. Scrap screens are clean and in position.
  - b. Spray arms assembled, capped and properly adjusted so that water spray hits utensils directly.
  - c. Temperature of wash tank is in accordance with manufacturer’s instructions found on the data plate affixed to the machine by the manufacturer.
  - d. When the rinse valve is open, the rinse water temperature is in accordance with manufacturer’s instructions found on the data plate affixed to the machine by the manufacturer. Some machines will not operate unless the rinse temperature is at a specified temperature set by the manufacturer. The rinse temperature should not be less than 165° F.
5. If the machine does not have an automatic detergent dispenser installed, add the prescribed amount of detergent to the wash tank.
6. Push the start button and run the machine for 2 minutes (two cycles) to mix the detergent and water.
7. Open the door and place the dish rack in the machine. Close the door and push the start button to start the wash cycle.
  - a. If the machine is manually operated, allow for at least 40 seconds wash and then move the control handle to the rinse position for 10 seconds. Release the handle, which should return to the closed position.
  - b. Most machines are automatically timed to allow for a 40-second wash, a 10-second rinse and then shut off.
8. Open the door; remove dish rack, shake slightly to remove excess water and allow to air dry for at least 1 minute.
9. Place clean, air dried dinnerware, bottom side up in clean storage cabinet or dispenser.
10. Place a sanitized, empty cylinder over clean, air dried silverware, invert, and place in clean storage cabinet, avoid hand contact with eating surfaces.

Machine temperatures should be checked frequently, using a pocket thermometer (0°-220° F.) to ensure accuracy of the external temperature gauges. If the machine temperature gauges do not agree with the thermometer within  $\pm 3$  degrees, the gauge must be calibrated or replaced.

### **K-5-5 OPERATING INSTRUCTIONS FOR DOUBLE-TANK DISHWASHING MACHINES**

Most enlisted dining facilities have double-tank dishwashing machines installed. The procedures listed below should be followed when operating the double-tank dishwashing machine:

1. Close the drain valves to the wash and rinse sections of the machine. Open the hot water “fill” valves and fill the tanks to the “full” mark on the water level indicator.

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2. Inspect the inside of the machine to ensure that:
  - a. Scrap screens are in place.
  - b. Spray arms are capped, and adjusted so that the spray hits the utensils directly.
  - c. Splash curtains are in place and not hanging closer than five inches to the conveyor.
3. Open the steam valve to the rinse tank until the temperature of the water is in accordance with manufacturer's instructions found on the data plate affixed to the machine by the manufacturer.
4. Open the steam and hot water valves to the final rinse mixing valve. Adjust the mixing valve handle to the "hot" position to maintain a temperature range in accordance with manufacturer's instructions found on the data plate affixed to the machine by the manufacturer. On machines with hot water booster heaters installed, open the hot water and steam valves to the booster heater.
5. On machines without automatic detergent dispensers, add the prescribed amount of detergent (Table II) to the wash tank.
6. Push the "start" button to start the pumps and conveyor. Run the machine for 2 minutes to thoroughly mix the detergent and bring the temperature of the wash tank up to a temperature specified in the manufacturer's instructions. This can be found on the data plate affixed to the machine by the manufacturer.
7. Inspect the ends of the machine to ensure that the power sprays are operating properly.
8. During the operation of the machine, keep a close watch on the temperature gauges and ensure that they are within temperature ranges specified in the manufacturer's instructions found on the data plate affixed to the machine by the manufacturer.
9. Place the dish rack on the conveyor carefully and allow the conveyor to push the rack through the machine. If the conveyor speed is properly set, the utensils will receive a 20-second wash and a 20-second rinse.
10. As the dish rack approaches the end of the machine, it will pass a lever which will actuate the final rinse. Observe the final rinse temperature gauge for correct temperature.
11. Allow dinnerware and silverware to air dry for at least 1 minute after passing through the machine.
12. Place the clean, air dried dinnerware and trays bottom side up, in a clean storage cabinet or dispenser.
13. Place an empty cylinder over clean, air dried silverware, invert, and place in a clean storage cabinet.
14. For every 30 to 45 minutes of continuous machine operation, the wash section should be drained and the scrap trays cleaned. Machine temperatures should be checked frequently, using a pocket thermometer (0°-200° F.) to ensure accuracy of the temperature gauges.

Some shore activities have triple tank dishwashing machines installed. The procedures are basically the same with the following exceptions:

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1. The dishwashing machine consists of pre-wash, wash, and rinse sections with a final rinse.
2. Refer to the manufacturer's operating and instruction manual for the pre-set temperatures of the pre-wash, wash, and rinse sections.

### **K-5-6 CLEANING THE DISHWASHING MACHINE**

The dishwashing machine should be thoroughly cleaned after each meal or use. The procedures listed below should be followed:

1. Turn the machine off.
2. Secure the steam and hot water valves to the final rinse mixing valve, or the steam and hot water valves to the hot water booster heater.
3. Add  $\frac{3}{4}$  to  $1\frac{1}{2}$  cups of dishwashing machine detergent to the rinse tank, depending on the capacity of the rinse tank.
4. Turn the machine on and allow it to operate for 5 minutes.
5. Turn the machine off and secure the steam valve to the rinse tank.
6. Open the drain valves to the wash and rinse tanks; open the doors and allow the machine to cool.
7. Remove the door's scrap screens, metal frames, wash and rinse spray arms (including the spray arm caps), pump intake strainer, drain strainer and splash curtains. Wash thoroughly in the utensil wash sink and rinse.
8. Using hand dishwashing detergent and water with a nylon brush, thoroughly clean the inside and outside of the machine including all removable parts, i.e. splash curtains, spray arms caps, etc. Rinse with clean water to remove all loosened dirt and detergent.
9. Reassemble the machine, close the drain valves to the wash and rinse tanks.
10. Fill the tanks  $\frac{1}{2}$  full of water, open the steam valve to the rinse tank and allow the machine to reach normal operating temperatures in accordance with manufacturer's instructions.
11. Turn the machine on and operate for 5 minutes without detergent.
12. Turn the machine off, close the steam valve to the rinse tank, and open the drain valves to the wash and rinse tanks.

**NOTE:** Follow the same basic procedures for the single-tank dishwashing machine with the exception of steps 1 through 4.

### **K-5-7 DESCALING DISHWASHING MACHINES (NOTE: STRICT SAFETY PRECAUTIONS MUST BE FOLLOWED.)**

The interior of the dishwashing machine and the manifold(s) should be inspected monthly for accumulation of calcium or lime deposits. If deposits are evident, the machine must be descaled.

Descaling the machine should be a part of the Planned Maintenance System (PMS) and is the responsibility of the food service division. The descaling operation must be closely

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supervised from “start to finish,” and personnel must wear face shields, chemical safety goggles, rubber gloves, and rubber aprons when handling acid. The following procedures will be followed:

1. Drain wash/rinse tank(s), if applicable.
2. Install overflow pipe(s), scrap tray(s), screen(s), spray manifold(s) (except final rinse), and curtains (inlet and discharge ends only). Place final rinse spray manifold on top of scrap tray in wash tank.
3. Shut drain valve(s).
4. Commence filling tank(s) to within 2 inches of top of overflow pipe(s) with clean hot water.
5. Add 7 fluid ounces of orthophosphoric acid and 1 fluid ounce of rinse additive for each gallon of water per tank (see notes 1 and 2).
6. Complete filling tank(s) and close door(s).
7. Start the machine and operate for 1 hour maintaining normal operating temperatures.
8. Stop machine, open drain valve(s) and completely drain acid solution from machine. (See note 3.)
9. Inspect interior of machine. Parts should be free of calcium or lime deposits and metal should be shiny.
10. Repeat steps 3 through 8 if necessary.
11. Close drain valve(s) and fill tank(s) with clean hot water. Add two CUPS of dishwashing machine compound per tank.
12. Close door(s), start machine and operate for 5 minutes at operating temperatures.
13. Stop machine and completely drain tank(s).
14. Refill and flush tank(s) with clear water to remove all traces of acid and detergent.

### NOTES:

1. In the absence of orthophosphoric acid, only USDA approved chemicals for descaling of dishwashing machine should be used. Follow manufacturer's instructions.
2. If tank capacity in gallons is unknown, multiply length (inches) x width (inches) x depth to overflow (inches) and divide product by 231.
3. Shore stations and ships in port shall dispose of acid drains in accordance with local regulations.

### K-5-8 DESTAINING DINNERWARE AND SILVERWARE

Dinnerware and silverware should be destained weekly or as necessary to remove unsightly stains. The following procedures should be followed:

1. Place the prescribed amount of hot water in a large utensil wash sink or steam jacketed kettle.

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2. Dissolve destaining compound in hot water as per the instructions on the container.
3. Place the dinnerware (glass or plastic) in the destaining solution and allow to remain for 30 minutes. A milder solution should be used for silverware.
4. Rinse dinnerware and silverware thoroughly with clear water; place in the dishwashing machine for washing and sanitizing.

### **K-5-9 CARE OF PLASTIC DINNERWARE (NON-DISPOSABLE)**

Many afloat and ashore food service activities use plastic dinnerware: trays, cups, tumblers, and bowls. These items are very durable and will last a long time if properly cared for. The following precautions will prolong the life of the plastic dinnerware:

1. Inspect new items prior to placing them in service for cracks. Those with cracks or damages should be rejected.
2. Ensure that food service attendants scrape food particles from dinnerware with a nylon bristled brush or rubber spatula. **DO NOT HIT DINNERWARE ON TRASH CANS** (this cannot be overemphasized).
3. Do not use abrasive pads or cleaning compounds to clean dinnerware. These will scratch the hardened surface and make the dinnerware unsanitary.
4. Ensure that the dishwashing machine final rinse temperatures are maintained in accordance with manufacturer's instructions. Temperatures in excess of 195° F. will harm plastic dinnerware.

Plastic dinnerware should be inspected during washing and those with cracks or chips set aside for disposition. The Mess Deck Master-at-Arms should inspect each piece prior to disposition to determine cause and course of action to be taken to prevent recurrence.

### **K-5-10 INVENTORY OF DINNERWARE AND SILVERWARE**

An adequate supply of dinnerware will be maintained so all personnel will have dinnerware that is air-dried and at room temperature. The number of patrons served at the most attended meal combined with a base percentage of each item of dinnerware may be used as a guide to ensure this requirement is met. The following table provides an example of this process:

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<u>ITEM</u>	<u>PERCENT</u>
Bowl, soup	40
Cup, coffee	60
Tumbler, glass	150
Silverware	100
Plate, 9 inch	100
Plate, 6 3/4 inch	200
Dish, 5 9/16 inch	80
Tray, carrying	100

EXAMPLE: 200 (persons served) multiplied by .40 (base percent) equals 80 soup bowls required.

Dinnerware and silverware should be inventoried every two weeks to ensure that a sufficient supply is available for service. Dinnerware and silverware should be closely inspected at this time. Dinnerware with cracks or chips and silverware that is badly bent should be discarded.

A local form or log book may be used to record the inventory. Figure 53 illustrates a proposed inventory record.

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**EXAMPLE**

DAILY AND WEEKLY WORK SCHEDULE  SPACE: <u>SCULLERY</u>	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	BEFORE BREAKFAST	AFTER EACH MEAL
	1. Decks swept, scrubbed and rinsed								
2. Overhead cleaned			X						
3. Bulkheads cleaned				X					
4. Table tops, bottoms and legs cleaned									X
5. Deep sinks thoroughly cleaned									X
6. Silverware metal chute cleaned									X
7. Trash container thoroughly cleaned	X	X	X	X	X	X	X		
8. Ventilation supply/exhaust openings cleaned	X		X		X		X		
9. Dishwashing machine descaled		X	Or as necessary						
10. Dishwashing machine disassembled and thoroughly cleaned									X
11. Dinnerware and silverware inventoried	X								
12. Dinnerware and silverware destained					X	Or as necessary			
13. Cleaning gear; cleaned and sanitized	X	X	X	X	X	X	X		
TO BE USED IN CONJUNCTION WITH CLEANING INSTRUCTIONS									

**Figure 5-1**



**INVENTORY RECORD**

Date: \_\_\_\_\_

(1) Item	(2) Previous Inventory	(3) Amount Received	(4) On Hand This Date	(5) Loss	(6) Gain
Tray, plastic	215	10	223	2	
Bowl, soup	80		80	0	0
Dish, sauce	125		119	6	
Cup, plastic	130	24	150	4	
Tumbler, plastic	205		210		5
Knife, table	230		227	3	
Fork, table	180	48	233		5
Spoon, dessert	210		203	7	
Spoon, tea	120		120	0	0
Dispenser, napkin	30		30	0	0
Dispenser, sugar	30		29	1	
Salt shaker	20	20	37	3	
Pepper shaker	33		36		3

MDMAA \_\_\_\_\_ Leading CS \_\_\_\_\_ Food Service Officer \_\_\_\_\_

Note:

Column (2) plus column (3) should equal column (4). If (4) exceeds (2) plus (3) there is a gain (6). If (4) is less than (2) plus (3), there is a loss.

**Figure 5-3**

## SECTION 6: HAND DISHWASHING OF COOKING UTENSILS

### K-6-1 BACKGROUND

As Mess Deck Master-at-Arms, your area of responsibility is extensive, involving not only the dining area and scullery, but on some occasions, in the galley as well. One of these instances is the washing of cooking utensils. With the continuous inflationary cost of raw food products coupled with the Navy's program to upgrade the quality of food service, it is very important that the cooking utensils in your food service facility be thoroughly cleaned. Greasy, improperly cleaned cooking utensils significantly effect an otherwise flavorful food item, not to mention the added possibility of contamination. By ensuring that food service attendants clean the cooking utensils properly, you are not only doing your job well but also contributing to the overall effectiveness of the food service division. Nothing is as irritating as reaching for a pan when the serving line is "backed up," and finding a greasy, improperly cleaned/sanitized pan. Ensure that pans and utensils are cleaned right the first time, every time.

### K-6-2 PREPARATION FOR WASHING

Before washing the cooking utensils, scrape large food particles off, and sort according to size and type. You should have the necessary hand dishwashing supplies ready. They are:

1. Dip and drain baskets.
2. Hand dishwashing compound (clear or opaque).
3. Nylon bristle brush.
4. Arm-length rubber gloves.
5. Water thermometer (if a booster heater unit is not available).
6. Scrub pad.
7. Clean storage facilities for cooking utensils.

### K-6-3 WASHING AND SANITIZING

To determine the proper detergent solution, compute by following the below procedures:

1. Fill the wash sink with water, using a measuring container. The water temperature should be maintained at not less than 110°.
2. Mark the water level with a permanent etched mark in the sink for future use.
3. Add the proper amount of detergent needed. The amount recommended is usually listed on the side of the container.

You are now ready to wash cooking utensils:

1. Scrub the surfaces thoroughly utilizing the detergent solution in the wash sink and a nylon bristle brush. Pay particular attention to the edges and seams.
2. Remove stubborn food particles with a scrub pad.

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3. Transfer each washed utensil to the next sink compartment for rinsing.

Ensure that the wash water's temperature is continually maintained at not less than 110°. Replace the water at the first appearance of grease or dinginess.

When the cooking utensils are in the second sink compartment, rinse each utensil thoroughly to remove all traces of detergent. To ensure that this is done, you should:

1. Keep the rinse water clean at all times.
2. Replace the rinse water as needed.
3. Transfer each rinsed cooking utensil to the third sink compartment.

The third sink compartment is designed to sanitize cooking utensils. Ensure that:

1. The water temperature is at least 171° F.
2. The utensils are immersed in the water for at least 30 seconds.

Many food service facilities do not have three-compartment deep sinks. To ensure that the cooking utensils are properly sanitized, use one of the following methods:

1. Place them in the dishwashing machine, or
2. Use a large pan, in lieu of the second sink compartment to remove all traces of detergent from each cooking utensil, and utilize the second sink compartment for sanitizing.

The cooking utensils are placed on the clean end-shelf to air dry after sanitizing. **DO NOT** dry with a towel or dish cloth.

As a safety measure, always ensure that arm-length rubber gloves are worn during the entire hand dish washing operation.

### **K-6-4 STORAGE OF CLEAN UTENSILS**

Ensure that sanitized cooking utensils are promptly and properly stored. The storage area should be clean, free of dirt, grease, food particles, personal clothing, etc., otherwise, they will be contaminated and your time and efforts will be wasted. By adhering to the following rules, your overall hand dishwashing operation will be a success:

1. **DO NOT** allow the cooking utensils to come in contact with your clothing while transporting them to the storage area.
2. Avoid handling the cooking surfaces.
3. Store them face down to prevent dust/dirt from accumulating.

## SECTION 7: FOOD WASTE AREAS

Garbage collection and disposal methods differ among various types of ships, but a few sanitary requirements commonly govern these methods. Garbage should be disposed of promptly to prevent contamination of spaces, preclude buildup of offensive odors and eliminate a potential fire hazard. Garbage collection areas should be thoroughly cleaned each day. Trash and garbage should not be left in food service areas overnight as they attract insects and rodents.

The Mess Deck Master-at-Arms should ensure that:

1. Food service attendants are properly trained in the operation and cleaning of equipment used in collecting and disposing of garbage.
2. All garbage grinders and disposal units are operated in compliance with established instructions.
3. An adequate supply of garbage/trash containers is available.
4. Garbage/trash containers are kept clean and covered. Recommend use of authorized trash can liners.

### K-7-1 GARBAGE GRINDER SAFETY PRECAUTIONS AND OPERATING PROCEDURES

1. Consult the manufacturer's operating instructions for the correct procedures to be followed when operating the garbage grinder.
2. Always check to be certain the sealing plate is locked in the open position and the hinged top of the feed chute hopper is locked shut when the grinder is to be used.
3. Turn on the flushing water by opening the valve to supply sufficient water to flush the ground food waste through the grinder. Do not turn on excessive water as the lower half of the grinder compartment will flood. Increase or decrease the amount of water, as required, during the grinding operation.
4. The grinder motor must be operating at full speed before feeding food waste into it.
5. Stand in front of the grinder when feeding food waste into the grinder.
6. Pick out and discard all metal tableware, glass, dishes, wood, leather, bones and cloth from food waste prior to feeding into the garbage grinder.
7. Corn husks and raw meat are not readily shredded and should be fed at a slow rate. Bones larger than  $\frac{1}{4}$  inch in diameter for 400 pound/hour grinder or 1 inch for the 1600 pound/hour model should not be put into the grinder.
8. Place the food waste into the feed chute at the cut-out end. Rake or push the food waste through the feed opening provided in front of the hinged safety door of the hopper. **NEVER** put your hand inside the hinged feed door while the grinder is operating.
9. The capacity of grinders is either 400 or 1600 pounds per hour. Do not overload it. Feed food waste at a rate of 7 pounds per minute (about 1 gallon) for the 400 pound per hour model and 28 pounds per minute (4 gallons) for the 1600 pound per hour grinder.

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10. Do not turn off the motor until the grinder is completely clear of food waste.
11. Before turning off the grinder, flush the feed chute with clean water.
12. After turning off the grinder, disconnect the electric power supply, open the hinged top of the hopper and flush the top, sides, and the interior of the grinder with clean water, turning the rotor by hand so that the hammer and discs are cleaned.

Due to rigid Navy environmental pollution control standards, always consult with the Food Service Officer to determine whether discharging garbage overboard is permitted. **Never operate the garbage grinder when the ship is in port, in polluted water, or congested anchorage.**

### K-7-2 CLEANING THE GARBAGE GRINDER

After each use:

1. Turn off the machine by pushing the "Stop" button, secure power at the breaker, ensure the tank is empty. Never stop the grinder with food waste in it.
2. Scrub the interior of the unit, using a nylon bristle brush with detergent and hot water solution.
3. Flush the machine with hot clean water to remove all traces of detergent.

### K-7-3 CLEANING GARBAGE/TRASH CONTAINERS

1. Garbage/trash containers should be emptied and thoroughly cleaned inside and out after each meal/use. The use of authorized trash can liners should not preclude the cleaning of garbage/trash containers on the prescribed frequency.
2. To clean the containers, remove large pieces of trash or food waste, place 1 gallon of hot water and detergent solution in each can. Vigorously scrub the inside, outside, and the bottom of each container with a nylon bristle brush.
3. If a live steam jet is available, invert garbage/trash container over it for 1 minute.
4. Rinse containers with hot, fresh water.
5. Scrub the lids/covers with a hot water and detergent solution and rinse.
6. Invert garbage/trash containers and allow to air dry.
7. Trash cans must stay covered when not in use.

## SECTION 8: CLEANING GEAR/ESTABLISHING AND MAINTAINING REQUIREMENTS

Throughout the preceding sections, emphasis has been placed on when and how to clean specific areas and equipment. This section discusses the use and care of the tools used and how to order consumables and maintain adequate supplies on hand.

### K-8-1 PROPER USAGE

There are various kinds of tools used for cleaning, but it is essential to select the type that eliminates the possibility of damaging the surface to be cleaned. The following is a list of items and their use:

1. A nylon bristle scrub brush can be used for most general cleaning.
2. Metal sponges made of corrosion-resistant steel can be useful for hard-to-clean surfaces. However, this type sponge should never be used on surfaces that can be easily scratched (stainless steel, Formica, plastic, glass, etc.) and should be discarded when signs of wear are noticed.
3. Steel wool is prohibited in all food service spaces.
4. Metal polish is prohibited on surfaces that come into contact with food.
5. Clean soft wiping cloths which are disposable and lint-free are ideal for wiping surfaces after they have been thoroughly cleaned.
6. Hand dishwashing compound should be used for hand dishwashing of galley utensils and for cleaning surfaces that come in contact with food (dining tables, food preparation tables, serving line, beverage dispensing equipment, etc.).
7. General purpose detergent should be used for removing dirt from bulkheads, decks, and over-heads. General purpose detergent should NOT be used for hand dishwashing or on surfaces which come into contact with food.
8. Scouring powder is not recommended for use. The powder contains abrasives which will scratch most surfaces and leaves a white, powdery film when not thoroughly rinsed.
9. Scrubbing deck brushes have bristles made of Palmyra fiber. Use for loosening dirt deposits from deck surfaces.

For sanitation purposes, sponges and scrub brushes used for cleaning dining tables or surfaces that come in contact with food should be used solely for that purpose and kept separate from similar cleaning gear. These items should be marked so as to eliminate their possible use in cleaning garbage/trash containers, toilet facilities, etc.

### K-8-2 CLEANING AND SANITIZING

Effective cleaning and sanitizing procedures cannot be overemphasized to food service attendants. Food service attendants should be fully aware of the hazards associated with careless procedures. An example of a careless procedure would be cleaning a dining table with a nylon scrub brush which had been "washed" (not sanitized) prior to use. Clean implies that the

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surface is free from dirt or impurities, while sanitize means to effectively treat clean surfaces by an approved process that destroys bacteria.

The approved methods of sanitizing are hot water or chemical sanitizing:

1. Hot water sanitizing - all surfaces are completely immersed in or exposed to hot water of at least 171° F. for at least 30 seconds (this procedure is the preferred method for sanitizing food service utensils).
2. Chemical sanitizing - the use of a chemical sanitizing agent which requires immersion in or exposure to solutions containing sufficient concentration of the agent to destroy bacteria. All contact surfaces must be wetted by the sanitizing solution. Immersion should be for at least one minute.

Brushes, mops, and sponges should be properly cleaned and sanitized after each use to preclude transmission of germs. The following methods of sanitizing different cleaning gear are recommended:

1. Scrub brushes - Brushes that are used for scrubbing dining tables or surfaces that come into contact with food should be cleaned after each use.
  - a. Wash in hot water and detergent solution. Pay particular attention to food particles between bristles.
  - b. Rinse in hot running water; dip in water to which a sanitizing agent has been added.
  - c. Shake and hang to dry; do not allow brushes to rest on bristles as this will cause the bristles to bend and mat. Brushes that will not be damaged by hot water may be placed in the dishwashing machine for sanitizing.
2. Scrub brushes (brushes used for general cleaning):
  - a. Hand wash with hot water and detergent solution.
  - b. Rinse.
  - c. Hang to air dry.
3. Cellulose sponges - clean at the end of each meal.
  - a. Wash in hot water and detergent solution.
  - b. Rinse in hot clear water.
  - c. Boil for at least 5 minutes (recommended) or chemically sanitize.
  - d. Wring out and air dry. Should be discarded when exceedingly soiled, stained, or deteriorated.
4. Mops - clean after each use:
  - a. Wash in hot water and detergent solution.
  - b. Rinse in clean hot water to which a sanitizing agent has been added.
  - c. Wring out and hang to air dry.

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- d. Mops should be designated for food service use only and stored separately.
5. Mop wringer and bucket – clean after each use:
- a. Wash thoroughly with hot water and detergent solution.
  - b. Rinse and allow to drain.
  - c. Sanitize and store bucket upside down.

Cleaning gear (mops, buckets, etc.) and cleaning supplies (detergents, disinfectants) should be stored in an area specifically designated for that purpose. These items will not be stored in:

1. Food preparation or serving areas.
2. Food storage cabinets or on food storage shelves.
3. Cabinets or lockers with insecticide.

### **K-8-3 ESTABLISHING AND MAINTAINING REQUIREMENTS**

Planning is the basis for supervising an efficient operation. It takes tremendous planning and forethought to maintain dinnerware and other related supplies in sufficient quantity to meet the requirements of your area of responsibility. Prior to estimating requirements, the desired endurance level (weeks or months of supply) should be established. Consult with the leading Culinary Specialist or Food Service Officer concerning endurance level and ordering procedures. Past usage data is necessary to establish requirements and endurance levels.

To obtain usage data, a form (such as Figure 8-1) should be maintained for each individual item. Once reliable data is obtained, multiply the usage data (weeks or months) by the endurance level (weeks or months) to determine future requirements. (Usage X endurance level = future requirements). The use of a form (Figure 8-1) will provide information such as:

1. On hand balance.
2. Excessive usage (losses or breakage).
3. Cost of previous supplies which can be used for supporting future budget information.

Follow local supply procedures for ordering of supplies. Check with the leading Culinary Specialist to ascertain the division's endurance levels prior to deployment. When ordering be sure to make allowance for:

1. Lead time (in ordering and receiving).
2. Ship's schedule (duration of cruise, available supply support, etc.).

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**Food Service Supplies Stock Record**

<b>Item:</b> Brush, Scrub, Utensil and Equipment			<b>NSN:</b> 9Q 7920-00-061-0038		<b>Required Inventory Level:</b> _____	<b>Stockage Objective</b> 30 days	
<b>High Limit:</b> 10		<b>Low Limit:</b> 5		<b>U/I:</b> EA	<b>Ordering</b>		
<b>Date</b>	<b>Recpts</b>	<b>Issues</b>	<b>Total</b>	<b>On Hand</b>	<b>Date</b>	<b>Quantity Ordered</b>	<b>Price</b>
6/30/00	INV			10	7/02/00	6	3.55
7/01/00	INV BF			10	7/18/00	3	3.68
7/05/00	6	2	2	14			
7/11/00		3	5	11			
7/15/00		1	6	10			
7/18/00		2	8	8			
7/22/00	3			11			
7/27/00		1	9	10			
7/31/00	INV ADJ	+1	10	9			
8/01/00	INV BF			9			

**Note: Recommend all items be inventoried monthly. Fast moving items should be inventoried weekly.**

**Figure 8-1**

## SECTION 9: PLANNED MAINTENANCE SUBSYSTEM

### K-9-1 RESPONSIBILITY

“Public Works never fixes anything. The Engineering Department could care less about our equipment.” How many times have you heard these remarks when equipment breakdown occurs, but how much did these statements accomplish toward repairing the piece of equipment? Stop for a minute and think whose job is going to suffer the hardship of poorly maintained equipment.

Equipment maintenance is the responsibility of the engineering or public works department. They are responsible for assigning qualified personnel to:

1. Conduct systematic inspections of all food service equipment.
2. Lubricate bearings, shafts, and other moving parts.
3. Make adjustments/repairs before they develop into major defects.

As the Mess Deck Master-at-Arms, you are responsible for the equipment under your cognizance and should familiarize yourself with the required preventive maintenance and the frequency in which it should be performed. The procedure for performing planned maintenance subsystem varies from command to command and ship to shore; however, the end results should be the same. It is up to you to make sure that the equipment located in your spaces receives scheduled maintenance.

In conjunction with the preventive maintenance subsystem, you should ensure that:

1. Arrangement for assignment of specific maintenance personnel is made with the engineering or public works department.
2. Only maintenance personnel are permitted to make repairs.
3. Equipment is not operated in excess of speeds prescribed by the manufacturer.
4. Personnel are thoroughly trained in the operation of assigned equipment.
5. An inspection is conducted each morning of equipment for loose nuts, bolts, parts, connections, etc., before beginning operation. Afloat, a thorough inspection of machinery should be made after firing the guns.
6. Proper cleaning is performed on a scheduled basis.

The leading culinary specialist/food service officer should be notified of any problems relating to the performance of preventive maintenance.

### K-9-2 TROUBLE CALL LOG

When equipment malfunction occurs, a trouble call or work request (OPNAV Form 4790-2K) is normally used for requesting repairs. A log (Figure 9-1) should be maintained to provide current information of all equipment repairs. This log, if properly maintained, should provide the following information:

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1. Recurring equipment malfunctions/problems.
2. Failure of responsible personnel to expedite repairs.
3. Necessary information for completing the Inoperative Equipment Report.

### **K-9-3 INOPERATIVE EQUIPMENT REPORT**

The Inoperative Equipment Report (Figure 92) may be used to provide daily status of inoperative equipment to the Supply/Food Service Officer. Many afloat activities utilize the Inoperative Equipment Report for preparation of Supply Department Eight o'Clock Reports.

The procedures listed in this section will initially appear to require additional time and effort, when time is already in short supply. The alternatives, however, are totally unacceptable. Preventive maintenance is an effective tool in keeping equipment operational. When properly performed, equipment "down time," and cost of maintenance, and man-hours are reduced. After all, lubrication is cheaper than repair parts.



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## **SECTION 10: TRAINING**

### **K-10-1 RESPONSIBILITY**

The primary objective of the food service attendants' training program should be to acquaint food service attendants with sanitation requirements and improve efficiency. Unlike other divisional training programs designed for advancement qualifications, the food service attendants' training should be job-oriented. The need for an effective food service attendants' training program is essential to the management of the dining area. Needless to say, training is the most important responsibility of a supervisor. Unfortunately, it is often either omitted or "gundecked." Gundecked training does not fool anyone, because training is measured by effectiveness, not signatures on training attendance sheets.

Food Service Management NAVSUP P-486 Volume I states, "The Mess Deck Master-at-Arms will, in conjunction with the medical department, administer a training program for food service attendants in sanitation scullery operation and food handling." Your responsibility has been assigned; now we begin.

### **K-10-2 SECRETARY OF THE NAVY REQUIREMENTS**

In addition to NAVSUP P-486 Volume I, the Secretary of the Navy issued SECNAVINST 4061.1C which delineates the Navy's food sanitation program. The instruction states that initial and subsequent semi-annual refresher training will be given to all food service workers employed for 30 days or longer. Personnel assigned to food service duties for less than 30 days shall receive 2 hours initial training and orientation by responsible supervisors.

A minimum of 4 hours for initial training and 4 hours annual refresher training is required for all food service personnel. All training programs must be conducted by qualified food sanitation/safety instructors. Qualified food sanitation/safety instructors are:

1. Independent duty Navy hospital corpsman (must re-qualify every three years);
2. Preventive medicine technicians;
3. Environmental health officers;
4. Personnel who supervise or train food service personnel and are successful graduates of a supervisor/manager food safety training course approved by the Preventive Medicine Authority (must re-qualify every three years);
5. Navy and Marine Corps food management teams, provided the instructors are certified as required by SECNAVINST 4061.1 Series.

Navy and U.S. Environmental and Preventive Medicine Units should provide instructor training to supervisory personnel to qualify them to carry out local command food sanitation programs. Food sanitation training shall be an integral part of existing divisional training programs, both ashore and afloat.

### **K-10-3 FORMAL TRAINING**

Now that you are aware of existing training requirements/directives, you should develop a 3-month training schedule. In 3 months all of your material will have been covered and the food

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service attendants should have been rotated. The following publications will help you greatly in the preparation of a 3-month training cycle and lesson plan development:

1. Manual of Naval Preventive Medicine, NAVMED P-5010-1.
2. Navy Customer Service Manual, NAVEDTRA 12972.
3. Ship's 3M Maintenance Material Management Manual, OPNAVINST 4790.4C.
4. Navy Environmental and Natural Resources Program Manual OPNAVINST 5090.1B.
5. Culinary Specialist Rate Training Manual.
6. Military Requirements for PO 1 & C (current edition).
7. Military Requirements for PO 3 & 2 (current edition).
8. Navy Food Service, NAVSUP P-476 (published quarterly).
9. NAVSUP published lesson plans are available on the NAVSUP Home Page at [www.navsup.navy.mil](http://www.navsup.navy.mil).

After each presentation, evaluate the effectiveness and make "pen and ink" changes to your lesson plan. This will assure you that in 3 months when the topic is presented again it will be even better.

The training program should have a means for measuring effectiveness of the instructor and trainees. One means is by testing. A written achievement test is the type most use. A test could be administered monthly or at the end of each phase of instruction.

The procedures for developing a formal training program for food service attendants are:

1. Know the requirement (SECNAV, NAVSUP, Command Instructions, NAVMED P-5010-1).
2. Develop the plan. A three-month cycle is recommended.
3. Prepare a lesson plan for each topic. Make pen and ink changes after each presentation.
4. Test for effectiveness. If several trainees miss the same questions, review your method of presentation.

If you apply the following rules in your classroom presentation, you will earn the respect of your trainees and you will be more effective:

1. The instructor should provide the motivation essential to learning.
2. Use audio-visual aids to improve the learning process. Retention is better when visual aids rather than audio aids are used.
3. Be sure of facts. It is well-known that to "relearn" is more difficult than to learn correctly in the beginning.
4. Retention of newly gained knowledge and skills is dependent upon repetitive exercise; the instructor should provide ample time for trainees to practice newly acquired skills.
5. The relationship that the instructor maintains with the trainee is extremely important. While giving more guidance and help to the slower learner, the instructor must plan interesting,

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session-related activities for fast learners to perform. Otherwise, the faster learners will probably become bored and lose interest.

6. Formal presentations should not last over one hour. It is also better to schedule formal training presentations in the morning when both you and the trainees are most alert.

### K-10-4 TRAINING RECORDS

It is necessary that training be recorded. The procedure for recording training should be simple but thorough. Individual training folders, although not required, are recommended. Training documentation should be in accordance with Type Commander (TYCOM) or command instructions. If utilized, it is recommended that the individual training folder contain:

1. Check In/Out format for Food Service Attendants (Figure 2-1).
2. Food Sanitation Training Certificate, NAVMED 4061/1 (Figure 10-1).
3. Report of Training Attendance (Figure 10-2).
4. Health Card/Health Certification.

These four items are considered sufficient for maintaining efficient training records and also to provide readily available personnel information concerning Food Service Attendants. All items can be retained in a binder for organizational purposes.

### K-10-5 ON-THE-JOB TRAINING

This is an area where a small investment (time) will pay great dividends (efficiency) compounded quarterly (length of food service attendants' tour of duty). One well-trained person can do the work of two or three poorly trained people. Well-trained personnel work better, faster, more efficiently, are better motivated and create fewer discipline problems than poorly trained personnel.

Sections 3, 4, 5, 6, 7, and 8 provide excellent information for on-the-job training. On-the-job training is definitely a learning process which is job or work-oriented. All training, other than formal classroom type, can be defined as on-the-job training. It can either be group or one-on-one, depending on the job and the number of trainees to be taught; however, always keep the groups as small as possible.

Never let opportunity for on-the-job training pass by. If you notice a person cleaning the mess decks table with only one bucket of water, stop them and show them the correct procedure (two-pan method). There are two major reasons for this: first, it teaches the person the correct method, and second, it re-establishes your high standards. If you permit someone to continue with the wrong method, then both that individual and the other food service attendants will notice this oversight and interpret it to be either poor leadership or a decline in standards.

Practice the following points:

1. Set realistic goals that the food service attendants can understand.
2. Realize that learning takes time. Learning the daily details which later become routine requires many hours of hard work.

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3. Speed up the learning process by praising where warranted, for encouragement is oil to the wheels of the mind. Be careful to praise only when justified. This again establishes your standards.
4. Build good morale. Inform food service attendants that they are a vital part of the food service organization. Help them realize that their job is important.
5. Recognize different mental and physical capabilities. This information is necessary to place the right person in the right job.
6. Finally, adopt the principle that each job is a stage in training for a more responsible assignment.

In training a newly-assigned food service attendant, tell the person exactly what is expected and make sure they understand what they are being taught. If possible, give them a written job description and distribute basic guidelines. Use the following method in teaching how to do a specific task or to operate or clean a piece of equipment:

1. Prepare the trainee (tell the person how to do the job).
2. Demonstrate the correct technique (show the person how to do the job).
3. Have the person perform under supervision while explaining to you what they are doing. Make training more realistic by preparing the food service attendants for the unusual or abnormal situations that may develop on the job. Make sure that they thoroughly understand and can apply what they are being taught. Extra time and effort spent in explaining and instructing during initial training will prove profitable.

### K-10-6 FOLLOW-UP TRAINING

Follow-up training is conducted to improve on-the-job performance. It may be limited to additional instruction or assistance in a specific aspect of the job. Follow-up on daily performance is the true measure of effective training; closely observe on-the-job performance and offer constructive criticism when necessary. Repeat training in any specific area of the food service attendant's performance that appears weak and continue to encourage and assist until the individual performs the job efficiently.

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**FOOD SANITATION TRAINING CERTIFICATE**  
BUREAU OF MEDICINE AND SURGERY

This Certifies that MSCS R. MANALAYSAY  
HAS COMPLETED A COURSE IN SANITARY FOOD SERVICE GIVEN AT  
Fla Naval Station, Mayport DATE 16 Nov 1976

AND HAS DEMONSTRATED UNDER ON-THE-JOB CONDITIONS THE APPLICATION OF THE PRINCIPLES WHICH WERE THE SUBJECT OF CONSIDERATION IN THE COURSE.

HMC F. CARNO  
NAVMED 4061/1 (6-67) INSTRUCTOR  
S/N 890-281-288

MSCM J. D. ALPHIN  
OIC, NAV FOOD MGMT  
MYPT FLA

REFRESHER TRAINING COMPLETED

AT NAS Jax., Florida DATE 13 May 1977  
MSCS Marvin L. METTS

AT NAS Jax., Florida DATE 16 Nov 1977  
MSCS Gareld L. MCPHERSON

AT \_\_\_\_\_ DATE \_\_\_\_\_

AT \_\_\_\_\_ DATE \_\_\_\_\_ MEDICAL OFFICER

AT \_\_\_\_\_ DATE \_\_\_\_\_ MEDICAL OFFICER

GPO 1975-7438-1 GPO 1975-743-207/3 S-1 MEDICAL OFFICER

Food Sanitation Training Certificate, NAVMED 4061/1

Figure 10-1

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REPORT OF TRAINING ATTENDANCE

Date: \_\_\_\_\_

**MEMORANDUM**

From: Mess Deck Master-at-Arms  
To: Food Service Officer  
Subj: Report of Training and Attendance  
Encl: (1) Lesson Plan for Session

1. Lesson:
2. Week of:
3. Date completed:
4. Personnel attending:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature of MDMAA

Figure 10-2

**TABLE I**  
**RECOMMENDED QUANTITY OF DISHWASHING COMPOUND**  
**FOR SINGLE-TANK MACHINES**

1. The quantity of dishwashing compound used is dependent upon:
  - a. The amount of wash water in the machine's tank.
  - b. The hardness of water being used.
2. Water hardness is the critical factor in determining the type and amount of dishwashing compound to use. Water produced by the ship's distilling plants is always very soft. Water furnished from the pier is always harder and will vary greatly depending on location. The engineering/public works department should assist in determining water hardness.

Water Hardness <sup>1</sup>	Water in wash tank (Gal.)	Type of compound	Amount (Oz.)	Amount <sup>2</sup> (Cup)
<u>Soft:</u> <sup>3</sup>	10	II <sup>4</sup>	3½	½
	15	II	5½	2/3
	20	II	7	1
<u>Medium hard:</u>	10	I <sup>5</sup>	5	2/3
	15	I	7½	1
	20	I	10½	1 1/3
<u>Hard:</u>	10	I	7	1
	15	I	10	1 1/3
	20	I	14	1¾

<sup>1</sup>Shipboard produced water may be considered soft. Ashore dining facilities should adjust quantities of detergent according to local water conditions.

<sup>2</sup>Add ½ the quantity shown after six racks have gone through the machine. The quantities in the table are initial charges.

<sup>3</sup>Engineering/public works department should determine hardness of water.

<sup>4</sup>Dishwashing compound, Type II for soft water.

<sup>5</sup>Dishwashing compound, Type I for hard water.

**TABLE II**  
**RECOMMENDED QUANTITY OF DISHWASHING COMPOUND**  
**FOR DOUBLE-TANK MACHINES**

1. The quantity of dishwashing compound used is dependent upon:
  - a. The amount of wash water in the machine's tank.
  - b. The hardness of water being used.
2. Water hardness is the critical factor in determining the type and amount of dishwashing compound to use. Water produced by the ship's distilling plants is always very soft. Water furnished from the pier is always harder and will vary greatly depending on location. The engineering/public works department should assist in determining water hardness.

Water Hardness <sup>1</sup>	Water in wash tank (Gal.)	Type of compound	Amount (Oz.)	Amount <sup>2</sup> (Cup)
<u>Soft:</u> <sup>3</sup>	10	II <sup>4</sup>	3½	½
	15	II	5½	2/3
	20	II	7	1
	25	II	9	1¼
<u>Medium hard:</u>	10	I <sup>5</sup>	5	2/3
	15	I	7½	1
	20	I	10½	1 1/3
	25	I	12	1½
<u>Hard:</u>	10	I	7	1
	15	I	10	1 1/3
	20	I	14	1¾
	25	I	16½	2¼

<sup>1</sup>Shipboard produced water may be considered soft. Ashore dining facilities should adjust quantities of detergent according to local water conditions.

<sup>2</sup>Add ½ the quantity shown after six racks have gone through the machine. The quantities in the table are initial charges.

<sup>3</sup>Engineering/public works department should determine hardness of water.

<sup>4</sup>Dishwashing compound, Type II for soft water.

<sup>5</sup>Dishwashing compound, Type I for hard water.

## TABLE III

### DISHWASHING MACHINE DETERGENT AUTOMATIC DISPENSER

Installation of a dishwashing detergent automatic dispenser is highly beneficial and strongly recommended. It is designed to automatically feed the dishwashing machine's wash section whenever the dishwashing detergent concentration falls below the proper level. The use of an automatic dispenser significantly reduces the food service attendant's work load and minimizes the wasteful use of dishwashing detergent.

Dishwashing detergent automatic dispensers are available in the supply system.

Below are procedures to be followed when using a dishwashing detergent automatic dispenser, regardless of its make or type:

1. Consult the manufacturer's operating manual for specific instructions.
2. Add dishwashing detergent as necessary. Many dispensers have an alarm feature which indicates when the detergent is running low.
3. Check the reservoir outlet daily to ensure that it is not clogged. An effective procedure is to stir the detergent in the reservoir periodically to prevent caking and settling which could clog the outlet hole.
4. Daily check the sensing electrodes, mounted in the wash tank, to ensure that they are not coated with mineral scale or other foreign matter. Clean the electrodes as necessary but at least once a week. A nylon web pad is ideal for this type of cleaning. Sensing electrodes are susceptible to corrosion from acid and should be protected from contact with the acid solution when descaling the dishwashing machine.
5. Ensure that periodic maintenance and calibration is performed by trained and authorized personnel as part of the planned maintenance subsystem.

**TABLE IV**

**RINSE ADDITIVE AUTOMATIC DISPENSERS  
FOR THE DISHWASHING MACHINES**

Rinse additive automatic dispensers installed on dishwashing machines are useful attachments designed to produce gleaming and virtually spotless dinnerware and silverware. Injected in very small amounts into the dishwashing machine's final rinse section, the rinse additive reduces the water's surface tension to allow dinnerware and silverware to dry more quickly with very little streaking and spotting. However, so called "short cuts" from the recommended washing procedures such as dinnerware not prewashed, improper amount of dishwashing machine detergent added, excessively loaded silverware cylinders or tray racks, will make the rinse additive ineffective.

Operation and maintenance of the different types of rinse additive automatic dispensers varies, depending upon the design and the manufacturer. In any case, consult the technical manual that accompanies the equipment. Food service attendants assigned to the scullery should not tamper with this device except to add additive solution, to clean the exterior, or to adjust the valve regulating the rinse additive's rate of flow.

Both the rinse additive automatic dispenser and liquid additive are available.

## TABLE V

### INSTRUCTIONS AND QUESTIONNAIRE FOR INCOMING FOOD SERVICE ATTENDANTS

1. Food service attendants have been an important part of the Navy from the beginning and will continue to be so as long as there are ships. Most of the chief petty officers and senior enlisted personnel on board, as well as numerous captains and admirals in today's Navy, served as food service attendants in the early days of their careers. Scuttlebutt has it that "messcooking (the previous term for food service attendant duty) is a nasty job and that you will suffer all types of hardship and injustice." This is not true. There are times when the work is hard and the hours long, but this is the case in most jobs aboard a Navy ship. While serving in the food service division, your future leading petty officers will be your "customers." There's a saying that, "If a sailor does a good job as a food service attendant, then that sailor will perform in a similar manner when rated." Many senior petty officers use this theory and closely watch the food service division for future "strikers."
2. While assigned as a food service attendant, the responsibility for the handling and service of food, as well as the sanitation of the serving line, dining area and related spaces, will be delegated to you and your fellow food service attendants. Keep in mind that the health and well-being of your shipmates depend on how well you do your job. Your attitude, personal appearance and concern for your customers play an important role in providing excellent food service for the crew.
3. Rules and regulations are necessary in any organization. In order to make your temporary assignment more meaningful while assigned to the food service division, familiarize yourself with the following:
  - a. Upon reporting to the Mess Deck Master-at-Arms, you will be assigned to the Supply Department. Work schedules, liberty/leave policy, personnel and similar inspections, and berthing while assigned as a food service attendant will all be discussed and explained to you by the Mess Deck Master-at-Arms.
  - b. Upon completion of your indoctrination period, you will be assigned to a job in the food service area. Some of the jobs may seem harder than others; nonetheless, they play a very important role in the overall image of the food service division. Strive to do your best in whatever job you are assigned. Your supervisors will readily notice your commendable performance and it will not go unrewarded. Furthermore, your reputation as a high caliber performer will remain with you beyond your duty as a food service attendant.
  - c. You will muster for work as instructed by the Mess Deck Master-at-Arms. When reporting to work, you will be inspected by the Mess Deck Master-at-Arms for cleanliness and personal hygiene. Always present a smart appearance; your hair must be clean and in accordance with Navy grooming standards, your fingernails must be clean and trimmed short, your uniform must be clean and "squared away," and your shoes must be polished. Additionally, observe the wearing of hats and "no smoking" regulations at all times.
  - d. It is expected that you will remain at your assigned station until all work is completed unless directed otherwise by the Mess Deck Master-at-Arms. Relief of one food service attendant by, or job-switching with, another food service attendant without authorization by the Mess Deck Master-at-Arms is not permitted.

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e. Whatever your job assignment, you will be expected to perform it as instructed by the Mess Deck Master-at-Arms. Shortcuts are not allowed; the end product will be less than acceptable and may possibly contribute to an injury or harm to an individual. Remember that the supervisors who instruct in these jobs are highly knowledgeable and proficient. Nonetheless, should you come up with an idea for improvement, bring it to your supervisor's attention.

f. Disagreements or misunderstandings while assigned to the food service division should be brought to the Mess Deck Master-at-Arms' attention. Do not attempt to settle it yourself. Your supervisor is more experienced in handling such problems.

g. Keeping aware of changes within the Supply Department is of the utmost importance as food service regulations and procedures are constantly being updated and improved. The Mess Deck Master-at-Arms will keep you informed of what's going on concerning your job as a food service attendant.

h. Your liberty will be regulated by the Mess Deck Master-at-Arms. When on authorized liberty, ensure that you return to your job on time and in a capable condition. In the event of a bona fide emergency, immediately notify your supervisor so that necessary arrangements may be initiated to assist you.

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**INCOMING FOOD SERVICE ATTENDANT'S QUESTIONNAIRE**

*This questionnaire is to be completed during your indoctrination period. Return it to the Mess Deck Master-at-Arms upon completion.*

1. Who is your division officer while assigned as a food service attendant? \_\_\_\_\_
2. Who is your immediate supervisor? \_\_\_\_\_
3. What is the uniform for food service attendants assigned to the dining area? \_\_\_\_\_
4. What time do you muster in the morning? \_\_\_\_\_ Where? \_\_\_\_\_
5. What time do you start setting up for:  
Breakfast? \_\_\_\_\_ Lunch? \_\_\_\_\_ Dinner? \_\_\_\_\_
6. What time period is the serving line open for the crew? Breakfast \_\_\_\_\_  
Lunch \_\_\_\_\_ Dinner \_\_\_\_\_
7. When should the dining tables and chairs be cleaned? \_\_\_\_\_
8. Why is a clean-as-you-go program necessary? (Example: Wiping the dining tables between sittings) \_\_\_\_\_
9. When should the napkin dispensers, salt and pepper shakers, sugar dispensers, and table condiment containers be cleaned? \_\_\_\_\_
10. How frequently should the napkin dispensers, salt and pepper shakers, and sugar dispensers be emptied and placed into the dishwashing machine? \_\_\_\_\_
11. At what temperature ranges should the dishwashing machine be maintained during operation?  
Wash section \_\_\_\_\_ Rinse section \_\_\_\_\_ Final rinse section \_\_\_\_\_
12. How long should dinnerware/silverware be allowed to air dry after being removed from the dishwashing machine? \_\_\_\_\_
13. When should the dishwashing machine be disassembled and thoroughly cleaned? \_\_\_\_\_
14. When should the scullery be thoroughly cleaned? \_\_\_\_\_
15. When should trash containers and lids be thoroughly cleaned? \_\_\_\_\_
16. The milk tubes should be cut at what length below the metal dispensing mechanism?  
\_\_\_\_\_
17. Explain the correct procedure for cleaning dining tables, chairs, and bulkheads. \_\_\_\_\_  
\_\_\_\_\_
18. Where is the laundry bag for food service attendants' trousers located? \_\_\_\_\_
19. When should the clean trousers be returned from the laundry? \_\_\_\_\_  
\_\_\_\_\_

**TABLE VI**

**CHECK LIST FOR MESS DECK MASTER-AT-ARMS**

Daily	Weekly	Every Other Week	Monthly
<ol style="list-style-type: none"> <li>1. Muster and inspect food service attendants.</li> <li>2. Review "daily and weekly" work schedule.</li> <li>3. Check food service attendants berthing space (note laundry bag).</li> <li>4. Check temperatures of the dishwashing machine during operation.</li> <li>5. Review on-the-job safety.</li> <li>6. Check equipment for operating defects and report to leading MS/FSO.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inventory fast moving consumable supplies.</li> <li>2. Check with Leading CS for receipt of provisions.</li> <li>3. Check dishwashing machine for scale/mineral deposits.</li> <li>4. Clean ventilation exhaust filters.</li> <li>5. Check trouble call log/inoperative equipment report and make follow-up report.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inventory dinnerware and silverware.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure safety and operating instructions are updated and posted.</li> <li>2. Review food service attendants' job rotation.</li> <li>3. Inventory all consumable supplies.</li> <li>4. Review Planned Maintenance Subsystem for assigned equipment.</li> </ol>

## **SUMMARY**

### **REVIEW OF RESPONSIBILITIES**

Have you noticed the number of times “effective” has been used throughout this appendix? According to the dictionary, effective is “producing a decided, decisive, or desired effect or the decisive accomplishment of a result or fulfillment of an intention.” Regardless of your intention, in order to be effective, the intention must be fulfilled. Effective is certainly a very positive word.

All of the many items covered in this appendix are important things to know and follow. Refer to this appendix often and soon the correct procedures will come automatically.

By following four very important supervisory techniques, your effectiveness as well as the effectiveness of the food service attendants will increase immediately. They are:

1. Muster and inspect food service attendants each morning prior to beginning breakfast set-up. (Use military procedure and be forceful).
2. Train food service attendants - both formally and on-the-job.
3. Set your standard. Require food service attendants to come up to it. Don't compromise.
4. Show interest - berthing spaces, laundry, career planning, etc.

In short - be positive and effective and remember that your assignment as Mess Deck Master-at-Arms is more than a job. It's a responsibility to your shipmates.

## APPENDIX L TRAINING

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## APPENDIX L TRAINING

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### L-1 GENERAL

Personnel who are properly trained form the foundation of an efficient and effective food service operation. A vigorous training program will result in better personnel performance and consequently, an improved operation in terms of both production and quality of service to patrons. Equally important, it affords personnel a better opportunity for advancement, thus improving morale.

Aboard ship, sufficient time is seldom available for attending shore-based schools. Because of this, it is mandatory to give close attention to the training possibilities of individual commands. While methods of training vary between ships/activities, the principle of time remains constant and must be carefully allocated to satisfy food service training and maintenance requirements. When time requirements are established, training and maintenance programs should be carefully planned, executed and controlled.

The information in this chapter is provided as a means to formulate and maintain an effective food service training program.

### L-2 DIVISION TRAINING PROGRAM

The primary purpose of this section is to provide assistance in the organization of a local food service training program. Contents will be determined by the needs of the local command.

A comprehensive training program should include four means of training: correspondence courses, schools, on-the-job training, and lectures/demonstrations.

In organizing a training program, remember that training is a means to an end, and that end should form the structure of the program. Decide specifically what the end or goal should be; that is, consider the food service areas that require increased attention and then establish an objective. Consider the following points in establishing a program tailored to your own needs:

- a. Instructor aids;
- b. Training methods;
- c. Training aids;
- d. Curriculum;
- e. Lesson planning, and
- f. Records and schedules.

It is necessary that training be recorded. The procedure for recording training should be simple but thorough. Individual training packages and folders will be structured and maintained according to the individual ships, Type Commander (TYCOM) and CNET guidelines. At a minimum, the following information should be kept on file by the Divisional Training Petty Officer:

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- a. Record of physical exam.
- b. Food handler's training certificate.
- c. Job rotation log.
- d. Record of training accomplished.
- e. Copies of profile sheets of exams completed.
- f. PQS for general mess operations.
- g. PQS for BQ operations.
- h. All other information considered pertinent by the respective FSO.

### L-3 INSTRUCTOR AIDS

1. GENERAL. The suggestions given below are intended to help upgrade and improve the level of instruction in a formal training program. Undoubtedly, the burden of instruction will fall on the food service division's petty officers, who may have had little formal training in the art of instructing. There are various aids available for all culinary specialists to become proficient in instructor training.

2. INSTRUCTOR TRAINING SCHOOLS. These schools help in developing the skills and confidence required of good instructors. If at all possible, one or more petty officers should be sent to an Instructor Training School in either Norfolk, VA or San Diego, CA.

3. NAVY INSTRUCTIONAL THEORY (NAVEDTRA 134). This manual can be used as a textbook for the inexperienced instructor. Each food service officer should read the manual and make it available to his/her petty officers.

4. TRAINING SESSIONS. Sessions for instructors may be the first step in establishing a training program. There are a few principles of learning what each instructor should know.

a. First, a great deal of self-motivation for training may not be present, in which case the instructor must provide the motivation essential to learning, e.g., self-satisfaction, promotion, recognition, etc.

b. Second, the learning process is considerably enhanced by the use of various training methods; therefore, the use of displays, mockups, movies, slides, and other audiovisual aids is desirable.

c. Third, the instructor must be sure of his/her facts. It is a well-known fact that to unlearn and relearn is more difficult than to learn correctly the first time. The instructor must provide time for the trainees to practice what they have learned.

d. Last, the relationship that the instructor maintains with the trainees is important. It is easy to fall prey to the temptations of ridiculing the slow learner; by doing so, an instructor is almost certain to lose the trainee. On the other hand, the more intelligent may be lost through boredom. The instructor must plan interesting activities related to the session for the fast learning trainees to perform while the point is being made to the slower ones.

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A final suggestion in solving the problem for the lack of qualified instructors is to use instructors from other divisions for damage control, first aid, and firearms training. The food service officer should arrange with other division officers for the services of their personnel to perform specialized training.

### L-4 TRAINING METHODS

1. GENERAL. Most of the sessions listed in the paragraph on "Curriculum" can be taught by lecture; however, this method should be combined with demonstrations when the applicable equipment, records, and other materials are available. In addition, because many of the professional topics correspond to actual job requirements, on-the-job training will frequently be the most effective method of training. More specific information concerning these three training methods is given below.

2. LECTURE. The lecture method for giving information normally is quick and effective if the subject matter has been thoroughly developed and organized. It is particularly useful in discussing policies and procedures and conveying new fundamental knowledge. This method is particularly useful in giving trainees background information in subject areas prior to on-the-job training. For example, in a course on bread making, such topics as baking theory and the effects of time and the conditions to which the bread dough is subjected, are well suited to a presentation by this method; however, for effective retention the demonstration or training phase of instruction should follow soon after.

3. DEMONSTRATION. Dramatization is used to give emphasis to a specific subject. Demonstration promotes interest through observation and stimulates a faster attainment of skills. When using this method, remember that prior planning and organization are necessary; everything that is part of the demonstration must be ready. If time permits, the demonstrator should rehearse before a knowledgeable spectator who can determine whether the presentation "comes across." This method is suitable for teaching trainees equipment operation; how to prepare reports, requisitions, or similar forms, and how to perform other duties that have a set procedure or definite standard. When used in conjunction with a lecture, sufficient information should be presented to familiarize the trainees with the subject and prepare them for the demonstration. In conducting the demonstration, the instructor must be exact, sincere, and explain each step and show why it is important to the overall operation. Periodically, questions should be asked by the instructor to see whether trainees understand the demonstrated steps. Be sure everyone understands all the materials and steps covered.

After a demonstration, a practice session should be conducted in which trainees put into practice what they have learned.

4. ON-THE-JOB TRAINING. This method is individually oriented and is done spontaneously while a person is engaged in normal work activity. It is usually accomplished under informal conditions with small groups and should take place where the job is actually performed. On-the-job training helps to correct weaknesses in job performance and is useful when new products and methods are introduced or to explain a change to an established procedure. It is the best method for teaching complex operations. Ideally, on-the-job training should be preceded by classroom training to give the trainee a thorough understanding of the subject matter. Guidelines for on-the-job training should entail the following:

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- a. Prepare the trainee;
- b. Demonstrate correct techniques;
- c. Try out performance by the trainee; and,
- d. Follow through on success of trainee.

5. **ADDITIONAL METHODS.** Depending on particular circumstances, other methods of training that may be useful are as follows:

a. **Role Playing.** Include participation of trainees in the enactment of a play or episode, followed by a group discussion. This method is particularly useful in developing the poise and tact required of wardroom food service personnel and food service attendants. The usual procedure for this technique is for the instructor to describe a situation, have trainees play the parts, and let the class analyze the episode.

b. **Conferences.** Conferences have the value in changing attitudes, extending practical knowledge through the experiences of others and correcting misunderstandings. This method is effective with experienced culinary specialists for resolving problems, stimulating ideas and for establishing or changing policy.

### **L-5 TRAINING AIDS**

1. **GENERAL.** Training aids that are properly constructed and used are valuable to any training lesson. In addition to illustrating or demonstrating the subject matter, training aids stimulate and hold the interest of the trainees; however, it should be kept in mind that training aids only reinforce the instructor, they do not replace the instructor. The following discusses training aids that are mainly for use in a training situation.

2. **PRINTED MATERIAL.** Printed materials such as books, pictures drawings, etc., are valuable to learning because they provide easy reference material; however, these aids should not be used as a substitute for teaching. Reading or passing out material to trainees and then asking a few questions about the material is a waste of valuable time that could be put to better use.

Printed material should be passed out or assigned for reading before the class session so that trainees can study the material to gain basic information about the subject matter. For example, if the subject training session is table setting, the appropriate section in NAVSUP Publication 486, should be assigned to the trainees as required reading. This will lay the foundation for proper table setting and help the trainees follow the presentation.

3. **TRAINING FILMS.** Training films are extremely useful as training aids to present information and to demonstrate skills or techniques. Before showing, the film should be previewed by the instructor and notes made of the main points and of those portions of the film that are of particular importance. The film should be introduced to the class giving the title and reasons for showing it and alerting the trainees to those portions of particular importance. After the film has ended, discuss it, summarize it, and clear up any misunderstandings the trainees may have about it.

Films directly applicable to the culinary specialist rating are listed in the U. S. Navy Film Catalog (NAVAIR 10-1-777).

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4. **TRAINING COST.** The Expenditure Log NAVSUP Form 1334 (Loss without Survey) may be utilized to expend up to \$50.00 maximum per month for associated food materials utilized for training. All food items used for training will be entered on the NAVSUP Form 1334 as separate single line item entries, not to exceed \$50.00 per month.
5. **SPECIALIZED PERSONNEL.** A person having expertise in a particular field or area being covered in a class session is a very valuable training asset. These specialized personnel offer experience and knowledge in their field that can develop in the trainees an enthusiasm for the subject. For example, an expert on manpower usage can demonstrate proper techniques of work flow that can be practiced on the job; an expert storekeeper can explain inventory procedures; and an expert pastry chef could demonstrate the fine points of preparing pies that would be impossible to learn from a recipe card. These people add to the training program by inspiring a desire for learning the subject.
6. **CHALKBOARDS AND CHARTS.** To gain the most effective use from a chalkboard, have as much of the class material as possible written on it before the session begins. When writing new material, do it quickly, and try to avoid getting in the trainees' line of vision or writing with your back to the class. Charts are valuable as permanent aids since they can be prepared in advance and are easily moved around; however, to be effective, they should be simple, the material should be understandable at first glance, and the lettering and illustrations should be large enough to be easily read or recognized. Charts are quite effective in presenting such material as enlargements of forms, diagrams of equipment, or illustrating the sequence of steps in a procedure.

### L-6 CURRICULUM

1. **CULINARY SPECIALIST CURRICULUM.** The present culinary specialist (CS) training curriculum was designed for optimal usage. The lesson plans are devised so that the trainer can follow a specific sequence that leads the MS's in the proper order of food service management. Each lesson should be 20 to 30 minutes long, with one topic scheduled per week.
2. **LONG RANGE TRAINING PLAN (Table 1).** The long range training plan is devised for the training petty officer to set up a training plan for the specific year. The plan should encompass the full calendar year, to include 4 hours of food sanitation training.
3. **SHORT RANGE TRAINING PLAN (The Culinary Specialist Division Quarterly Training Plan) (Table 2).** The short range training plan is an in-depth training plan that is compiled from the long range training plan. The short range training plan is prepared on a quarterly basis, and maintained on file for 1 year.
4. **REPORT OF TRAINING ATTENDANCE (Table 3).** This form is designed primarily to ensure an accurate record of attendance at training sessions. It will be signed by all personnel in attendance at the session. Upon completion of the training session, the remainder of the form will be filled in by the instructor who forwards it to the training petty officer to be kept on file.
5. **IMPLEMENTATION.** Even though the records contained herein are designed to satisfy most TYCOM requirements, individual TYCOM instructions should be checked and balanced with current instructions.

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### **L-7 CROSS TRAINING/JOB ROTATION LOG**

Culinary specialists are required to perform across a rather wide range of areas. They can be assigned to billets in general messes both ashore and afloat, to officers' and CPO messes afloat, and to quarters management positions ashore.

To ensure that personnel receive the proper training in all areas and are able to perform in any assignment, a certain amount of cross training and job rotation is required. It is the responsibility of cognizant officers and leading petty officers to ensure that each individual within their organization is afforded the opportunity to function in as many different assignments as possible. The CS Job Rotation Log provides a standard format to monitor individual qualifications and job assignments.

### **L-8 FOOD SERVICE ATTENDANT TRAINING PROGRAM**

In many general messes, the missing link in the chain of good food service is effective dining facility management. Contributing to this problem is the frequent turnover of the personnel concerned, both food service attendants and the Mess Deck Master-At-Arms (MDMAA). Good training for these personnel is therefore an essential part in the overall food service training program. Chapter 1 of this publication states that among the detailed duties assigned to the MDMAA, in conjunction with the medical department, is to administer a training program for food service attendants in sanitation, scullery, and food handling. Specifically, training in these areas should, at a minimum, include:

- a. Food Handling: Serving of food on the serving line and working in food-preparation areas;
- b. Sanitation: Maintaining cleanliness of general mess spaces and equipment, to include washing the cooking and baking utensils in the galley and bakery; and,
- c. Scullery: Operating the scullery equipment and handling the disposal of food waste.

The senior culinary specialist with his/her professional know-how, must develop written instructions covering the details and responsibility of each position in the dining area, on 5 by 8 inch cards or as lesson plans and maintain them in a file box or a three-ring binder. Use this information as a guide, and the preceding sections for your fluctuating food service personnel situation. Food Service Attendant training is covered in detail in Section 10 of Appendix K (Mess Deck Master-At-Arms Handbook) of this publication.

### **L-9 EVALUATING A TRAINING PROGRAM**

1. GENERAL. A successful training program is only as good as the results derived. Special efforts should be made to measure the progress of the trainees, and to determine the effectiveness of the training program.

Before measuring trainee progress, standards should be formulated before the training program begins. The trainees' progress can then be measured in terms of these standards. Progress can also be measured until such time as the desired standards are met or surpassed.

2. PERFORMANCE TESTS. A performance test requires a person to do a particular job under set conditions. Performance tests are especially useful in evaluating on-the-job training. Test instructions should be clear, complete, and standardized so that the trainee knows exactly what is expected. Your evaluation should be based on standardized procedures for the

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particular job being tested. Proper use of goals, materials, equipment, and the observance of safety precautions should be taken into consideration when making evaluations.

3. **WRITTEN TESTS.** Written tests should be used to measure the trainees' knowledge of facts and their understanding of the subject matter. It is important that test items be carefully prepared in order for the results to be accurate and reliable.

4. **OBSERVING PERFORMANCE.** The trainees' on-the-job performance may be evaluated by comparing the efficiency and the quality of their work to that of an experienced worker. For example, you could ask the trainee to prepare a certain recipe and compare it to one prepared by an experienced culinary specialist. An improvement in the quality of the product shows that the training has been worthwhile.



**Short Range Training Plan  
Table 2**

**CULINARY SPECIALIST DIVISION QUARTERLY TRAINING PLAN**

<b>Lesson Topic</b>	<b>Lesson Number</b>	<b>Date</b>	<b>Instructor</b>

**Prepared By:** \_\_\_\_\_ **Approved By:** \_\_\_\_\_





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## APPENDIX M

### PRESENTATION SILVER AND OTHER VALUABLE GIFTS

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## APPENDIX M

### PRESENTATION SILVER AND OTHER VALUABLE GIFTS

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#### SECTION 1: GENERAL

##### M-1-1 INTRODUCTION

Presentation silver and gold presents us with a vast number of time capsules, each representing a unique exchange and many with a fascinating tale to tell. The circumstances surrounding each presentation piece piques our curiosity and raises questions about specific people, places and events that beg to be answered.

Presentation silver is considered to be “priceless,” and many of the skills used in creating it are a “lost art,” with irreplaceable artistic expression.

Title 10 U.S. Code, Section 7221 authorizes the Secretary of the Navy to accept and care for gifts of silver and other valuable articles presented to United States ships by states, municipalities, organizations, individuals, or other sources, and is the basic authority to expend operational funds to care for such gifts. Presentation silver may consist of a single item (e.g., a bowl, a tray, a candelabra) or a group of items (e.g., punch bowl set, tea set, dinner service). Other valuable articles may consist of paintings, portraits, original historical documents, engraved clocks or chronometers, and other such items which the Commanding Officer considers to warrant continuing accountability. The historical value and intrinsic worth of such material, the continuing high level Navy and public interest it holds, and the numerous inquiries of donors concerning its status require the maintenance of detailed, current, and accurate records for all items of presentation silver and other valuable gifts. Presentation silver is the property of the U.S. Navy and cannot be authorized by assigned ship/activity Commanding Officer to be loaned or returned to anyone without prior NAVSUP and/or UNSECNAV approval.

##### M-1-2 ACCEPTANCE OF GIFTS

1. APPROVAL AUTHORITY. In line with Secretary of the Navy policy set forth in SECNAVINST 4001.1 series on the management of presentation silver, proper reporting, inventory and care of this signature required equipage is essential. In accordance with SECNAVINST 4001.2 and OPNAVINST 4001.1 Series, the following officials are delegated gift acceptance authority for gifts of silver made to vessels of the Navy under 10 U.S.C. 7221:

- a. Only the Secretary of the Navy can accept gifts of a value in excess of \$50,000.
- b. Gifts of a value from \$10,000 to less than \$50,000: the Vice-Chief of Naval Operations.
- c. Gifts of a value at less than \$10,000: the Commander, Naval Supply Systems Command.

A letter to the appropriate level of authority must be submitted requesting approval to accept the gift (see sample on following page). Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) (ATTN: SUP 51) will be provided copies of all related correspondence. These gifts become the property of the U.S. Navy and must be maintained intact as originally presented and safeguarded against damage and loss.

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SAMPLE ACCEPTANCE LETTER

4001

DRAFTER/DOC

DATE

From: Commanding Officer, SHIP (XXX 1000)

To: APPROPRIATE LEVEL

Subj: GIFTS<sup>1</sup> TO (SHIP) FROM (DONOR)

Ref: (a) NAVSUP P-485, Afloat Supply Procedures

1. To accept a gift in accordance with reference (a), (DONOR) have/has made unsolicited offers of gifts for (SHIP). The following is a list of presentation silver items and their appraised value.

<u>Gift</u>	<u>Cost, if Known</u>	<u>Appraised Value</u> <sup>2</sup>
1. ITEM, DES.	\$xxx,xxx.xx	\$xxx,xxx.xx
2. ITEM, DES.	\$xxx,xxx.xx	\$xxx,xxx.xx
3. ITEM, DES.	\$xxx,xxx.xx	\$xxx,xxx.xx
TOTAL		\$xxx,xxx.xx    \$xxx,xxx.xx

2. In the interest of crew morale and development of closer ties between (SHIP) and (DONOR), recommend approval of acceptance of the gift(s) specified as gift(s) to the Navy.

(COMMANDING OFFICER)

Copy to:

(TYCOM LEVEL)

NAVSUP (IF NOT ADDRESSEE)

<sup>1</sup> Gifts other than presentation silver fall under the cognizance of the Curator of the Navy.

<sup>2</sup> Appraised Value (Reproduction Cost) is defined as: "The total cost to reproduce an exact replica of the property, at current costs, using a similar or the same artist or craftsman, materials and design as the original property."

## **NAVSUP P-486 – Food Services Management**

### **M-1-3 REQUESTS FOR PRESENTATION SILVER**

Previously assigned sets of presentation silver which have been turned-in to storage may be reassigned by the Naval Supply Systems Command (on a loan basis) to active Fleet ships that submit justified requests. When a ship has a particular need for a set of such silver, a request will be submitted in a letter from the Commanding Officer or the prospective Commanding Officer to the COMNAVSUPSYSCOM (ATTN: SUP 51), Food Service Division. The letter will state the purpose for which the silver is required and will indicate the size and quantity of the items desired (e.g., one set of silver service consisting of: 1 large tray, 1 large punch bowl, 1 ladle, and 12 punch cups). If the requested silver is unavailable, the requesting ship will be advised of any available items which most nearly correspond to the specific items requested or be placed on the waiting list until appropriate items are available. It is recommended that only 2 or 3 items, or a small coffee and tea service, be assigned to submarines or ships with limited storage and security.

### **M-1-4 CLASSIFICATION FOR REASSIGNMENT PURPOSES**

Presentation silver received by a ship as a gift is classified as namesake silver. Namesake silver is assigned to a ship for as long as that ship remains in commission. Unless unusual circumstances exist, requests to turn-in namesake silver will not be honored. Presentation silver obtained from NAVSUP is transferred on a loan basis. Presentation silver on loan may be turned-in to the supporting FISC at any time provided prior approval is obtained from NAVSUP (SUP 51). On rare occasions, presentation silver on loan to a Fleet unit may become namesake silver when a new ship by the same name is commissioned. In such instances, the new ship will have first priority to any or all of such silver set as determined by NAVSUP.

## SECTION 2: RECEIPT

### M-2-1 APPRAISAL

After receipt of new silver an appraisal must be promptly completed to determine the value of the silver. Assistance in obtaining the appraisal may be obtained through FISC contracting or pierside procurement. It is strongly recommended that silver be reappraised every 5 years. Appraisal costs are chargeable to the ship's OPTAR. If appraisal services are performed aboard ship, the contractor must be accompanied by a crew member at all times. The contractor must provide an appraisal of the reproduction cost of the silver as opposed to the fair market value. Reproduction cost is defined as, "The total cost to reproduce an exact replica of the property, at current costs, using a similar or the same artist or craftsman, materials and design as the original property." For each appraisal conducted, the contractor must provide an appraisal for each ship or activity to include the following information:

- a. Quantity of each unique item
- b. Description, dimensions and markings of each unique item
- c. Weight of each unique item
- d. Metallic content
- e. Manufacturer (if available)
- f. Name of ship (include hull #) silver set originally donated to (as determined by inscription)
- g. Appraised value of each unique item
- h. Appraised value of total number of each item (e.g., twelve punch cups), if available
- i. Narrative justification of appraised value assigned
- j. Appraised value of each complete silver set
- k. Date of appraisal
- l. Name of ship or station silver for which appraisal was performed

The original of each completed appraisal and a legible copy of the invoice will be submitted within 15 days to:

Naval Supply Systems Command

P.O. Box 2050, Code SUP 51

5450 Carlisle Pike

Mechanicsburg, PA 17055-0791

## **NAVSUP P-486 – Food Services Management**

### **M-2-2 REPORT OF RECEIPT**

Within 60 days of receipt of presentation silver a complete inventory of the donated items will be sent to: Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791, or send email to:

**Presentation\_Silver@navsup.navy.mil**

A cover letter will be submitted with the inventory report giving the date and place of presentation, the name, address and phone number of the donor, and the name and address of the silversmith, if known. For gifts other than presentation silver, the report will be sent to:

Naval Historical Center

Curator Branch

Washington Navy Yard

901 M Street, Southeast

Washington, DC 20374-5060

A retained copy of the initial inventory report will be used to post receipts of new gifts to the controlled equipage custody records.

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### SAMPLE APPRAISAL FORMAT

USS CARL VINSON (CVN 70)

SANDWICH TRAY

DESCRIPTION: A sterling silver SANDWICH TRAY of circular outline, the perfectly plain center engraved with armorials.

INVENTORY NO: 19

INVENTORY TITLE: SANDWICH TRAY, circular 19" diameter

QUANTITY: 3 units

ORIGINAL OWNER: USS SAN FRANCISCO  
(Protected Cruiser No. 5)

DONOR: City of San Francisco, CA

METALLIC CONTENT: Sterling Silver

MANUFACTURER: Wallace International

DESIGN NO.: Not indicated

INSCRIPTION: "SAN FRANCISCO" in Old English letters

DIMENSIONS: Diameter: 19 inches  
Height: 1/2 inches

WEIGHT: 33 troy ounces each

CONDITION: Good

VALUE FOR UNIT: \$1,500.00

VALUE FOR SET: \$4,500.00

## NAVSUP P-486 – Food Services Management

### M-2-3 PHOTOGRAPHS

Proper management of Presentation Silver dictates that a system must be in effect which enables the holder of Presentation Silver to adequately identify to the appropriate investigative body a complete description of the item(s) should it/they become lost or destroyed. Accordingly, a photograph of each unique item shall be taken using a ruler in the photograph to indicate actual size as shown below. For example: for a punch service consisting of a punch bowl, ladle, a tray and twelve cups, four separate photographs are required, one each of the punch bowl, the ladle, the tray and one group photograph of the punch cups. The photographs are to be 8" x 10" black and white (color photographs are unacceptable due to distortion of silver and tendency to "cover" true condition of silver). One copy of the entire set will be forwarded promptly, after receipt of the silver, to NAVSUP (SUP 51). Two prints of each photograph will be retained by the ship as an additional means of inventory control. These prints will accompany the gift if and when it is transferred.

#### SAMPLE PHOTOGRAPH OF UNIQUE PIECE OF A SILVER SERVICE SET



# NAVSUP P-486 – Food Services Management

## M-2-4 REASSIGNED SILVER

1. REPORT OF RECEIPT. Within 30 days of receipt of presentation silver which formerly belonged to a ship that has been inactivated or otherwise disposed of, the recipient command will forward a receipted copy of the itemized DD Form 1149 (or DD Form 1348-1-A with an itemized inventory attached) by letter of transmittal to Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791. A receipted copy of the DD Form 1149 will be used to post receipts of reassigned silver to custody records. If reassigned silver is received without documentation, contact NAVSUP (SUP 51) and prepare a dummy receipt invoice (DD Form 1149) as illustrated below:

### SAMPLE DD FORM 1149 DUMMY RECEIPT INVOICE

SHIPPING CONTAINER TALLY										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50									
REQUISITION AND INVOICE / SHIPPING DOCUMENT															Form Approved OMB No. 0704-0246				
Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0246), Washington, DC																			
1. FROM (Include ZIP Code)					SHEET NO. 1		NO. OF SHEETS 1		9. REQUISITION DATE 26 Nov		8. REQUISITION NUMBER N00189-6330-								
(N00189) FISC Norfolk, VA (Code 301A)					7. DATE MATERIAL REQUIRED BY (MMDD)					8. PRIORITY									
2. TO: (Include ZIP Code)					9. AUTHORITY OR PURPOSE														
(R52704) USS JOUETT (CG-29)					COMNAVSUPSYSCOM ltr dtd 10 Nov 95														
3. SHIP TO - MARK FOR					10. SIGNATURE <i>J. M. Jones</i>					11. VOUCHER NUMBER & DATE (YMMDD)									
PRESENTATION SILVER CUSTODIAN					12. DATE SHIPPED (YMMDD)					b.									
					13. MODE OF SHIPMENT					14. BILL OF LADING NUMBER									
					15. AIR MOVEMENT DESIGNATOR OR PORT REFERENCE NO.														
4. APPROPRIATIONS SYMBOL AND SUBREAD			OBJ. CL.	BUR. CONT. NO.	SUBAL. LOT	AUTHORIZATION ACCT/GACTIVITY	TRANS. TYPE	PROPERTY ACCT. ACTIVITY	COUNTRY	COST CODE	AMOUNT								
16. FEDERAL STOCK NUMBER, DESCRIPTION, AND CODING OF MATERIAL AND / OR						UNIT OF ISSUE (g)	QUANTITY REQUESTED (d)	SUPPLY ACTION (e)	TYPE CONTAINER (f)	CON-TAINER NOS. (b)	UNIT PRICE (h)	TOTAL COST (i)							
1. Punch Bowl, 15" Diameter						1 EA													
2. Serving Tray, 24" Diameter						1 EA													
3. Punch Cups						12 EA													
Date Recv'd: 28 Dec 95 by <i>J. M. Jones</i>						I.M.T.G. N. N. Withrow. SC USS JOUETT (CG-29)													
18. TRANSPORTATION VIA MATS OR MSTs CHARGEABLE TO						17. SPECIAL HANDLING													
RECEIPT INFORMATION	ISSUED BY	TOTAL CONTAINERS	TYPE CONTAINER	DESCRIPTION	TOTAL WEIGHT	TOTAL CUBE	CONTAINERS RECEIVED EXCEPT AS NOTED	DATE (YMMDD)	BY	SHEET TOTAL									
	CHECKED BY						QUANTITIES RECEIVED EXCEPT AS NOTED	DATE (YMMDD)	BY	GRAND TOTAL									
	PACKED BY						POSTED	DATE (YMMDD)	BY	20. RECEIVER'S VOUCHER NO.									
	TOTAL																		

DD Form 1149, DEC 93 308/080 S/N 0102-LF-017-7900 (Navy Overprint 1994)

## **NAVSUP P-486 – Food Services Management**

a. If reassigned silver is received without a photograph, contact NAVSUP (SUP 51). An 8 x 10 inch black and white photograph of each unique piece received will be made for use as an additional means of inventory control. Photographs of reassigned silver are not normally required by NAVSUP unless there is no photograph on file.

b. If reassigned silver is received without an appraisal, contact NAVSUP (SUP 51) to check for NAVSUP file copy. If an appraisal is required, contact FISC contracting or pierside procurement for assistance. Upon receipt of appraisal, forward a copy to NAVSUP (SUP 51) for file.

## SECTION 3: CUSTODY AND STOWAGE

### M-3-1 GENERAL

Adequate protection and strict accountability of presentation silver is required to guard against damage or loss, which, if occurring, may cause public criticism of the ship's Commanding Officer and embarrassment to the Secretary of the Navy. The custody of presentation silver, therefore, will be entrusted to a responsible individual designated in writing by the Commanding Officer. The designated custodian will be responsible for adequate security, proper display, care, and preservation of all presentation silver items in his custody. When utilizing presentation silver for command functions where the designated custodian will not have immediate direct control of the items, subcustody records will be utilized.

### M-3-2 CUSTODY

1. RECORDS. The custodian of presentation silver is responsible for maintaining records, conducting physical inventories, and submitting required reports. Records to be maintained are as follows:

a. Controlled Equipage Custody Records, will be maintained for presentation silver or other valuable gifts (a presentation may consist of one item or a number of items). If all items included in a presentation cannot be listed and properly identified in a single custody record, separate custody records will be prepared for individual items or groups of items. In addition to the requirements, each custody record will include:

(1) A card number (to be consecutively assigned if more than one record is maintained);

(2) Complete description, including the engraving and dimensions, of each item;

(3) The name, address, and phone number of the donor; if known,

(4) The name of the ship and hull number to which originally presented;

(5) The quantity of each item;

(6) The condition of each item;

(7) The date of receipt;

(8) Place of presentation;

(9) The receipt document number, for reassigned silver; or the accession number for gifts other than silver. (The accession number is the numeric or alphanumeric identification number that is assigned by the Curator for the Navy upon receipt of the initial inventory report.);

(10) For presentation silver, photographs of each unique piece;

(11) Appraised value and date of appraisal.

b. Copy of inventories submitted to NAVSUP covering the most recent two year reporting periods.

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c. Copy of Financial Liability Investigation of Property Loss (DD Form 200) if applicable, submitted/prepared during the most recent two year period.

d. Copy of correspondence submitted to or received from NAVSUP for the most recent two year period.

e. Copy of appraisal report.

2. REFERENCE DATA. The designated custodian is provided the following list for use in the performance of duties:

a. Title 10, U.S. Code, Section 7221 - Acceptance and care of gifts to vessels.

b. Title 10, U.S. Code, Section 7546 - Loan or gift of articles to ships' sponsors and donors.

c. SECNAVINST 4001.1 Series - Delegation of responsibility for and inventory control of Presentation Silver Service.

d. SECNAVINST 4001.2 Series - Acceptance of Gifts.

e. NAVSUPINST 4441.20 Series - Fitting Out Guide for Prospective Supply Officers.

f. JAG Manual, Para. 0217-0220 - Report of Investigation, Distribution.

g. OPNAVINST 4440.4 Series - Declassification, Demilitarization and Stripping Procedures for Ships Programmed for Disposal.

h. NAVSUP MANUAL P-485, VOLUME III (Supply Ashore), Para. 23189 - Strip Ship Material.

3. SECURITY. The following excerpt from SECNAVINST 4001.1 Series is provided for appropriate information and action: "In addition to the historical value and intrinsic worth of presentation silver, the continuing high level Navy and public interest in this material requires that these gifts be maintained intact as originally presented, and safeguarded against damage or loss." Commands with a presentation silver inventory valued at \$90,000 or more should carefully evaluate their security procedures and consider integrating presentation silver security procedures into the ships' SORM. Consideration should be given to including display on Sounding and Security Watch/CDO rounds, installation of electronic sensors, and any other security devices deemed necessary.

### M-3-3 STOWAGE

1. PREPARATION FOR STOWAGE. Prior to placing presentation silver in storage, all items will be carefully cleaned, wrapped in anti-tarnish tissue and protected with an outer layer of bubble wrap cushioning material. It is extremely important to wrap silver in anti-tarnish tissue paper before bubble wrap. The bubble wrap causes the silver to sweat and will ultimately damage the silver if placed directly against the silver piece. Soft flannel can be used as a substitute for the anti-tarnish tissue paper. Once the items are carefully wrapped they will be labeled to identify the item and placed in a sturdy container. Sufficient packing material will be utilized to prevent damage of items from the motion of the ship.

2. STORAGE CONTAINER. The recommended storage container for presentation silver service is manufactured under federal specification: Class 5 Cabinet-AA-F-363B (GSA-FSS) and is covered under Federal Supply Schedule 71 III E (FSC Group 71 Part III Section E Miscellaneous Furniture Insulated and Uninsulated Security Filing Cabinets, Safes, Vault Doors,

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and Map and Plan Files) Special Item (S.I.). National Stock Numbers are assigned to the basic container while special numbers are assigned to associated drawers or shelves. The dimensions of the safe currently available from Mosler are: Inside - 25 3/4" high, 19 1/4" wide, 19 3/8" deep; Outside - 29" high, 22 5/8" wide and 24 1/4" deep. The recommended container, if possible, will weigh in excess of 500 pounds, therefore, weight and movement compensation will be required on most combatants as well as other type ships.

## SECTION 4: INVENTORY

### M-4-1 GENERAL

Physical inventories of presentation silver and other valuable gifts are required to ensure that all items received are actually on hand and in good condition.

### M-4-2 INVENTORY REPORTS

1. PRESENTATION SILVER. Each Command having custody of presentation silver will submit an itemized inventory report of such material to the Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791. An annual report is required for all sets appraised at \$90,000 or more; a biennial report, to be submitted in each odd numbered year, is required for all sets appraised below \$90,000. The report is to be submitted by letter no later than 20 March. The report will include the nomenclature (with dimensions) and the following information:

- a. Inscription
- b. Name of Donor
- c. Name of ship originally donated to
- d. Condition to be noted as follows:
  - (1) Excellent (like new);
  - (2) Good (almost new);
  - (3) Fair (minor dents and scratches OR items for which an expert appraiser or silversmith recommends repairs not required in order to preserve historical value); or
  - (4) Poor (broken, missing parts, repairs required).

**NOTE:** If listing condition is Fair or Poor, a detailed description must be provided.

- e. Manufacturer, if known
- f. Appraisal date
- g. Appraised value
- h. Attach DD Form 200 when applicable

2. OTHER VALUABLE GIFTS. Inventories of gifts other than presentation silver are required to be taken upon relief of the custodian, upon change of command, and upon inactivation of the ship. Upon completion of the inventory, both the custodian being relieved and the relieving custodian (if applicable) will report to the Commanding Officer that the inventory has been completed, with an itemization of any missing or damaged items. For inventories incident to change of command or inactivation of the ship, an itemized inventory will be submitted to the Naval Historical Center, Curator Branch, Washington Navy Yard, 901 M Street, Southeast, Washington, DC 20374-5060. The inventory will be submitted by letter, identified by NAVHISTCEN report symbol 4001-1, as soon as practicable after completion of the inventory. The report will include the following:

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- a. Description (including inscriptions) and quantity of each item;
- b. Name of the donor;
- c. Accession number assigned by the Curator for the Navy;
- d. Identification and explanation of any damaged items;
- e. Copy of a completed DD Form 200 for any item which, incident to inventory, is determined to be missing or destroyed.

### **M-4-3 CARE AND MAINTENANCE**

1. **GENERAL.** Presentation silver is a part of America's history and Navy tradition and requires correct handling to prevent damages. White cotton gloves should always be worn. Bare hands will leave fingerprints or other marks which may be hard to remove. Silver should be handled one piece at a time using both hands. When setting silver down, place the piece down gently and by itself. Ask for assistance with bulky or heavy pieces.
2. **ROUTINE CARE.** Maintenance of presentation silver can be an easy matter if a regular program is established. It is recommended that presentation silver be cleaned every three months. All surfaces should be lightly wiped down using a polishing mitt or polish-saturated soft cloth. A mild dishwashing liquid in hot water may be used to wash pieces by hands. Silver should be immediately and thoroughly dried with a soft cotton or linen cloth.

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NAVSUP REPORT 4001-1

15 March 2000

USS SOUTH WIND (FFG-001)

**PRESENTATION SILVER INVENTORY**

Certification: I hereby certify that the following inventory is accurate to the best of my knowledge. I further certify that any change(s) from the prior year inventory report is (are) properly documented and supported in accordance with NAVSUP P485, Afloat Supply Procedures.

*A B Jonah*

*William Still*

A. B. JONAH, CDR, SC, USN

WILLIAM STILL, LT, SC, USN

Responsible Officer

Assigned Custodian

<u>ITEM NO.</u>	<u>QTY</u>	<u>U/I</u>	<u>ITEM</u>	<u>DEPT/DIV</u>
# 01	01	EA	COFFEE POT w/lid, handle. 11.5" high, 8.5" wide (spout tip to handle) sterling silver	SUP/S5
			a. USS SOUTH WIND crest (front) Presented to the USS SOUTH WIND (FFG-001) by her sponsor Mrs. Jeremy Slatter on the occasion of her commissioning August 14, 1985. (back)	
			b. Mrs. Jeremy Slatter	
			c. USS SOUTH WIND (FFG-001)	
			d. Good	
			e. Wallace International	
			f. September 7, 1985	
			g. \$460.00	
# 02	01	EA	TRAY, COFFEE/TEA SERVICE, oval, w/handles. 13" wide, 18" long, 1.5" deep - sterling silver	SUP/S5
			a. Scene of customs house, Water Street Somewhere, Ohio (center) Seal of Ohio (upper rim) Seal of Navy Department (lower rim)	
			b. Mrs. Jeremy Slatter	
			c. USS SOUTH WIND (FFG-001)	
			d. Good	
			e. Wallace International	
			f. September 7, 1985	
			g. \$585.00	

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3. **POLISHING.** Polishing requires special care and consideration. Presentation silver may be cleaned professionally or by using polishing kits available from Fleet Industrial Supply Center, Norfolk, Code 100S, 757-443-1165 (DSN 646-1165) or Fleet Industrial Support Center, San Diego, Code 112, 619-556-4965 (DSN 526-4965 ). Instant or dip type commercial cleaners are not approved for cleaning presentation silver. Pieces with unique engravings or details require extra time and thought during polishing. Allow enough space to move freely and cover the workspace with plastic to protect the surface. The following procedures should be used to clean the silver:

- a. Using a container with hot water and a mild dishwashing liquid, gently clean all sides with a thin damp sponge. With the same sponge, rinse the piece with water from another container.
- b. Using a small quantity of polish on a clean sponge, put a thin coating of polish all over the silver and allow to dry briefly and then rinse off.
- c. With a circular motion, lightly rub a little polish over one area at a time. When one area has become bright, move to a new area. Never press hard or scrub while polishing.
- d. Wash off polish with a clean sponge being sure to clean out any carved or engraved areas. Cotton tipped applicators can help in these areas. These can be hard to polish and an attempt should not be made to remove all tarnish from these areas, especially in those places where oxidation is used as accent.
- e. Use a wet soft toothbrush or a "Tampico" brush to remove old polish that has dried in engravings and crevices by gently rubbing the surface to lift the polish out.
- f. When polishing is completed, rinse carefully to remove all traces of polish. Dry thoroughly before returning to display cabinet or packing for storage.

### 4. SPECIAL CONSIDERATIONS.

- a. **Acid Etching.** This is a process by which an engraving or detailed design is painted on a silver item with warm wax. After the wax hardened, the object is placed in acid that eats away a layer of silver around the wax. Due to the delicate nature of these designs, use a specially made polishing mitt and be sure keep fingers straight when lightly wiping the surface. Do not put any pressure on the engraving or design.
- b. **Engraving/Flat Chasing.** Engraving is one of the most common ways to decorate silver and is performed by using a sharp point to cut lines, detailed patterns and create three-dimensional patterns. Flat chasing is made by a tool pressing into the object making a design that leaves its pattern on the inside surface. Clean these areas by wiping gently, without pressure, using a specially treated polishing cloth or mitt. Be sure to thoroughly wash out all traces of polish from the fine lines or it will dry, detracting from the piece's appearance.
- c. **Oxidation.** This term is used to describe dark areas which are recessed or sunken in a decorative pattern. Never try to polish out these places as they have been specially designed to create shade or accent parts of the design. Oxidation creates contrasts of color and texture which is important to the appearance. Polish only the upper surface and lightly wipe the recessed or sunken areas. Wait for the polish to dry before removing using a soft-bristled toothbrush to gently brush and lift away particles of polish. A cotton-tipped applicator is also useful.

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d. Repousse. This decoration appears to have been carved in the silver or stands away from the body of the object giving it a three-dimensional look. Clean with a polishing mitt or treated cloth to keep polish from settling in the details. The appearance and treatment are similar to those for oxidized silver.

e. Weighted Silver. Lightweight silver objects particularly candlesticks and footed shallow dishes, often have filled or "weighted" bases. These pieces are filled with plaster, resin or cement to prevent them from falling over. They are usually marked on the under side of the base "cement filled," "weighted," or "weighted base" to warn the user that they have been filled and are not solid. These pieces should never be placed directly into water, which can cause the filling to either melt or shift and the object become unbalanced.

f. Lacquered Surfaces. This is when a thin coating of chemical substance is put on the silver object to protect from tarnish and chemicals. However, these substances become yellowed and brittle over time leaving the exposed silver tarnished and hard to polish. When the lacquer has become chipped exposing the silver, it is best cleaned with a polishing mitt or treated cloth to prevent unsightly tarnish.

g. Gilt/Gold Wash. Gilding is a coating of gold used to enrich the decoration with its gold appearance or to protect certain surfaces from acids and chemicals in food. It is easily recognized by its yellow color. Polish should not be used on these surfaces, as the coating will easily come off. Instead, use a mild soap and water and wipe gently to dry. Do not rub these areas.

h. Candle Wax. Whenever candles have been used in table decorating, it is almost certain that the melted wax will drip where it is not wanted. Allow the wax to become cold and harden before trying to remove it from any surface. When the wax is hard, many times it can be gently chipped or picked away from the object. If some of it remains on the silver, place a cloth soaked in hot water on the area to melt it slightly and carefully rub or ease away the wax with a cotton tipped applicator. After the wax has been removed, polish the area again lightly to protect the surface.

i. Wood Surfaces. Occasionally silver pieces have handles, carved finials or other parts made of wood. These should never be placed in water. Keep the wooden parts looking attractive by rubbing a light coating of an oil-based furniture polish into the wood. Do not allow silver polish to dry on wooden parts or in areas where they join the body, such as hinges.

5. SILVER CARE PRODUCTS. Both FISC Norfolk Code 100S and the FISC San Diego Code 112 stock a supply of anti-tarnish tissue paper, flannel cloth storage bags, and silver cleaning kits for your use. To obtain these products contact FISC NV (757-443-1165 or DSN 646-1165) or FISC-SD (619-556-4965 or DSN 526-4965 ) or contact your ship's LSR.

### **M-4-4 MISSING, DAMAGED OR DESTROYED ITEMS**

1. DAMAGED ITEMS. If a presentation item or other valuable gift is damaged, and repair is possible, it will be repaired even though the cost to do so may not be considered economical. The cost of such repairs are properly chargeable to the ship's OPTAR. If an item is damaged to such an extent that it cannot possibly be repaired (i.e., destroyed) it will be surveyed.

2. MISSING OR DESTROYED ITEMS. Presentation silver items and other valuable gifts which have been lost, stolen or destroyed must be expended by means of survey. The survey action will be initiated as soon as the loss or irreparable damage is discovered. A detailed description

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of the circumstances relative to the loss or damage will be included in the DD Form 200 or in attachments thereto. If the survey pertains to a missing item and it is suspected that the missing item may have been stolen, the loss will be reported by letter to the Naval Criminal Investigative Service Headquarters (NCISH), Washington, DC 20388-5380 in accordance with SECNAVINST 5500.4 series.

a. All surveys of presentation silver determined to be missing or destroyed must be approved by NAVSUP, not by the ship's Commanding Officer. Missing or destroyed silver must be reported to NAVSUP (SUP 51) within 48 hours after discovery via naval message, or saltgram (COMNAVSUPSYSCOM NFS) as required by SECNAVINST 5500.4. After the initial notification of the missing or destroyed item(s), a letter report will be promptly submitted to the Naval Supply Systems Command (ATTN: SUP 51) briefly outlining the known facts surrounding the loss or destruction. The letter will include, as a minimum:

- (1) A brief description and quantity of the item or items lost or destroyed,
- (2) The name of the designated custodian,
- (3) A telephone number, if available,
- (4) A statement regarding the feasibility of replacement.

After the issuance of the report, the submission of a DD Form 200 is required in all cases where loss of presentation silver is involved. Ensure the current edition of DD 200 is used. When a missing or destroyed item of presentation silver is surveyed, the original and one copy of the completed DD Form 200 will be forwarded immediately in a letter of transmittal to the Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791 for approval. Only NAVSUP (SUP 51) is authorized to approve the DD Form 200. When a missing presentation silver item which has been reported to the NCISH results in the issuance of a Report of Findings, forward a copy to NAVSUP (SUP 51) for file. Since loss of presentation silver is a potential embarrassment to the Secretary of the Navy, action will be taken to replace missing items with exact duplicates, chargeable to ship's OPTAR. If the manufacturer of the missing item cannot be determined or contacted, NAVSUP (SUP 51) may be able to assist in locating silver replacement sources. A copy of all correspondence concerning replacement of missing presentation silver will be provided to NAVSUP (SUP 51).

b. When a missing or destroyed item other than presentation silver is surveyed, a copy of the completed DD Form 200 will be forwarded immediately in a letter of transmittal to the Curator for the Navy. However, if the loss or damage is discovered during an inventory incident to change of command or inactivation of the ship, the copy of the completed DD Form 200 will be included with the inventory report. When a missing item which has been reported to the NCISH results in the issuance of a Report of Findings, the Curator for the Navy will be advised in order that a copy may be requested as required.

### **M-4-5 RECOVERY OF MISSING ITEMS**

In the event that a presentation silver item or other valuable gift which was surveyed as missing is subsequently found, written notification of the recovery will be promptly sent to the Naval Criminal Investigative Service Headquarters (if notified of the loss) and either Naval Supply Systems Command (Food Service Division, SUP 51), if a presentation silver item, or to the Curator for the Navy, if other than a presentation silver item. The "receipt" of the recovered item

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will be posted to the custody record by reversing the previous survey entry.

## SECTION 5: TURN-IN

### M-5-1 GENERAL

Except for the circumstances mentioned in this section, presentation silver will not be transferred, loaned or removed from the ship without prior approval and disposition instructions from NAVSUP. Except for the circumstances mentioned in this section, valuable gifts, other than presentation silver, may not be transferred without prior approval and disposition instructions from the Curator for the Navy. Presentation silver is the property of the U.S. Navy and cannot be authorized by the assigned ship or activity Commanding Officer to be loaned or returned to anyone without requesting in writing via NAVSUP to UNSECNAV for approval. Direct any loan or return inquiries to COMNAVSUPSYSCOM (SUP 51). Do not include presentations of the silver at decommissioning ceremonies unless the loan or return has been approved. Any movement of silver (transfer, temporary storage, etc.) must be reported to NAVSUP Code 51.

### M-5-2 STRIP SHIP

1. GENERAL. When directed by competent authority to remove "strip ship material," any presentation silver or other valuable gifts on board will be transferred subject to the restrictions indicated in the following paragraphs.
2. PRESENTATION SILVER. Presentation silver, together with 8" x 10" black and white photographs, appraisal, and copy of most recent inventory report submitted to NAVSUP, will be turned in for temporary vault storage at the nearest FISC or Supply Department of the Naval Shipyard for safekeeping. To ensure proper turn-in procedures are in place, it is recommended that the custodian of the silver contact the storage point and/or NAVSUP for specific disposition instructions. Broken or visibly damaged items will not be accepted for turn-in. Holders are expected to repair or survey broken/damaged items prior to turn-in. All DD Form 200s for presentation silver require NAVSUP approval prior to turn-in. A legible copy of the transfer document (DD 1149 or DD 1348-1-A) will be provided to Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791 within 30 days of transfer. A legible copy of the receipt document (DD 1149 or DD 1348-1-A) including the name (printed and signed), command code, phone number of the new holding custodian, and date received will be forwarded to NAVSUP (SUP 51).
3. OTHER VALUABLE GIFTS. Gifts other than presentation silver will be shipped directly to the Curator for the Navy, Naval Historical Center, Washington, DC 20374-0571.

### M-5-3 TEMPORARY VAULT STORAGE

When scheduled for a period of extended maintenance such as regular overhaul, restricted availability, or post shakedown availability, and, in the opinion of the Commanding Officer, the level of industrial activity will create a significant security risk, presentation silver or other valuable gifts must be transferred for temporary vault storage to the nearest FISC, or Naval Shipyard. In all such instances, NAVSUP (SUP 51) or the Curator for the Navy, as appropriate, will be advised by letter when the presentation silver or other valuable gifts are transferred. As a minimum, the letter will include the date of transfer, transfer document number, activity to which transferred, and expected date of return. Upon return of the presentation silver or other valuable gifts, a letter report will be made to NAVSUP (SUP 51) or the Curator for the Navy, as appropriate. Inventory reports are still required by March 20. NAVSUP will accept letter and transfer document as your report if silver is still in storage during the reporting cycle. It is

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required that tamper-evident serialized seals be used on the storage containers for silver to be temporarily stored at the FISC's. Ensure silver is prepared for stowage. The silver remains under the custody of the transferring activity and FISC signs only for the containers, not its contents. Presentation silver in storage containers without serialized seals **will not** be accepted by the FISC.

### M-5-4 REPAIR

It is the obligation of each ship with presentation silver to provide responsible care and upkeep of its service. The Pierside Procurement Specialist (PPS) should be contacted for assistance in obtaining repairs. Presentation Silver in need of repair will be released only to a commercial silversmith. The DD 1149 will be annotated with the name, address and phone number of the silversmith. Upon delivery of the presentation silver to the silversmith, the name of the recipient will be printed below his or her signature and the date of turnover will be indicated. First line in the description block will be: "Presentation silver, described as follows:" A copy of the itemized/receipt DD Form 1149 will be provided to the Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791, promptly upon release of the silver to the silversmith. Upon return of the silver, a copy of the dealer's invoice will be attached to the DD 1149 and forwarded to NAVSUP (SUP 51). In either the transmittal of the DD 1149 or the DD 1149 with copy of the dealer's invoice, a forwarding letter is not required.

### M-5-5 TURN-IN PROCEDURES

1. TURN-IN APPROVAL. Presentation Silver on loan to a Fleet unit may be permanently turned-in provided prior written approval has been obtained from NAVSUP (SUP 51). The request for turn-in shall include a statement indicating:

- a. All silver is in good condition (no damaged items),
- b. There is no Financial Liability Investigation of Property Loss (DD Form 200) outstanding,
- c. Two individual 8" x 10" black and white photographs are on file for each item assigned,
- d. The silver held has been appraised and a copy of the appraisal report is available,
- e. Location of supporting FISC.

Turn-in of presentation silver or other valuable gifts will be accomplished by an itemized DD Form 1149 with photograph(s) attached and must cite specific NAVSUP authority. Multiple sets of silver will be packed separately and the outside of the container appropriately marked with set name. Shipment of presentation silver covered by this paragraph is not authorized; turn-in shall be made during a routine inport visit. For presentation silver, a copy of the itemized DD Form 1149 and copy of most recent itemized inventory report submitted to NAVSUP, will be forwarded by a letter of transmittal to the Commander, Naval Supply Systems Command, Code SUP 51, P.O. Box 2050, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0791. **DO NOT SEND SILVER TO NAVSUP.**

2. SHIPMENT. When authorized by proper authority, material will be properly cleaned, wrapped with in flannel bags or anti-tamish tissue paper, then wrapped with bubble wrap and packaged prior to delivery of the material to the supporting FISC or Naval Shipyard for shipment. An itemized DD 1149 will accompany shipment. In the absence of a supporting activity to prepare

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the material for shipment, every effort must be made to protect the contents during shipment. The use of cardboard carton(s) as the external shipping container(s) is prohibited. "Constant Surveillance, Signature Service Required" will be used in the shipment of presentation silver. Prior to shipping, a declared value equaled to the appraised value, will be made for insurance purpose.

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**APPENDIX N**  
**FOOD MICROBIOLOGY**

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**FOOD MICROBIOLOGY .....N-1**  
**CONTROLLING MICROORGANISMS.....N-2**  
**INVESTIGATING AND REPORTING FOOD BORNE DISEASE OUTBREAKS.....N-3**

**TABLE N-1:**

- FOOD BORNE INTOXICATION**
- FOOD BORNE PARASITIC INFECTIONS**
- CHEMICALS**
- NATURAL POISONS**
- FOOD BORNE INFECTIONS**

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## APPENDIX N

### FOOD MICROBIOLOGY

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#### N-1 FOOD MICROBIOLOGY

1. **GENERAL.** The term microbiology or microbe refers to organisms too small to see without a microscope. They include bacteria, viruses, protozoa, and fungi, and are found wherever life can exist. The vast majority of these microbes are either beneficial or do not affect humans directly. Microbes that will cause disease in humans are referred to as pathogens. Knowing some basic facts about microorganisms will help us take advantage of their beneficial characteristics and avoid the undesirable ones.

2. **BACTERIA.** Bacteria, like most other living organisms must have basic requirements to survive and grow. These include nutrients, moisture, temperature, pH (degrees of acidity and alkalinity), presence or absence of oxygen, and time to grow. Most foods provide the necessary nutrients, moisture and pH. With the addition of proper temperatures and oxygen levels, bacteria can multiply in large numbers within a short period of time. Under ideal conditions, many bacteria can triple their number every hour.

3. **VIRUSES.** Viruses are microbes that must be inside animal or plant cells to survive and multiply. The most important thing to know about viruses is that they are passed in human waste and unlike bacteria do not multiply in food or cause disease.

4. **PROTOZOA.** Protozoa are single celled animals which are normally not found in food. They are abundant in natural waters and most are not harmful to humans, but some kinds can cause diarrheal diseases in humans.

5. **FUNGI.** Fungi include a large variety of microscopic plants lacking chlorophyll. Yeast, mold, and mushrooms are all forms of fungi. Like bacteria, most fungi are beneficial and do not affect humans directly. Fungi decompose matter similar to bacteria which results in destruction of food. Beneficial forms of fungi are used to ferment beer, raise bread and sharpen several kinds of cheeses. A number of fungi produce toxins which are harmful to humans.

#### N-2 CONTROLLING MICROORGANISMS

1. **GENERAL.** Microorganisms may be controlled by manipulating the temperature, moisture, pH, presence or absence of oxygen, and time. These are described below:

a. **Temperature.** Microorganisms may be controlled by altering the temperature. Below 32° F., most organisms stop growing, although freezing won't kill them. As the temperature rises most pathogenic bacteria will multiply. The optimum temperature for pathogens is normal body temperature (98.6° F.). Above 140° F. most bacteria will die, however, heat resistant bacteria or spores may continue to survive above 170° F. Most microorganisms are killed at 212° F.

b. **Moisture.** Moisture is controlled by dehydration or altering the activity level. With the addition of sugar, salt, or certain other ingredients, water becomes unavailable to bacteria and growth is retarded.

c. **pH.** Most microorganisms, particularly pathogens, do not tolerate acidic conditions. Foods with a pH of 4.5 or below will not support the growth of bacteria. Preserving food in vinegar is an example of controlling bacteria by lowering the pH.

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d. Oxygen. Bacteria may be classified into two groups with respect to oxygen needs. Anaerobic bacteria thrive in the absence of oxygen and facultative bacteria can exist either with or without oxygen. Vacuum packing for example is a way to alter the availability of oxygen.

e. Time. Microorganisms require time to grow. The population of microorganisms, particularly bacteria and fungi, may be controlled by limiting the time food is allowed to stand at their optimum temperature ranges. This is the basis of the 4 hour rule in food service which states that the maximum amount of time potentially hazardous food may be held between 41° F. and 140° F. is 4 hours. Beyond the 4 hour time limit, pathogenic bacteria are capable of producing sufficient number of microorganisms to cause illness. Table N-1 shows incubation times of certain agents.

### **N-3 INVESTIGATING AND REPORTING FOOD BORNE DISEASE OUTBREAKS**

All suspected occurrences of food borne outbreaks (epidemics) must be investigated and reported by Disease Alert Reports (DAR). Information about this report is addressed in BUMEDINST 6220 series. Report all cases of suspected food borne disease to the medical department. It is responsible for initiating an epidemiological investigation to identify the cause of the outbreak and for preparing the Disease Alert Reports. Additional epidemiological assistance is advisable in most situations when large numbers of people become ill or when a continuing source of a disease cannot be found. Assistance is available from Navy Environmental and Preventive Medicine Departments at naval hospitals. The DAR's may be used for requesting assistance.

**FOOD BORNE INTOXICATION**

**TABLE N-1**  
Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Staphylococcus Food Poisoning	Several Enterotoxins of <i>Staphylococcus aureus</i>	Cream filled Pastries, custards, salad dressings, meat, meat products	1 to 7 hours, usually 2 to 4 hours
Botulism	Toxins produced by <i>Clostridium botulinum</i> types A, B and E; rarely F and G	Home canned vegetables, fruits, meats, baked potatoes, pot pies, usually low acid or alkaline	12 to 36 hours, usually 18 to 36 hours
<i>Clostridium perfringens</i> Food Poisoning	Toxins elaborated by Type A and C strains of <i>Clostridium perfringens</i>	Meats, stews, meat pies, gravies made of beef, turkey or chicken and beans	8 to 22 hours, usually 10 to 12 hours
<i>Vibrio parahaemolyticus</i> Food Poisoning	Enterotoxins and hemolysis (responsible for a hemolytic reaction, the "kenagawa phenomenon" of <i>Vibrio parahaemolyticus</i> )	Seafood, any food cross-contaminated with raw seafood, food rinsed with contaminated sea water	4 to 96 hours, usually 12 to 24 hours
<i>Bacillus cereus</i> Food Poisoning	Two enterotoxins of <i>Bacillus cereus</i> , one heat stable causing vomiting and one heat labile causing diarrhea.	Rice (such as fried rice), vegetables and meat dishes	30 minutes to 6 hours, where vomiting is the symptom, 6 to 16 hours where diarrhea is the symptom.

## FOOD BORNE PARASITIC INFECTIONS

**TABLE N-1**

Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Amebiasis	<i>Entamoeba histolytica</i>	Contaminated raw vegetables; contaminated water	A few days to several months or years. Commonly 2 to 4 weeks
Trichinosis (Trichiniasis, Trichinellosis)	<i>Trichinella spiralis</i>	Raw or insufficiently cooked flesh of animals; animals containing viable encysted larvae, chiefly pork and pork products, and beef products adulterated with raw pork	2 to 28 days; depending on number of larvae ingested
Taeniasis due to <i>Taenia Solium</i> Intestinal Form (Pork Tapeworm)	<i>Taenia solium</i>	Raw or uncooked infected pork	8 to 12 weeks
Cysticercosis (Infection by <i>Taenia solium</i> cysticercus)	<i>Taenia solium</i>	Food or water contaminated with the eggs of <i>Taenia solium</i>	A few months to 30 years
<i>Taenia saginata</i> Infection (Beef Tapeworm)	<i>Taenia saginata</i>	Raw or uncooked beef	10 to 14 weeks
Diphyllocothriasis (Broad or Fish Tapeworm infection)	<i>Diphyllobothrium latum</i>	Raw or inadequately cooked fresh water fish	3 to 6 weeks
Anisakiasis	Larval nematodes of the family Anisakidae, including the general Anisakis, Phocanema, Contracaecum, and Terranova	Raw, undercooked, or improperly frozen seafood, especially cod, haddock, fluke, Pacific salmon, herring, flounder, monkfish, and fish used for sashimi	A few hours to 1 week

## CHEMICALS

TABLE N-1

Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Chinese Restaurant Syndrome	Monosodium glutamate	Food containing large quantities (5 gms) of MSG	Few minutes to 1 hour
Arsenic Poisoning	Insecticides and rodenticides	Unwashed fruits and vegetables	1 hour or less
Fluoride Poisoning	Insecticides and rodenticides	Accidentally contaminated foods such as dry milk, flour, baking powder, cake mixes	Few minutes to 2 hours
Antimony Poisoning	Antimony in gray enamelware	High-acid foods and beverages	Few minutes to 1 hour
Lead Poisoning	Lead in earthenware vessels, pesticides, paint, plaster, putty, soldered joints	High-acid foods and beverages stored in lead-containing vessels, any accidentally contaminated food	30 minutes or longer
Copper Poisoning	Copper in pipes and utensils	High-acid foods and beverages	Few minutes to a few hours
Cyanide Poisoning	Metal polishes (Silver polishes) containing cyanide	Food accidentally contaminated with detarnishers	2 hours or less
Zinc Poisoning	Zinc in galvanized containers	High-acid foods and beverages stored in galvanized containers	Few minutes to a few hours
Organophosphorous Poisoning	Organic phosphorous insecticides, e.g., parathion, TEPP, diazinon malathion	Any accidentally contaminated food	Few minutes to a few hours

## NATURAL POISONS

TABLE N-1  
Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Mushroom Poisoning	Muscarine group of mushrooms	Eating Muscarine group of mushrooms, eating unknown varieties, mistaking toxic mushrooms for edible types	15 minutes to 2 hours
Mushroom Poisoning	Gastrointestina irritating group of mushrooms	Many varieties of wild mushrooms	30 minutes to 2 hours
Mushroom Poisoning	Cyclopeptides and gyromitrin in some mushrooms	Certain species of Amanita, Galerina, and Gyromitra mushrooms	6 to 24 minutes
Paralytic/Neurologic Shellfish Poisoning	Saxitoxin and similar toxins from dinoflagellates Protoogonaulas and Gymnodinium species	Shellfish from waters with high concentration of Protoogonaulax or Gymnodinium species (Red Tide)	Few minutes to 30 minutes
Diarrhetic Shellfish Poisoning	Okadaic acid and others produced by dinoflagellates Dinophyses acuminata and D. forti	Shellfish from waters with high concentration of Dinophyses	1/2 hour to 12 hours, usually 4 hours
Ciguatera Poisoning	Ciguatoxin in intestines, roe, gonads, and flesh of tropical marine fish	Liver, intestines, roe, gonads, or flesh of tropical reef fish; usually large reef fish are more commonly toxic	3 to 5 hours
Water Hemlock Poisoning	Resin and cicutoxin in hemlock root	Root of water hemlock <i>Citcuta virosa</i> , <i>C. maculata</i> , and <i>C. douglarii</i> . May be mistaken for wild parsnip, sweet potato, or carrot.	15 to 60 minutes
Jimsonweed Poisoning	Tropane alkaloids	Any part of plant, tomatoes grafted to Jimsonweed root stock	Less than 1 hour
Solanine Poisoning	Solanine	Potato sprouts	1 hour or less

**FOOD BORNE INFECTIONS**

**TABLE N-1**  
Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Viral Hepatitis A (Infectious Hepatitis)	Hepatitis A virus	Contaminated water and food, including milk, sliced meats, salads, and raw or undercooked mollusks	10 to 50 days, average 30 days
Epidemic Viral Gastroenteropathy (Norwalk type disease)	Norwalk virus, adenoviruses, astroviruses, caliciviruses, coronavirus, and others	Clams, oysters, cockles, green salads, pastry, and frostings	24 to 48 hours, usually 12 to 36 hours
Escherichia coli (E.coli 0157:h7)	Bacterium Escherichia coli	Undercooked ground beef, unpasteurized milk	1 to 10 days
Salmonellosis	Numerous serotypes of Salmonella, e.g., <i>S. enteritidis</i> , <i>S. typhimurium</i>	Raw (especially cracked) eggs, egg products, raw milk and products, poultry, pet turtles and chicks.	6 to 48 hours, range 12 to 36 hours
Typhoid Fever	Salmonella typhi	Food or water contaminated by feces or urine of a patient or carrier. Shellfish from sewage contaminated water. Flies can infect foods.	Usually 1 to 3 weeks
Yersiniosis	Yersinia enterocolitica, Y. pseudotuberculosis	Meat (pork, beef and lamb), oysters, fish, raw milk, contaminated pasteurized milk and raw unpasteurized milk and tofu	1 to 7 days, usually 1 to 3 days

**FOOD BORNE INFECTIONS (continued)**

**TABLE N-1**

Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Shigellosis (Bacillary dysentery)	Four species or subgenera of <i>Shigella</i> , e.g., <i>S. dysenteriae</i> , <i>S. flexneri</i> , <i>S. boydii</i> , and <i>S. sonnei</i> . They are divided into groups A, B, C, and D and some 40 serotypes identified by arabic numbers	Food or water contaminated by feces from a patient or carrier. Any direct or indirect fecal-oral transmission from a patient or carrier. Water, milk, cockroach and fly-borne transmission may occur from direct fecal contamination.	1 to 7 days, usually 1 to 3 days
Diarrhea caused by campylobacteria (Campylobacter enteritis, Vibronic enteritis)	<i>Campylobacter jejuni</i> ( <i>C. fetus</i> subsp. <i>jejuni</i> ) and <i>C. coli</i> . A diversity of biotypes and serotypes occur	Food or unpasteurized milk or water. Contact with infected pets (especially puppies and kittens), wild animals, or infected infants; and possibly food cross-contaminated with these sources.	1 to 10 days, usually 3 to 5 days
Brucellosis (Undulant fever, Malta fever)	<i>Brucella abortus</i> , biotypes 1 to 7 and 9; <i>B. melitensis</i> , biotypes 1 to 3; <i>B. suis</i> , biotypes 1 to 4; and <i>B. canis</i>	Raw milk, daily products (cheese) from infected animals. Contact with infected animals or their tissues, blood, urine, vaginal discharges, aborted fetuses, and placentas.	1 to 10 days, usually 3 to 5 days
Leptospirosis (Weil's disease, Hemorrhagic jaundice)	<i>Leptospira interrogans</i> species which is subdivided into more than 170 serovars in the U.S. are <i>icterohaemorrhagiae</i> , <i>canicola</i> , <i>autumnalis</i> , and <i>hebdomidis</i> .	Food contaminated with urine of infected rats. Abraded skin or mucous membrane contact with water moist soil or vegetation contaminated with urine of infected animals.	4 to 19 days, usually 10 days

**FOOD BORNE INFECTIONS (continued)**

**TABLE N-1**  
Table of Incubation Times

Name	Etiologic Agent	Foods usually involved	Incubation Time (Onset of Symptoms)
Streptococcal Diseases caused by Group A (Beta Hemolytic) Streptococci (Streptococcal sore throat)	<i>Streptococcus pyogenes</i> , Group A has about 75 serologically distinct types. Occasionally groups B, C, and G can produce disease.	Milk, milk products, egg salad, deviled hard boiled eggs.	1 to 3 days, rarely longer
Tuberculosis (TB), Bovine	<i>Mycobacterium bovis</i>	Raw unpasteurized milk or dairy products.	About 4 to 12 weeks, the risk of infection remains greatest for 1 to 2 years after infection. Risk may persist for lifetime as a latent infection.
Tularemia (Rabbit Fever)	<i>Francisella tularensis</i>	Insufficiently cooked rabbit or hare meat; contaminated water.	2 to 10 days, usually 3 days
Q Fever (Query Fever)	<i>Coxiella burnetii</i>	Raw milk from infected cows	Usually 2 to 3 weeks
Listeriosis	<i>Listeria monocytogenes</i> from soil, manure and silage	Inadequate cooking, failure to properly pasteurize milk, prolonged refrigeration.	3 to 21 days, maybe longer

**APPENDIX O**  
**FOOD SERVICE OPERATIONS**  
**IN CHEMICAL, BIOLOGICAL AND RADIOLOGICAL**  
**DEFENSE**

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## **APPENDIX O**

### **FOOD SERVICE OPERATIONS**

### **IN CHEMICAL, BIOLOGICAL AND RADIOLOGICAL DEFENSE**

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#### **O-1 GENERAL**

Food safety and Bio Terrorism is a major concern today in all areas of food service. Recent terrorist activities have made bio-terrorism a real concern in the area of food safety. It is imperative that Culinary Specialist are made aware of this danger and are prepared to meet this threat, especially when dealing with overseas vendors and husbanding agents. It is extremely important that steps are taken to ensure that subsistence is being procured from approved sources and that a thorough inspection of all food items has been completed prior to stowage onboard. These steps are necessary in ensuring that the consumption of contaminated food is avoided at all cost eliminating the chance of illness, injury or death. The nature of the chemical, biological, and radiological contamination problems, outlining basic defense measures, and procedures to be followed when decontaminating eating, drinking and galley utensils, galley equipment, and food preparation spaces are discussed in the following paragraphs.

#### **O-2 CHEMICAL DEFENSE**

1. GENERAL. Chemically contaminated food is difficult to decontaminate. Due to limits in the ability to detect contamination that is bound to other materials, the use of such food will always pose a major risk. Methods are given for decontaminating eating, drinking, galley utensils, dinnerware dining spaces, food items, and water.

2. COMBINATION. Descriptions of chemical agents, methods of detection and identification of the various agents, material, equipment, and clothing to be used by decontamination personnel, and methods of decontamination to be employed in the recovery of various areas, spaces, materials, and objects are published in NAVMED P-5059 "NATO Handbook on the Medical Aspects of NBC Defense Operations," NSTM Chapter 470, "Shipboard BW/CW Defense and Counter Measures," and NAVMED P-5041, "Treatment of Chemical Agents Casualties and Conventional Military Chemical Injuries." Descriptions of Biological Warfare Agents are published in NAVMED P-5042 "Treatment of Biological Warfare Agent Casualties."

3. DECONTAMINATION OF FOOD SERVICE SPACES AND EQUIPMENT. The degree of contamination of food, food service spaces and equipment will depend on the chemical agents used and the factors involved such as the method of delivery, the weather, and various degrees of contamination (vapor contamination, light liquid contamination and heavy liquid contamination).

4. VAPOR CONTAMINATION. After surrounding areas have been decontaminated, the enlisted messing facility should be aerated thoroughly and the entire food service space washed down, inside and out, with clean water. All equipment and utensils used in the preparation and service of food should be washed carefully, using normal procedures. Spaces, utensils, and equipment then should be tested with the chemical agent detector kit and, if necessary, any of the prescribed procedures should be repeated.

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5. **LIGHT LIQUID CONTAMINATION.** The food service spaces, inside and out, should be washed with hot water and an alkaline detergent, such as standard dishwashing compound. The application of the solution at high pressure will increase effectiveness. During and after cleaning, the spaces should be aerated. If slight contamination remains, the food service spaces should be heated to as high a temperature as possible for about 1 to 2 hours. The spaces then should be opened and ventilated for 15 minutes. This procedure should be repeated as necessary, testing at intervals with the M8 Chemical Agent Detector Paper, M9 Chemical Agent Detector Paper (tape) or detector kits such as the M256 Chemical Agent Detector Kit. Porous objects, such as wooden benches, will absorb liquid contamination to the extent that it probably will be necessary to destroy them. Decontamination of utensils and equipment is discussed below.

6. **HEAVY LIQUID CONTAMINATION.** Heavy liquid contamination is unlikely, except from a direct hit. However, where the necessity of the local situation requires that the food service officer attempt recovery, the following procedures are recommended:

a. **Spaces.** As no amount of washing or scrubbing of a porous surface that is heavily contaminated by a liquid chemical agent, particularly mustard, is likely to do much good, heavily contaminated areas should be roped off or abandoned as unsalvageable. Residual contamination on nonporous surfaces or other light contamination should be removed as described for "light liquid contamination."

b. **Utensils.** Metal, glass, or china utensils or any equipment not damaged by water should be immersed for 30 minutes in actively boiling water. Add 1 cup of alkaline detergent to each 5 gallons of water. This process should be followed by normal dishwashing procedures.

c. **Large Equipment.** Large equipment unsuited for immersion in boiling water should be scrubbed vigorously with DS2 (general-purpose decontamination that is effective for all toxic chemical agents) solution of hot water and an alkaline detergent, rinsed, disassembled, and scrubbed again with particular attention to parts not reached by the first washing. The equipment should be rinsed, dried, oiled, greased, and reassembled. Any wooden items should be removed and destroyed.

d. **Electrical Equipment.** Unless the electrical unit is enclosed in a watertight seal, water must not be used in the decontamination processes. Electrical equipment should be decontaminated with DS2 or other solutions and methods as directed by the damage control assistant or disaster control officer.

e. **Decontamination of Water.** In war, all water from undetermined sources is considered contaminated. There are no field methods for individuals or small units to decontaminate water sources. Disinfection does not remove chemical agents. Certain types of standard water purification equipment, held by engineer/quartermaster units, are capable of removing chemical contaminants from water; however, some modification of procedures may be required. Water that has been obtained from approved sources, stored in impermeable containers and has retained its residual disinfectant can be considered safe for drinking provided that external decontamination of the container has been performed. Any water source suspected of contamination should not be used unless the absence of contamination has been confirmed using a chemical testing kit. The following table (Table O-1) gives some guidance on the effects of liquid chemical agents on water.

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### TABLE O-1

#### Effects of Liquid Chemical Agents on Water

Effect of Agents on Water				
Chemical	Taste	Smell	Color	Toxicity
Mustard	Acid	Bad	Yellow	Yes
N-Mustard	Acid	Bad	Yellow	Yes
Arsenicals	Acid	Bad	Yellow/Turbid	Yes
Nerve	Acid	None	None	Yes
Cyanogens	Bitter	None	None	Yes, but rapidly fades

f. Decontamination of Food. The effects of chemical agents on food depends on both the nature of the agent and the nature of the food. These physical and chemical properties determine the degree of penetration of the food by the agent as well as whether any chemical reaction will take place. This in turn determines whether decontamination is possible. There is likely to be a requirement for military units to go completely over to using prepackaged foods in air tight containers. Physical and chemical absorption of agents into food can take place. In either event, the taste, smell, and appearance of the food may be effected. In addition, food may become highly toxic without any change in outward appearance. Field concentrations of phosgene and HCN would be unlikely to cause any serious contamination. Unlike the case with water, both liquids and vapors can cause spoiling of food. The following table (Table O-2) gives some effects of agents on foods.

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**TABLE O-2 - Effects of Chemical Agents on Water**

Agents	Food Type	Action
Liquid Nerve	All	Condemn
Vapor Nerve	Low fat/High moisture	Dry food should be exposed to air for 48 hrs., others to be washed with NaHCO <sub>3</sub> , peeled if possible, and cooked by boiling.
Vapor Nerve	Low fat/Low moisture	Dry food should be exposed to air for 48 hrs., others to be washed with NaHCO <sub>3</sub> , peeled if possible, and cooked by boiling.
Vapor Nerve	High fat content	Condemn
Liquid Blister	All	Condemn
Vapor Blister	Low fat/High moisture	Dry food should be exposed to air for 48 hrs., others to be washed with NaHCO <sub>3</sub> , peeled if possible, and cooked by boiling.
Vapor Blister	Low fat/Low moisture	Dry food should be exposed to air for 48 hrs., others to be washed with NaHCO <sub>3</sub> , peeled if possible, and cooked by boiling.
Vapor Blister	High fat content	Condemn
Choking	All	Agents decompose in water, wash food and expose to air for 24 hrs. Food may be unpalatable and require disposal.
Cyanogens	All	Unlikely to have any effect.

### O-3 BIOLOGICAL DEFENSE

1. GENERAL. Current and emerging technology indicates that the most effective route for Biological Warfare Agents to gain entry into the body is the respiratory tract using aerosols 1-5 microns in diameter. Biological warfare employing the oral route of entry through ingestion of deliberately contaminated food may be limited to small terrorist attack scenarios. The deliberate use of heat stable toxins, however, such as staphylococcal enterotoxin, which is frequently the cause of reported peacetime outbreaks of foodborne illness, would make identification of a biological warfare attack very difficult. Development of detectors, the use of individual protective equipment and prophylaxis will be the best protection against biological warfare attack.

The general sanitation procedures discussed in this section are very important from a food sanitation viewpoint, but will have little impact in reducing the effect of a biological warfare attack employing aerosols.

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The instructions of the military commander should enable the supply officer to operate an enlisted messing facility under conditions following a biological attack. The following instructions prescribe the protection that should be employed in the decontamination of eating, drinking, and galley utensils, food preparation equipment, dining spaces, food items and water in an area contaminated by biological agents. In contrast with nuclear and chemical contamination, it probably will be impossible to locate or identify in a reasonable time specific items or areas that are contaminated with biological agents. Similarly, it will not be possible to measure the completeness or efficiency of the biological decontamination unless tedious laboratory procedures are used; therefore, all surfaces that would be health hazards if contaminated will be regarded as contaminated and treated accordingly.

2. **PRECAUTIONS IN BIOLOGICAL DEFENSE.** Decontamination teams should wear individual protective equipment including the MCU-2/P protective mask. Precautions should be taken to prevent any personnel from entering uncontaminated spaces.

3. **CONTAMINATION BY BIOLOGICAL AGENTS.** When treating the problem of biological contamination, it is assumed that there could be contamination of personnel, of all exposed surfaces, and of surrounding air. These instructions are intended for use in the event of suspected or known contamination. The task is to decontaminate and prevent recontamination.

The major risk from transmission of infectious disease is from droplet nuclei, tiny particles that do not settle readily. Because of their size, they can bypass the barriers in the upper airway and settle in the alveoli of the lungs. Large particles will settle rapidly; while they are less likely to be inhaled, they can contaminate surface and foodstuffs. Contamination on food and surfaces may be ingested with the food or carried from the surfaces to the mouth by hand-to-mouth contact.

Because of the current difficulty in rapidly detecting biological agents, knowledge of contamination may (although, not necessarily) be based on the occurrence of widespread or unusual sickness. This sickness could be caused by contamination that had occurred several days or weeks before.

### **O-4 DECONTAMINATION OF EQUIPMENT AND SPACES**

1. **INITIAL PROCEDURES.** After contamination has occurred, decontamination measures should be carried out (as described below) so that recontamination will not occur.

Decontamination procedures and chemicals. Steam application to surfaces, when available, is effective and may be used ashore and afloat. Afloat, Naval Ships' Technical Manual (NSTM), Chapter 470, outlines a steaming procedure for decontaminating spaces. Calcium hypochlorite (65-70%) used as a one percent or 9 percent solutions in water with 0.5 percent detergent (Decontaminating Compound, NSN 9G 6850-00-664-2008) is readily available and is recommended. If the above detergent is not available, Liquid Detergent #50, NSN 7930-00-282-9699, or equivalent may be substituted. Disinfectants such as iodophor solutions (germicidal or detergent) or other disinfectants registered with the Environmental Protection Agency (EPA) may be used if chlorine is not available. The medical department should be contacted for advice and recommendations as necessary when using these solutions. If calcium hypochlorite is not available, the deposits can be removed (physical decontamination) by the use of

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detergent solutions alone. In addition to the CBR decontamination compound a variety of detergents or cleaning compounds are available including liquid chlorine bleach and other laundry and dishwashing compounds, solvent-emulsion and water emulsion cleaners.

### 2. DECONTAMINATION OF VARIOUS TYPES OF EQUIPMENT

a. **Large Equipment.** Large equipment (those items too large to be immersed in sinks or run through dishwashing machines) should be washed, rinsed, and decontaminated in the same manner as prescribed for interior surfaces of food service spaces. The methods most suited to decontaminating large equipment are those involving the use of hypochlorite and detergent solutions. Hypochlorites are corrosive to all metals that will rust and should not be allowed to come into contact with motors and other electrical equipment from which such hypochlorites could not be thoroughly wiped off. As much equipment as possible should be covered with clean cloths after decontamination to prevent recontamination. Hypochlorites identified as calcium hypochlorite (high-test hypochlorites), which contain 65-70 percent available chlorine can be used. This is the most concentrated form of hypochlorite or active chlorine available. Its normal use is for disinfecting potable water, potable water tanks, potable water hoses, etc. (NAVMED P-5010-6). This solution can be used, after suitable dilution, for decontamination or the calcium hypochlorite can be dissolved in 1 gallon of water, which gives a solution of 5,000 ppm (0.5 percent) available chlorine.

b. **Small Items of Equipment.** Small items of equipment that will not suffer damage by immersion should be washed, rinsed, and sanitized in the manner described here for eating and drinking utensils.

c. **Dining and Small Galley Utensils and Other Small Items.** Dinnerware, small galley utensils, and all other small items should be decontaminated. Items not absolutely essential to the operation or the mess can be removed more easily than decontaminated.

3. **ADDITIONAL PROCEDURES.** In addition to the initial procedures, decontamination should continue for as long as it is determined by competent authorities that danger exists. Interior surfaces, except overhead and bulkhead surfaces out of reach, should be decontaminated daily as long as the danger exists. Also, as long as the danger exists, large equipment should be decontaminated before and after each meal, and small equipment and utensils should be decontaminated after each use. After decontamination, the small equipment and utensils should be covered with a clean cloth.

Direct exposure to bright sunlight for an hour or more is an effective decontaminant for smooth, nonabsorbent surfaces. Most exterior surfaces of building and ships where rapid decontamination is not required will be decontaminated satisfactorily by environmental conditions, sunlight, and time. Dirty, dusty, or porous surfaces tend to protect biological organisms from direct rays of the sun.

4. **MACHINE WASHING GALLEY UTENSILS.** The machine dishwashing instructions given in this manual shall be scrupulously observed with qualified supervisory personnel stationed in the scullery.

a. **Additional Washing Precautions.** The interior walls of the scullery, all working surfaces (tables, dish carts, and sinks), the interior and exterior of dishwashing machines, and all other equipment used in the washing and sanitizing of eating and

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drinking utensils should be thoroughly washed, rinsed and decontaminated (sanitized). After all surfaces and equipment have been decontaminated, eating and drinking utensils should be brought to the scullery for decontamination. Decontamination of such utensils must be accomplished by following the instructions for washing and sanitizing eating and drinking utensils contained in this manual and the "Manual of Naval Preventive Medicine" (NAVMED P-5010-1).

Decontaminated eating and drinking utensils should not be handled by any person who has previously handled contaminated utensils and should not be placed in contact with any surface that has been exposed to contamination. Baskets or containers should hold silverware in a vertical position, handle down, during the washing and sanitizing procedure. Additionally, containers should be available into which the silverware may be inverted without being handled by workers. If such containers are not available, silverware should be laid flat in racks not to exceed one layer of utensils. Particular care should be exercised in removing utensils from racks after decontamination to prevent recontamination.

b. Sanitizing. If properly operating dishwashing machines, with the wash, rinse and sanitizing rinse at the recommended temperatures are not available, it will be necessary to manually wash and/or manually sanitize the dishware in a deep sink, steam jacketed kettle or other container. The sanitizing rinse may be hot water (170° F. for 30 seconds) or an approved chemical sanitizing agent.

c. After Sanitizing. After sanitizing, cover the wash racks containing utensils with a cloth that has been sanitized by boiling or soaking in an approved sanitizing solution.

5. HAND WASHING GALLEY UTENSILS. Eating and drinking utensils may be washed and sanitized to effect decontamination by manual methods as described in "Manual of Naval Preventive Medicine" (NAVMED P-5010-1). The washing precautions noted in the instructions in this manual for machine dishwashing are equally applicable to manual dishwashing.

### O-5 PREVENTION OF RECONTAMINATION

Recontamination may be caused by secondary aerosols or clouds formed from particles (bacteria or other organisms) which having been deposited on a surface, are stirred up into the air again by scuffing, shaking, or other mechanical action. Although the degree of danger that these secondary aerosols represent has not been definitely established, protective measures to suppress them should be taken. Secondary aerosols may be suppressed by wetting surfaces with oil or water. If oil is used as a suppressant, it must not generate harmful vapors (cooking oil is suggested) and it must not be applied to walking surfaces, which may create slippery conditions. A suppressant should be used and traffic should be restricted in food preparation areas.

It is important to ensure that before entering food service spaces, culinary specialists and all personnel eating in the dining area are as free as possible from contamination. The medical and public works officers and the damage control assistant may be consulted on the decontamination of personnel. Personnel should be indoctrinated in at least the objectives of biological defense. It has been found that removing clothing will shake off organisms covering on the surfaces, thereby, setting up secondary aerosols. Therefore, in cold weather, personnel in dining lines should remove outer garments and

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leave them outside food service spaces prior to entering. Unauthorized personnel should not be permitted in the food service spaces.

### O-6 DECONTAMINATION OF FOOD ITEMS

1. GENERAL. The advice of the medical officer should be sought before any attempt is made to decontaminate food suspected of biological contamination.

2. DRY ITEMS. Food stored in containers that are resistant to the passage of biological agents (sealed containers of metal, plastic, glass or porcelain) requires only the proper exterior decontamination be performed. Paper labels and paper covers should be removed from the container (identify contents of container using a grease pencil if necessary) and one of the following methods of decontamination should be used:

a. Immerse the container for one minute in a solution of warm water containing not less than 200 ppm available chlorine. Check the concentration periodically to ensure the chlorine residual is maintained above 50 ppm. A potable water rinse is not necessary. Clean containers may also be immersed in hot water, at least 170° F. for 30 seconds.

b. If the impermeable containers are soiled and require detergent cleaning, they should be processed by dishwashing and sanitizing procedures either by machine or manually.

c. Impermeable containers may be sanitized using any of the standard chemical methods (such as bleach slurry, sodium carbonate, or DS2) followed by rinsing in potable water).

d. Food packages that will not stand immersion should be wiped off with a solution of water containing 200 ppm available chlorine. The food is to be thoroughly cooked before it is served.

e. Food packed in sacks or other permeable containers, (e.g., fruit vegetables, nuts, etc.) can be decontaminated by immersion for at least 15 minutes in a 100 ppm free available chlorine solution or 30 minutes in a 50 ppm free available chlorine solution and by thoroughly rinsing with potable water before cooking or serving. Head items, such as lettuce, cabbage, celery, etc., must be broken apart before immersion.

### 3. FRESH OR CHILL ITEMS

a. Foods That Can Be Peeled or Pared. Foods that can be peeled or pared may be decontaminated by using the procedure described for food packed in sacks above.

b. All Other Fresh or Chill Items. The use of heat is the most practicable means of decontaminating contaminated foods. Thorough cooking will reduce contamination to a safe level so food can be consumed. Specific methods to be followed in this form of decontamination are outlined under "Additional Precautions" later in this chapter.

### 4. FROZEN ITEMS

a. Impermeable Containers. Food items stowed in freezer space in impermeable containers (canned frozen strawberries, for example) may be decontaminated as outlined in "Dry Items" in this chapter.

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b. Permeable Containers. Food items stowed in freezer space in permeable containers (frozen fruits or vegetables for example) may be decontaminated by thorough cooking before use.

c. Not Contained in Outer Packaging. Food items stowed in freezer space but not contained in outer packaging (meat, for example) should be completely thawed and thoroughly cooked before eating.

### 5. ADDITIONAL PRECAUTIONS

a. General. Hands must be free of contamination during the opening operations to ensure that the contents do not become contaminated.

b. Opened Cans of Food. Opened cans of fruit, jam, jelly, or similar foods will be destroyed, but opened cans of vegetables may be decontaminated by boiling the vegetables for a minimum of 15 minutes in a steam-jacketed kettle.

### 6. DECONTAMINATION BY HEAT

a. Heat is the most practicable method of decontaminating foods. In no case will decontaminated food be consumed until it is pronounced safe by a designated medical officer. It is recommended that, insofar as possible, only foods contained in impermeable packages (cans, bottles, jars) be decontaminated and used for meal preparation.

b. Cooking. Food items that are not packaged or those, which are packaged in permeable containers, may be cooked by either of the following methods:

(1) In a pressure-type cooker at 15 pounds pressure at 250° F. (121° C.) for 15 minutes.

(2) Boiling for a minimum of 15 minutes.

c. Baking. Certain contaminated items may be decontaminated by baking. Only those items in the Armed Forces Recipe Service that specify an oven temperature of 400° F. (204° C.) and above for a cooking period of 40 minutes or longer, will be used to prepare baked items using contaminated ingredients.

d. Meats. All meats, except those contained in decontaminated impermeable containers (canned meat items), must be cooked to the well-done stage (at 325° F.) (167° C.) for about 2 hours. Guidance cards in the Armed Forces Recipe Service also include information on internal temperature indicating the well-done stage.

### 7. WATER CONTAMINATION

The detection of water contamination and the completion of associated laboratory analysis are responsibilities of the medical department. Biological decontamination of water is not difficult when regular water treatment facilities exist. However, more chlorine than normal will be needed to process the water. If no water-treatment facilities are available, water contaminated by bacteria can be decontaminated by any of the following methods:

a. Boiling for 5 minutes.

b. Distilling, if equipment is available.

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- c. Using iodine tablets according to the direction found on the label.

A medical officer will approve the method and the completeness of the decontamination process before any water is used for drinking purposes. Water that has been decontaminated must be protected against recontamination.

### **O-7 RADIOLOGICAL DEFENSE**

Radiological (nuclear) defense includes all measures taken to reduce personnel injury and material damage from radioactivity. Commanding Officers usually assign responsibilities for guidance in radiological defense to the engineering officer/damage control assistant (at sea) and to the disaster control officer (ashore). Food service personnel shall be assigned duties within the overall damage control plan. The specialized nature of the food service operation will require the following:

- a. Preliminary organization, distribution, and training of personnel to deal with blast damage and subsequent radioactive contamination.

- b. Emergency operation, decontamination, and recovery measures to cope with the situation. Survival may depend on how all individuals and teams are trained in each area of responsibility. Advance preparation will contribute to rapid recovery of functions essential to the mission. All Culinary Specialists will be made thoroughly familiar with plans and procedures to be followed. Personnel training should be accomplished with the advice and assistance of disaster control and medical officers.

During an emergency, a realistic evaluation of the disaster situation will be made and initial steps toward recovery taken. There will be advance planning to meet this situation. Protective clothing, monitoring equipment, and decontamination gear will be needed.

### **O-8 RADIOLOGICAL CONTAMINATION**

Radioactivity may be inducted in exposed materials close to a nuclear burst or may result from bomb fission residues. Most common will be dust, although such items as soap, table salt, copper or brass may become radioactive as a result of the action of neutrons. A person carrying radioactive particles can easily contaminate an otherwise safe object in an area. If this person handles food, the food likewise can become contaminated.

Radioactivity cannot be destroyed by cooking or sterilization, or neutralized by chemical treatment. Radioactive materials can only be removed by physical means. It must be reduced to a limit of radioactivity set by command authority by removing the contamination physically or allowing it to "decay." The extent radioactivity is existing in any food space will be determined by survey with RADIAC (Radiation Detection, Indicator, and Computation) monitoring equipment. If the survey so indicates, it may be necessary to reestablish the general mess in an area designated safe by the Commanding Officer.

### **O-9 DECONTAMINATION**

1. GENERAL. Natural decay of radioactive substances commences immediately following the nuclear blast. If the situation permits, hazards to decontamination

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personnel can be reduced by delaying decontamination operations until natural decay has reduced radioactivity to a safer level. The process of decontamination consists mostly of cleaning or removing the surface to the depth of the contaminated layer. It will often be impossible to decontaminate meat, fish, etc., due to absorption of radioactive salts found in the fallout. This process neither neutralizes nor destroys the contamination, but transfers it to another area where it presents less hazard.

The severity of contamination and its nature should be considered. Because galley and dining spaces are usually protected, it is likely that contamination will result from the deposit of finely divided solids or water droplets carried by the blast or otherwise airborne. Some radioactive particles may lodge in porous surface materials. Distribution and, therefore, levels of radioactivity will not be uniform.

There are various methods of removing contamination. They differ in effectiveness in removing the contaminant, in applicability to various surfaces, and in rate of operation. They fall into two general classes, gross or rough decontamination and detailed contamination. Gross decontamination consists of rapid washing down with large quantities of water from a fire hose or nozzle system. Personnel aboard ship and in the field will be concerned with gross decontamination. Detailed decontamination procedures are costly in time, manpower, and material, and would be done only under direction of qualified personnel at shipyards.

2. WATER DECONTAMINATION. Efforts to decontaminate with heavily contaminated water will obviously be ineffective. Water used for decontamination must be allowed to drain freely from contaminated areas.

Aboard ship the evaporators are an effective means of obtaining potable water. If a ship is in port the ship may be required to furnish safe potable water to the station. Seawater in the neighborhood of an aerial burst to windward will be contaminated at the surface. A subsurface burst will heavily contaminate seawater in the vicinity. See NSTM, Chapter 070; Radiological Recovery of ships after Nuclear Weapons Explosions or NAVEDTRA 10670C, Rate Training Manual for Hospital Corpsman 1 & C, for additional information on decontamination procedures.

3. DECONTAMINATION BY CLEANING AGENTS. When materials specifically designed for the removal of radioactive contaminants are available, they will be used as instructed. When specifically designated materials are not available, the following formulas are suggested for general cleaning of galley surfaces.

a. Formula 1:

Detergent, general purpose, liquid water soluble, type 1, 1/2. Sodium phosphate, tribasic, technical phosphate, type 2, 1/2 pound.

Water, hot (12 gallons), 100 pounds.

Directions: The sodium phosphate will be completely dissolved by being stirred into hot water. The syrup liquid detergent will be added and stirred until thoroughly dispersed.

b. Formula 2:

Dishwashing compound, machine granular, free-flowing.

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Directions: The compound will be dissolved in hot water to make a 0.5 percent (approximate) solution and will be used hot.

c. Formula 3:

Citric acid, monohydrate, granular form.

Directions: Citric acid will be dissolved by being stirred into hot water to make a 3 percent (approximate) solution (3 pounds in 12 gallons of water). In use, utensils will be immersed and metal surfaces will be sprayed.

Except for citric acid, the foregoing materials are commonly used and are readily available. The suggested formulations are not intended to supplant agents specified in existing decontamination instructions. They constitute the bare minimum as substitutes and will serve to meet immediate emergency requirements. All chemical cleaning agents function most efficiently when hot. The choice of method and cleaning agent to be used all depend on the nature of the surface to be decontaminated, kind and degree of contamination, time, manpower, and materials to do the work.

4. **DECONTAMINATING GALLEY, EQUIPMENT, AND DINING SPACES.** Conduct a radiological assay to determine the presence or absence of contamination with the food service spaces using radiological detection equipment. Only readily accessible surfaces (bulkheads and decks), and all food contact surfaces must be decontaminated unless a significant penetration dose hazard exists in the spaces due to contamination in inaccessible locations. Use conventional cleaning methods employing two man teams to decontaminate the majority of interior spaces that have become contaminated. These methods include scrubbing, wiping and some paint removal, as necessary, working from top to bottom in line direction of any liquid flow. Care should be taken to avoid electrical equipment, especially controls that are not water-proofed. Bare metal surfaces should be given an initial scrubbing with alkaline detergents to remove grease films. Citric acid solution should then be applied and allowed to remain for a minimum period of 10 minutes. The surfaces should then be rinsed with clean fresh water, allowed to dry, and then monitored. In the absence of citric acid, vinegar may be used, but it is less effective.

5. **DECONTAMINATING UTENSILS AND DINNERWARE.** The treatment for metal utensils should be carried out in essentially the same manner as for other metal surfaces, namely, a detergent wash followed by acid treatment. When feasible, the utensils should be immersed in the solution. Tray, cutlery, and metal tableware should be given the same treatment as utensils. Dishes and glass items present no particular cleaning problem if the glazed surfaces are without scratches and foreign deposits such as stains or hard-water scale.

Plasticware may present some difficulty because of the relatively porous character of the surfaces, scratches, and the presence of foreign deposits. Both glass and plasticware will be machine washed, rinsed, dried, and each item monitored. Those that do not pass will be inspected for cracks and surface defects. Cracked and badly scratched items should be disposed of immediately. The other items still showing contamination should be given repeated washings until safe, or should be segregated to await natural decay or disposal.

6. **DECONTAMINATING FOOD.** All foodstuff should be carefully monitored in areas of low background radiation so that greater accuracy can be achieved. Foods in metal or

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glass packages will be safe. Contamination will be on the exterior surfaces and can be removed by washing. Food items in sealed dust-proof packages will probably be safe if the wrapper is not broken. Care must be taken with the disposal of the containers and wrappers. Some vegetables can also be decontaminated if carefully washed, dried, monitored, and peeled. Nonperishable items that cannot be easily decontaminated, such as flour, sugar, or salt, should be set aside allowing natural radioactive decay to reduce the radioactivity to less hazardous levels. Canned food should not be disposed of or segregated on the basis of high readings obtained from unopened containers. Cans, particularly those enameled, may incur a high level of induced activity (from zinc in the enamel, and not so much from the iron in the can). Glass, because of its high salt content, may turn in color. Container radioactivity is not transferred to the contents and highly radioactive containers can contain food that is safe to eat. When surface contamination cannot be physically removed, the food will be condemned. All food will be inspected and approved by the medical officer.

7. PRECAUTIONS IN DECONTAMINATION. Personnel engaged in decontamination must wear individual protective equipment only if chemical weapons have also been used. In the absence of chemical weapons, team members should wear water-resistant or water-repellant clothing and rubber foot wear. In order to prevent heat stress casualties from occurring, particularly at high ambient air temperatures and relative humidity, WGBT heat stress monitors should program work/rest cycles.

Precautions will be taken to prevent any contaminated personnel or material from entering uncontaminated food storage or food service spaces. All personnel and material must be monitored and cleared before entering spaces not requiring decontamination. Cleaning gear, items of protective clothing, etc. used in decontamination procedures should be segregated and disposed of as contaminated, according to their level of contamination. If contaminated items are brought accidentally into food spaces, the contaminated items should be removed and, pending decontamination of the effected areas, these areas should be isolated. Personnel who may have walked through such areas or who may have otherwise come in contact with radioactive particles, shall be sent to a decontamination station.

### O-10 FOOD PRESERVATION

1. GENERAL. Most foods will spoil unless special procedures are used to retard decomposition. The principle methods used to preserve foods employ high temperatures to pasteurize the foods, low temperatures to retard growth and enzymatic action, use of preservative that alters water activity levels or alters pH, and gamma or X-ray radiation that sterilizes certain foods.

2. PRESERVATIVES. Certain agents are used as preservatives to inhibit microbial growth in food. They include salt, sugar, and sodium nitrate, and are used for curing and pickling meat and vegetables. Other agents such as salicylic acid and sodium benzoate are also used as preservatives. Ordinarily, salting is combined with curing and smoking to preserve some meats. Smoking improves flavor and, to a limited extent, helps inhibit microorganisms.

3. FREEZING. Freezing at 0° F. and below is an effective method of preserving certain foods. The length of time foods may be stored frozen depends on some extent on the foods being frozen and on the temperature. The colder and more constant the temperature the better. Maintaining foods at -30° F. or below is desirable.

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4. **CHILLING.** Chilling food between 30° F. and 40° F. will prevent most pathogens and retard many spoilage microbes, but will not prevent spoilage.

5. **COOKING.** Ordinary cooking may render foods digestible and palatable, but cooking does not preserve them. In fact, it may expedite spoilage of protein foods (meat, milk and its products, eggs), permitting active growth of both harmful organisms and those responsible for spoilage at certain temperatures. Bacteria carry out the protein breakdown that brings on foul-smelling, rotting processes in these foods.

Temperatures used for boiling (212° F.) (100° C.) on top of a range or in a steam-jacketed kettle are not sufficiently constant to ensure a complete destruction of spoilage organisms in most foods. A product is safe only if cooked long enough to destroy the spore-forming microorganisms and many kinds of heat-enduring bacteria. This destruction is not accomplished by ordinary baking at the oven temperatures used to bake most products. During the baking process, heat does not penetrate into the item being cooked. Frying, like baking, is not effective in destroying heat-resistant microorganisms because heat does not penetrate the interior of some foods before over browning occurs on the exterior.

6. **PASTEURIZATION.** Foods can be preserved at least for short periods of time by the pasteurization process. Pasteurization is a process of heating a substance, usually a liquid, to a sufficient temperature to destroy disease producing microorganisms without changing the composition, flavor, or nutritive value of the liquid. Some spoilage microbes are destroyed in the process. Milk is a good example of how pasteurization, in combination with refrigeration or preservatives, can extend the storage times of many foods.

### **O-11 ADDITIONAL REFERNECES**

Additional information on Food Service Operations in Chemical, Biological and Radiological Defense can be found in the Army (Field Manual) FM 10-23, Part Five, Nuclear, Biological, and Chemical Operations, Chapter 13, Protection From Contamination and FM 8-10-7, Appendix F, Food Contamination and Decontamination.

**APPENDIX P**  
**SAFETY AND 3M/PMS STANDARDS**

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**Section 1: SAFETY**

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**Section 2: PLANNED MAINTENANCE SYSTEM (PMS)**

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## APPENDIX P

# SAFETY AND 3M/PMS STANDARDS

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### Section 1: SAFETY

#### P-1-1 GENERAL

A well organized safety program will reduce accidents which result in time lost from the job, additional administrative burdens and undue hardships on all concerned. A safety conscious operation with well-trained personnel will result in reduced dish breakage, a more pleasant atmosphere, more efficient work habits, and better food service. In the final analysis, safety is good management.

#### P-1-2 SAFE WORKING CONDITIONS

1. GENERAL. It is necessary to have safe conditions before operations themselves can be made safe. The following are conditions that should underline safety.
2. AMPLE WORKING SPACE. All working spaces should have adequate clearance between equipment. Overhead clearance should be adequate enough so as to preclude injury. All food preparation counters should have adequate width and height so as to make the preparation area comfortable to work in.
3. SUITABLE STOWAGE FACILITIES. Food stowage areas should have adequate stowage facilities for all food items and food preparation equipment, with special emphasis on stowage of machine attachments and cutting devices.
4. ADEQUATE LIGHTING. All food service spaces should have adequate lighting as well as proper light intensity for jobs to be performed. For a good working environment it is necessary to have a well lighted space. Adequate guards on low hanging fixtures are required so as to avoid personal contact with exposed bulbs.
5. GOOD INSULATION. Steam and water lines located near food preparation spaces are required to have adequate insulation on all exposed pipes and valves.
6. GOOD HOUSEKEEPING. A properly cleaned and stowed operation will have a lasting impression on all parties involved. Safety is a primary concern for all; floor clutter and improper stowage can and will cause accidents to happen.
7. PROPER ENCLOSURES AND GUARDS FOR MACHINES. Machinery does not cause physical harm to personnel; people cause physical harm to each other. To avoid personal injury of personnel, knife guards and safety devices are required to be installed on all equipment that requires them. You are further required to have all safety and operating instructions posted adjacent to all equipment and visible to all operators.
8. PROPER CARE OF FLOORS. The floors in all areas require special attention; they must be kept clean and dry to avoid personal mishaps. Terazzo and tile floors may become especially slippery when weather is humid, and will require additional attention to maintain a dry and safe condition.
9. CHAIRS AND TABLES. Chairs and tables can be some of the most abused pieces of furniture in a food service operation. All chairs and tables requiring repair must be

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accomplished so as to preclude injury to personnel. Any damaged furniture must be removed until it is repaired.

10. **FIRE SAFETY.** Fire can be the single most damaging casualty afloat as well as ashore. It is up to you to ensure that your operation is fire safe, and that all personnel follow fire safety procedures. All fire extinguishers should be checked for leakage as well as charging on a monthly basis, and personnel must know the location of all equipment as well as who to notify in case of emergency. All exits must be clearly designated as fire exits, unlocked and free of debris. The use of supplementary locks or chains on fire exits is prohibited.

11. **SAFE CLOTHING.** The clothing that you wear during your working hours must be presentable and well taken care of. Jewelry, watches, and bracelets are prohibited from food service spaces. This does not apply to a plain ring, such as a wedding band. Safety shoes are required in all food service spaces and loose sleeved shirts, ties or aprons should not be worn when using grinders, mixers or saws.

12. **COMPLIANCE WITH ORDINANCES, REGULATIONS, AND CODES.** All equipment installed in Navy galleys will be in accordance with National Restaurant Association guidelines. Electrical equipment must be in accordance with the National Electrical Codes guidelines. All circuit breakers must be legibly marked as to what that particular circuit services. Integral electrical wiring on all equipment is mounted and secured properly. There is no evidence of electrical shock hazards in any food service space.

### **P-1-3 RECEIVING AND STOWAGE OPERATIONS**

In general, stowage compartments should be located away from sources of contamination, maintained in good repair and kept clean. When receiving food items the following procedures apply:

1. When opening boxes, cartons, crates etc., remove nails and beware of broken glass.
2. Locate the heavier and bulkier materials on the lower shelves. Avoid storage on top of food lockers or other high storage units.
3. Food containers should be covered except when in actual use or service.
4. Food containers will become contaminated by wire splinters and dirt if not opened properly.
5. Know where your firefighting equipment is located. Items will not be stored where they would be in the way when equipment is needed for emergency use. Flammable cleaning materials or other materials will be placed in specified lockers or in approved safety cans.
6. Maintain good housekeeping so as to reduce the hazards of fire and other accident hazards. Place stores so that they do not protrude into the aisles from bins or shelves.
7. Be sure that light bulbs are guarded and that materials are stored no closer than 18 inches to any bulb.
8. To avoid toppling of cases and injury to personnel; do not stack cases too high.

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9. Use shelving of sturdy construction. In storerooms afloat, merchandise should be secured behind battens or lashed down.
10. Storerooms will be properly ventilated and smoking prohibited.
11. When lifting, keep back straight, bend knees and let leg muscles do the work. If load is too heavy for one person to manage, ask for assistance.
12. Use adequate and safe ladders; avoid overreaching to get objects.
13. Store pesticides, cleaning agents and chemicals in original containers away from food service areas.
14. Carbon dioxide (CO<sub>2</sub>) bottles (tanks) should be stored and secured where they cannot be knocked over. All gauges on tanks should be in good working condition.

### **P-1-4 SAFE FOOD PREPARATION OPERATIONS**

1. To avoid burns you must use hot pads properly. Slip hands through the elastic straps on the back of pads to protect the underside of wrists and enable firm gripping of hot pans. Launder pads frequently.
2. Cook in minimum amounts of water to avoid boiling over and spilling when pouring off hot liquids.
3. Remove steam-jacketed kettle covers carefully so that steam may escape without scalding hands or face.
4. Keep range tops and ventilation hoods free of grease.
5. Handles of cooking utensils should be turned away from the edge of the range to prevent being pushed off.
6. Ask for help to lift heavy containers; know where to place the container in a clear work area.
7. To avoid splashing when drawing hot water or coffee from an urn, turn the spigot slowly and check all valves and spigots for proper closed position before filling urn.
8. Keep oven doors closed when not in use.
9. Do not clean the oven or range until it has cooled.
10. Clean up spills immediately and store all kitchen utensils off the floor and on shelves or in proper spaces provided.
11. ALL EQUIPMENT MUST BE SECURED WHEN GALLEY WATCH PERSONNEL ARE NOT IN FOOD SERVICE SPACES.

### **P-1-5 EQUIPMENT USED FOR FOOD PREPARATION**

1. **GENERAL.** Only trained and qualified personnel are authorized to use food service equipment. Be sure all safety devices, to include interlock switches, shielded toggle switches, temperature/pressure gauges, steam relief valves and machinery guards are in place, are in proper operating condition, and that all parts are installed as directed

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by the manufacturer. All electrical equipment must be secured before cleaning or adjusting. The following guidelines apply for specific types of equipment.

2. **CUTTERS AND CHOPPERS.** Guards are required for cutters and choppers as specified by the manufacturer, including blade guard and interlock switches that render the machine inoperable when the guard is not properly positioned.

3. **SLICERS.** Slicers are required to be located away from the traffic areas, secured, mounted, guarded, and grounded electrically.

a. Keep knife guards in place at all times unless the slicer is unplugged and disabled for cleaning.

b. Use the pusher (not your hand) to guide the product being sliced toward the blade.

c. Always disconnect power cord prior to cleaning and reconnect only when ready to use.

d. Never touch the blade with your hands. Clean the blade with a clean, detergent soaked cloth, wiping from the inside to the outside.

e. Always secure the machine when not in use.

f. Always replace knife guards after cleaning machine.

4. **GRINDERS.** A guard or feeding device must be installed on every grinder and kept in place while the machine is in use. Do not put fingers or hands against the feed screw or other grinding mechanisms. On other models a multi-hole plate is secured over the opening. Plastic or metal stompers especially designated to prevent contact with the feed screw must be provided. Always feed the grinder with the stomper, not by hand.

5. **MIXERS.** Food service mixers come in various sizes depending on the specific gallon capacity that the mixer is capable of holding. You should never fill the mixer more than 2/3 full due to the uneven weight distribution. **DO NOT START MACHINE WITH THE CLUTCH ENGAGED - IT CAN DAMAGE THE MACHINE OR DO PERSONAL HARM TO FOOD SERVICE PERSONNEL.**

6. **STEAM-JACKETED KETTLES AND STEAMERS.** There are two different types of steam jacketed kettles in use afloat as well as ashore. It is important to know which type your command has installed. The following are basic principles to follow for each type kettle:

a. **Steam-Jacketed Kettle (Steam Supplied).** Steam is supplied to food service spaces for various operations including the use of steam jacketed kettles. The food service division is required to ensure that the operating procedures are closely monitored, or the steam kettle can become a potential lethal instrument. To ensure the kettle is maintained properly follow the required PMS cards and operating instructions.

b. **Steam-Jacketed Kettle (Electric).** Steam is internally supplied through a sealed "vacuum" system. It is the responsibility of the galley watch captain to ensure that the level of water does not go below the "MIN" level on the sight glass. To recharge the system with new water it must be distilled. You can obtain this water from either the ship's distilling plant or from shore sources of supply. If tap water is used it can cause

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buildup of mineral deposits on the heating coils and decrease the effectiveness of the kettle.

c. Hydrostatic Testing of Steam-Jacketed Kettles. Hydrostatic testing of steam-jacketed kettles is required as per OPNAVINST 11000.16A (ASHORE), and NAVSEA Tech Manual Chapter 651 Commissary Equipment (AFLOAT) is required to be scheduled on the ship's preventive maintenance schedules. The testing is required on an annual basis.

7. CUTLERY. Knives are the most important tool in your food service operation. A dull knife can cause more harm than a sharp knife, so ensure that your knives are always kept sharp and clean. Cutting boards made of plastic, polyethylene, or hard maple or equivalent close-grained wood are required for use (see P5010-1, Section 4 for additional guidance regarding the use of wood cutting boards and utensils in the general mess). Each CS is required to clean his/her own knives; do not delegate them to the mess attendant. KNIVES ARE NOT CAN OPENERS and should not be used as such.

8. DEEP FAT FRYERS. The deep fat fryer has the potential to be an extremely dangerous piece of equipment. If the deep fat fryer is not maintained properly or safety rules adhered to the possibility exists that you may be severely burned. The following basic safety rules should be followed:

a. The heating coils must ALWAYS be completely immersed in shortening. If they are not then the possibility exists that the shortening may ignite.

b. The deep fat fryer is required to be manned at all times while the deep fat fryer is in operation.

c. The deep fat fryer will not be operated without deep fat fryer thermometers inserted in each separate fry kettle or attached to the individual fryer baskets. Use of individual thermometers is not only a good safety practice, but allows you to quickly check the accuracy of the units' thermostats and make adjustments in your frying temperature as needed.

d. When filling the deep fat fryer with new shortening ensure that the coils are packed with new shortening and that the level is at least 1 inch above the top of the coils.

e. The maximum temperature that you may melt the solid shortening is 200° F.

f. Melted shortening ignites at 475° F.

g. Ensure that the deep fat fryer is calibrated and that all safety devices are in full operation.

9. CHINA AND GLASSWARE. China and glassware is essential to your food service operation. To ensure that you get the most out of your eating utensils follow these simple rules:

a. Chipped or cracked dinnerware/glassware is required to be discarded when discovered.

b. Use care when handling glasses and dishes. Do not stack them so that there is danger of toppling. Whether afloat or ashore, remember, STOW FOR SEA.

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- c. When stowing glasses and cups, place them upside down in the stowage racks.
- d. If you know of, or suspect that there is broken glass or dishware in soapy water, remove the broken pieces carefully.

### Section 2: PLANNED MAINTENANCE SYSTEM (PMS)

1. GENERAL. PMS maintenance actions are the minimum actions required to maintain machinery and equipment in a fully operable condition, and within specifications. Preventive maintenance is set up for all equipment that might seriously damage the equipment or effect the safety of the operator if it should break down. A good maintenance program should have the list of equipment that requires periodic inspection, adjustment, cleaning, and lubrication. A well maintained galley plays an important role in having an effective food service operation that contributes to saving labor and high morale.

#### 2. PLANNED MAINTENANCE SYSTEM (PMS)

- a. Ensures that preventive maintenance is completed when required.
- b. Provides a simple and standard means for planning, scheduling, controlling and performing preventive maintenance.
- c. Uses schedules and documents, some of which are the following:
  - (1) Daily PMS schedule;
  - (2) Weekly PMS schedule; and
  - (3) Quarterly PMS schedule.

3. LIST OF EFFECTIVE PAGES (LOEP). The list of effective pages (LOEP) provides a listing of the maintenance index pages (MIPs) assigned to each department, divided by work center.

4. MAINTENANCE INDEX PAGE (MIP). The Maintenance Index Page (MIP) lists all maintenance requirements for each particular piece of equipment (see Fig. P-1).

5. MAINTENANCE REQUIREMENT CARD (MRC). The Maintenance Requirement Card (MRC) provides detailed procedures for performing maintenance requirements and tell who, what, when, how, and with what resources a specific requirement is to be accomplished. It also states safety precautions which reduce the chance of costly or dangerous preventive maintenance errors. The MRC contains the following (see Fig. P-2).

- a. Ship system, system subsystem, and equipment.
- b. MRC codes:
  - (1) MIP series code
  - (2) Periodicity code
- c. Brief definition of the PMS action to be done.

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- d. Rates. Recommended skill level of the maintenance person identified by rate or NEC. Qualified maintenance personnel other than specified may be assigned.
- e. Manhours required to accomplish the maintenance action.
- f. Safety precautions. Awareness to possible hazards to personnel or equipment while performing maintenance.
- g. Tools, parts, materials and test equipment. Note: Necessary to accomplish the maintenance action.
- h. Procedure. Sequence of detailed steps to be followed in performing the maintenance action.
- i. Location.
  - (1) Denotes the physical location of the equipment.
  - (2) EGL is placed in lieu of the physical location to alert maintenance personnel that more than one piece of equipment exists.
- j. Date, Month, and year the MRC was prepared.
- k. Syscom MRC control number located vertically along the lower right side of the MRC.

6. EQUIPMENT GUIDE LIST (EGL). A 5" x 8" card is used when several identical pieces of equipment are listed under the same MRC card. The EGL contains the following:

- a. Controlling MRC code.
- b. Name of equipment and serial number (if applicable).
- c. Location of each piece of equipment.

7. CYCLE PMS SCHEDULE. The Cycle PMS Schedule displays the planned maintenance requirements to be performed during the period between major overhauls of the ship. The Cycle PMS schedule contains the following:

- a. Ship's name and hull number.
- b. Work center.
- c. Department head signature and date approved.
- d. MIP/components - listing of the MIP codes and their related system, subsystems, or equipment for which PMS requirements are to be scheduled in the cycle schedule.
- e. The annual, semi-annual, multiple-month (18 month and greater) maintenance requirements, and any related maintenance checks (except daily and weekly) to be completed during the cycle indicated.
- f. Every two weeks, monthly, every two months, and quarterly maintenance requirements, any related maintenance checks and situation requirements to be completed during each quarter.

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8. QUARTERLY PMS SCHEDULE. The Quarterly PMS Schedule displays the work centers' PMS requirements to be performed during a specific three-month period. The quarterly PMS schedule contains the following:

- a. Work center
- b. Year
- c. Quarter after overhaul
- d. Department head signature
- e. Date prepared
- f. Months covered

9. WEEKLY PMS SCHEDULE. The Weekly PMS Schedule displays the planned maintenance schedule for accomplishment in a given work center during a specific week. The weekly PMS schedule contains the following:

- a. Work center code
- b. Date of current week
- c. Division officer approval signature
- d. MIP code minus the date code
- e. List of applicable components
- f. Maintenance personnel assigned
- g. Periodicity
- h. Outstanding major repairs, etc.

10. PERIODICITY CODE. The periodicity code denotes the number of maintenance requirements needed for a certain piece of equipment. The following are examples of periodicity codes:

- a. D - daily
- b. 2D - every second day
- c. W - weekly
- d. 2W - every second week
- e. M - monthly
- f. Q - quarterly
- g. S - semi-annually
- h. A - annually
- i. R - situation requirement

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- j. 18M - every 18 months
- k. 48M - every 48 months, and,
- l. LU - lay up.

**NOTE:** The numbers indicate sequence. For example, if a piece of equipment has four monthly checks, they are identified as M-1, M-2, M-3 and M-4. Periodicity may indicate a combination of calendar and situation requirements. (For instance, M-1R means that the check is to be done monthly or when some specified situation occurs).

### 11. PMS PROCEDURES

- a. Daily the designated maintenance person checks the weekly PMS schedule.
- b. Maintenance person selects the proper MRC from the holder in his/her work center. The SYSCOM MIP CONTROL number plus the periodicity code gives the maintenance person the MRC code, which is found in the upper right hand corner of the MRC. (The MRC's are filed in numerical order by MRC code i.e., A-609 M-1, A609 M-2, 6512 M-1, 6513 W-1, etc.).
- c. Verify the correctness of the MRC using the MIP, LOEP, and change page.
- d. Perform all maintenance of equipment listed on the EGL (when EGL is attached to the MRC).
- e. Accomplish the job using proper tools, parts, materials, test equipment and procedures on the MRC.
- f. Follow safety precautions.
- g. Maintenance person reports to his/her work center supervisor if a problem exists or when work is complete.
- h. Maintenance person returns the MRC to the card holder.

12. PMS AUDIT/SPOT CHECK. Individual maintenance requirements will be audited periodically in order to determine the effectiveness of PMS accomplishment. The food service division officer, or other designated person should perform a PMS audit on at least one maintenance requirement (MR) per week. The following steps should be taken:

- a. Select at random from the weekly or quarterly schedule a maintenance requirement that has been crossed off as being completed.
- b. From the work center supervisor, weekly schedule or accomplishment log, identify the individual who performed the maintenance requirement.
- c. Have the maintenance person pull the MRC (auditor should read the MRC and become familiar with the steps performed). Proceed with the individual to the equipment selected to be checked.
- d. Question the maintenance person. The questioning should be of a general nature and related to the maintenance requirement. Memorizing the card is not

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required, but if the maintenance was done, the person should be familiar with the MRC. Inquiries should be made to determine whether:

(1) The person actually did the work. (If not, a scheduling or supervisory problem exists). If someone else did the work, then the individual who actually did the maintenance should be questioned.

(2) All basic parts of the maintenance requirement were done (i.e., if parts of the MR required operation of the equipment, is it in fact operable? If there was a requirement to grease the chain drive, was it greased? If there is a requirement to calibrate the oven, how was it done, etc.?).

(3) Were basic safety precautions observed?

(4) The proper tools/materials were used (e.g., where did the maintenance person obtain the grease or solvent; was test equipment properly calibrated, etc.?).

(5) If disassembly is part of the procedure, inspect the equipment for evidence of disassembly (e.g., access plate, hold down bolts, mechanical guards, etc.).

(6) If an equipment guide list (EGL) was used, determine if the maintenance requirement was performed on all equipment listed.

(7) The work center supervisor should question the technical accuracy of the MRC. (If it is incorrect or not clear in any way, has a technical (category B) feedback report (FBR) been submitted?).

### 13. COORDINATING PERSONNEL

a. The work center supervisor initially organizes personnel by filling out the weekly PMS schedule, based on the cycle and quarterly schedules.

b. Maintenance personnel from other areas such as the Electrical Division, Air Conditioning and Refrigeration, Steam and Heat, or Damage Control are to perform the PMS.

(1) The senior CS is responsible for communicating with senior personnel from maintenance divisions to ensure that maintenance has been performed properly and on schedule.

(2) The senior CS reviews the MRC to ensure work was done properly and on schedule.

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## Figure P-1 - Maintenance Index Page

SHIP SYSTEM, SYSTEM, SUBSYSTEM, OR EQUIPMENT			REFERENCE PUBLICATIONS				DATE
Dishwashing Machine 6512							MAY 1998
T E S T	O T H E R	SYSCOM MRC CONTROL NO.	MAINTENANCE REQUIREMENT DESCRIPTION	PERIODICITY CODE	RATER	MAN HOURS	RELATED MAINTEN ANCE
			<p>A scheduling aid: "U" MRC (Unscheduled Maintenance Requirement) is provided to assist in restoring system/equipment to an operational condition. Its use may be directed by a scheduled MRC, scheduling air, or system/equipment failures.</p> <p>** For scheduling purposes only; no MRC is provided.</p>				
		65 Z75J N	1. Inspect dishwashing machine.	M-1	EN/MM2	0.2	None
		58 A7TT N	1. Verify accuracy of dishwashing machine thermometer(s).	M-9R	EN/MM2	2.0	None
			NOTE: Accomplish monthly and when thermometers are suspected of being out of calibration.				
		65 Z75K N	1. Inspect in-line strainer.	Q-1	EN/MM3	1.0	None
		65 Z75L N	1. Descale machine.	U-1			None
			<b>INACTIVE EQUIPMENT MAINTENANCE</b>				
			<p>The following requirements will be scheduled when equipment is inactivated for periods of prolonged idleness.</p> <p>Lay-Up Maintenance</p> <p>1. Inspect dishwashing machine. NOTE: Use MRC M-1.</p> <p>1. Install approved fire retardant cover over dishwashing machine. NOTE: Accomplished as required to protect equipment.</p> <p>Periodic Maintenance</p> <p>None</p> <p>Start-Up Maintenance</p> <p>1. Remove protective cover from dishwashing machine. NOTE: Accomplish if required.</p> <p>Operational Test</p> <p>None</p>				
				LU-1 **			
				SU-1 **			
MAINTENANCE INDEX PAGE (MIP) OPNAV 4790/84 (REV. 2-82)		Page 1 OF 1	SYSCOM MIP CONTROL NUMBER		6512/003-58		

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## Figure P-2 - Maintenance Requirement Card

SHIP SYSTEM	SUBSYSTEM	MRC CODE 6512 M-9R	
SYSTEM	EQUIPMENT Dishwashing Machine 6512DV	RATES EN/MM2	M/H 2.0
MAINTENANCE REQUIREMENT DESCRIPTION 1. Verify accuracy of dishwashing machine thermometer(s).		TOTAL M/H 2.0 ELAPSED TIME 2.0	
SAFETY PRECAUTIONS 1. Forces afloat comply with Navy Safety Precautions for Forces Afloat, OPNAVINST 5100 series. 2. Ensure all tag-out procedures are in accordance with current shipboard instructions.			
TOOLS, PARTS, MATERIALS, TEST EQUIPMENT			
MATERIALS 1. (1144) Tag, safety		MISCELLANEOUS 1. [1682] Calibrator, temperature indicator, Model 3604/3605 2. [3631] Calibrator, temperature indicator, Model 3603-1-1	
TOOLS 1. [1396] Wrench, torque, preset, 2 interchangeable heads, Part No. T8438 2. [1789] Wrench, adjustable, 10" heavy duty, 1.135" jaw open			
NOTE: Numbers in brackets can be referenced to Standard PMS Materials Identification Guide (SPMIG) for stock number identification.			
PROCEDURE			
NOTE 1: Accomplish monthly and when thermometers are suspected of being out of calibration.			
NOTE 2: Calibration by an authorized calibration activity shall be accomplished when Measure Automated System for Uniform Recall and Reporting (MEASURE) indicates calibration is due.			
NOTE 3: Accuracy of installed thermometers should be within $\pm 3^\circ \text{F.}$ of "standard" used. If thermometer is found to differ by more than $\pm 3^\circ \text{F.}$ , have results verified by authorized calibration activity.			
Preliminary			
WARNING: Ensure all tag-out procedures are in accordance with current shipboard instructions.			
a. De-energize circuit and tag "Out of Service."			
LOCATION		DATE MAY 1998	N

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**APPENDIX Q**  
**AFLOAT WARDROOM AND STATEROOM SERVICE**

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## APPENDIX Q

### AFLOAT WARDROOM AND STATEROOM SERVICE

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#### SECTION 1: AFLOAT WARDROOM FOOD SERVICE

##### Q-1-1 INTRODUCTION

This section is designed primarily for use in the operation of afloat wardrooms. Procedures for performing the basic wardroom food service functions are presented as guidelines for establishing a uniform training program. The text may also be used for self-study, for on-the-job training or as a point of reference. However, it should be noted that wardrooms and groups of officers have different characteristics and habits, and wardroom operations will by necessity vary with the desires of the command, the extent of the facilities and the number of personnel assigned. Therefore, questions regarding procedures in certain situations should be referred to the wardroom supervisor. The information contained in this appendix has been gathered from various sources within and outside the Navy.

##### Q-1-2 BACKGROUND

There are different types of wardrooms. Large ships may have a flag officer's mess, a commanding officer's mess, senior and junior officer's messes, and a warrant officer's mess. Small ships may have only a single officer's mess. Although the types of wardroom messes may vary, they all have one thing in common - the wardroom is each officer's sea-going home; a home in which he/she should be proud to entertain family and friends. It is their club, reading room, and occasionally conference room. The attitude and spirit of the wardroom permeates the entire ship. The wardroom must be an institution in its own right, and one that unites officers and creates among them the desire for cooperation and growth. Whatever the event, it is a place where members must conduct themselves within the ordinary rules of propriety, common sense and good manners, and habitually observe the rules of etiquette and the customs and traditions of the Naval service. The wardroom should exhibit the maximum in habitability regarding meal preparation and general messes, berthing arrangements, appearance and decor, and noise level. The quality and variety of china, silverware, linen, and equipment in the ship's allowance list are the minimum required and therefore must be maintained and augmented when necessary. The service of varied, well-prepared and attractively presented meals must likewise be expected and required. The achievement of high standards of facilities and food service depends upon the cooperation of all concerned mess members, food service personnel, and commanding officers.

##### Q-1-3 RESPONSIBILITIES

1. GENERAL. The responsibility for wardroom mess operations are a combination of regulation, custom, and tradition. NAVSUP Publication 486, App F, contains the basic regulations governing wardroom mess operation and procedures, and details of duties and responsibilities for those involved in the operation of a wardroom.
2. THE COMMAND. The commanding officer is responsible for the proper operation of officers' messes. It cannot be expected that Culinary Specialists (CSs), other mess

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personnel, or young officers on their initial assignment will assume this responsibility. The commanding officer, directly, if he/she is president of the mess, or through the president if he/she has his/her own mess, must not hesitate to exert positive and direct personal control if the operation or condition of the mess so dictates. Group and division commanders, in the administration of the ships under their command, are responsible for ensuring that all of the officers' messes in their command meet established standards.

3. **PRESIDENT OF THE MESS.** The senior line officer in succession to command, who is a member of the mess, normally is the president of the wardroom mess. In smaller types of ships, the commanding officer is president; in larger ships, the executive officer is usually president. Officers of an embarked staff are not eligible for presidency of the ship's mess. The president presides over the mess and is responsible for ensuring compliance with mess regulations and with the customs and traditions of wardroom living. He/she sets the example of conduct and behavior expected of his/her messmates and looks after the welfare of mess members.

4. **MESS CATERER.** The mess caterer supervises the operation of the mess; the procurement, storage, and issue of supplies for the mess; and assignment and performance of Culinary Specialists and rotational pool personnel. The commanding officer appoints the Mess Caterer. Commanding officers may permanently assign the collateral duty of mess caterer. The mess caterer must be someone who will take pride in the mess and who has adequate background and interest to make a success of the wardroom mess.

5. **MESS TREASURER.** The Mess Treasurer is appointed by the commanding officer for the wardroom mess. He/she may also be assigned the responsibilities and duties of mess caterer when considered appropriate. The mess treasurer shall keep accounts of and transact all receipts and expenditures of cash and provisions. Officers charged with the custody or disbursement of public funds and members of embarked staffs are not eligible for the office of mess treasurer. The mess treasurer shall render a statement of the mess account to the members as of the end of each month and be able to produce the books of the mess whenever called for by the commanding officer or the executive officer.

6. **WARDROOM MESS OFFICER.** When authorized and assigned, the wardroom mess officer shall be responsible for and perform the duties of both mess caterer and mess treasurer.

7. **MEMBERS.** The members of the wardroom mess are individually and collectively responsible for adherence to wardroom customs and traditions and their own habits of neatness. All officers regularly attached to the command normally are members of the appropriate mess. Officers attached for temporary duty in excess of 30 days should join the mess. Officers attached for less than 30 days need not join the mess but shall be accorded the comforts of the mess on a reimbursement basis. Civilian personnel embarked are not eligible for mess membership. However, if they are of a status equivalent to naval officers, they shall be accorded the comforts of the mess on a per diem basis. All wardroom mess members are solely responsible for the care, maintenance and orderliness of their personal effects. Sorting and storage of personal laundry is the responsibility of the individual officer.

8. **SUPPLY OFFICER.** Organizationally, the facilities, equipment, and personnel of officers' country are under the administration of the supply officer. He/she, therefore,

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must maintain particularly close liaison with the officials and members of the mess. The supply officer is responsible for providing the consumable supplies, soft goods, and laundry and cleaning services available on the ship for the proper operation of the mess.

Because of the supply officer's organizational responsibilities in the wardroom, commanding officers may consider the advantages of assigning the collateral duty of mess caterer to the supply officer. Appointment of the food service officer is especially advantageous for those ships whose officers subsist primarily from the general mess. It should be realized, however, that a Supply Corps Officer reporting for his/her first tour of duty in a ship with only one supply officer will have all he/she can do to master his/her own department. Therefore, assignment as mess caterer should be deferred for at least a year.

9. **CULINARY SPECIALISTS.** Wardroom Culinary Specialists are responsible for performing and supervising functions associated with the management and operation of officers' messes and quarters afloat. Food preparation, service and the cleaning and maintenance of these and related spaces are the responsibility of this rating. Culinary Specialists are also assigned to supervise the work of rotational pool personnel who work in the food service and quarters areas.

10. **ROTATIONAL POOL.** Rotational pool personnel are assigned to assist Culinary Specialists in providing services. All personnel in pay grades E-1 and E-3 will be eligible for assignment to the rotational pool. Petty officers shall not be detailed to rotational pools except when personnel E-3 and below are not available. The duties normally assigned to rotational pool personnel include stateroom housekeeping, maintenance and cleaning of officers' country, passageways and heads, food service maintenance, and cleaning and scullery duties. Rotational pool personnel may also be used to provide support service to include wardroom service and food preparation efforts when it is impractical to rely solely on CS personnel.

### **Q-1-4 TYPES OF WARDROOM MEAL SERVICE**

1. **GENERAL.** Normally family style is the most popular meal service provided in wardroom messes afloat. Specific wardroom design, number of food service personnel, and the desires of the mess president and the commanding officer, in many cases determine the type of service to be used. However, regardless of which style of service is used, it must be executed properly. The success of the best written menu and preparation efforts depend on how the food is served. There is a proper sequence to be observed in good food service. Good food service begins before the seating of wardroom members. It depends very much on advanced planning and proper preparation.

2. **TWO BASIC MEAL STYLES.** The two basic meal styles are "formal" and "informal," with variations within each style. Different aspects of these styles will be discussed along with the peculiarities of each.

a. **Formal Service.** Formal meal service includes the semi-formal style and the formal style of "French" service. This type of meal requires more advanced planning, detailed preparation, and elaborate tableware than any of the other styles. For these reasons, this style is usually conducted only in commanding and flag officers' messes and is normally used for occasions involving the entertainment of special guests. The reference rules for this meal are covered more completely in the reference book entitled

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“Service Etiquette.” Interpretation and application of these rules or guidelines for any officers mess afloat will usually be done by the senior CS in association with the mess president and/or treasurer.

b. **Semi-Formal Service.** This modification of the formal style service is used much more often. For example, it may be used daily in commanding and flag officers' messes if there are no guests. The preparation and service of this meal are not as elaborate as the formal style and require less time, facilities and personnel. The individual place settings are similar to those used for the informal meal styles. Few center items are used other than salt and pepper shakers, sugar bowls, and creamers.

The method of serving meal items is what distinguishes semi-formal from informal meal styles. In the semi-formal style, each food item is arranged on a separate serving dish in the pantry and then offered to each diner. Beginning with the meat or main course, each course is carried into the wardroom separately. The courses are presented to each diner in turn, starting with the head of the table, the senior guest, or the individual designated by a buck. Each diner selects desired items from the serving dishes and places them on his/her plate while the serving dish is held. Serving dishes are returned to the pantry after their contents have been offered to all the diners.

3. **INFORMAL SERVICE.** Several types of informal service are used in the typical wardroom messes. Each has its own advantages, but all are faster and more convenient to use than the formal styles. Those currently in use are called family, American, a la carte, cafeteria, and buffet styles.

a. **Family Style.** For this style of service, food is arranged in serving dishes, along with serving utensils. The dishes are then placed on the dining table and diners serve themselves, and then pass the dishes around the table until all diners have been served. The CS replenishes serving dishes as necessary and provides beverage service. Dessert items may be brought in and placed on the sideboard and served by the CS/rotational pool personnel when the main course items have been removed from the dining table.

b. **American Style.** This type of service is used in most restaurants. The main course plate is not part of the initial place setting. Instead, individual plates are prepared in the pantry or galley and placed before the seated diners. This form of meal service is often provided in officers' messes in medium-sized ships and is often combined with other, traditional forms of service. In American service, food is placed on plates in the galley and taken to the wardroom and served to each diner.

c. **A la Carte (Breakfast) Style.** This type of service is usually provided at breakfast. As with the American style, the main plate is not part of the initial plate setting. Instead, the diner is given a menu or breakfast order form. After the diner has decided what food he or she wants and how it is to be prepared, the order is delivered to the pantry or galley and the food is prepared as requested. It is placed on a plate and served to the diner as the American style of service.

d. **Cafeteria Style.** This is the type of service that is used aboard some larger ships (i.e., carriers, tenders, etc.). The diner does not normally serve himself/herself, rather, the diner selects the desired items and the food service attendant places them on his/her plate. For example, salads, desserts, and some side dishes may be apportioned in dishes; and the diner simply takes them from the serving line. The main course,

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vegetables, starches, and meat, are portioned onto a plate by the food server as the diner selects them.

e. Buffet Style (Self-Serve). Although buffet service is listed under informal style service, it may also be used on formal occasions. The requirements for formal use, as for all formal service, may be obtained from the references listed under formal meal style. For both formal and informal use, this type of service can be used when either space or serving personnel is limited, and this is the preferred method of service to reduce workload. The food is attractively arranged on a sideboard or serving table and the diners serve themselves. It is customary to place silverware and other necessary dishes on the dining table so that the diners do not have to carry them.

### Q-1-5 TABLEWARE ITEMS

Tableware items used for arranging individual place settings are listed and discussed below. Some ship wardroom facilities may not have such infrequently used items such as pickle forks or egg cups, but these items are presented to familiarize food service personnel with them.

a. Main Course Knife. The largest meal knife is always set for lunch and dinner meals.

b. Breakfast Knife. This is always set for breakfast and brunch. It is similar in shape to the main course knife but is slightly smaller.

c. Bread and Butter Knife. This is used only at lunch and dinner meals when bread is to be served. It is the same size as the breakfast knife, but has straight edges and a blunt tip.



MAIN COURSE KNIFE



BREAKFAST KNIFE



BREAD AND BUTTER KNIFE

Figure Q-1 - Knives

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d. Main Course Fork. This is always set for lunch and dinner meals. It is largest of the eating forks. It is also used for serving meats, starches, and some vegetables.

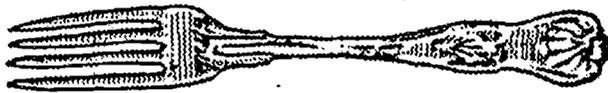
e. Dessert/Breakfast Fork. This is always set for breakfast or brunch. It is also set at dinner or lunch when dry desserts such as cake or pie are to be served. This fork is similar in shape to the main course fork but is slightly smaller.

f. Salad Fork. This is used only at lunch or dinner when salad is to be served. It has four short tines, one of which is slightly wider than the other three and has a notch or indentation at the end.

g. Oyster Fork. This is used only at lunch or dinner when oysters or shrimp cocktails are to be served. It is slightly smaller than the salad fork and has only three tines. One of the two outer tines is wider and the other and is notched at the end.



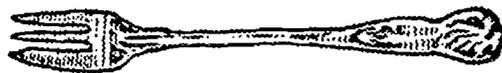
MAIN COURSE FORK



DESSERT/BREAKFAST FORK



SALAD FORK



OYSTER FORK

**Figure Q-2 - Forks**

h. Teaspoon. The teaspoon is set for every meal. It is similar in size and shape to the common household teaspoon.

i. Iced Tea Spoon. The iced tea spoon is set at lunch or dinner when iced tea or coffee is to be served. It has a smaller bowl and a longer handle than the teaspoon.

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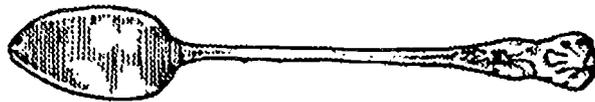
j. Soup Spoon. The soup spoon is set at lunch and dinner when hearty soups or bouillon is to be served in the soup plate. It is slightly longer than the teaspoon with an almost round bowl.

k. Dessert/Cereal Spoon. The dessert/cereal spoon is set at breakfast or brunch when cereal is to be served. It is also set at lunch or dinner when frozen, jelled or liquid dessert is to be served. The spoon is similar in shape to the teaspoon but is somewhat larger.

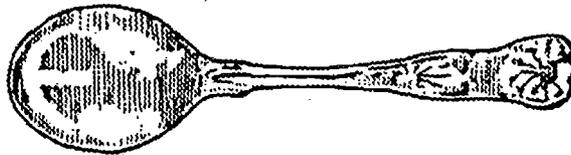
l. Bouillon Spoon. The bouillon spoon is set for lunch and dinner when the bouillon cup is to be used. It has a round bowl and is smallest of the eating spoons.



TEASPOON



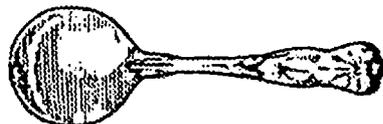
ICED TEA SPOON



SOUP SPOON



DESSERT/CEREAL SPOON



BOUILLION SPOON

Figure Q-3 - Spoons

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m. Main Course Plate. The main course plate is set when lunch or dinner is to be served in either semi-formal or family style. It is not set for American, a la carte, cafeteria, or buffet style meals. The dinner plate is the largest meal plate.

n. Breakfast Plate. The breakfast plate is used for breakfast or brunch. Because these meals are normally served a la carte or buffet style, the breakfast plate is usually not set as a part of the cover. It is slightly smaller than the main course plate but is the same shape. The breakfast plate can be used as an underliner for soup (if a soup plate is to be used in serving).

o. Bread and Butter Plate. The bread and butter plate is set when bread, toast, and butter are to be served at lunch or dinner. It is the smallest flat plate. At breakfast it is used to deliver individual servings of toast and butter. If rolls or doughnuts are to be served at breakfast, bread and butter plates are stacked in the center of the table next to the cereal bowls.

p. Dessert/Salad Plate. The dessert/salad plate is set with individual servings when salad is to be served at lunch or dinner. It is also used to serve pies, cakes, or other dry desserts after the main course has been completed. If shrimp cocktail is to be served in a sherbet cup, the cup is placed on this plate. The dessert/salad plate is smaller than the breakfast plate.

q. Coffee Cup and Saucer. This coffee cup and saucer are set for every meal. Normally, the cup is placed upside down on the saucer. The diner turns it over when he/she is ready to be served.

r. Demitasse Cup and Saucer. This cup and saucer are set when demitasse, a strong, rich coffee, is to be served at lunch or dinner. These items are shaped similar to the coffee cup and saucer, but are slightly smaller. The cup is placed upside down until the diner is ready to be served.

s. Bouillon Cup. The bouillon cup is set at lunch and dinner when bouillon is to be served. Note, however, that bouillon may also be served in the soup plate at the discretion of the wardroom supervisor or the mess president. The cup is similar in size and shape to the coffee cup except that it has two handles. The coffee saucer is used with the bouillon cup.

t. Sherbet Cup. The sherbet cup is a glass cup used to serve liquid desserts or shrimp cocktail at lunch or dinner. It is always served on a dessert plate.

u. Egg Cup. The egg cup is a small china cup without handles used to serve hard cooked eggs at breakfast or brunch. It is used with a coffee cup saucer.

v. Dessert/Cereal Bowl. The dessert/cereal bowl is used at lunch or dinner when jellied, frozen, or liquid desserts are to be served, and at breakfast or brunch when cereal is to be served. At breakfast, when hot or cold cereal is to be served, the dessert/cereal bowl is placed in stacks of four or five along with the dining table center items. At lunch or dinner, when jellied, frozen, or liquid desserts are to be served, the dessert/cereal bowl is placed before the diner after the main course plate has been removed. It may also be used with a tablespoon as a center item for serving horseradish, sour cream, applesauce, or similar condiments. It is smaller than the soup bowl.

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w. Soup Plate. The soup plate is used when hearty soup is to be served. It may also be used for bouillon. It is usually filled and brought from the pantry after the diners are seated. The soup plate is a shallow plate which is slightly deeper and wider than the dessert/cereal bowl. It is the larger of the two.

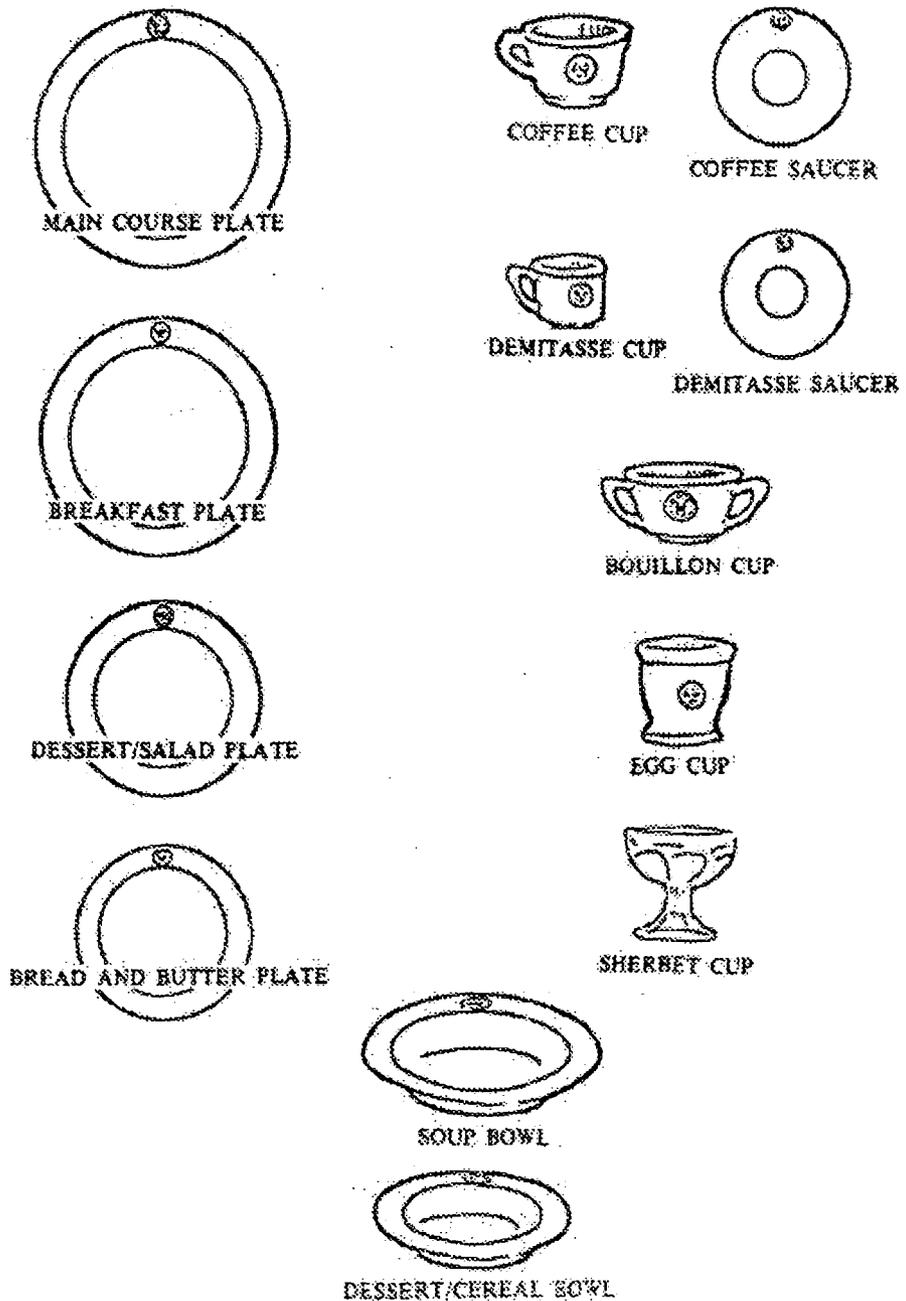


Figure Q-4 - China

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x. **Beverage Glass.** The beverage glass is set for lunch or dinner when milk, iced tea or coffee, or other chilled beverages are to be served. It is also a 10-ounce glass but is taller and narrower than the water glass.

y. **Water Glass.** The water glass is set for lunch or dinner unless another chilled beverage is to be served. It is a 10-ounce glass and is used only for water. It is wider and shorter than the beverage glass.

z. **Juice Glass.** The juice glass is normally used only at breakfast. It is not set but is used to serve juice when ordered by the diner. It is the smallest glass and contains 6 ounces.



**Figure Q-5 - Glasses**

### **Q-1-6 DINING TABLE CENTER ITEMS**

1. **GENERAL.** Tableware items commonly placed in the center of the dining table are listed and discussed below. These items include standard items that are typically used at every meal, related items which may be included on the basis of menu requirements.

2. **STANDARD CENTER ITEMS.** The standard center items listed below are normally set for all meals.

a. **Sugar Bowl.** The sugar bowl is a small, silver, oval-shaped container with a short pedestal stand and lid. It is always set with a sugar spoon.

b. **Salt and Pepper Shakers.** The salt and pepper shakers may be all silver or they may be glass with silver tops. The salt should always be kept loose and dry, and both shakers should always be at least 3/4 full when placed on the dining table.

c. **Coffee Cream Pitcher.** The coffee cream pitcher is similar in size and shape to the sugar bowl, but has a spout and no top.

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d. Centerpiece. Most ships consider some type of centerpiece as standard. The centerpiece usually consists of a silver fruit bowl containing either fresh or artificial fruit for breakfast or fresh or artificial flowers for lunch or dinner.

e. The Buck. A buck is normally a small object, such as a statue, a model or a dummy weapon round, which is used aboard some ships to designate which diner is to be served first. The buck is not used at breakfast, at brunch, or when guests are to be served.



**Figure Q-6 - Standard Center Items**

3. MEAL-RELATED CENTER ITEMS. The meal-related center items listed below and shown in Figure Q-7 are set at the indicated meals if the food items for which they are used are listed in the menu.

a. Cereal Cream Pitcher. The cereal cream pitcher is shaped like a small beverage pitcher with a modified hour glass design. It has a handle on one side and a capacity of 16 ounces. It is set only for breakfast or brunch when cereal is to be served.

b. Syrup Pitcher. The syrup pitcher is similar in size and shape to the coffee cream pitcher except that the pouring spout is partially enclosed by a metal lip. It is set only for breakfast or brunch when pancakes or waffles are to be served. It is placed on a coffee cup saucer.

c. Silver Fruit Bowl. The silver fruit bowl is a large hollow bowl. It is used for serving fresh fruit for breakfast or brunch and is also set as a centerpiece containing artificial or real fruit for breakfast or artificial or real flowers for lunch or dinner.

d. Bread Tray. The bread tray is rectangular silver dish with rounded ends and perforated sides. It is used primarily for breads, but it may also be used for relishes such as carrot or celery sticks. When used for breads, an opened napkin is placed in the tray, the bread is neatly arranged on the napkin and folded over the bread to retain freshness and warmth.

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e. Cruet and Caster. The cruet and caster consists of two stoppered glass bottles placed on a small tray. The bottles hold oil and vinegar salad dressings when salads are served at lunch or dinner.

f. Butter Dish. The butter dish is a small, rectangular china dish with rounded corners. It may be used at all meals for serving butter patties. At breakfast or brunch, it may be used for serving jam or jelly packets.

g. Pickle Fork. The pickle fork is used only at lunch or dinner when pickles or other relishes are served. It is placed on the relish (bread) tray.

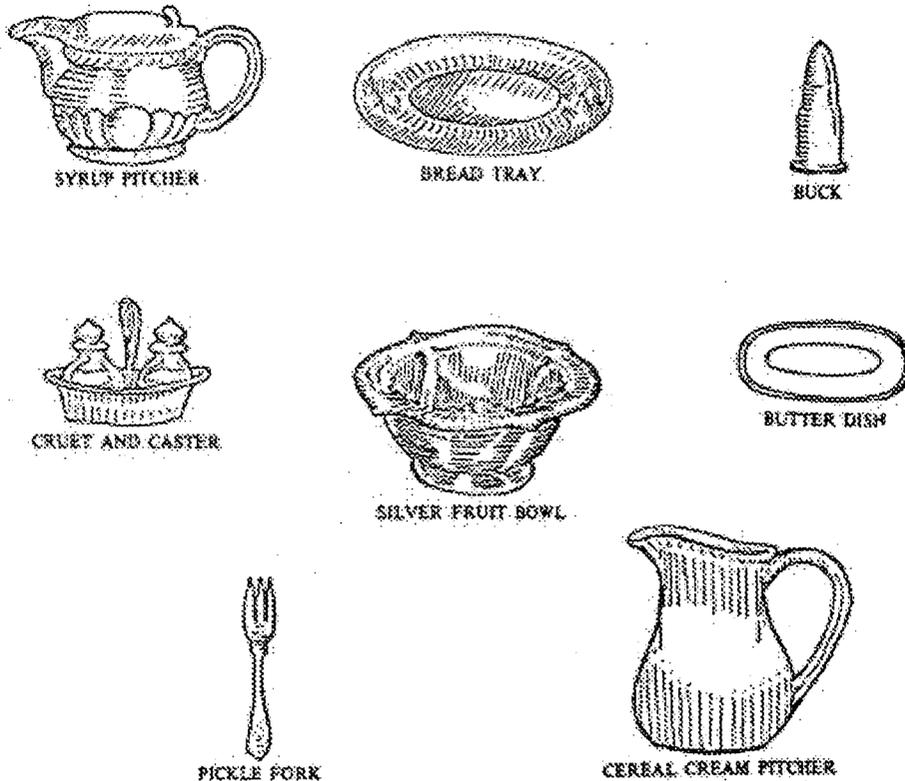


Figure Q-7 - Meal Related Center Items

### Q-1-7 SETTING THE DINING TABLE

1. GENERAL. Setting the dining table involves two basic tasks: setting individual place settings and setting the dining table center items. Linen placement should be completed before setting the dining table. This section lists the steps for selecting and pacing individual place settings and dining table center items for specific menus and styles of meal service. Variations in the procedures may occur, depending on the way in which a specific general mess is equipped and on the desires of the mess president and/or the wardroom supervisor. For instance, if there is a lack of a certain type of needed

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tableware, the wardroom supervisor should be asked to decide what items should be used as substitutes.

2. SETTING INDIVIDUAL PLACE SETTINGS. Individual place settings, often called “covers” are set following the placement of linen. For sanitary reasons, it is important to remember to not handle tableware on “eating” surfaces. Handle silverware only by the handles, and handle plates, dishes and serving ware by the edges and/or handles. The sequence of steps involved in setting individual place settings is outlined below.

a. Determine the Meal Style and Number of Diners. Information concerning the specific meal style and the expected number of diners is obtained from the wardroom supervisor.

b. Plan the Place Setting. There are two basic place settings: one for breakfast or brunch and one for lunch or dinner. The basic breakfast/brunch place setting (Figure Q-8) includes a breakfast fork, a breakfast knife, a teaspoon, a coffee cup and saucer, and an order form, if available. The basic dinner setting (Figure Q-9) includes a main course plate, a coffee cup and saucer, a main course fork, a main course knife, and a teaspoon. Modifications to the basic place settings, based on specific meal service and menu requirements, are discussed below.

c. Breakfast. Breakfast or brunch is normally served a la carte or buffet style. For a la carte style, each diner’s meal is served with whatever cover items offered. For buffet style, the diner obtains his/her own items. If cereal is to be served, the dessert/cereal spoon is set to the outside of the teaspoon.

d. Lunch/Dinner. The basic lunch/dinner setting applies to informal service. If soup or shrimp cocktail is being served, the breakfast plate is set as a serving plate. For cafeteria/buffet, a la carte, and American style meals, the main course plate is not set. Other changes in the basic settings are based on specific menu requirements. Check each item on the menu to determine if a specific item of individual tableware is required. As a general rule, only six pieces of silverware should be set for any one meal, but the oyster fork may be set as a seventh item. Normally, if more than six items are required, each additional piece must be set with its related meal item. For example, if six items are already planned and dessert is to be served, place the dessert fork or spoon in the proper place on the table when serving the dessert.

e. Obtain Tableware. Based on the plan for each place setting, obtain enough tableware from the sideboard to arrange a place setting for each diner. If there are not enough seats for the expected number of diners, arrange extra individual tableware on the sideboard, unless a buffet is being served. Place the dessert fork or spoon in the proper place on the table when serving the dessert. For a buffet follow the procedures for placing silverware on the dining table or serving line as described in that section.

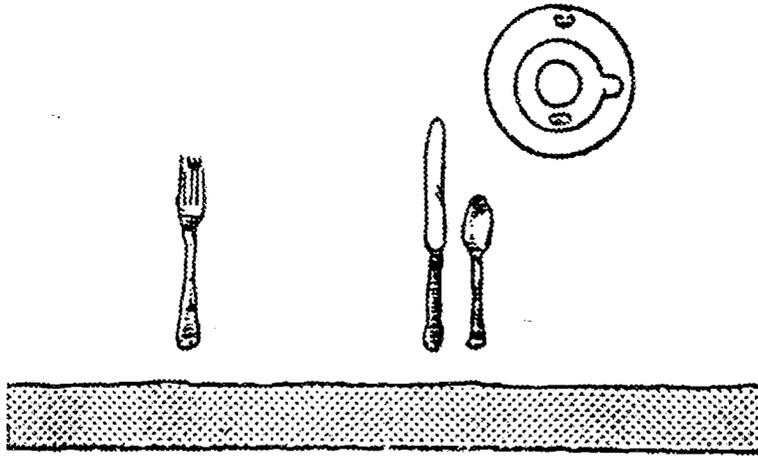


Figure Q-8 - Basic Breakfast/Brunch Cover

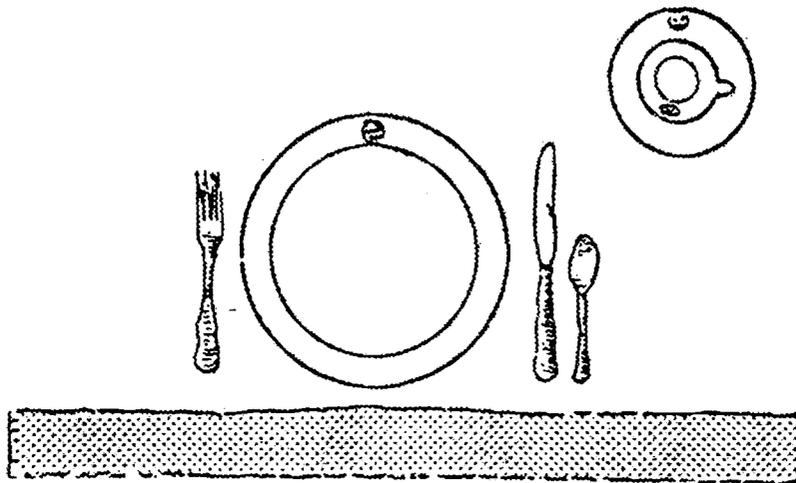


Figure Q-9 - Basic Lunch/Dinner Cover

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### Q-1-8 SETTING THE SIDEBOARD

1. GENERAL. Most wardrooms are equipped with a waist-high cabinet known as the sideboard. Its storage spaces are used for storing wardroom linen and tableware, and the top forms a counter for the placement of beverage services and extra tableware in preparation for a meal. The sideboard may also be used for a buffet serving line on ships where the use of a separate buffet table is not practical. This latter use is discussed in "Setting the Buffet Serving Line." The steps to be followed in preparing the sideboard for all other meals are outlined below.

2. SETTING UP THE HOT BEVERAGE SERVICE. The principal hot beverage used aboard ship is coffee. Hot tea or hot chocolate may also be used if desired by wardroom members. The hot beverage service should be set up following placement of the linen on the sideboard. The steps outlined below will guide beverage service set-up.

a. Set-Up Coffee. Take coffee pots (one each per 10-12 diners) from the sideboard to the pantry and obtain enough coffee for the meal. Place the pots on the sideboard coffee warmers. Select at least one coffee pitcher for each dining table and place on the linen next to the coffee warmers. Coffee servers should be filled just before serving and should not be placed on the warmers.

b. Set Up Hot Tea or Chocolate. Place hot water in a coffee pot and set on the coffee warmer. Arrange tea serving pots next to the warmer. The number of tea pots will be determined by the wardroom supervisor or through experience. Tea bags and/or hot chocolate packets should be placed next to the serving pots.

### 3. SETTING UP EXTRA TABLEWARE

a. Determine Extra Tableware Requirements. The required amount of extra tableware will normally be determined by the wardroom supervisor. Considerations that may influence the amount of extra tableware required include occasional breakage of china during meals and the possibility of unexpected diners. Additionally, if a second seating of diners is required due to limited wardroom seating capacity, sufficient tableware should be placed on the sideboard to permit quick resetting of the dining tables after the first seating has finished.

b. Place the Extra Tableware. Obtain and neatly place the necessary items on the covered portion of the sideboard. Dishes and bowls may be stacked several high. Cups and glasses should not be stacked, especially during rough seas. Silverware should be arranged by type and napkins should be pre-folded and stacked near the silverware.

### 4. SETTING UP THE COLD BEVERAGE SERVICE

a. Obtain Cold Beverage. Take serving pitchers from the sideboard to the pantry. Water will be made available even if another beverage is to be served. Water and other cold beverages are pre-chilled in the pantry and the glasses filled and placed on the table just before announcing the meal.

b. Prepare Fruit Juices for Breakfast. If fruit juices are called for in the breakfast menu, a galley serving pan insert should be filled with enough ice to cover half the height of the glasses and then placed on the sideboard. The juice glasses are then filled to the bulge with juice and placed in the ice to cool.

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### Q-1-9 SETTING FOR BUFFET SERVICE

1. GENERAL. Buffet service is like cafeteria-style service in that foods are placed in serving pans on a serving line or table. The main difference between the two styles is that buffet diners serve themselves, while cafeteria diners are served by food service personnel. In either case, the food is attractively arranged on a sideboard or on a separate serving table. The area to be selected for the serving line set-up will depend on the amount of space available in the wardroom. The wardroom supervisor or the mess caterer should be asked for their buffet-style preference before setting up the buffet serving line.

Buffet service has the advantage of reducing service personnel but the disadvantage is that it can be wasteful of food. Buffets make it possible to display food attractively and are useful in providing fast service. Buffets are also good for handling large numbers of people who wish to eat at different times.

Sanitation is an important consideration in preparing and serving all meals. It becomes especially critical in the set-up and operation of buffet or cafeteria serving lines. Open serving pans and trays provide ideal sites for the growth and spread of disease-carrying organisms. Observing a few simple rules can greatly reduce the chance of infection. Hot foods should always be held for service at temperatures 140° F. or higher and cold foods held for service at temperatures 41° F. or lower. If these temperatures cannot be maintained, the food should be discarded within four hours of the beginning of preparation. Only limited amounts of food should be displayed on the serving line at any one time, permitting the balance of the food to be kept in the pantry for easier temperature control. Serving pans and trays may be refilled as necessary. Finally, a sneeze shield should be used whenever possible.

The principle tasks involved in setting up the buffet serving line are presented below and the serving line set-up tasks should be done in the order listed and should be completed five minutes before serving time.

#### 2. INITIAL PREPARATIONS

a. Obtain Space for the Buffet Serving Line. This is often done by setting up a separate buffet table. Where space is limited, the counter space on the sideboard is used for the buffet serving line. If a buffet table is used, it should be located both to allow CSs convenient access to the pantry for filling the serving pans and to allow diners to easily use the serving line without being crowded by furniture or other diners. If the sideboard area is to be used, it should first be cleared of all non-essential items.

b. Placement of Linen. This should be done in accordance with the guidelines in the section of "Linen."

c. Set Up the Chafing Dish Stands. The chafing dish stand is composed of a stand or framework and a pan, which is set on the stand. Enough stands should be set up so that there is at least one for each food item served. They should be placed in the serving area so that a diner can have ready access to them without leaning over the table. Sufficient space should be left at the beginning of the serving line for the placement of plates, silverware and napkins and at the end of the serving line for dessert items. After the chafing dish pans have been set in place, one inch of water is put into those pans that will be used for hot food. Sterno heating units are then placed below the

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center of the pans containing water. Ensure that there are no flammable items placed near these units as the set-up continues. Do not light the heating units at this time.

d. Place the Sneeze Shield. If a sneeze shield is available, put it in place. Ensure that all food items to be served will be protected by this shield and that diners still have ready access to the foods.

e. Place Necessary Eating Utensils on the Buffet Table. Determine what plates, bowls and other eating utensils will be needed to arrange these items neatly at the beginning of the serving line.

Place dinner plates and other china next to the chafing dish stands, but not so close that diners could burn their hands picking them up. Do not stack china so high that it becomes unstable and thus presents a danger, especially in rough seas.

Napkins and silverware are usually placed on dining tables. However, at times when there are more diners than seats, additional place settings will be kept on the sideboard and placed on the dining table as diners finish and depart. If there are not enough CSs to do the resetting, the napkins and silverware are to be placed on the buffet serving line next to the china and on the side away from the chafing dish stands.

f. Arrange Decorations on Serving Table. Decorations will be designated by the wardroom supervisor. Decorations will usually consist of artificial or real flowers placed around the three sides of the serving area facing the diner. They should not be placed near the heating units or positioned so that diners could easily knock them off the table. It may be necessary to pin the decorations to the tablecloth so that they do not become a fire hazard or interfere with serving during rough sea conditions.

g. Lunch or Dinner with Guests. A buck is not used if guests are present. If there is only one guest, he or she will be served first, the diner to the right of the guest is served next, and so on around the dining table. If there are two or more guests, the guest of the senior officer is served first, the person to the right of the guest is served next, and so on around the table.

### 3. DELIVERY OF FOOD TO THE DINING TABLE

a. Foods are delivered to the dining table in various combinations of three basic methods:

- (1) Individual service;
- (2) Table service; and,
- (3) Self-service.

The various meal styles typically employ combinations of these three methods. The special characteristics of these methods are discussed below.

b. Individual Service. Individual service involves serving foods directly to each diner, either by delivering single portions on individual plates or by presenting platters or serving dishes with utensils to each diner to permit self-service. Individual service is always done from the diner's left. Plates are normally placed on the table with your left hand while your right hand is held behind your back. In rough seas, you may grasp the back of the diner's chair for stability. The proper way of offering platters or serving

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dishes is to stand to the left of the diner and lower the serving dish with the left hand until the diner can easily serve himself/herself. The left hand should not rest on the table unless required for stability during rough seas. The right hand is held behind the back or is used to offer serving utensils.

c. Table service. Table service involves the careful placement of filled serving utensils directly on the dining table. Food items are then passed around the table for each diner to serve themselves.

d. Self-Service. Self-service is normally limited to buffet and cafeteria style meals. Each diner takes their food from a serving line to the table.

### Q-1-10 MEAL STYLE PROCEDURES

1. FORMAL STYLE. As mentioned in the section on wardroom meal service, the requirements for serving this style are quite elaborate and are open to much variation between general messes. For these reasons, the serving of this style of meal is not described here.

2. SEMI-FORMAL STYLE. In this style of individual service, each item of food is brought to the dining table and offered to each diner. Serving dishes, other than the main course item, are placed on serving trays before they are brought into the dining areas. To prevent the serving dishes from sliding, a clean damp cloth should be placed on the tray.

When all diners are seated, individual servings of the first course, soup and/or salad or shrimp cocktail are brought to the dining table and placed on the service plate in front of the diner. If both salad or shrimp cocktail and soup are to be served, the salad or shrimp cocktail is set on the table before the diners arrive and the soup is served after the diners have been seated. The order of delivery to the diners will be according to the rules specified previously. When the diners have finished the first course and the used china (including the service plate and silverware) has been removed, the main course items are served. Each food item will be in a separate serving dish and will be served in the following order:

a. The entrée, or meat dish, is arranged on a meat platter and comes first. Serving utensils, usually a tablespoon and a main course fork, are carried in the right hand while the platter is carried in the left. The platter and serving utensils are offered on the left side of the first diner to be served. When the first diner has served himself/herself, he/she replaces the serving utensils on the platter, which is then offered to the next diner. There should be no need to touch the serving utensils again unless a diner leaves them in an awkward position for the next diner.

b. The starch food item comes next. It is served in an appropriate serving dish carried on a serving tray. The tray is carried in the left hand and the serving utensils, a tablespoon and main course fork, are carried in the right hand. They are offered to the first diner in the same manner as the entrées.

c. The vegetable comes next and is served in the same manner as the starchy food.

d. The gravy or sauce is served last unless it is to be used only for the meat. If so, it is served immediately after the meat. The gravy boat is also placed upon a serving

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tray. The tray is carried in the left hand and the ladle in the right. Both are offered to the first diner to be served. The ladle should then be kept in the gravy boat as it is offered to other diners.

This type of service is best accomplished when there are four servers at each table, so that each person can be responsible for serving only one item. Fewer personnel can do this type of service if there are not many diners to be served.

When two or more persons are serving the food and a serving dish is emptied, the server should quickly return to the pantry for a refill.

While this is happening, serving should stop until the refilled dish has been presented to the next diner. To prevent long delays in service, a space of two or three diners should be maintained between servers.

e. When all diners have been served the main course, bread and/or rolls and butter can be brought to the dining table and placed in the center. The amount will be determined by the wardroom supervisor. Refills of food items are seldom available during a semi-formal meal, but if a diner asks for seconds, the wardroom supervisor will decide if the request can be granted.

f. If dessert is to be served, it will be served to diners in the same order as the other food items after all the main course tableware has been removed from the table. Each diner is offered the dessert and is not served unless he/she replies in the affirmative.

### 3. INFORMAL MEAL STYLES

a. Family Style. As with the semi-formal style, food items are delivered to the dining table in appropriate serving dishes after the diners are seated. However, for family style service, the serving dishes are placed on the dining table and are not delivered or offered to each diner as is done in semi-formal service. The food items should be delivered to the dining table in the same order as for semi-formal; that is, the entrée should be placed first, starchy food second, the vegetable third, and the gravy or sauce last. The number of serving dishes placed at each table will be determined by the wardroom supervisor.

Once all the serving dishes have been placed, they should be carefully watched so that they may be refilled when needed. When refills are obtained from the pantry or galley, the serving dish should be returned to the same place it was picked up. If soups or salads are to be served at a family style meal, they usually are individually portioned and may be set in place before the diners arrive. Desserts are served by presenting them to the individual, as is done for the semi-formal style of meal.

Bread and/or rolls and butter will be placed on the table. The quantity will be determined by the wardroom supervisor.

b. American Style. For this style of meal, foods are portioned on individual plates in the pantry or galley and then delivered to the diners. Food is served in the sequence previously described. Plates should be delivered to the dining table in the order in which they have been prepared so that the food presented to the diners is as warm as possible.

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Salads and/or soups are also served either by presenting them individually or by placing them on the table before diners arrive. Once the dinner plates have been placed, bread and rolls and butter will be put on the table in the same manner as for semi-formal style meals. The dessert service will also be the same as for the semi-formal style in which each diner is offered a serving.

c. A la Carte (Breakfast) Style. A la carte means “in accordance with the menu.” This style of service is most often used at breakfast. Since diners enter the general mess at various times for breakfast, the order of service is simply “first-come, first-served.” As diners seat themselves, offer them menus and/or breakfast order forms. When it appears that a diner has made their selection, return and ask if they are ready to order. If so, take the order and make sure all ordered items and instructions for their preparation are clearly identified (e.g., whether or not eggs are to be prepared sunny-side up or easy over). The order form is coded to identify the diner (i.e. Seat 6 at Table A) and is then delivered to the pantry where it is placed in sequence on an order board. The wardroom supervisor will describe how the order forms are to be coded and where they are to be placed. While the main course is being prepared in the pantry, begin serving the other ordered items. The first item to be delivered, after coffee has been offered, will be fruit or fruit juice. Next, hot or cold cereals, if ordered, should be brought to the diner. Quite often, cold cereals are made available in the center of the dining table along with cereal bowls. In this case, a server must make sure that a filled cereal cream pitcher and sugar bowl are available. After this has been done, place butter and syrup next to the diners who have ordered pancakes or other such items. As the diner completes the cereal, check the pantry for the diner's next course. The eggs, pancakes, or other cooked items should not be delivered until the diner has finished or nearly finished with the previous course of fruit or cereal. Toast, if ordered, should be taken to the diner immediately after the main hot course has been delivered. Cereal and fruit dishes should be removed if the diner has finished with them before the main course is delivered.

d. Cafeteria Style. In this style of meal service, the CS stands behind the serving line and serves individual portions of each food item at the diner's request. All food items are usually available on the serving line or are already in place on the dining table. Thus, this style of meal is quite efficient, requiring relatively few serving personnel. Once diners have been served from the serving line, the dining tables must be attended so that beverages may be served and tableware removed as diners finish.

Place settings should be reset if there are to be more diners than space is available at one seating. In this case, as a diner finishes the meal, the place at the table should be cleared quickly and silverware, napkin, beverage glass, and other needed items replaced as quietly as possible so as not to disturb other diners. However, before removing tableware, it is best to check with the departing diner to make sure that he is through eating. The diner may merely be returning to the serving line for more food. If this is the case, remove only the empty used plates from this place setting and leave everything else as it is.

For cafeteria style service, the serving line is usually kept open throughout the meal period, unless the wardroom supervisor decides differently. No matter how long the line is kept open, it is important that sanitary conditions be maintained by keeping foods at proper temperatures and cleaning up spills as they occur.

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e. **Buffet Style (Self-Serve).** This type of service, as with cafeteria style, requires relatively few personnel. Food is arranged on the serving line and the diners serve themselves. The primary tasks are to keep enough food in the serving dishes and to keep the serving area tidy. As hot food items are nearly depleted on the serving line, go to the pantry or galley and place more portions of this food on a plate, return to the serving line, and neatly place the food onto the correct serving pan or dish. Cold food items may be refilled in the same manner, or the entire serving pan or dish may be replaced by a filled one. Refilling should be done as smoothly as possible and with minimal disturbances to diners. To prevent the entire serving line from halting, try not to replace all items at the same time.

In addition to the serving line, the dining tables also must be attended in the fashion described for cafeteria style meals. Thus, food items such as bread and butter should be refilled, beverages served, and place settings replaced as needed. Finally, desserts may be included on the buffet serving line or they may be served individually after diners have finished the main course. The wardroom supervisor will decide how dessert is to be served.

4. **SERVING BEVERAGES.** Presented below are four general guidelines and several specific procedures for serving beverages.

a. The first guideline is that beverages are to be served from the diner's right if at all possible. Otherwise, check with the wardroom supervisor about how to serve the beverages in a way which disturbs the least number of diners.

b. The second guideline is that the server should never lift the diner's glasses or cups from the dining table to refill them. Rather, the server should pour the beverage into them while they are on the table. If the cup or glass is not conveniently placed for service, carefully move it to a better location, or, if it cannot be reached, politely ask the diner to move it.

c. The third guideline is that the order of service for beverages is the same as that for the serving of foods:

At breakfast, order of service is not a problem, since diners enter at random and are served on the first-come, first-served basis.

At lunch or dinner when no guests are present, the head of the table or the diner who has the buck in front of them will be served first. The diner to the right will be served next and so on around the table.

If one guest is present, this guest will be served first, followed by the diner on the guest's right, and so on around the table. If more than one guest is present, the guest of the senior officer is served first, followed by the diner to the right, and so on around the table.

d. The fourth guideline is to not fill serving pitchers to the tip when they are to be used for filling glasses or cups at the dining table. A full pitcher is difficult to handle and feels quite heavy after a while. Therefore, pitchers should be filled to no more than one half to two thirds full.

e. Finally, it is important to remember that each private mess may have certain rules for serving beverages. The wardroom supervisor should be asked about these rules. Specific guidelines for the various meal styles are presented below.

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### 5. FORMAL MEAL STYLE

a. Formal Style. This style of meal is quite elaborate and requires considerable guidance to be done correctly. Guidance should be obtained from the wardroom supervisor and from other references.

b. Semi-Formal Style:

(1) Cold Beverages. Usually, water is the only cold beverage served at semi-formal style meals. It is poured into the glasses before the diners are seated. Water and another cold beverage are rarely served together. However, if another cold beverage is served, water is always made available. If two cold beverages are to be served, both are usually poured before the diners are seated. Remember, beverages are served from the right. Glasses should be filled to about one-half inch from the top. Try not to fill higher than this, as a completely filled glass is difficult for a diner to handle without spilling.

Refills of cold beverages (except milk) should be offered during the meal to diners when their glasses become less than one half full. Milk is refilled only upon request. When refilling a cold beverage, remember not to lift the glass off the table. Always pour while the glass is on the dining table. If ice cubes are available, they should be offered first to diners needing refills.

(2) Hot Beverages. For semi-formal meals, the hot beverage most often served is coffee. It normally is not offered to diners until the dessert course has been served. At that time, coffee should be transferred from the Silex-type pot on the heater to the serving pots. The coffee should then be politely offered to each diner from the right in the previously described order. Cups should be refilled to about one-half inch from the top. If hot tea is requested and is available, hot water and a tea bag should be put in a tea serving pot and immediately delivered to the diner. Refills of coffee should be offered to diners when their cups become less than one half full. As mentioned previously, cups should be left on the table while being filled. Remember also that coffee will become cold if left in the serving pitcher too long. If this happens, empty the cold coffee in the pantry or galley and refill the serving pitcher with fresh coffee.

c. Informal Meal Service

(1) Family Style:

(a) Cold Beverages. Use the procedures described under semi-formal style. The only exception is, if there is enough space, serving pitchers of water or other cold beverages may be placed on the dining table after the initial service so that diners can serve themselves. During the meal, the serving pitchers should be checked and refilled as needed.

(b) Hot Beverages. Again, use the procedures listed under semi-formal style with these variations:

((1)) Offer coffee to the diners as soon as they have begun eating the main course; and,

((2)) After the initial serving, filled coffee serving pots may then be left on the dining table for the diners' use. Care should be taken so that this coffee does not

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become too cold. If it does, the cold coffee should be emptied in the pantry and fresh coffee obtained.

d. American Style - Use the same procedures given under Family Style meals.

(1) A la Carte (Breakfast) Style:

(a) Cold Beverages. Water is poured before seating the diners. Upon taking a breakfast order, juice, if ordered, will be the first item delivered after coffee has been offered. Obtain juice in glasses from the pan on the sideboard. Wipe ice from the outside of the glass with a clean cloth and place the glass to the diner's right, just above the end of their knife. If milk is ordered by the diner, it is usually obtained from the pantry. Milk is to be delivered to the diner when it is requested or just after the hot food item is served. So that there will be no question, it is best to ask the diner when they would like their milk served. If the diner requests refills of milk or juice, remove the soiled glass from the dining table and use fresh glasses for the refills. Always handle both soiled and fresh glasses as close to the bottom as possible.

(b) Hot Beverages. If coffee is requested, it should be served immediately while the diner is deciding what to order. Refills of coffee should be offered when the diner's cup becomes less than one half full. If hot tea is requested, the diner should be asked when they would like to have the tea served. At the requested time, the hot water and tea bag should be delivered to the diner. Hot chocolate may also be available at breakfast. If the diner orders this, determine when they would like it served. At the requested time, either fill the tea pot with hot water and deliver it with a hot chocolate packet to the diner or prepare the hot chocolate for the diner by taking the cup and saucer from the dining table to the sideboard, emptying the packet into the cup, and mixing the correct amount of water with it. Once prepared, the hot chocolate should be delivered to the diner.

Coffee servers or other beverage pitchers are seldom left on the dining table during breakfast for service by the diner. Because of few diners likely to be seated at any one time, the beverage would soon become cold and stale.

e. Cafeteria Style:

(1) Cold Beverage. For cafeteria style, cold beverage may be in place before diners enter the general mess. If not, the cold beverage is offered to the diner as soon as they have been through the serving line and is seated. Refills should then be offered whenever their glass becomes less than one half full. Once the dining tables are full of seated diners, serving pitchers of cold beverages may be left for self-service. The pitchers should be checked often during the meal and refilled as needed. There may be several resettings of the dining table during this style of meal so it is important to remain alert for diners who are in need of beverage service.

(2) Hot Beverage. Once cold beverages have been offered and served, coffee should be offered. Refills should then be offered whenever the diner's cup becomes less than one half full, or upon the diner's request for more. Filled serving pitchers may be left on the dining table once several diners have been initially served coffee.

f. Buffet Style. Use the same procedures given for the cafeteria style meal.

6. REMOVING TABLEWARE. The removal of tableware during a meal is another task which takes place in the presence of diners. After use, dishes and silverware are often

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slippery and may contain food scraps, making them hard to handle. These factors combine to make the removal of tableware a task which requires care and skill. Special care should be taken until one becomes more familiar with the tasks. Practice will aid in the development of confidence and of a smooth, polished performance which can be accomplished without hurrying the diner. A few basic rules have been developed for the removal of tableware during a meal. The rules are based on common sense and should be of considerable help in doing all the tasks involved. Remember, however, that variations may occur in a specific general mess. Thus, if there is any question about what to do, ask the wardroom supervisor.

- a. The first basic rule is to remove soiled tableware from the right side of the diner.
- b. The second basic rule applies when more than one item is to be removed from the table. Pick up the largest item first with your right hand and transfer it to your left hand behind the diner's back. Then pick up the next largest item and stack it on top of the first item in your left hand. Do not stack items in front of the diner before you remove them from the table. This increases the chance of dropping tableware on the diner, the floor, or yourself.
- c. Third, dishes are picked up from the dining table with silverware on them. It is best to first move the silver to the right side of the dish and hold it with the thumb of the right hand as the dish is removed. This prevents the silverware from sliding off the dish and gives the CS better control.
- d. Finally, never try to carry more items than can be easily controlled and carried to the pantry or galley. With experience, one should be able to determine when enough tableware has been collected from the dining table. Nothing is more disturbing to the diner and the CS than the crashing sound of tableware hitting the deck.

Further discussion of specific rules is presented under the various meal styles.

### 7. FORMAL MEAL STYLE

a. **Formal Style.** As mentioned in other sections, the requirements for the serving of this style are quite elaborate and are open to much variation among general messes. For these reasons, nothing on the removal of tableware shall be presented here. Guidance will be obtained from the wardroom supervisor and from the references, "Service Etiquette" and the CS Rate Training Manual (NAVEDTRA 10267).

b. **Semi-Formal Style.** The important factor to keep in mind for the removal of tableware during a semi-formal style meal is that no items are removed until all diners have completed a course. The tableware for that course then is removed in the same sequence that the diners were served. When no guests are present, the head of the table or the diner with the buck will have their course items removed first, the diner to his/her right next, and so on around the table. When no more than one guest is present, the guest should have his/her tableware removed first, followed by the diner to their right, and so on around the table.

Thus, all tableware for a specific course will be removed before the next course is served. The specific items to be removed after each course will be determined by what is to be served next. Be careful not to remove items that are to be used in a later course. If this should occur, replace these items at the diner's place setting as soon as possible. After the main course is completed all tableware should be removed from the

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individual place setting except for coffee cup and saucer, teaspoon, water glass, and any silverware needed for dessert. All center items should also be removed at this time, with the exception of the sugar bowl, creamer, and centerpiece. Individual place setting items should be removed first, followed by the center items. All this should be completed before serving dessert. Dessert dishes and silverware will then be removed when all diners are finished. All other items are to be left on the table until the diners leave.

## SECTION 2: AFLOAT STATEROOM SERVICE

### Q-2-1 INTRODUCTION

This section is designed primarily for use in the operation and care of officers' quarters afloat. Procedures for performing the basic stateroom functions are presented as guidelines for establishing uniform stateroom maintenance training programs. The text may also be used for self-study, for on-the-job training, as a point of reference and for developing local lesson plans.

To effectively use the information contained herein, especially in teaching newly assigned personnel, it is recommended that the following method be used:

- Step 1. Prepare the trainee (tell how to do the job).
- Step 2. Demonstrate the correct technique (show how to do the job).
- Step 3. Have the trainee perform under supervision while explaining what he/she is doing.

### Q-2-2 CARE OF QUARTERS AFLOAT

Staterooms are the berthing spaces for officers aboard ship. They are like small bedrooms ashore. It is here that officers sleep and keep their personal belongings.

Quarters for the commanding officer and for the flag officer (if there is one aboard) include a stateroom and private head facilities for each of these officers. On some ships, the executive officer and department heads also have separate quarters and head facilities. Other officers are usually billeted two to a stateroom. They share head facilities with officers of other staterooms.

Personnel assigned to the admiral and/or captain messes are responsible for cleaning those quarters while the Culinary Specialists and rotational pool personnel assigned to wardroom/stateroom areas are responsible for all other officers' quarters.

Regardless of quarters assignment, the cleaning procedures presented here are applicable for all officers' berthing spaces.

**NOTE:** NAVSUP evaluated the Reduced Stateroom concept of operations onboard the USS TARAWA during the period November 99 - May 00. In the concept of operations, Junior Officers (Lieutenant Commanders and below) performed daily cleaning tasks within their staterooms. Officers in paygrades O5 and above, Commanding Officers and Executive Officers continued to receive stateroom cleaning services from the assigned Food Service Attendants or Culinary Specialists. Results indicated that approximately 7 hours per day were now available for additional S5 related duties. During the July 2000 Afloat Supply Department of the Future (ASDOF) conference attended by Supply representatives from the Fleets and the Type Commanders, the decision was made to allow Fleet-wide implementation of this concept at the discretion of the Commanding Officer.

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Although quarters/stateroom work is not physically hard, it does require a sense of orderliness, attention to detail and an understanding of the important role played by CS personnel in support of the ship. It is not enough just to see that the bunk is made, clothes are out of sight and trash cleaned away. Staterooms must be thoroughly cleaned to include furnishings, desks, all corners, ledgers and bulkheads. The same cleanliness is required for heads, showers, passageways and vestibules in officer's quarters.

### Q-2-3 USING CULINARY SPECIALISTS AND ROTATIONAL POOL PERSONNEL

CS personnel are responsible for performing functions associated with the management and operation of officers' messes and quarters afloat. However, a rotational pool of enlisted personnel in paygrades E-1 through E-3 is established to assist the CSs in providing maintenance, cleaning, and other services. This pool will be formed of personnel from various divisions (and squadrons if they are onboard). These personnel are normally assigned to such duties by the executive officer.

Under the supervision of the Culinary Specialist, the rotational pool may perform housekeeping duties and basic maintenance service. Bedmaking service is provided ONLY to commanding officers, executive officers, unit commanders and officers in paygrades O-5 and above or their equivalents. Maintenance and cleaning of passageways, heads and showers is also the responsibility of the rotational pool. As a part of the stateroom service, the rotational pool may be required to pick up and deliver officers' laundry. Sorting and stowage of personal laundry, however, is the responsibility of individual officers. (See Section 5, NAVSUP Pub 486, App F for responsibilities and duties of enlisted personnel assigned to wardrooms/staterooms afloat.)

### Q-2-4 STATEROOM CARE

1. **CLEANING.** Daily cleaning of staterooms is necessary, but the extent to which spaces are cleaned may vary with circumstances. Limited cleaning may be done each day with a major effort on field day, or the workload may be spread over the entire week. The advantages to spreading the workload over the entire week are:

a. There can be a more equitable distribution of work.

b. Cleaning schedules can conform to other schedules. For example, linens, bedsheets, pillowcases, and towels may be issued on the day the officers send their laundry to the ship's cleaner/laundry.

c. More attention can be given to all jobs when they are performed throughout the week, rather than crowded into one day.

2. **WORK SCHEDULING.** Work should be scheduled to make the most efficient use of available manpower and time. Good daily cleaning makes field day much easier. The following tasks should be considered as the minimum daily cleaning under ordinary circumstances:

a. Empty and wash ashtrays.

b. Dust furniture and sweep and mop deck.

c. Clean mirror, washbasin, soap container and toothbrush holder.

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d. Empty wastebasket.

3. **CARE OF CLEANING MATERIALS.** The importance of the proper care of cleaning materials should be stressed to personnel assigned these duties. Cleaning materials should be correctly stowed after each use to prevent loss or damage. Mops should be washed, rinsed, and spread or hung to dry, not stood in a corner or sour. Obvious cleaning jobs, such as washing dirty paintwork resulting from plumbing or electrical repairs, should be performed as necessary and not put off until the day paintwork is scheduled to be washed. The major cleaning jobs normally weekly are:

- a. Paintwork checked carefully and scrubbed as needed.
- b. Brightwork polished.
- c. Knife edges of hatches and edges of ports cleaned.
- d. Soiled towels removed and clean ones issued.
- e. Decks scrubbed and waxed.

4. **INSPECTIONS.** Staterooms should be inspected frequently by the stateroom supervisor to ensure that these duties are being performed properly, and to request any maintenance or repair work that must be done by the engineering department.

### **Q-2-5 CARE OF PRIVATE PROPERTY**

1. **GENERAL.** One important rule to follow in cleaning staterooms is to avoid disturbing anything of a private nature that has been left laying about. From time to time, officers rush off leaving letters, papers, money, or other valuables in sight. These instances should be reported at once to the officer, the wardroom leading CS, or stateroom supervisor. Furthermore, papers, books or letters should not be examined if left lying around. These may concern official Navy matters or the officer's personal affairs. In either case, they are to be treated as private property. If valuables or other items of a private nature must be moved when cleaning, be sure they are put back where they were found.

2. **PERSONAL PAPERS AND MONEY. DO NOT TAKE PERSONAL PAPERS** unless they are in the wastebasket. The officer may have official Navy papers or personal letters on his/her desk. You are trusted not to look at these papers or take them away when cleaning. **DO NOT REMOVE MONEY** or valuables which are left unsecured by the officer. They may have been called away in a hurry and may have forgotten to take their wallet, money, or watch. Notify the officer or the stateroom supervisor immediately. You are trusted not to take valuables.

### **Q-2-6 JOB SCHEDULING**

So that all weekly duties can be attended to, jobs can be spread out over the week, with some weekly jobs scheduled each day. For example, decks may be swabbed on Mondays, bed linens changed on Tuesdays, extra cleaning of heads and showers on Wednesdays, and so on. Major clean-up must also be scheduled regularly.

If all jobs are carefully accomplished when scheduled, getting the spaces ready for field day (weekly inspection) should be just a matter of taking care of daily duties and

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touching up any weekly jobs that need last minute attention. A stateroom cleaning bill must be prepared.

Major stateroom clean-up will be scheduled regularly. Some examples of major stateroom clean-up are monthly turning over of mattresses and vacuuming underneath (preferable during the week linen is changed), quarterly shampooing of carpets, and quarterly sending draperies, chair covers and bed spreads for dry cleaning. Figure Q-10 is an example of a stateroom cleaning bill:

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### Figure Q-10 - Example of a Stateroom Cleaning Bill

DATE: \_\_\_\_\_

From: Leading CS, Wardroom Mess

To: All Stateroom CSs and Rotational Pool Personnel

Subj: STATEROOM CLEANING BILL

1. In order to have a more uniform cleaning system, the following cleaning bill will be strictly adhered to by all personnel concerned. Any deviation of schedule will be referred to the stateroom supervisor or wardroom mess Leading CS.

#### DAILY

- a. Clean wash basin, mirror, soap container and toothbrush holders.
- b. Make up beds for officers O-5 and above.
- c. Sweep and mop deck or vacuum carpet.
- d. Empty and wash ashtrays.
- e. Empty wastebaskets.
- f. Dust all furniture.

#### WEEKLY

- a. Wash paintwork.
- b. Polish brightwork.
- c. Clean electric fans and wipe down light fixtures.
- d. Dust locker tops, shelves and overheads.
- e. Replace soiled hand and bath towels and replace with clean ones as scheduled.
- f. Deliver and pick up officers' laundry as scheduled.
- g. Replace stripped linens with fresh clean ones. Leave linens on top of beds (O-4 and below only), as scheduled.
- h. Scrub and wax deck; or spot check carpet and remove stains as scheduled.
- i. Clean air conditioning filters and screens.
- j. General field day for certain staterooms as scheduled. Stand by for inspection.

#### CLEAN AS SCHEDULED

- a. Monthly turn mattresses over and vacuum underneath (preferably during linen change).
- b. Quarterly send draperies, curtains, chaircovers and bedspreads for dry cleaning.
- c. Quarterly shampoo carpets.

SUBMITTED BY: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_

Leading CS  
Wardroom Mess

Division Officer  
Wardroom Mess

**Q-2-7 ADDITIONAL STATEROOM CLEANING**

1. **CLEANING WASHBOWLS AND MIRRORS.** When cleaning washbowls and mirrors, apply cleaning material to a clean, damp cloth, and wipe mirror first, then the light with the cloth. Wash mirror and light first so that any falling dust and water can be wiped up when cleaning the bowl.

a. Clean all metal, including faucets, valves, stoppers, and chain.

b. Rinse the cloth in running water, add cleaning material, and clean all porcelain surfaces inside and out. Be sure to clean the underside of the rim above the overflow opening. Clean the overflow drain opening, using a thick fold of cloth or a wedge covered with the cloth.

c. Rinse the cloth again and rinse porcelain and metal surfaces with fresh water.

d. Dry and shine all surfaces with a clean dry cloth.

e. Clean all exposed pipes below the basin. If the pipes are nickel, brass or copper, polish as scheduled. Also clean the bottoms of washbasins.

2. **SWEEPING THE DECK.** Decks must be swept carefully every day, which includes all corners. Place chairs on bunks while sweeping. Dampen the bristles of the broom slightly. This allows trash to be swept up more easily, and keeps dust from stirring up. Staterooms that are carpeted should be vacuumed.

3. **SWABBING THE DECK.** Check the cleaning schedule to see how often decks must be swabbed. When scheduled, swab them after they have been swept. Use a clean swab and hot soapy water. For best results, wring out the swab often. Dry the deck immediately with a clean swab. A wet deck is slippery and can cause accidents.

4. **WASHING PAINTWORK.** Weekly, or when scheduled, paintwork must be washed in staterooms. To do this, use hot soapy water and a clean rag. Use even motions up and down on the bulkhead. Rinse the suds off with clear water. Wring out the cloth often. Caution: Never use salt water soap on bulkheads, even for small spots. The soap destroys the paint's shiny surface and makes the bulkhead more easily subject to soil.

5. **CARE OF BUNKS.** On the day when bed linens are scheduled to be changed, clean the bunk springs and turn the mattress. Reverse it from side to side, and also from end to end. This helps to prevent the mattress from getting lumps. Changing the areas where head, shoulders, and hips rest also helps to prolong mattress life. Do this once every month.

6. **CHANGING TOWELS.** Handling personal towels varies on different ships. On some ships, a supply of towels is issued to the officer when reporting aboard. The officer uses a clean one and puts the soiled one with clothes that are to go to the laundry. On other ships, the CSs or rotational pool personnel collect soiled towels, exchange them for clean ones, and put out clean ones on the days when towels are scheduled for changing. This may be done twice a week or more often. Follow the schedule of the ship.

7. **CHANGING PILLOWCASES.** To change a pillow case, grasp the soiled case by the corners of the closed end and shake the pillow out. Put the clean case flat on the bunk

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with its open end toward you. Place the pillow on the bunk just in front of the clean case. Open the case by grasping the corners near you and start sliding it onto the pillow. Lift them and shake the pillow into the case.

8. **MAKING BUNKS.** The characteristics of a properly made-up bunk are as follows:

- a. Square corners (all four corners);
- b. Bed spread 6-inches from head to mattress;
- c. Blanket 6-inches from foot of bed centered from both sides;
- d. Pillow centered at the head of bed and even with 6-inch folded top sheet; and,
- e. Bed sheet and bed spread tight and free from wrinkles.

9. **CARE OF HEADS AND SHOWERS.** Heads must be cleaned thoroughly every day. First flush the toilet. Next put cleaner or disinfectant into the bowl and let it stand while you clean the outside, adjoining pipes, seat hinges, and all around the base of the bowl. After cleaning the outside, use the special brush provided for cleaning the inside of the bowl. Be sure to scrub under the inside rim to prevent germs and odors from collecting there. The special brush has an extending tuft of bristles for doing this job quickly. Never use this brush on the outside of the stool or on the seat. Wipe the seat with disinfectant.

Wash and dry the metal work. Wiping it with an oily cloth as soon as it is dry will prevent a green tarnish from forming on the metal.

At least once a week, decks in heads and showers must be scrubbed and bulkheads cleaned. Soap dishes and shower heads must be cleaned, rubber mats scrubbed, shower curtains cleaned or changed if necessary and all brightwork polished in both areas. Figure Q-11 shows an example of a cleaning bill for stateroom heads and showers.

10. **PASSAGEWAYS AND VESTIBULES.** Passageways and vestibules are also important parts of the responsibilities of Culinary Specialists and rotational pool personnel, and must be incorporated in the daily and weekly schedules. Figure Q-12 is an example of a cleaning bill for passageways and vestibules.

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### Figure Q-11 - Example of a Cleaning Bill for Stateroom Heads and Showers

DATE: \_\_\_\_\_

From: Leading CS, Wardroom Mess

To: All Stateroom CSs and Rotational Pool Personnel

Subj: CLEANING BILL FOR STATEROOM HEADS AND SHOWERS

1. In order to have a more uniform cleaning system, the following cleaning bill will be strictly adhered to by all personnel concerned. Any deviation of schedule will be referred to the stateroom supervisor or wardroom mess leading CS.

#### DAILY

- a. Clean wash basins and wipe down mirror.
- b. Refill soap and towel dispensers.
- c. Clean utility sink and storage area.
- d. Wipe down shower curtains.
- e. Scrub down shower stalls.
- f. Wipe down glass doors or stainless steel doors.
- g. Scrub rubber mats and air dry.
- h. Scrub, clean and disinfect/sanitize urinals and commodes (use rubber gloves).
- i. Wipe down partitions or dividers.
- j. Sweep and swab deck with hot soapy water and disinfectant.
- k. Replenish toilet paper.
- l. Empty trash can.
- m. Clean and neatly stow all cleaning gear in locker.

#### WEEKLY

- a. Scrub down bulkhead.
- b. Clean overhead and light fixtures.
- c. Scrub down shower curtains; replace as required.
- d. Descale urinals and commodes.
- e. Wipe down and polish stainless steel and all other brightwork.
- f. Sweep, swab and scrub deck with hot soapy water and disinfectant.

#### CLEAN AS SCHEDULED

- a. Replace burned out bulbs as required.
- b. Replace missing curtain hooks/rubber mats.
- c. Check for cold and hot water leaks.

SUBMITTED BY: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_

Leading CS  
Wardroom Mess

Division Officer  
Wardroom Mess

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### Figure Q-12 - Examples of a Passageways and Vestibules Cleaning Bill

DATE: \_\_\_\_\_

From: Leading CS, Wardroom Mess

To: All Stateroom CSs and Rotational Pool Personnel

Subj: PASSAGEWAYS AND VESTIBULES CLEANING BILL

1. In order to have a more uniform cleaning system, the following cleaning will be strictly adhered to by all personnel concerned. Any deviation of schedule will be referred to the stateroom supervisor or a wardroom mess leading CS.

#### DAILY

- a. Sweep down ladders; vacuum if necessary.
- b. Sweep, swab and buff passageways and vestibule decks.
- c. Wipe down ladder handrails with hot soapy water.
- d. Clean around deck coaming or hatch openings.
- e. Check angle iron ledges for gear adrift.
- f. Clean scuttlebutts.

#### WEEKLY

- a. Spotcheck bulkheads and scrub down as required.
- b. Sweep, swab, wax and buff decks.
- c. Dust overhead, light fixtures and air vents.
- d. Clean baseboards and make sure all corners are completely cleaned.
- e. Scrub down ladders and dust guards with hot soapy water.
- f. Clean knife edges of hatches and ports.
- g. Polish brightwork as scheduled.

#### CLEAN AS SCHEDULED

- a. Strip wax (once every two weeks or as scheduled).
- b. Check non-skid deck treads; replace when stripped or as required.
- c. Check for burned out bulbs and replace as required.
- d. Check for preservation and paint as required (Quarterly).

SUBMITTED BY: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_

Leading CS  
Wardroom Mess

Division Officer  
Wardroom Mess

### Q-2-8 CARE OF DECK COVERINGS

1. GENERAL. Resilient coverings (vinyl, linoleum, etc.) are provided for the interior decks of many ships today. These coverings require special care. Rough and improper maintenance quickly destroys the appearance and durability of these decks.

When cleaning deck coverings, scrub with a stiff-bristle tampico brush or circular brush, scrubbing machine, or swab, using a synthetic detergent cleaning solution. Avoid excess water, and use a limited quantity of detergent solution. To prolong the life of the material and prevent loss of deck adhesion, strong alkaline soap, abrasive cleaning compounds, or salt water should never be used. All water, cleaning compounds, and dirt should be removed and the deck rinsed with clear water, using a clean mop. The trick to efficient mopping is to use a rhythmic side-to-side stroke rather than a back-and-forth stroke. Do not try to over-reach. Stand erect and mop close to your feet, moving slightly backward (toward the buckets) as the mop nears your feet. Use fine steel wool, or a rag moistened with paint thinner, to remove stubborn grease and dirt. (See Figures 10-13 and 10-14 for more information on deck caring and cleaning recommendations.)

After washing and drying, the covering may be buffed (without wax) to a velvet sheen with a buffing machine, or given a coat of wax (except certain linoleum) and allowed to dry without polishing.

In applying waxes, (see Figure Q-15) the same tools are used for mopping decks but with one essential condition - the tools must be scrupulously clean. The wringer and the bucket and must contain no traces of cleaning solution, and the mop must be perfectly clean and free of contaminants. It is desirable to have a separate mop on hand for applying wax only.

It is important to remember that wax should always be applied **THINLY AND EVENLY**. Care taken in this respect will not only produce a better job, but will result in a longer lasting finish and make future deck finishing easier. The deck must be clean and dry and free of all stripping materials before waxing.

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**Figure Q-13 - Deck Care Information**

TYPE DECK	COMPOSITION	FEATURE
CERAMIC TILE	CLAY AND WATER MIXTURE, GLAZED AND BAKED	CLEANS EASILY BUT ALKALINE CLEANERS MAY RUIN GROUT BETWEEN TILES
LINOLEUM	FORMED OF BURLAP OR CANVAS, COATED WITH LINSEED OIL, POWDERED CORK, AND ROSIN	EASY TO MAINTAIN BUT AVOID SOLVENTS AND EXCESS WATER
RUBBER TILE	RUBBER-NATURAL OR SYNTHETIC WITH INERT FILLERS AND COLOR PIGMENTS	EASY TO MAINTAIN, OILS, GREASES AND SOLVENTS MAY CAUSE HARM
TERRAZZO	MARBLE OR GRANITE CHIPS MIXED WITH PORTLAND CEMENT AND GROUND SMOOTH	VERY DURABLE, SHOULD BE MAINTAINED WITH SYNTHETIC CLEANERS
VINYL TILE	VINYL PLASTICS	VERY EASY TO MAINTAIN; IMPERVIOUS TO ALMOST EVERYTHING
STRATICA DECKING	MINERAL FILLED ETHYLENE COPOLYMER WITH A DUPONT SURLYN SURFACE	LOW MAINTENANCE, EASY TO CLEAN, NO-STRIPPING, NON-WAXING, NON-BUFFING WITH A SIGNIFICANT REDUCTION IN WORKLOAD AFLOAT

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**Figure Q-14 - Cleaning Recommendations**

<b>TYPE DECK</b>	<b>CLEANING SOLUTION</b>	<b>NOTES</b>
CERAMIC TILE	SYNTHETIC DETERGENT MILD ABRASIVE POWDER	WET TILE WITH CLEAR WATER BEFORE OCCASIONALLY APPLYING CLEANER
LINOLEUM	SYNTHETIC DETERGENT	PROMPT RINSING AND DRYING IMPORTANT
RUBBER TILE	SYNTHETIC DETERGENT	RINSE AND DRY PROMPTLY
TERRAZZO	NEUTRAL SYNTHETIC DETERGENT	WET WITH CLEAR WATER FIRST-RINSE AND DRY THOROUGHLY
VINYL TILE	SYNTHETIC DETERGENT	WET FLOOR WITH WARM CLEAR WATER FIRST
STRATICA DECKING	RECOMMEND A NEUTRAL DETERGENT SUCH AS JOHNSON STRIDE 1000, BRITISH NOVA LIQUID 99, OR BUTCHERS SUNDANCE	DO NOT USE ANY HARSH ABRASIVES ON STRATICA DECKING

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**Figure Q-15 - Waxing Recommendations**

<b>TYPE DECK</b>	<b>TYPE FINISH</b>	<b>NOTES</b>
CERAMIC TILE	WATER EMULSION WAXES	FLOOR MUST BE CURED AND NEUTRALIZED
LINOLEUM	EMULSIFIED RESINS, WATER EMULSION WAXES, SOLVENT LIQUID WAXES	AVOID USE OF VARNISH OR LACQUER SEALING COMPOUNDS
RUBBER TILE	WATER EMULSION WAXES	AVOID OILS AND SOLVENTS
TERRAZZO	EMULSIFIED RESINS AND WATER EMULSION WAXES	SEAL TO PREVENT DUSTING AND STAINING
VINYL	ALL TYPES	SOME SOLVENTS MAY ATTACK ADHESIVE

2. **FLOOR WAXING.** It is not always necessary to completely wax a deck when only small areas are worn. These areas can be cleaned and waxed separately, taking care to avoid waxing over perfectly good areas. This will prevent excess wax build-up, which will make tedious stripping projects unnecessary. In rewaxing decks that have not been stripped, or in spot-waxing decks, care must be taken to avoid mixing types of finishes. If a heavier coating is desired, allow the first coat to dry thoroughly and then apply a second thin coat.

Steps in proper wax application are as follows:

- a. Rinse clean mop in clean water and wring thoroughly.
- b. Pour wax in bucket and saturate mop completely.
- c. Wring lower half of mop, leaving heel saturated.
- d. Swing mop in side-to-side motion, being careful to keep moist heat flat on deck and allowing fanning out strands to spread wax.
- e. If required, apply second coat after at least 1 hour of drying time. Two thin coats give higher gloss and last longer than a single, heavy coat.
- f. Buff with the buffing machine, if necessary, for appearance.

To conserve wax and reduce maintenance, decks should be rebuffed several times before rewaxing. Decks may require only rewaxing in the traffic lanes once a week if dirty spots are promptly wiped up with a damp rag, and these areas are immediately redone.

The most painstaking and careful maintenance of deck coverings may be wasted if the legs of furniture, especially movable pieces, are not properly equipped with rubber

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tips to prevent scratching and denting. If such tips are not provided, avoid dragging heavy objects across resilient deck covering.

### Q-2-9 CARPET CARE

1. GENERAL. The ability of carpets to perform the functions of many materials has long been recognized. Overall safety factors and low maintenance costs make carpeting a far more desirable and flexible environmental control material than any hard surface material which performs a single function.

2. PREVENTIVE MAINTENANCE. Maintenance time and costs can be greatly reduced and a good overall appearance of carpets can be maintained by eliminating soil and dirt before they are tracked into staterooms. Placing mats outside or inside entryways will eliminate most of the soil from shoes before it can be tracked onto the carpet. Critical high traffic areas, such as hallways and entrance doors, take the brunt of soiling. Frequent vacuuming and preventative maintenance in the high traffic areas will reduce the amount of time required to maintain these areas.

3. MAINTENANCE PROGRAM. Carpet maintenance requirements are directly related to the amount of traffic in the area.

a. Daily. Clean with vacuum cleaner along all traffic patterns. It is extremely important to keep carpets as free as possible of loose, sandy, gritty soil. Remove spots and stains as they occur, if possible.

b. Monthly. Shampoo using a good commercial-type steam cleaner, in accordance with manufacturer's instructions. Proper shampooing procedures require the use of a neutral, synthetic detergent which is specially designed for cleaning carpets.

4. SPOTTING PROGRAM. A separate spot-cleaning program should be established, especially for areas where accidental spillage occurs at a higher rate. There are many excellent commercial spot-removal kits available for this type of use. Spills should be attended to as soon as possible and never left for more than a day.

5. DUST AND DIRT. Carpets are cleaned primarily to remove soil, in an effort to restore the original color, lengthen wear-life by the removal of gritty soil, and discourage mildew and other unsightly damages. A good carpet-care program will save time and money.

6. LOW MAINTENANCE. Carpeting requires only about half as much time to maintain as hard-surfaced decks. It is recommended that demonstrations be obtained from professional carpet cleaners before starting your carpet-care program.

### Q-2-10 CONTROL OF LINEN, CLEANING EQUIPMENT AND SUPPLIES

Aside from being expensive, supplies afloat are limited. A separate record should be kept for linens, cleaning equipment and consumable supplies. High and low limits for all items used should be established to assist in determining requirements.

### Q-2-11 PERSONAL LAUNDRY

Taking officers' clothes to the laundry is another duty that varies from ship to ship. Individual ship schedules should be followed for taking care of personal laundry.

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When clean laundry is returned to the stateroom, the usual practice is to leave it out where the officer can check it to see that everything has been returned. In the captain's or admiral's mess, it may be the responsibility of the attendant to check the clean laundry and put it away.

### **Q-2-12 ACCESS TO STATEROOMS**

Access to staterooms is a necessity in order to accomplish job requirements. This access should not be abused. To prevent conflict, Culinary Specialists and rotational pool personnel should be aware of their responsibility and accountability while in these working spaces, and a check-in and check-out key control log should be maintained by the stateroom supervisor or wardroom leading CS.

**APPENDIX R**  
**COMMAND FUNCTIONS, CATERING, AND ORGANIZATION**

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## APPENDIX R

# COMMAND FUNCTIONS, CATERING, AND ORGANIZATION

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### R-1 GENERAL

Special occasions such as Change of Command, entertaining dignitaries, Foreign Navies, prayer breakfasts, spouse club meetings and special command functions require special planning.

This chapter provides guidance in the planning and organization of special functions. Although some examples are given, use your imagination to make menus less complex or more elaborate. In presenting your plan/menu to the person sponsoring the special function, it is always a good idea to have several plans for the sponsor from which to choose.

Funding of these events is covered in Chapter 2, paragraphs 2402.2 (Special Events) and 2402.3 Official Representation Funds (ORF). Subsistence Appropriation Funds (SIK Account) will not be used to fund or subsidize these types of events. Under no circumstances will crew's meals be substituted to offset costs of ORF functions.

### R-2 SAMPLE SPECIAL EVENT CATERING QUESTIONNAIRE

Use the special event catering questionnaire to aid you in the proper planning of your function. Check and fill in the appropriate blocks. Fill in the names of personnel assigned to each item on the checklist. The questionnaire allows you to look at the entire function from start to finish. Several meetings should be held with your personnel to ensure they understand the overall theme of the function and their individual duties. All personnel must understand the desired end-product of their personal and team efforts.

Assign personnel appropriately using each CS's personal skills for the best end-product. Select people with exceptional culinary skills for presentation and use individuals with outgoing personalities who are conscientious and courteous for serving. Use every opportunity to train junior personnel for future functions.

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### SPECIAL EVENT CATERING QUESTIONNAIRE

1. Name of Ship/Activity: \_\_\_\_\_
2. Site/Location: \_\_\_\_\_ Date: \_\_\_\_\_
3. Type of Function/Event: \_\_\_\_\_
4. Estimated Number of Guests: \_\_\_\_\_
5. Type of Meal Service: Select one of the following:
  - Select: a. Formal Style: \_\_\_\_\_
  - b. Semi-Formal: \_\_\_\_\_
  - c. Informal
    1. Family Style: \_\_\_\_\_
    2. American: \_\_\_\_\_
    3. À la Carte: \_\_\_\_\_
    4. Buffet: \_\_\_\_\_
    5. Cafeteria: \_\_\_\_\_
6. Menu: Select from the listings of recommended menus accompanying this chapter. Are there any special menu considerations such as religious, command or group favorites?
7. Estimate cost of food: \_\_\_\_\_ (Ref: See sample per item cost control sheet.)
8. Annotate if item is to be rented/procured from a commercial source or is readily available at the activity.

Tableware	Decoration	Tent
Silverware	Tables	Dance Floor
China	Skirts, Bunting	Lectern
Serving Trays	Gift Table	Microphone
Meat Platters	Hat Table	Coat Rack
Beverage Containers	Novelties	Stage
Tablecloths	Candles	Signs
Napkins (cloth/paper)	Chairs	Parking
Ice	Tables	Photographer
Bar Setup	Decorations	Room
Flags, Banners	Flowers	Ice Carvings

Note: To facilitate the creation of ice carvings, ensure that the design, procurement and transportation of the ice blocks and finished product is planned well in advance of the function.

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9. Cost estimate of above items/service:

Itemized:

10. What time will these events occur?

	From	To
Cocktail Hour	_____	_____
Ceremony	_____	_____
Speeches	_____	_____
Program	_____	_____
Entertainment	_____	_____
Awards/Presentation	_____	_____
Other	_____	_____

11. Is there a full kitchen facility at the site? \_\_\_\_\_ If so, describe:

---

NOTE: The following questions regard the on-site kitchen. If applicable, these areas should be confirmed by personal inspection before the event.

12. Cooking Facility:

\_\_\_\_\_ Gas

\_\_\_\_\_ Electric

\_\_\_\_\_ # of Burners

\_\_\_\_\_ # of Ovens

(Will a standard size sheetpan 18" x 24" fit in the oven?)

\_\_\_\_\_ Check electrical outlets, compatibility, and extension cord availability.

13. Cold Storage:

\_\_\_\_\_ Refrigerator Size

\_\_\_\_\_ Freezer Size

\_\_\_\_\_ Ice Maker

\_\_\_\_\_ Other Cold Storage Area/Pantry

14. Diagram of table/sitting arrangement.

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### R-3 PER ITEM COST CONTROL SHEET

Once the menu has been approved by the host, costing out the menu becomes very challenging. Accuracy is the “key.” Using the format examples, price can be determined either “by the person” or “à la carte” or a “total cost” concept. It is best to have this ready for the host.

EXAMPLE: ITEM 1.

ROAST STEAMSHIP ROUND (BONE-IN)

RECIPE L00401

YIELD = 100 PORTIONS

EACH PORTION = 6 OZ

INGREDIENTS:	QUANTITY OR WEIGHT	UNIT PRICE	TOTAL COST
1. BEEF ROUND, BONE-IN	75 LBS	\$1.98 LB	\$148.50
2. PEPPER, BLACK	1/2 OZ	\$1.39 (4 OZ JR.)	\$ .17
TOTAL COST =			\$148.67

NOTE: Cost of this recipe can be reduced by 50% by decreasing the serving size to 3 oz per person.

EXAMPLE: ITEM 2.

MEATBALLS

RECIPE L02700 (FOLLOW STEP 1-7)

YIELD = 100 PORTIONS

EACH PORTION = 6 MEATBALLS

INGREDIENTS:	QUANTITY OR WEIGHT	UNIT PRICE	TOTAL COST
1. MILK, NONFAT, DRY	3 1/4 OZ	\$5.90 (3 LB CAN)	\$0.40
2. WATER	3 3/4 CUP	0	
3. EGGS, WHITE, SLIGHTLY BEATEN	6 EGGS	\$0.66 DOZ	\$0.33
4. PARSLEY, FRESH CHOPPED	1 1/2 OZ	\$0.95 LB	\$0.09
5. SALT	1 1/4 OZ	\$1.01 (5 LB BAG)	\$0.02
6. PEPPER, BLACK	1/2 OZ	\$1.39 (4 OZ JR.)	\$0.17
7. THYME, GROUND	1 TBSP	\$0.74 (2 OZ JR.)	\$0.05
8. PEPPER, RED, GROUND	2 TSP	\$1.04 (1-2 OZ CO)	\$0.06
9. GARLIC POWDER	1 TSP	\$0.88 (3-4 OZ JR.)	\$0.05
10. BREAD, DRY, BROKEN	2 LB 10 OZ	\$0.36 LB	\$0.95
11. BEEF, GROUND BULK	20 LB	\$1.62 LB	\$32.40
12. ONIONS, DRY, CHOPPED	12 OZ	\$0.46 LB	\$0.35
TOTAL COST =			\$34.87

\*NOTE: (In step 5, shape into 600 balls weighing 3/4 oz)

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### R-4 ITEMIZED EXPENSES

#### 1. SAMPLE MENU:

CHANGE OF COMMAND RECEPTION \$ \_\_\_\_\_ PER PERSON

#### CHOICE OF TWO HOT CHAFING DISH SELECTIONS:

- Steamship Round with Rolls
- Meatballs (Sweet and Sour, BBQ or Stroganoff)
- Chicken Fillets with Dipping Sauce
- Cocktail Sausage in BBQ Sauce
- Fried Mozzarella Sticks with Marinara Sauce
- Fried Cauliflower or Zucchini

Combination Meat Tray (Ham, Turkey and Roast Beef)  
Fresh Vegetable Tray with Dip  
Crab Meat Spread with Wheat Thins  
Punch and Wine Table

CHANGE OF COMMAND RECEPTION \$ \_\_\_\_\_ PER PERSON

#### CHOICE OF THREE HOT CHAFING DISH SELECTIONS:

- Steamship Round with Rolls
- Meatballs (Sweet and Sour, BBQ or Stroganoff)
- Chicken Drumettes (Fried or Teriyaki Style)
- Baby Burritos or Beef/Chicken Enchiladas
- Scallops Wrapped with Bacon
- Fried Mozzarella Sticks with Marinara Sauce
- Fried Cauliflower or Zucchini

Combination Meat Tray (Ham, Turkey and Roast Beef)  
Fresh Vegetable Tray with Dip  
Fresh Fruit and Cheese Tray or Fruit Boat  
Punch and Wine Table

NOTE: Use the Per Item Cost Control Sheet format (para. R-3) to compute the cost per person.

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Figure R-1 - MEMORANDUM EXAMPLE

1301  
Code 108  
22 June 2003

MEMORANDUM

From: Food Service Officer

To: Commanding Officer

Via: Executive Officer  
Supply Officer

Subj: ESTIMATED EXPENSES FOR CHANGE OF COMMAND RECEPTION

1. The following is an estimated, itemized list of expenses for the Change of Command Reception:

a. Ice Mold	\$ 48.00
b. Fountain Rental (2)	96.00
c. Coffee and Punch	60.00
d. Shrimp with Cocktail Sauce	535.00
e. Lumpia with Sweet and Sour Sauce	323.00
f. Roast Beef Sandwich	148.00
g. Decorated Cake	50.00
h. Vegetable Relish Tray	29.00
i. Fresh Fruit Basket	100.00
j. Consumables i.e., Napkins, Toothpicks, Cups, Plates, Table Skirt	100.00
Grand Total	\$1,489.00

2. Please contact me or CSC Van Damme at X260 for additional information. It will be our pleasure to serve you.

Very respectfully,

A. R. MAUPIN  
LT, SC, USN

\* Example of consumables, food and decorations to be submitted to the Host or Hostess of the Function/Party.

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### R-5 SPECIAL EVENTS MENU ITEMS

1. This section is designed to give the menu planner examples of menus when planning special functions. Early consultations with the Host and/or Hostess are very important in determining the type of function and style of service desired. It is also important to determine if the host's spouse has any special requirements. The guide should be used in the development of other menus. The "Protocol Handbook" should be consulted when hosting foreign dignitaries due to some dietary restrictions or religious customs.

2. General guidelines for Hors d'oeuvres: For an Hors d'oeuvres dinner allow 12-14 units per person. For a cocktail hour preceding dinner allow 5-6 units per person for a cocktail event. For a Change of Command allow 6-8 units per person.

<b>TYPICAL BREAKFAST MENU SELECTIONS - "QUICK REFERENCE"</b>			
<b>CATEGORY</b>	<b>ITEM</b>	<b>RECIPE NUMBER</b>	<b>REMARKS</b>
JUICE	Orange/Fruit Juice		Freshly squeezed or from concentrate
	Vegetable Juice	B 003 01	Canned, chilled overnight
FRUIT	Assorted Fruit		Place a minimum of 3 types of cut fresh fruits neatly arranged on a lettuce leaf in a dessert bowl for individual serving
QUICK BREADS & PASTRIES	Quick Breads		Select one for appropriate occasion
	Muffins	D 029 00	With favorite fruit mixes
	Assorted Donuts	D 018 00	
	Cinnamon Rolls	D 036 04	
	Apple Fritters	D 024 00	With favorite glazes
ENTRÉES	Pancakes	D 025 00	Add favorite fruit topping for mixes
	French Toast Puff	D 023 00	
POTATOES	Hashed Brown Potatoes	Q 046 00	
	Home Fried Potatoes	Q 047 00	

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**TYPICAL BREAKFAST MENU SELECTIONS - "QUICK REFERENCE"**

<b>CATEGORY</b>	<b>ITEM</b>	<b>RECIPE NUMBER</b>	<b>REMARKS</b>
BREAKFAST MEAT	Creamed Turkey or Creamed Beef on Toast	L 030 00 L 030 01	Select only what is ideal depending on guest preference, meal style or occasion
	Oven Fried Bacon	L 002 00	
	Grilled Canadian Bacon	L 002 03	
	Grilled Ham Slices	L 071 03	
	Grilled Sausage Patties	L 089 00	
	Minute Steak		
YEAST BREADS	White Bread	D 008 00	Toasted, cut diagonally, remove crust on toast
	Wheat Bread	D 055 00	Toasted, cut diagonally, remove crust on toast
	Bagels	D 013 00	With cream cheese
	Baking Powder Biscuits	D 001 00	Served with creamed meat or gravy
BEVERAGES	Coffee		
	Hot Tea		
	Milk		

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**“PRAYER BREAKFAST”**

ORANGE JUICE (FROM CONCENTRATE)

CHILLED CRANBERRY OR VEGETABLE JUICE B 001 00/B 003 01 (CHILLED OVERNIGHT)

ASST'D FRESH FRUITS (SLICES, WEDGES, CUBES, WHEELS)

CANTALOUPE - A13(2)

HONEYDEW MELONS - A13(3)

STRAWBERRIES - A13(4)

KIWI - A13(3)

ORANGES - A13(3)

PINEAPPLE - A13(4)

NOTE: GARNISH FRUIT BARS OR USE DESSERT BOWLS FOR INDIVIDUAL SERVINGS. RECOMMEND A MINIMUM OF 3 TYPES OF CUT FRESH FRUITS PLACED ON A LETTUCE LEAF IN INDIVIDUAL SERVING DISHES

FRENCH TOAST PUFF – D 023 00

APPLE FRITTERS (WITH FAVORITE GLAZES) – D 024 00

HARD BOILED EGGS (F.004 00) OR SCRAMBLED EGGS

CREAMED GROUND TURKEY ON TOAST – L 030 01

BAGELS - D 013 00

MUFFINS - D 029 00

CREAM CHEESE

STRAWBERRY JAM

COFFEE

HOT TEA

MILK

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**“LIGHT LUNCH MENU”**

CREAM OF BROCCOLI SOUP – P 014 01

PUFFED CRACKERS (LOCAL RECIPE)

COBB SALAD – M 030 00

NOTE: COBB SALAD CAN BE ATTRACTIVELY SERVED ON A LARGE LETTUCE LEAF PLACED ON A SERVING PLATE, SURROUNDED WITH SLICES OF CANTALoupES AND HONEYDEW MELONS, OR SERVED IN A LARGE TOMATO, CARVED-LIKE FLOWER OR CROWN, ALSO SURROUNDED WITH CRISP SLICES OF MELONS.

*OMIT BACON WHEN SERVING MUSLIM DIGNITARIES*

ICE CREAM SUNDAE

APPLE PIE Á LA MODE

ICED TEA

COFFEE

NOTE: SUBSTITUTE FOR COBB SALAD

1. SHRIMP SALAD - USING BOILED, PEELED AND DEVEINED SHRIMP PLUS 2-3 TYPES OF LETTUCE.

NOTE: ENSURE AN ALTERNATIVE DISH IS AVAILABLE TO GUESTS WITH SHELLFISH ALLERGIES.

2. CHEF SALAD - USED BOILED CHICKEN/TURKEY FOR MEAT PLUS FAVORITE DRESSING VINAIGRETTE.

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### "CHANGE OF COMMAND MENU - #1"

SHRIMP COCKTAIL – B 004 00

FRIED EGG ROLLS (SHANGHAI STYLE) (COMMERCIAL OR LOCAL RECIPE)  
WITH SWEET AND SOUR SAUCE – O 008 00

ROAST STEAMSHIP ROUND WITH ROLLS ON CARVING TABLE – L 004 01  
WITH NATURAL PAN (AU JUS) GRAVY – O 018 00

GRILLED CHICKEN KABOBS (MARINATED IN TERIYAKI SAUCE) – O 014 00

MEATBALLS (MINIATURE) WITH BBQ SAUCE – O 002 00

FRESHLY BAKED DINNER ROLLS – D 033 00

ASSORTED CHEESE CUBES: (RUFFLED TOOTHPICKS)

1. CHEDDAR CHEESE
2. MOZZARELLA (MONTEREY JACK)
3. SWISS

AT LEAST 3 TYPES ASSORTED CRACKERS/CHIPS

FRESH VEGETABLE TRAYS AND DIPS:

1. CARROT STICKS
2. CELERY STICKS
3. CAULIFLOWER
4. BROCCOLI
5. CUCUMBERS
6. OLIVES

DIPS: RANCH/ONION

FRESH FRUIT BASKET/FRUIT CUPS OR FRUIT KABOBS

1. WATERMELON
2. CANTALOUPE
3. HONEYDEW MELONS
4. KIWI
5. PINEAPPLE
6. STRAWBERRIES
7. GRAPES
8. ORANGES

FRUIT PUNCH OR APPLE CIDER

COFFEE

CEREMONIAL CAKE

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### "CHANGE OF COMMAND MENU - #2"

SPIRAL HAM

SHRIMP COCKTAIL – B 004 00

FRIED EGG ROLLS (PHILIPPINE STYLE) – B 002 02

WITH SWEET AND SOUR SAUCE – O 008 00

STEAMED WHOLE SALMON (LOCAL RECIPE),

OR SMOKED WHOLE SALMON (COMMERCIAL)

BEEF KABOBS (GRILLED) (USE SHORT BAMBOO BBQ STICKS/SKEWER)

CHICKEN KABOBS (GRILLED) (USE TERIYAKI SAUCE – O 014 00 FOR MARINADE)

NOTE: EACH STICK CONSISTS OF 3 CUBES OF MEAT AND 3 TYPES OF VEGETABLES (I.E., SWEET PEPPERS, ZUCCHINI, MUSHROOMS - D-G-6)

HOT CRESCENT DINNER ROLLS OR CLOVERLEAF ROLLS - D 036 17/D 033 04

ASSORTED CHEESE TRAY SERVING 3 TYPES OF CHEESE AS A MINIMUM

ASSORTED PARTY CRACKERS

RELISH TRAYS:

1. CARROT CURLS/STICKS
2. CELERY STICKS
3. CAULIFLOWERETS
4. CUCUMBERS
5. BROCCOLI
6. SWEET PICKLES
7. OLIVES

DIPS: RANCH/ONION

FRESH FRUIT IN A CARVED WATERMELON BASKET, FRESH FRUIT KABOBS OR FRUIT CUPS. RECOMMENDED FRUITS:

1. WATERMELON
2. CANTALOUPE
3. HONEYDEW MELONS
4. KIWI
5. PINEAPPLE
6. STRAWBERRIES

FRUIT PUNCH

CEREMONIAL CAKE

COFFEE

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**"CO'S GIG PARTY"**

TORTILLA CHIPS WITH SALSA – O 007 01

POTATO CHIPS WITH ONION/RANCH DIPS

VEGETABLE TRAY - CARROTS/CAULIFLOWER/BROCCOLI

CHEESE CUBES

FRESH FRUIT KABOBS

STRAWBERRY

WATERMELONS

PINEAPPLE

HONEYDEW MELONS

CANTALOUPE

ASSORTED COLD CUTS OF MEAT

(SLICED THIN, ROLLED AND SKEWERED WITH FRILLED TOOTHPICKS)

ROAST BEEF

ROAST TURKEY

HAM

ASSORTED PARTY BREADS

CRACKERS

SODA

APPLE CIDER

COFFEE

## NAVSUP P-486 – Food Service Management

### SPECIAL DINNER MENU #1 (FOR SHIP'S VIP AND FOREIGN DIGNITARIES)

#### DRINKS:

RED WINE

ICE WATER

ICE TEA (WITH SLICE OF LEMON)

#### CHOICE OF SALAD OR SOUP:

SOUP #1 FRENCH ONION SOUP – P 004 01 WITH PARMESAN CROUTONS – D 016 02  
TOPPED WITH PUFF PASTRY AND BAKED

SOUP #2 CREAM OF ASPARAGUS SOUP OR CREAM OF BROCCOLI SOUP – P 014 01  
WITH PUFFED PASTRY CRESCENTS

SOUP #3 TOMATO BOUILLON WITH CROUTONS – D 016 00  
OR PUFFED PASTRY CRESCENTS

SALAD #1 TOSSED GREEN SALAD – M 047 00 WITH CHERRY TOMATOES (HALVES) OR  
TOMATO (WEDGES) WITH SWEET PEPPERS - YELLOW/RED (JULIENNE  
CUT)

SALAD #2 TOSSED VEGETABLE SALAD – M 048 00 WITH CROUTONS OR PUFFED  
CRACKERS

NOTE: OMIT SLICED ONIONS

DRESSING: VINAIGRETTE OR ITALIAN DRESSING

#### MAIN COURSE:

BEEF CHATEAU BRIAND WITH BÉARNAISE SAUCE (USE COMMERCIAL MIX FOR SAUCE)

#### STARCH:

WILD RICE – E 005 03

BAKED POTATO TOPPED WITH SOUR CREAM AND CHIVES OR SCALLIONS

#### VEGETABLES:

JULIENNE CUT OR FRESH VEGETABLES

ZUCCHINI - STEAMED

SQUASH - STIR FRIED ON A BED OF CABBAGE

GREEN BEANS - LIGHTLY BUTTERED

NOTE: DO NOT OVERCOOK VEGETABLES

#### BREAD:

FRESHLY BAKED CRESCENT DINNER ROLLS – D 036 17

OR PROVIDE ENOUGH PUFFED CRACKERS IN THE BREAD TRAY IF THIS WAS USED  
DURING THE SALAD OR SOUP COURSE

## **NAVSUP P-486 – Food Service Management**

### **DESSERT:**

**ORANGE AND LIME SHERBET**

**CHOCOLATE ICE CREAM OR VANILLA ICE CREAM WITH COOKIE (GARNISH WITH FRESH MINT LEAF)**

### **BEVERAGES:**

**HOT COFFEE**

**HOT TEA**

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### JAPANESE STYLE

#### DRINKS:

HOT TEA (PROVIDE TEA POT ON EVERY TABLE)

ICED WATER

ICED TEA

#### SOUP:

EGG DROP SOUP P 803 00

#### MAIN COURSE:

CHICKEN TERIYAKI - L 114 00

STEAMED WILD RICE – E 005 03

STEAMED “MEDIUM GRAIN” RICE – E 005 00

TEMPURA VEGETABLES – Q 068 00

CHINESE MUSTARD SAUCE – O 022 00

NOTE: TEMPURA FRYING, WHEN DONE PROPERLY, RETAINS THE CRISPNESS OF THE FRESH VEGETABLES. CHINESE MUSTARD SAUCE (O 022 00) CAN BE SERVED WITH TEMPURA VEGETABLES.

#### DESSERT:

FRUIT MEDLEY SALAD – M 032 00

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### R-6 SAMPLES OF LOCAL RECIPES

#### HAM ROLLS - SERVES 25

1 1/4 LB HAM, THINLY SLICED  
5 OZ ROQUEFORT OR BLUE CHEESE  
12 OZ CREAM CHEESE SOFTENED  
5 OZ BUTTER/MARGARINE SOFTENED  
1 TSP SALT  
1 TSP TABASCO SAUCE  
2 TSP WORCESTERSHIRE SAUCE  
25 EA PICKLE SPEARS THIN OR  
1 C. GREEN STUFFED OLIVES (SLICED)

1. COMBINE ROQUEFORT/BLUE CHEESE, CREAM CHEESE BUTTER, SALT, TABASCO SAUCE, WORCESTERSHIRE SAUCE.
2. SPREAD MIXTURE ON HAM SLICES EVENLY 1/8" THICK. PLACE PICKLE OR SLICED OLIVES ON EDGE AND ROLL UP.
3. ARRANGE ATTRACTIVELY ON MIRROR OR GARNISHED MEAT PLATTER.

#### CRAB/SHRIMP STUFFED MUSHROOMS - SERVES 75

5 LBS LARGE FRESH MUSHROOMS  
1 1/2 CUPS BUTTER/MARGARINE  
2 LBS CREAM CHEESE SOFTENED  
2 CUPS FINELY CHOPPED SHRIMP, CRAB MEAT OR IMITATION CRAB  
1 CUP CELERY FINELY CHOPPED  
1 CUP ONION FINELY CHOPPED  
1 TSP BLACK PEPPER  
1 TSP CAYENNE PEPPER  
1 CUP MONTEREY JACK CHEESE, SHREDDED

1. RINSE MUSHROOMS, PAT DRY. REMOVE STEMS FROM MUSHROOM CAPS. BLANCHE MUSHROOM CAPS IN BOILING WATER FOR 3 MINUTES. REMOVE FROM WATER AND COOL.
2. FINELY CHOP MUSHROOM STEMS AND SAUTÉ WITH ONIONS, CELERY AND BUTTER. COOL SLIGHTLY. WHIP WITH CREAM CHEESE, SALT, BLACK PEPPER, CAYENNE PEPPER, CRAB OR SHRIMP MEAT AND MONTEREY JACK CHEESE. FILL EACH MUSHROOM CAP WITH MIXTURE.

NOTE: LABOR INTENSIVE

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### ROQUEFORT STUFFED MUSHROOMS - SERVES 50

4 LBS FRESH MUSHROOMS, MEDIUM - LARGE  
2 CUPS BUTTER/MARGARINE MELTED  
1 LB ROQUEFORT CHEESE CRUMBLED  
12 OZ CREAM CHEESE SOFTENED  
1 TSP ONION POWDER  
1 TSP BLACK PEPPER

1. RINSE AND PAT DRY MUSHROOMS. REMOVE STEMS FROM MUSHROOM CAPS. BRUSH MUSHROOM CAPS WITH BUTTER. PLACE MUSHROOMS ON SHEET PAN AND BAKE AT 450° F. FOR 4 MINUTES.
2. CHOP VERY FINELY MUSHROOM STEMS.
3. BLEND ROQUEFORT CHEESE, CREAM CHEESE, ONION POWDER AND BLACK PEPPER. COMBINE WITH CHOPPED MUSHROOM STEMS.
4. SPOON INTO PASTRY BAG. USING STAR TIP, SQUEEZE INTO MUSHROOM CAPS.
5. SERVE COLD ON SERVING PLATTER.

NOTE: LABOR INTENSIVE

### THAI CHICKEN - SERVES 50

2-3 LBS CHICKEN BREAST OR CHICKEN THIGH MEAT (BONELESS)  
1 CUP SWEET SOUR SAUCE  
1 CUP HOISON SAUCE  
1 CUP TERIYAKI SAUCE (PREFERABLY GLAZE)  
1 QUARTER CUP HOT CHILI GARLIC SAUCE  
3 TSP CRUSHED FINE PEANUTS  
1 HONEYDEW MELON  
1 MUSKMELON

1. CUT UP CHICKEN INTO 1-INCH SQUARES. MIX UP INGREDIENTS AND MARINATE CHICKEN MEAT ONE HOUR PRIOR TO BAKING. BAKE AT 400° F. FOR 5-8 MINUTES.
2. MEANWHILE, USE A SMALL MELON BALLER AND MAKE SAME AMOUNT OF MELON BALLS AS CHICKEN. SKEW MELON BALLS WITH A FRILLED TOOTHPICK. WHEN CHICKEN IS DONE, SKEW THE CHICKEN WITH THE MELON TOOTHPICKS.

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### COLD ROASTED VEGETABLES - SERVES 50

2 CUPS OLIVE OIL  
2 TSP BASIL  
2 TSP OREGANO  
1 TSP THYME  
1 TSP GARLIC POWDER  
2 TSP SALT  
2 TSP BLACK PEPPER  
1 TSP DILL  
1/2 TSP CAYENNE PEPPER  
4 LBS LARGE CARROTS, SLICED 1/4" THICK AT AN ANGLE  
2 EA EGGPLANT 1/3" SLICED ROUNDS CUT INTO QUARTERS (DO NOT USE  
SMALLER THIN END OF EGGPLANT)  
5 EA RED BELL PEPPERS CUT 1 1/2" SQUARES  
3 EA ORANGE BELL PEPPERS CUT 1 1/2" SQUARES  
2 LBS FRESH MUSHROOMS, HALVED  
1-1/2 QTS. RANCH DRESSING

1. COMBINE OLIVE OIL WITH SEASONINGS.
2. COMBINE CARROTS WITH 1/2 CUP SEASONED OLIVE OIL
3. COMBINE EGGPLANT WITH 3/4 CUP SEASONED OLIVE OIL
4. COMBINE PEPPERS AND MUSHROOMS WITH 3/4 CUP SEASONED OLIVE OIL
5. PLACE VEGETABLES ON SHEET PAN OR COOKIE SHEET. ROAST EACH TYPE OF VEGETABLE SEPARATELY AT 425° F. FOR 3-5 MINUTES, OR UNTIL VEGETABLES START TO BROWN. PEPPERS AND CARROTS SHOULD BE CRUNCHY.
6. POUR 1 CUP RANCH DRESSING INTO SHERBET CUP.
7. REMOVE VEGETABLES FROM SHEET PAN AND COOL.
8. ATTRACTIVELY ARRANGE VEGETABLES ON A SERVING PLATTER, AROUND 1 CUP RANCH DRESSING.
9. MAY BE REFRIGERATED OVERNIGHT.

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### TERIYAKI BEEF - SERVES 50

3 LBS BEEF, SIRLOIN/TENDERLOIN 3/4 CUBES

1 1/2 CUPS TERIYAKI GLAZE

1 BUNCH FRESH CHIVES, FINELY CHOPPED

1 FRESH PINEAPPLE, DICED 1/2 INCH CUBES

1. MARINATE BEEF CUBES WITH TERIYAKI GLAZE ONE HOUR BEFORE BAKING.
2. BAKE ON A SHEET PAN AT 400° F. 5 TO 6 MINUTES.
3. SKEW 1/2" FRESH PINEAPPLE CUBES WITH FRILLED TOOTHPICKS. THEN SKEW BEEF CUBES WITH THE PINEAPPLE TOOTHPICKS TO SERVE.
4. ARRANGE IN SERVING DISH, SPRINKLE WITH FINELY CHOPPED FRESH CHIVES.

### PUFFED CRACKERS - SERVES 25

2 OZ NON-STICK COOKING SPRAY

75 EA CRACKERS, SALTINE

SPRAY BOTTLE (SANITIZED)

3 CUPS WATER

1 CUP BUTTER (MELTED)

1. SPRAY NON-STICK COOKING SPRAY TO LIGHTLY GREASE A BAKING PAN.
2. PLACE THE CRACKERS IN THE PAN AT LEAST 1/4" APART.
3. USE THE SPRAY BOTTLE FILLED WITH POTABLE WATER TO WET THE CRACKERS UNTIL THEY ARE MOIST AND SWELLED DOUBLE IN SIZE.
4. USE MELTED BUTTER TO BRUSH AND DAUB EACH PIECE OF CRACKER.
5. BAKE 30 MINUTES AT 300° F. UNTIL GOLDEN BROWN.
6. REMOVE CRACKERS FROM PAN WHILE STILL WARM.

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### GARLIC BREAD STICKS - SERVES 100

32 SLICES WHEAT BREAD  
5 TBS 1 TSP MARGARINE, SOFTENED  
GARLIC POWDER

1. SPREAD 1/2 TSP MARGARINE PER SLICE OF BREAD.
2. SPRINKLE WITH GARLIC POWDER.
3. CUT EACH SLICE INTO SIX EVEN STRIPS.
4. PLACE ON LIGHTLY GREASED SHEET PAN.
5. BAKE AT 300° F. FOR 18 MINUTES UNTIL CRISP.

### FRUIT DIP - SERVES 100

4 16-OZ PKG CREAM CHEESE, SOFTENED  
8 OZ BUTTER/MARGARINE, SOFTENED  
4 CUPS CONFECTIONER'S SUGAR  
8 TBS ORANGE JUICE  
4 TBS GRATED ORANGE RIND  
2 TSP VANILLA FLAVORING  
4 CUPS CHOPPED WALNUTS/PECANS

1. COMBINE ALL INGREDIENTS TOGETHER.
2. SERVE WITH ANY KIND OF FRUIT. SUGGESTED FRUIT TO USE ARE FRESH PINEAPPLE CHUNKS, CANTALOUPE AND HONEY DEW MELON CUBES, STRAWBERRIES, APPLE AND PEAR SLICES BRUSHED WITH LEMON JUICES.
3. MAY BE SERVED WITH GINGERSNAPS AND SHORTBREAD COOKIES.

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**APPENDIX S**  
**FOOD SERVICE EQUIPMENT**  
**OPERATING/SAFETY PROCEDURES**

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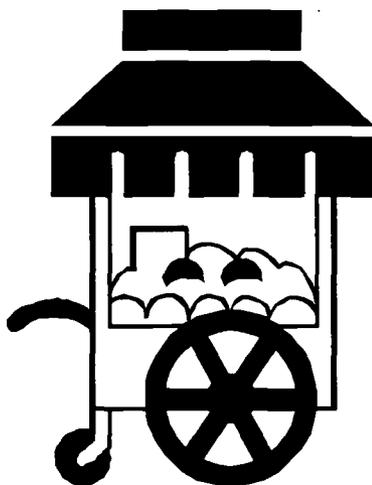
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## APPENDIX S

### FOOD SERVICE EQUIPMENT OPERATING/SAFETY PROCEDURES

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#### SECTION 1: NAVAL SHIPBOARD FOOD SERVICE EQUIPMENT CATALOG



**S-1-1 GENERAL.** The following information is taken from the Naval Shipboard Food Service Equipment Catalog which is available on-line on the Naval Surface Warfare Center Carderock Division's (NSWCCD) homepage and it should be noted that this is the only catalog that identifies food service equipment approved for shipboard use. The catalog can be accessed on-line at:

<http://www.dt.navy.mil/code97/9780/9783hp.html>

1. The catalog has been prepared to assist planning yards, Naval Shipyards, Supply Officers, Food Service Officers, Supervisors of Shipbuilding (SUPSHIP), Fleet Industrial Supply Centers (FISC) and any other personnel who are required to order food service equipment authorized for Naval ships and to provide information relative to dimensions, weight and utility requirements. Equipment and their manufacturers have been selected because of their known conformance to shipboard food service equipment standards.
2. The catalog identifies Food Service equipment approved for use aboard U.S. Navy ships. Food service equipment listed in the General Services Administration (GSA) catalog is **not** authorized for shipboard use. Some equipment, with the exception of utensils and small consumable appliances, contained in the Forces Afloat Shopping Guide (FASG) may be duplicates of those contained in this catalog, however, this catalog shall be the **only** authority for all shipboard equipment.
3. Each page provides information relative to procurement, specific features, sizes, electrical or steam requirements and any other additional information needed to properly install the equipment in accordance with all applicable shipboard specifications.

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If no entry appears in an equipment field, no information was available and none is expected to be available. If "Pending" appears, no information was available at the time of publication, but will be available at a later date. A "Surface Ship Hatchable" entry in the remarks area means equipment will fit through a 26 inch by 66 inch oval hatch. A "Submarine Hatchable" entry means equipment will fit through a 25 inch diameter hatch. A "Modular" entry means that the equipment was designed to be disassembled to allow entry into a submarine and/or surface ship hatch and re-assembled at place of installation.

4. If you wish to procure food service equipment that is not shown in this catalog, a request must be submitted to NAVSEA Philadelphia for assessment of shipboard applicability. Letter or facsimile shall be forwarded containing the following information:

- a. Requestor's name, phone number and facsimile (fax) number.
- b. Requestor's activity or ship.
- c. Type of Food Service equipment, manufacturer, model number, and manufacturer's point of contact and estimated cost of item.
- d. Valid technical and configuration justification for procurement. (Note: Please plan ahead; imminent deployment, circumspect declarations of medical exceptions, end of fiscal year dollars or other time related reasons are **not** generally considered valid reasons for consideration).
- e. Technical characteristics: dimensions, service or utility requirements, (electrical, water, steam, air, etc.) materials used in fabrication, hardware integral design and primary function of equipment.
- f. Area where equipment is to be used to include compartment name and number.
- g. Maximum dimensions of location where equipment is to be installed to ensure adequate fit and accessibility for maintenance/service.

5. If source of equipment/item is a discount/retail store, recommend soliciting technical information from this source or obtaining name references of part number used by source.

In addition, the following general notes have been compiled to provide guidance to repair activities during installation of all food service equipment included in this catalog.

6. There shall be no crevices or inaccessible voids which might harbor vermin, cooking waste or other extraneous matter. Access shall be provided to all areas requiring cleaning, painting or treating with insecticide.

7. Whenever possible, a clear space of at least 6 inches shall be provided under each piece of deck mounted equipment.

8. The following deck mounted equipment shall be leg mounted for air circulation and cleaning access: ovens, deep fat fryers, ranges, under counter and/or upright refrigerators and freezers, cold food counters, ice machines, and soft serve ice cream makers.

Equipment abutting other pieces of equipment, dressers or bulkheads shall be installed in a manner to avoid grease or soil-catching crevices.

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Where the back or side of heat producing equipment adjoins a bulkhead, an air space of not less than three inches shall be provided.

9. Dresser mounted equipment shall not be welded to the dresser. Equipment shall be installed on four to six inch high round stock corrosion resistant (CRES) leg supports of suitable size in diameter for supporting the specified equipment and secured by bolting to the dresser.

Dressers shall be adequately reinforced to support dresser mounted equipment and to prevent excessive vibration when equipment is operated.

10. Questions and comments concerning the catalog may be forwarded to:

Commander

Carderock Division

Naval Surface Warfare Center

Habitability Section, Code 9783

Naval Business Center

Philadelphia, PA 19112-5083

Telephone: DSN 443-1647, Commercial 215-897-1647

## SECTION 2: EQUIPMENT

### S-2-1 ICEMAKING MACHINES AND ICE FLAKERS

#### OPERATING AND SAFETY PRECAUTIONS

Check the machine periodically to see that temperatures are being maintained and enough ice is being produced. The machinery and inner workings of icemakers are the responsibility of the engineering department. Food service personnel should not enter the equipment without the assistance of Engineering and Public Works personnel. Ensure that planned maintenance on icemaking equipment is carried out in accordance with the established schedules. Weekly disconnect the electric power and remove ice in the collection bin. Scrub out the bin area with a brush and mild detergent solution. Flush with clean water until all traces of the detergent are gone. Reconnect electric power.

#### FLAKE ICE MAKER/DISPENSER

1. Make sure all air vents are open and unobstructed at all times.
2. Unless turned off for maintenance or cleaning, leave machine turned on at all times.
3. All housing parts and particularly doors and covers on the ice bin must be securely closed and attached at all times.

#### Directions for Cleaning Automatic Ice Flakers Without Disassembly

Step	Procedure
1. Shut off water.	Pour 1 quart cleaning solution slowly into water reservoir.
2. Place a container below ice chute in bin and start ice machine.	Ice will be formed from cleaning solution. Discard ice. Shut off machine.
3. Flush icemaking system.	Add 1 quart clean water to reservoir. Catch ice in container. Discard.
4. Wash down storage bin with mild detergent solution. Rinse.	Inside should be scrubbed with plastic brush.

Areas in and around motor, insulation panels, and condenser coils should be vacuumed or blown free of lint and dust. Periodic weekly checks for cockroach infestation should be made.

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### Directions for Cleaning Water Reservoir

At least once every 30 days, clean out the water reservoir

Step	Procedure
1. Shut off power.	Use manual switch.
2. Turn off water supply.	Shut water inlet valve.
3. Remove entire water reservoir from fittings of machine.	Take out water inlet. Pull out reservoir from top water inlet.
4. Clean and descale.	Wash out reservoir with warm detergent water. Rinse. Use a scale removing solution if necessary to clean inside of possible sediment.
5. Replace reservoir and reconnect power and water supply.	Refill reservoir and adjust water level in accordance with manufacturer's instructions.

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### **S-2-2 MEAT SLICER**

#### **OPERATING AND SAFETY PRECAUTIONS**

1. Meat slicer should be securely bolted to the dresser top and electrically grounded.
2. Keep knife guard in place at all times except when slicer is unplugged and disassembled for cleaning. If the slicer is hardwired to a bulkhead mounted switch, make sure the switch is off before attempting any cleaning or adjustment.
3. Use a pusher, not your hand, to guide product being sliced.
4. Never touch the blade with your hands. Clean the blade with a clean, detergent soaked cloth wrapped around a pad or block.
5. Always replace knife guard as quickly as possible after cleaning. Do not leave an unguarded blade unattended at any time.
6. After each use or at least daily, wash all food contact parts with detergent and warm water. Rinse thoroughly.

**S-2-3 MICROWAVE OVEN**

**OPERATING AND SAFETY PRECAUTIONS**

1. Keep inside of oven door and heating surface on the cabinet scrupulously clean at all times. Do not use tools or abrasives on door closing surfaces at any time.
2. Do not allow oven door to be closed on any object including rags, towels, etc.
3. Do not attempt to defeat oven door safety interlocks.
4. Do not operate oven with an empty cavity and keep all metal utensils out of the oven cavity at all times.
5. Do not obstruct cooling vents in the oven housing.
6. Keep the oven door closed when the oven is not in use.

**Cleaning:**

1. Wipe up spills immediately.
2. Do not allow food particles or grease to collect on plastic stirrer and light cover, inner door and oven cavity front surface.
3. Do not use scouring pads, abrasive powders or other abrasive materials on any oven surfaces.

**Daily:**

1. Turn power to "OFF."
2. Wipe the plastic stirrer cover with a cloth or sponge dampened in mild detergent solution.
3. Wipe all surfaces in the oven cavity with the dampened cloth or sponge and then dry with a clean cloth.
4. Wipe the inner door surface and oven cavity front with mild detergent solution and dry.

**Weekly:**

Remove the air intake filter and wash in hot water to remove grease and dust.

**S-2-4 MILK DISPENSERS**

**OPERATING AND SAFETY PRECAUTIONS**

1. Check temperature range which should be from 32° to 41° F.
2. Cut milk dispenser tube with a clean sanitized instrument to a point not more than 1/4 inch below the termination of the dispensing mechanism.
3. Fill milk dispensers and replenish as necessary during the meal.
4. Wipe up spills immediately.
5. Keep catch bowls or trays clean; empty them as necessary.
6. Always wipe off the bottom of the containers or cans before placing them in the dispenser.
7. Do not reuse disposable cardboard milk containers; dispose of them when empty.

**Daily:**

1. Clean exterior with a mild detergent solution. Rinse well with clear water to remove film. Use of abrasives is to be avoided.
2. Remove, disassemble, and wash the lift valves after each meal.

**Defrosting milk dispensers:**

When ice deposits have accumulated to a thickness of about 1/4 of an inch, defrost the dispenser by securing the electric power and leaving the door wide open. When the ice has melted, wash the interior with warm solution of water and detergent, rinse, dry, and reconnect the electric power. DO NOT use metal objects to scrape ice from cabinet walls.

**S-2-5 NONCARBONATED BEVERAGE DISPENSERS**

**OPERATING AND SAFETY PRECAUTIONS**

Noncarbonated beverage dispensers are often located on the serving line to dispense fruit juices, lemonade, and other popular beverages. The majority of these machines have a self-contained refrigeration unit and a recirculating pump to keep the solids associated with pulpy juices in suspension and promote uniform cooling. The beverages are dispensed from a clear plastic tank.

1. Fill the dispensing tank well in advance of each meal to ensure a properly chilled beverage. Frequent resupply during the meal will minimize the temperature rise caused by adding an unchilled beverage to the tank.
2. Empty and clean the drip pans as required.
3. Turn off refrigeration unit when not in use and as soon as the tank is empty.

**Daily or after each use:**

1. Drain, fill with warm detergent water, scrub the tank and flush through the dispensing valve. Rinse away traces of detergent.
2. Check the impeller assembly for cleanliness and wash away any syrup build-up which could clog the pumping mechanism.

**S-2-6 POWDERED MIX BLENDER**

**OPERATING AND SAFETY INSTRUCTIONS**

1. Assemble cleaned and sanitized parts into the machine and lubricate with food grade lubricant in accordance with manufacturer's instructions.
2. Assemble powder funnel and "O" ring and install in the funnel opening in the machine top housing.
3. With both switches in the "OFF" position, position water fill switch for milkshake operation and water will automatically fill to proper level.
4. Position "AUTO" switch to "AUTO" position which will start blending action and the refrigeration system.
5. Add milkshake powder through the funnel. Check powder in the funnel periodically and make sure powder is feeding down the funnel into the mix chamber.

**CAUTION:** Do not put tools or fingers through funnel opening to the mix chamber.

6. The four gallon batch takes about six minutes to blend and chill to 40° F. When batch is done, turn off both switches and draw off mix and store in refrigerator.

**Cleaning:**

1. After each day's use, disassemble, clean, and sanitize all parts of the machine which have come into contact with dry powder or powder and water mixture.
  - a. Dispensing door.
  - b. Valve core.
  - c. Beater.
  - d. Beater drive shaft.
  - e. Powder funnel.
  - f. Powder funnel vent tube.
  - g. All "O" rings.
2. Clean inside of mixing barrel and rear shaft bearing.
3. Before each use, sanitize assembled machine and drain.

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### S-2-7 PROOF BOX

#### OPERATING AND SAFETY PRECAUTIONS

1. Make sure water is turned on to the proof box automatic feed, or in manual fill machine, and that the water reservoir is filled.
2. Turn on switches for heat, humidity control and circulating fan.
3. Proper temperature is 95° F. and proper humidity is 95 percent.
4. Allow proof box to reach proper proofing temperature. Normally, 30 to 45 minutes are required for stable conditions.
5. Proof products in accordance with the appropriate Armed Forces Recipe Service, NAVSUP P-7.

#### Directions for Cleaning a Proof Box

Step	Procedure
1. Clean interior after removing racks.	Clean floor, walls, top and inside of door. Scrape sides, corners, and guide rails with putty knife. Scrub floor with long-handled gong brush and hot machine detergent solution. Rinse, dry. Wipe guide rails and ledges thoroughly. Remove and clean water pan, rinse, wipe dry.
2. Scrub exterior.	Scrub top, outside of door, and sides with hot machine detergent solution; rinse and dry.
3. Clean around proof box.	Scrub back of box and wall. Scrub floor behind and under machine if space permits; if not, flush with hot water.
4. Air dry.	Leave open to air.

## NAVSUP P-486 – Food Service Management

### S-2-8 REACH-IN REFRIGERATORS

#### OPERATING AND SAFETY PRECAUTIONS

1. Maintain refrigerator temperature at 32° F. - 41° F.
2. Store only food items in refrigerator.
3. To avoid taste transfer, do not store eggs and butter with fruits and vegetables.
4. Frost or glaze should not be allowed to accumulate more than 1/4 inch on surfaces or coils as compressor overload will result.

#### Daily:

Clean up spills and exterior surfaces with detergent and warm water. Wipe dry.

#### Bi-weekly Cleaning:

1. Transfer all stored foods to protected temporary storage.
2. Remove shelving and loose equipment to wash sink filled with detergent solution. Scrub with plastic bristle brush. Rinse. Sanitize with spray. Leave door open to dry.
3. Scrub interior of box with hot detergent solution, using plastic brush. Clean corners, doors, openings, hinges, and latches. Rinse. Sanitize.

#### Periodically:

Clean vacuum compressor, condenser coils, motor and related areas.

## NAVSUP P-486 – Food Service Management

### S-2-9 SALAD BAR

#### OPERATING AND SAFETY PRECAUTIONS

1. Salad bars may be refrigerated or non-refrigerated. Non-refrigerated salad bars will be filled with enough ice to properly cool the salad pans to ensure all salad bar items remain below 41° F. Also ensure that the salad dressings are refrigerated. After each meal the ice should be discarded and the salad bar cleaned.
2. Refrigerated salad bars in use must be maintained at a temperature in order to keep the salad bar items below 41° F. The electric power should be disconnected prior to cleaning. Clean and defrost after each use. Particular attention should be paid to the drain when cleaning the salad bar.
3. Dispose leftover food from the salad bar as directed by the Watch Captain and/or Food Preparation Worksheet or refer to NAVMED P-5010 3-5.11.
4. Metal objects should not be used to scrape ice from the coils; metal scrapers may damage or puncture the coils.

#### **After each use:**

1. Run insert pans and trays through dishwashing machine.
2. Wash and scrub table surfaces with detergent and plastic brush. Rinse and allow to air dry.

**S-2-10 SOFT ICE CREAM/MILKSHAKE MACHINE**

**OPERATING AND SAFETY PRECAUTIONS**

1. Assemble the machine in accordance with manufacturer's detailed instructions. Pay close attention to lubrication instructions.
2. Sanitize the freezer with approved sanitizing solution. Operate machine in wash cycle for two minutes, then drain off all sanitizing solution.
3. Precharge the freezing cylinder with the amount of fresh mix recommended by the manufacturer. With a container under the draw-off spout, open spout and hold open until pure mix starts to flow.
4. Set temperature control knob for product to be dispensed. Set machine to automatic and allow freezer to operate and cycle off.
5. Assemble mix feed and install in machine reservoir. Fill reservoir to fill line with mix.

**Directions for Cleaning Soft Ice Cream Machines:**

Before use sanitize all utensils that come in contact with mix. Thoroughly clean and sanitize ice cream freezer and all component parts daily.

**To Clean:**

1. Empty freezer and flush with cold water until water runs clear.
2. Rinse again with warm water (120° F.).
3. Pour a 140° F. solution of water and detergent into freezer and brush hopper as detergent runs through freezer.
4. Remove all parts that come in contact with the ice cream mix: lid, hopper valve, dasher, freezer door, all gaskets, seals, and O-rings. Place all parts in detergent solution and brush all surfaces. Brush inside of freezing cylinder; pay particular attention to the back wall and shaft connection. Rinse all parts thoroughly and allow to air-dry.

**To Sanitize:**

Prepare sanitizing solution (calcium hypochlorite) in accordance with package directions. Wear disposable gloves when assembling machine. Dip each part in solution as machine is assembled. Pour remaining solution into hopper and brush solution over entire inside and lid. Rotate dasher as solution runs through mixer. Drain completely, and the freezer is ready for the next batch of soft serve ice cream.

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### S-2-11 VEGETABLE CUTTER

#### OPERATING AND SAFETY PRECAUTIONS

1. Never attempt to operate the machine with the blade guard raised.
2. Do not use hands or any other thing to attempt to push vegetable under the blade guard. If machine becomes clogged, shut off at the circuit breaker box or unplug the machine.
3. Observe product in the bowl carefully and unload when chopped satisfactorily.
4. When high speed gear-attachment and slicing-attachments are being used on the power take off hub, use extreme caution since there are no safety switches on the accessories. Always shut off the machine when opening or making adjustments.
5. See operator's manual for complete instructions.

#### Directions for Cleaning Meat and Vegetable Chopper:

##### Step

##### Procedure

#### Daily:

Preflush. Scrub bowl and parts with long handled brush and 125° F. detergent water. Air-dry. Sanitize. Be sure to reach all food contact surfaces.

#### Weekly:

- |  |   |
|--|---|
| 1. Shut off motor and disassemble for weekly cleaning. | Lift out feeder pan. Remove the following: adjusting ring, perforated chopping plate, knife, food screw, and chopping cylinder.             |
| 2. Clean.  | Run parts through dishwasher or wash in detergent water in pot and pan sink with brush. Scrub vigorously until food particles are loosened. |
| 3. Rinse. Sanitize and air-dry.                        | If not machine cleaned, adequately rinse to eliminate solution and sanitize in 180° F. water.   |

## NAVSUP P-486 – Food Service Management

### S-2-12 VEGETABLE PEELER

#### OPERATING AND SAFETY PRECAUTIONS

1. Put in proper load of vegetables in accordance with name plate rating.
2. Turn on water.
3. Start machine and run until skin is removed.
4. Open discharge door and allow load to empty into sink or container of clean water.
5. Do not overpeel or product will be lost.
6. Keep hands and all other articles out of peeler chamber while machine is running.

#### Directions for Cleaning Vegetable Peeler:

Step	Procedure
1. Disassemble removable parts.	Remove lid and disk.
2. Wash interior.	Flush with hot water; scrub thoroughly walls, shoulders, inside and outside of door. Leave door open to air dry.
3. Clean peel trap.	Remove (or raise) lid, strainer, and stopper. Flush interior with hot water; scrub with stiff fiber brush while flushing. Leave open to air dry.
4. Clean parts.	Under hot running water, scrub lid, disk, strainer, and stopper. Leave abrasive parts out to dry.
5. Clean exterior.	Wipe or scrub with brush and hot detergent solution.

#### Safety Notes:

1. Do not stop machine while product is being peeled. Allow it to empty before opening.
2. Never operate the peeler unless water has been properly applied.

## S-2-13 UTENSIL WASHING MACHINES

### OPERATING AND SAFETY PRECAUTIONS

1. Properly install all internal removable components.
2. Clean drain valve, add sudsless detergent as required and lower all doors.
3. Open all supply valves and turn “heat” switch on.
4. Turn selector switch to “Manual.” Tanks will be filled to proper level in approximately 2-1/2 minutes. When wash water is heated to desired temperature, machine will be ready for operation.
5. Open side doors and place rack of utensils in machine. Do not overpack racks.
6. Lower side doors, then turn selector switch to “auto.” The machine will automatically wash, rinse, and shut off.
7. For continuous operation, repeat steps 5 and 6.
8. If manual operation is desired, turn switch to “manual” and select “wash” or “rinse” as desired. Machine will perform selected function after doors are lowered.

### General Instructions:

1. Remove scraps from all utensils before placing them in racks.
2. Maintain rinse temperature.
3. Drain machine when finished.
4. After use, clean and replace all internal removable components.
5. Pump can be reached for cleaning by removing inspection plate only when necessary.

**NOTE:** Ware washing machines will be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer. The plate will indicate the machine’s design and operating specifications to include required temperatures for washing, rinsing, and sanitizing.

## S-2-14 MULTIPLE BLADE BREAD SLICER

### OPERATING AND SAFETY PRECAUTIONS

1. Carefully remove the slicer from the shipping box. Install machine in accordance with installation instructions.
2. Ensure machine connection to power source and switch master switch to "ON" position.
3. Use the handle located on the front of the machine to raise the knife frame up until it remains in fixed position and bread rack pivots forward to open position.
4. Place bread to be sliced in receiving trough and raise operating handle on right side of machine to automatically operate motor switch and start the knife frame on its downward slicing motion.

**NOTE:** Switch will shut off automatically when knife frame reaches its bottom position.

5. To remove sliced bread from machine, place right and left hands against the respective ends of the sliced loaf and lift loaf out of rack. Place it on bagging attachment for bagging.
6. When cutting rye bread with hard crust, place bottom of loaf against front side of rack.
7. When slicing large round loaves or long loaves lengthwise, use the procedure as follows:
  - a. Raise the frame.
  - b. Start the knives by lifting the switch button located on top of the frame at right.
  - c. Feed bread (lengthwise) upward through knives until uncut portion of bread can rest on receiving trough.
  - d. Rest lower end of bread on receiving trough and raise the operating handle to complete slicing.

**CAUTION:** Do not allow fingers or hands to come in contact with knives when operating machine.

8. When slicing very hot bread, or bread of a very sponge-like, soft texture, with a well baked crust, slightly retard downward motion of knife frame until knives have entered the hard crust.
9. Follow procedures as outlined in operator's manual for removal and replacement of knife frames and for removal and replacement of knives in frames.
10. Pay particular attention to manufacturer's lubrication instructions.

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### **Cleaning:**

#### **Daily or after each use:**

1. Disconnect machine from power source.
2. Machine parts coming in contact with bread products such as upper and lower knife frame assemblies, bagging trough, and holding rack should be removed and washed thoroughly in mild detergent and warm water solution. Rinse and dry. Reassemble parts in accordance with operator's manual.
3. Wipe down machine exterior with mild detergent and warm water solution. Rinse.

**CAUTION:** Do not, at any time, spray or allow water to enter motor housing or crank mechanism.

## NAVSUP P-486 – Food Service Management

### S-2-15 DISHWASHING MACHINE (CONVEYOR)

#### OPERATING AND SAFETY PRECAUTIONS

The machine should be uncrated carefully. Take caution not to damage component accessories which usually are appended to side of machine. Installation of machine and component accessories shall be in accordance with the manufacturer's instructions.

#### Operating:

1. Close all tank drains.
2. Open water supply service valves, turn main electrical disconnect on.
3. Check to see that conveyor is cleared of objects that may cause "jam-up" in machine.
4. Check to see that all internal removable parts are properly installed.
5. Turn on detergent dispenser.
6. Fill tanks to desired level (either manually by opening fill valves or by turning automatic tank fill switch to "on" position when machine is so equipped). Tanks will fill in approximately 4-1/2 minutes.
7. Turn heat switch on (or open all steam valves to tanks and booster). Allow time for water in tanks to reach desired temperatures. Machine is now ready for operation.
8. Start conveyor and pumps by depressing the proper push-buttons, then load dishes in correct manner for best cleaning.

#### General:

1. Remove scraps from all dishware and utensils before placing on conveyor.
2. Maintain approximately 110° F. - 120° F. pre-wash, 150° F. - 160° F. wash, 160° F. - 180° F. rinse, 180° F. - 194° F. final rinse temperatures.
3. Always turn off tank heat before draining tanks.
4. Clean and replace all internal removable parts daily. Make sure spray pipes are free of foreign matter.
5. Shut off water, electric, steam, and gas supply when machine is not to be used for extended period.

**NOTE:** Above listed temperatures are approximate. Ware washing machines will be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer that indicates the machine's design and operating specifications including required temperatures for washing, rinsing, and sanitizing.

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### Cleaning:

For best results, the dishwasher should be cleaned after using. The simple steps outlined below will ensure clean, sanitized dishware.

1. Before cleaning, shut off the steam, water, and electrical supplies.
2. Open drains and wait until tanks are empty.
3. Remove wash manifolds, rinse manifolds, scrap screens, and suction strainers.
4. Clean dishwasher tank(s) preferably by using a hose. Be careful not to bend or twist any ball float arms. Wipe down inside of hood.
5. Clean and replace suction strainers.
6. Clean and replace scrap screens.
7. Clean all spray pipes using the brush provided with the machine. The end caps must first be removed.
8. Replace caps and install manifolds in their proper positions.
9. Wipe down outside of hood.
10. It is necessary, periodically, to remove lime deposits which may build up on the machine over a period of time. An approved de-limer should be used for this purpose.

## S-2-16 DISHWASHING MACHINE

### OPERATING AND SAFETY PRECAUTIONS

1. Install machine in accordance with manufacturer's instructions.
2. Filling Tank: Open all water valves and fill tanks to level of overflow with hot water. Turn main electrical disconnect on.
3. Place an approved detergent in the wash tank.
4. Ensure that conveyor is cleared of objects that may cause "jam-up" in machine.
5. Heat water in rinse tank by opening steam valve. Temperature of water in wash tank will rise after machine is in operation. The rinse tank-fitted thermostat prevents operation of machine unless minimum temperature of 180° F. is reached.

**NOTE:** Do not change this setting if temperature in rinse tank falls below 175° F.; thermostat will stop motor and pump operation.

6. In event rinse tank thermostat stops motor and pump due to low temperature, add additional steam to bring temperature of rinse tank up over 180° F. To resume operation, press start button.
7. Final rinse and sterilization spray: Set lever on steam and water-mixing valve to regulate mixture of steam and water desired. The final rinse spray should be adjusted to temperature of about 190° F.

#### Operating:

1. Press starting button to start pump.
2. Place dishes loosely in baskets. Turn cups upside down, place bowls or deep dishes on end but tilt enough to allow for drainage of water.
3. Place basket between the conveyor chain lugs.

**NOTE:** Above listed temperatures are approximate. Ware washing machines will be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer that indicates the machine's design and operating specifications including required temperatures for washing, rinsing, and sanitizing.

## NAVSUP P-486 – Food Service Management

### Daily Cleaning:

The scrap trays of the machine are to be cleaned of garbage as follows:

- a. Before cleaning, shut off steam, water, and electrical supplies.
- b. Remove the lower manifold assembly.
- c. Lift out scrap trays, and at the same time, remove pump suction strainer.
- d. After cleaning and washing, replace suction strainer and scrap trays in machine.
- e. Manifolds may be cleaned by inserting brass cleaning brushes directly into the tube, pushing ball inwards. When machine starts, the ball will return to end of pipe.
- f. Install manifold assembly in proper position.
- g. Wipe down outside of hood.

## NAVSUP P-486 – Food Service Management

### S-2-17 FOOD MIXING MACHINE, 20 QUART

#### OPERATING AND SAFETY PRECAUTIONS

1. Set the shifter handle at the desired speed and turn on the switch to start the motor.
2. To change speeds, first turn off the motor, then move the shifter handle to the desired speed.
3. Use number 3 speed for fast, light work, such as whipping cream, beating eggs, and mixing thin batters.
4. Number 1 or slow speed is for heavy mixtures, such as breakfast rolls, etc. Also use this speed for the food chopper attachment.
5. In many operations, it is desirable to start on number 1 then change to a higher speed as the work progresses.
6. To lower the bowl, pull the lift handle forward.

**NOTE:** It is necessary to lower the bowl to change agitators; this position also makes the bowl more accessible for filling.

7. When raising the bowl, move the lift handle a little beyond the vertical center until it is felt to touch the stop.
8. To mash potatoes or to cream butter, start with the bowl down and raise it slowly into working position, while the agitator is rotating.
9. When attaching an agitator (bowl in the "DOWN" position) slip the agitator up on the shaft and turn it until the driving pin in the shaft reaches the L-shaped slot in the agitator shank.
10. The style "B" beater is commonly used for thin batters, cakes, and mashing potatoes.
11. The style "D" whip is best for whipping cream and beating eggs. The "E" dough arm is for heavy bread doughs, and the "P" pastry knife for cutting shortening into flour for pastry. The "S" beater is used for sweet dough and the "C" wing whip for heavy whipping.
12. The attachment socket is for the size 12 attachments. Before putting an attachment into the socket, stop the motor, then insert with a slight twist toward the left so that the stop stud in the attachment is tight against the side of the hole that receives it. When in place, tighten the thumb screw and put a drop of oil in the oiler.
13. The attachment drive has three speeds, governed by the shifter handle of the mixer. For most attachments, set the handle at number 1. Set the speed at number 3 for the tool grinder.

**CAUTION:** The chopper attachment must never run faster than speed 1 when cutting meat; when cutting vegetables it may run at the number 2 speed. Use the motor switch to start and stop the motor before changing the speed of an attachment.

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### **Cleaning:**

#### **Daily or after each use:**

1. Disconnect power to machine prior to cleaning.
2. Remove attachment, bowl, or accessory and preflush as required.
3. Scrub bowls, attachments, and accessories with long-handled brush and 125° F. detergent water solution. Rinse thoroughly. Air dry. Sanitize. Be sure to reach all food-contact surfaces.
4. Wipe down main body of machine with mild detergent and warm water solution. Rinse.

**CAUTION:** Do not spray machine.

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### S-2-18 WALK IN REEFER

#### OPERATING AND SAFETY PRECAUTIONS

##### General:

1. To gain maximum use and performance, this refrigerator must be installed and operated properly. Assembly and installation must be in strict accordance with manufacturer's instructions.
2. Operators of the unit must be thoroughly familiar with the various features of the unit.
3. The door latch is equipped with provisions for padlocking and with inside door release mechanism which enables door to be opened from inside even when latch is padlocked.

**NOTE:** An inside door release instruction label is attached to door interior. DO NOT REMOVE THIS LABEL FOR ANY REASON.

4. The strike part of the latch is adjustable to compensate for gasket wear. As the need arises, simply loosen two adjusting screws of the strike and move the sliding tongue forward or backward as required. Then tighten the screws.
5. The alarm control should be set to operate the warning lamp at 61° F.
6. The hold-back hook holds the door in the open position. To release door, simply press lever of the hold-back hook.
7. The condensing unit, with compressor and motor, is lubrication-sealed and is equipped with a relay, overload protector.
8. The evaporator is of the forced circulation type in which the accompanying fan cycles warmer air over coils of evaporator and re-circulates the air.

**CAUTION:** Do not load refrigerator too close to the blower coil as this will block the air cycle.

9. The refrigerator cabinet is equipped with an automatic defrosting system, which eliminates the need for manual defrosting.

##### Operating:

1. Before starting unit, open liquid valve, suction valve and discharge valve and make connection to the junction box.
2. The pressure control is factory set to maintain a cabinet temperature of 35° F. If adjustment is necessary, be sure the temperature does not go below 32° F., as the evaporator coil will be iced up.
3. Freon 12 refrigerant is used in the unit. Should a compressor operate too long a period or too often, it is generally due to the refrigerant being low, even though the temperature is cold enough. In the event either condition is present, refer to operator's manual.

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### Cleaning:

1. To clean the interior of the refrigerator, use a solution of baking soda or borax and hot water. These compounds act as deodorants and will not scratch or mar the finish.
2. To prepare a soda solution, mix one-half teaspoon of ordinary baking soda to each quart of water.
3. Clean the exterior of the cabinet with clear water or a weak solution of baking soda and warm water.
4. Once a week, wash door gasket rubber with mild soap and water followed by a fresh rinse.

**NOTE:** Grease accumulation on door gaskets will shorten the life of the gaskets.

**S-2-19 STEAM JACKETED KETTLES**

**OPERATING AND SAFETY PRECAUTIONS**

1. Installation of steam kettle is to be in accordance with installation instructions.
2. Do not tamper with or obstruct safety valve.
3. Leave cover and drain open when not in use.
4. Do not turn on steam unless water or food is in kettle.
5. Do not put water in hot dry kettle.
6. When heating a cold kettle, turn the steam on gradually, thus allowing the kettle to become warm before full pressure is applied. After kettle becomes warm, and before applying full pressure, open the safety valve momentarily to release any air trapped within the jacket.

**Cleaning:**

1. Do not use steel wool or any abrasive for cleaning.
2. Wash kettle before and after each use with hot soapy water and rinse thoroughly with clean water. Dry thoroughly.
3. Clean strainer before and after each use with hot soapy water. Rinse thoroughly.
4. The stainless steel surface of the unit may be polished periodically with an approved stainless steel cleaner.
5. Clean strainer, draw off valve and draw off tube thoroughly after each use. To clean draw off valve and tube, remove the front end of the valve and brush. Scrub with hot water.

**S-2-20 HOT DOG GRILL**

**OPERATING AND SAFETY PRECAUTIONS**

**General:**

1. Install machine in accordance with installation instructions.
2. The fast heating rollers of the machine are capable of turning a large quantity of franks over at a slow, even speed which causes the fat to self-baste the franks while sealing in natural juices and flavors. Cooking the frank is quick, uniform, and requires no constant attention.
3. The machine is equipped with eight rollers with separate heating controls for each set of 4, which can be lowered or raised, thereby providing flexibility in capacity depending on the demand.

**Operating:**

1. Turn on main disconnect switch to machine.
2. Turn both heat controls on high temperature and allow rollers to heat up for 10 minutes before turning on motor switch.
3. Temperature Controls.

Front Control, left hand side, controls first four rollers nearest operator. Rear Control, right hand side, controls last four rollers farthest away from the operator. Each control has four heat settings -- HIGH, MEDIUM, LOW, and OFF -- each independent of the other.

**NOTE:** On medium heat it is normal for alternate rollers to be cold.

4. Adjust temperature settings in accordance with manufacturer's instructions.
5. Never change franks that have been on high heat to lower heat as they will shrivel.
6. Franks should be kept under refrigeration until ready to be used. Keep at about 40° F. but be careful not to store in a freezer as this will cause the franks to dehydrate and toughen the skin.
7. If drip pan collects an unusual amount of drippings, a large amount of fat in frank is indicated. This generally means a poor quality frankfurter. If rollers show consistent black deposits, a high sugar content is indicated and possibly a large cereal content. Both indications reveal a poor quality frankfurter.

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### Cleaning:

Daily or after each use:

1. Turn both switches on high heat and allow rollers to get very hot. Turn on motor.
2. Clean rollers with a clean wet cloth. Cold water or plain carbonated water lifts grease.
3. Always start at end of rollers and wipe toward center of rollers. This prevents extra grease from entering bearings.

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### S-2-21 DEEP FAT FRYER (NON-COMPUTER)

#### OPERATING AND SAFETY PRECAUTIONS

##### General:

1. Assembly and installation is to be in accordance with manufacturer's instructions.
2. Check for accuracy of the thermostat. A reading of more than five degrees difference from the setting of the thermostat knob requires recalibration of the thermostat.

**NOTE:** Do not remove manufacturer's decals from unit.

3. Do not operate without individual deep fat fryer thermometers inserted into each fry kettle or attached to individual fryer baskets.
4. Do not leave fryer unattended while it is in operation.
5. Do not operate deep fat fryer without thermometers inserted into each fry kettle or attached to individual fryer baskets.
6. Handle food only with the implements provided for the purpose.
7. Avoid spattering hot fat. Foods which have been in water should be well drained before immersion in the fat. Keep all other water sources away from the operating fryer.
8. Wipe up spilled fat immediately.

##### Operating:

**CAUTION:** DO NOT TURN ON THE POWER TO THE ELEMENTS WITHOUT FIRST FILLING THE FRY KETTLE.

##### Filling the Fry Kettle:

1. Check to make sure that the thermostat sensing bulb inside the kettle is firmly held in the bracket attached to the back of the tank inside. Tighten the screws in clamp holding the bulb if necessary.
2. Always check to make sure that the drain valve is completely closed before filling the fry kettle.
3. If the fryer is new, it is advisable to fill the kettle with water and clean thoroughly as explained in the cleaning instructions in order to remove rust inhibitors and any foreign matter.
4. If solid shortening is used, be careful not to bend, break or twist the thin flexible capillary wire of the thermostat sensing element located inside the fry kettle.
5. Pack solid shortening into the zone below the elements, all spaces between the elements and at least an inch above the top of the elements before turning fryer on. If any spaces are left around the element surfaces when the heat is turned on, the element will become red hot and cause the shortening to burn.

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6. As a further precaution to prevent burning or scorching the shortening, keep the thermostat knob set at 200° F. until all shortening between and above the element has melted. Additional shortening can then be added until the desired frying depth has been reached.

7. After filling fry kettle, always check thermostat calibration. See "Thermostat Calibration and Recalibration Instructions" in the operator's manual.

### **Frying:**

1. After filling the fry kettle, select the proper temperature for the product to be fried. Set the thermostat to this temperature.

**NOTE:** DO NOT ATTEMPT TO FRY ANYTHING UNTIL THE PROPER TEMPERATURE HAS BEEN REACHED.

The indicator light will shut off when the set temperature is obtained.

2. Fill each basket with food, and lower them into the fry pot. Sample frying times are given in the operator's manual. These are average times and, with a little practice, proper load and time will be established.

### **Cleaning the Fry Kettle:**

Do the following DAILY:

1. Turn off electrical power.
2. Screw drain nipple into drain valve. Place a suitable container under the drain nipple and drain the fry kettle completely.
3. Flush out any sediment remaining in the kettle with a little hot shortening.
4. Wipe off the elements and the inside of the fry kettle with a clean cloth.
5. Close drain valve and strain the shortening back into the fry kettle through several thicknesses of cheesecloth or filter it back using a filter machine.

**NOTE:** ADD AT LEAST 7-1/2 POUNDS OF NEW FAT TO KETTLE DAILY. IF EQUIVALENT WEIGHT HAS NOT BEEN ABSORBED BY FOOD FRIED, REMOVE SUFFICIENT AMOUNT OF OLD FAT TO ALLOW ADDITION OF NEW FAT.

6. Unscrew the drain nipple and the fryer is ready to operate when needed.

Do the following WEEKLY:

1. Follow steps 1, 2, and 3 above.
2. Close drain valve and fill kettle with a solution of warm water and an approved strong detergent.
3. Turn on electric supply to the fryer and bring the water to a gentle boil.
4. Turn off electrical power.
5. Let the solution stand until the gum deposits are softened and the carbon spots and burned grease spots can be rubbed off.

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6. Scrub the kettle walls, then drain out the kettle and rinse it with clean water.
7. Turn on electrical power.
8. Refill the kettle with clean water and boil again.
9. Turn off electrical power.
10. Drain and rinse well.
11. Wipe dry with a clean cloth.
12. Close drain valve and strain the shortening back into the fry kettle through several thicknesses of cheesecloth or filter it back using a filter machine.

**NOTE:** ADD AT LEAST 7-1/2 POUNDS OF NEW FAT TO KETTLE DAILY. IF EQUIVALENT WEIGHT HAS NOT BEEN ABSORBED BY FOOD FRIED, REMOVE SUFFICIENT AMOUNT OF OLD FAT TO ALLOW ADDITION OF NEW FAT.

13. Unscrew the drain nipple and the fryer is ready to operate when needed.

### Cleaning the Exterior Surfaces:

1. Wipe off spilled or splashed shortening while still warm with a soft clean cloth.

## S-2-22 COOKIE CUTTER/DROPPER

### OPERATING AND SAFETY PRECAUTIONS

#### General:

1. Uncrate machine with care and install in accordance with installation instructions.
2. Operators of the machine must be thoroughly familiar with machine parts.

#### Operating:

The depositor is started and stopped by an electrical toggle switch or push button. The fingers that carry the cut-off wire can be inched forward by quickly mapping the toggle "ON" or "OFF." If the depositor has a magnetic starter with push buttons, hold in on the "Stop" and "Start" buttons and quickly operate the "Stop" button in and out.

**CAUTION:** Keep hands clear of feed rolls and finger drive mechanism when depositor is in operation.

Before placing depositor into production, it is beneficial to operate the depositor as though it is in production by completing the following:

1. Be sure machine is in the "OFF" position.
2. Inch the finger bar forward as explained in the first paragraph until the leading ends of fingers are close to the die pads.
3. Tilt the hopper and attach the die to be used. DO NOT start depositor with hopper tilted as this will damage the depositor. Lower the hopper easily down into operating position, loosen the finger wing screws and slide the fingers on shaft until fingers are between the pads of the die, lock wing screws. See operator's manual for setting cut-off wire. Use the outer most holes in fingers for 3" and larger dies, each successive hole in finger is for dies with holes having smaller than 3" in 1" increments.
4. Start the depositor by placing the toggle switch in the "ON" position or by pushing the "Start" button.
5. The pans are carried on a pair of belts. The spacing between the row of deposits can be varied as follows: (a) stop the depositor, (b) pull out on conveyor, adjusting knob, (c) slide sliding lock nut "UP" (to increase spacing) or "DOWN" (to decrease spacing), and release adjusting knob so it can engage detents in the square rod. The gauge on square rod is approximate spacing per stroke in inches. DO NOT try to change spacing while depositor is running.
6. Feed adjustment (amount of deposit) can be made when the depositor is operating or not. A lock screw is provided so setting is not lost while operating. The indicator plate does not indicate weight but is used for reference only.
7. The speed of the depositor, strokes per minute and the conveyor speed can be changed in uniform by the machine speed adjusting hand wheel. The adjustment must be made while depositor is running.

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8. Improper adjustment of the cut-off wire may cause some pieces to be deposited upside down, or in irregular rows. See operator's manual for correcting improper depositing.
9. Lubrication of this machine is of vital importance, and should be accomplished in strict accordance with manufacturer's instructions.
10. Refer to operator's manual for mixing instructions for machine-made cookies.

### **Cleaning:**

1. Before initial operation, and after each day's use, the feed rolls must be thoroughly washed and sanitized. Do not delay in cleaning after operation as the material sets which makes taking it apart more difficult.
2. Move the finger shaft assembly so that the finger shaft is away from the hopper section, i. e., toward charge end of the depositor.
3. Remove the hopper by removing the two wing nuts, one on each bearing cap. Replace nuts, finger tightened.
4. Hinge the gear cover open at the far side of the hopper by tilting top of cover away from hopper. Tilt feed rolls toward left and by lifting at finger bar side. Loosen the two die screw knobs and remove die, then hinge feed rolls back to operating position being careful not to allow it to drop.
5. Remove the two wing nuts, one in each bearing cap at the end of feed rolls. Pull stud pin out of link stud, remove pin washer and slide end of drive link off of lever. Holding it so it does not fall, lower it gently. Lift bearing caps off, then lift each feed roll out.
6. DO NOT submerge drive clutch at end of drive feed roll in water or direct live steam against it. This precaution is necessary to protect the precision parts from corrosion. Clean all exposed surfaces.

**NOTE:** When re-assembling feed rolls in machine, place drive feed roll in its bearings. The drive roll is the one with the clutch mounted on the outer shaft.

7. Place the motor (driven) feed roll on top of the driver roll, with gear teeth in mesh, roll the driven feed roll into its bearings. Replace bearing caps, hopper and the two wing nuts.
8. Replace the drive link on the link stud, place pin washer on stud and slip stud pin into and through hole in link stud.

## S-2-23 DOUGH MIXER - HORIZONTAL

### OPERATING AND SAFETY PRECAUTIONS

Uncrate machine carefully to prevent damage to mixer or finish. Install in accordance with manufacturer's instructions.

#### Operating:

##### 1. FUNCTION OF POWER DUMP:

The function of the power dump is to place the bowl in the three working positions: loading position for flour and other ingredients; mixing position, where bowl is up to stop point and closed by the canopy; and dumping position, for removal of dough. Press the "DOWN" button until bowl is open far enough for loading and press "STOP" button. Press "UP" button until bowl stops (partially open), then hold in "UP" button to complete closing.

##### 2. LOADING:

To load flour and other ingredients, open the hinged part of the canopy and run the bowl toward the dump position far enough to allow the flour and ingredients to be put into the bowl. Run the bowl up to stop point (mixing position), close the hinged part of the canopy and start the mixer.

##### 3. STARTING:

The agitator is driven by a two-speed motor through a starter that has over-load and low-voltage protection. Starter is set into front of frame. Push button control for agitator motor consists of "BLOW," "FAST," and "STOP" when bowl is tilted, safety switch cuts off current. With bowl anywhere from slightly open to dump position, agitator will run only as long as "SLOW" button is held in.

**NOTE:** If machine is equipped with "JOG" button, hold both "SLOW" and "JOG" buttons in to run agitator with bowl open.

4. Relay in starter box will cut off current in event line voltage drops below safe limit, or if motor over-load occurs. To restart motor, wait approximately two minutes and press "SLOW" button.

##### 5. TIMERS:

If mixer is equipped with one or two timers, set low speed timer for desired low speed mixing, set high speed timer for total mixing time and press "SLOW" button.

6. Lubrication of mixer is to be in accordance with manufacturer's instructions.

#### Cleaning:

1. After finishing the last mix, the bowl, agitator, dough seals and canopy must be cleaned. Residue will harden if allowed to stand over a half-hour period.

2. To clean bowl, use the following procedure:

a. Run bowl to loading position, put approximately 10 gallons of hot water into bowl, run bowl up to mix position and start mixer.

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- b. Allow mixer to run for several minutes and push “STOP” button.
  - c. Run mixer bowl down approximately half way to dump position and clean surfaces using hot water and a stiff brush.
  - d. Run bowl to dump position and empty water and residue.
3. Clean dough seals in the following manner:
- a. Remove the two wing nuts and slide the pressure ring off at the studs.
  - b. Grasp lugs of seal ring and pull ring out of bowl head.
  - c. Flip seal garter out of seal groove by placing the index finger under garter at notch in bowl seal.

**CAUTION:** Do not use tools to remove garter; finger should provide sufficient pressure.

- d. After disassembling the seal, wash all parts and allow them to dry.
- e. To replace bowl seals, place garter around seal ring and push ring into bowl. Place pressure ring over studs and finger tighten wing nuts.

**S-2-24 MODEL 550 FRISPO-MATIC**

**OPERATING AND SAFETY PRECAUTIONS**

**General:**

1. Installation of this machine must be in strict accordance with the manufacturer's instructions.
2. Operation of this machine is divided into four functions:
  - a. The charging procedure which must be performed each operational day and also when machine has been idle for a long period of time.
  - b. The AUTO operation mode, where machine dispenses all of potato pieces and then charges itself for next cycle.
  - c. The SINGLE operation mode where machine dispenses one portion of potato pieces. When all of potato mix is used, machine will then recharge itself for next cycle.
  - d. The operational checkout which contains procedures for checking and adjusting the machine.

**Operating:**

1. Connect main disconnect and plate machine POWER switch to ON. Indicator in center of switch should illuminate, indicating that power is connected to unit. Ready button light should be visible within eight seconds and unit is now ready for charging.
2. If red REFILL indicator is also illuminated at this time, adding french fry potato product mix to storage hopper will cause REFILL indicator to go out.

**NOTE:** Only refill hopper when REFILL indicator is illuminated.

3. After charging cylinder in prescribed manner, reassemble piston-diaphragm, cylinder slicer and cutter subassembly.
4. Now complete charging sequence by waiting for ready light to illuminate, then depressing READY button. This initiates a sequence which adds additional product and water into charging cylinder. When READY button illuminates again, unit is ready to operate and will dispense product upon request.
5. With PORTION CONTROL switch set at SINGLE, potato pieces will be dispensed only when READY button is depressed. Single portions, double portions, triple portions, etc., to a maximum of five portions, may be obtained in this manner.
6. With PORTION CONTROL switch set at AUTO, operator can actuate READY button causing unit to dispense one-half the rehydrated product. Unit will then automatically recharge its cylinder.
7. To receive ten portions, actuate illuminated READY button in normal manner and catch first dispensed portions in a fry basket. Move charged basket from drop area and place an additional empty basket for second five portions. Operator can now make a second five-portion request by pushing READY button even though button is not

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illuminated. This second request is stored in machine memory. After automatic recharge takes place, the second five portions will begin.

8. Move transfer tray slowly to distribute dispensed potato pieces evenly.
9. Place potato pieces into submerged fry basket.
10. After potato pieces are immersed in oil, shake basket with up and down motion.

**NOTE:** Fry potato pieces in approximately 350° F. oil.

11. After 1-1/2 minutes, or when fry kettle timer sounds, remove basket from fryer, shake basket briskly and place fries under a red heat lamp.
12. Check fries for sticking and breaking.
13. If fried product sticks or breaks excessively, perform Operation Checkout and/or refer to product Troubleshooting guide in operator's manual.

### **Cleaning:**

**NOTE:** Failure to clean this machine could cause food poisoning or machine damage.

Daily or after each use:

1. Move power switch to "ON" position and place transfer tray under the deflector plate.
2. If red REFILL light is on, refill product hopper.
3. When ready light is on, place PORTION CONTROL switch at AUTO and depress READY push button.
4. When potato pieces falling, place POWER switch to OFF.
5. Remove front cover, lift cutter sleeve and cutterback.
6. Rotate slicer counterclockwise and remove slicer.
7. Lift and remove deflector plate.
8. Remove cylinder and slide piston from piston shaft.
9. Remove remainder of rehydrated potato product. Remove diaphragm from piston.
10. Wipe all surfaces of the machine with a clean damp cloth. Wipe dry.

**CAUTION:** Do not use abrasives on rubber, plastic or stainless steel surfaces. Do not use solvents on plastic parts, or place parts in automatic dishwasher. Hard to remove dry product may be softened by soaking parts for a short time in warm water.

11. Wash all removed parts in warm, soapy water. Rinse parts in clear, clean water. Submerge parts in sanitizing solution and allow parts to air dry.
12. Check piston shaft and area around nozzle discharge and dry-product discharge for dirt and product buildup. Wipe clean as required.

**NOTE:** Do not reassemble until machine has been charged.

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13. Install diaphragm on piston and install piston on shaft.
14. Install cylinder and deflector plate.
15. Install slicer and rotate slicer clockwise.
16. Lift cutter sleeve, install cutterback and front cover.
17. See manufacturer's instructions and procedure for periodic major cleaning.
18. Lubrication and de-liming is to be in accordance with manufacturer's instructions.

**S-2-25 PIE RIMMER/CRIMPER**

**OPERATING AND SAFETY PRECAUTIONS**

**Operating:**

1. Turn on electrical power to the machine.
2. Place a pie plate with a rolled untrimmed bottom crust in the bottom die and raise by pressing the counter-balanced foot pedal.
3. The rotating head of the machine engages automatically and produces a crimped, single crust pie shell.
4. For two-crust pies, use the optional trimming head and die. Place a filled, untrimmed, two-crust pie in the bottom die.
5. Raise pie with the counter-balanced foot pedal and the pie crust will be trimmed and crisp/sealed.
6. Trimmed dough will drop into catch pan for reuse.
7. Normal machine capacity is six to ten pies per minute.

**Safety Precautions:**

1. Turn off the power at main disconnect for cleaning, for removing and changing dies or rimmer/crimper heads, and when machine is not in use.
2. Keep hands and tools out of the area between the die and the head when machine is in operation.

**Cleaning:**

**Daily or After Each Use:**

1. Turn off power to the machine at main disconnect.
2. Vacuum or blow off loose flour, dust, etc. Removable parts such as the lower die, rimmer/crimper head, and catch pans should be washed in a solution of warm water and an approved detergent. Rinse thoroughly under hot water. Dry thoroughly.
3. Wipe down surfaces of machine frame and permanently attached parts with a clean damp cloth. Dry thoroughly.

**CAUTION:** Do not hose down or spray machine.

**S-2-26 ROTARY BREAD TOASTER**

**OPERATING AND SAFETY PRECAUTIONS**

**Operating:**

1. Turn on the electrical power approximately fifteen minutes prior to use.
2. After warm-up, set the conveyor speed to produce desired brownness of toast.
3. Turn knob on right side of the toaster only if jamming occurs in the unit.
4. Place slices of bread on each conveyor rack as the conveyor turns.
5. Remove finished toast from the drop tray.

**Safety Precautions:**

1. Secure the electrical power when the toaster is not in use.
2. Do not introduce any foreign objects into, or allow parts of the body to come into contact with, the toaster when in operation.

**Cleaning:**

**Daily or After Each Use:**

1. Secure the power to the unit.
2. Turn the knob on the right side of the toaster to ensure all the toast is out of the unit.
3. Remove the catch tray and chute, wash in a solution of hot water and an approved mild detergent, sanitize in 180° F. minimum water. Allow all removable parts to air dry.
4. Brush all crumbs out of the toaster and from around the base.
5. Clean the exterior of the toaster with a clean wet cloth and wipe dry.

**S-2-27 FOOD MIXER (140 QUART)**

**OPERATING AND SAFETY PRECAUTIONS**

**Operating:**

1. Properly attach the mixing bowl prior to starting the machine.
2. When shifting gears, always disengage the clutch lever and move the shift lever to the desired position. Re-engage the clutch to activate the spindle.
3. The bowl is raised and lowered by a power lift controlled by a lever on the control panel. Place the whip or beater in the bowl before raising the bowl. With the power off, attach the beater to the spindle. Always use the recommended beater for the product to be mixed.
  - a. Batter beater for mixing cake batter, etc.
  - b. Wing whip for icings, mayonnaise, etc.
  - c. Balloon whip for thin mixtures.
  - d. Dough hooks for bread and roll dough.
  - e. Sweet dough beater for sweet yeast doughs.
  - f. Pastry knife for cutting shortening into flour.

**Safety Precautions:**

1. Keep hands and utensils out of the mixing bowl when the beater is running.
2. Never attempt to attach or detach beaters when the spindle shaft is turning.
3. Do not wear loose clothing or jewelry when working with rotating parts.
4. Determine that bowl lugs are firmly seated on the pins before raising or lowering the bowl.
5. Do not allow anything to be placed under the bowl when it is in the raised position.
6. At any sign of unusual noise or operating condition, secure the power immediately.

**Cleaning:**

1. Secure the electrical power.
2. Detachable parts such as beaters should be thoroughly washed in a solution of hot water and approved mild detergent. Sanitize in the sanitizing sink and air dry. Bowls should also be thoroughly washed in a solution of hot water and approved mild detergent. If the sanitizing sink is large enough, sanitize the bowls and air dry. Chemical sanitizing may also be used.
3. Wipe down exterior parts of the mixer with a solution of hot water and approved mild detergent, rinse and wipe dry.

**CAUTION:** Do not allow water to enter machine electrical compartments or gear case.

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### S-2-28 BUN SLICER (HOTLINE)

#### OPERATING AND SAFETY PRECAUTIONS

1. **WARNING:** Do not operate this machine without guards. Operators should be thoroughly familiar with the safety guards and safety features of the machine.
2. The machine is adjustable for width and height and can be adjusted to cut all the way through the bun, or part way. Maximum product size is 4-1/2" wide x 2-3/4" thick.

**CAUTION:** Adjustments should be made with switch in the "OFF" position (switch is located on the base of the machine).

3. To adjust for thickness of bun, turn knob located on top of guard. This will increase or decrease the height of the chute.
4. To adjust for the thickness of cut, first loosen knob located on machine base under chute, then turn the thumb screw (which penetrates flange of base and underside of chute) to obtain desired thickness, and reset knob.
5. To adjust for depth of the cut and the width of the bun, loosen the two thumb screws located on the underside of the chute and slide the right guide assembly to the desired width. Tighten right guide thumb screws. Depth of cut has now been set. Left guide adjustment also aids in adjusting chute for width of bun after depth of cut has been determined. To make this adjustment, loosen the two left guide thumb screws and slide left guide toward the right guide, (to narrow chute) or away from the right guide (to widen chute), tighten left guide thumb screw.

**NOTE:** Operator will note that chute-width and depth-of-cut adjustments are interrelated.

6. Adjustments should be made liberally to allow for size irregularities of buns.
7. The motor is equipped with manual reset thermal overload protection. In the event that the motor becomes overheated and stops, proceed as follows:
  - a. Turn switch to "OFF" position.
  - b. Allow motor to cool for approximately five (5) minutes.
  - c. Reset by pressing red button on bottom side of motor.

#### **Cleaning:**

Daily or as required.

1. Machine may be disassembled as required for cleaning.

**CAUTION:** Disconnect machine prior to cleaning.

2. Dip-wash disassembled machine parts in warm water and a mild detergent solution. Do not use abrasive cleaners. Rinse and dry thoroughly with soft cloth.

**NOTE:** Do not submerge base (motor housing) in water.

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3. Wash outside surfaces of base (motor housing) with mild detergent - warm water solution. Rinse with clean water and dry.

**CAUTION:** Do not allow water to enter base.

4. Reassemble machine.

5. Before each day's use, wash with warm water and mild detergent solution, rinse thoroughly, and dry all machine parts coming into contact with bread product.

## S-2-29 CARBONATED BEVERAGE DISPENSER

### OPERATING AND SAFETY PRECAUTIONS

1. The refrigeration system cools the dispensed drinks by means of an ice bank or block which is built up over an initial period of 5 to 7 hours after connection to electrical outlet. Periods of inactivity for the dispenser are needed to replenish the ice banks. Therefore, except as required for repairs, do not turn dispensers off between uses.
2. On dispensers serving one non-carbonated drink, the extreme left hand valve is for non-carbonated. The small lever on the side of the valve is for plain cold water.
3. Due to evaporation of water in the water bath inside the dispenser, it will be necessary to periodically add water. Low water level results in noisy operation and reduced cooling capacity. Refer to operating manual.
4. Make sure water lines to dispenser and carbonator are open at all times. Refer to operating manual for restarting procedure after extended shut down.

**CAUTION:** Do not remove exterior housing or put hands into operating compartment with electrical power connected.

#### **Cleaning:**

1. To remove dispensing valves for cleaning or repair, remove plastic cover from valve, remove vertical latch pin from top center of valve body, and pull valve body away from the valve plate. Quick disconnect fittings automatically close and prevent liquid discharge. All other valves will remain operational.
2. When replacing valves, moisten the "O" ring on the inlet fittings with water.
3. Lines leading from the syrup tanks to dispenser can be cleaned in place by putting a little water in each tank.

**CAUTION:** Before opening syrup tanks, disconnect all lines and bleed pressure off slowly.

**S-2-30 COFFEE URNS**

**OPERATING AND SAFETY PRECAUTIONS**

1. Make coffee as needed according to the Armed Forces Recipe Service P-7.
2. Hold coffee at 185° F. for no longer than one hour. Coffee held longer than one hour loses its good aroma and becomes bitter.
3. Remove coffee grounds immediately after water passes through coffee grounds.
4. Discard filter and coffee grounds after use.

**Daily - Between brews:**

Clean coffee making equipment is required before your patrons can enjoy a good brew. Deposits will form on all surfaces of the equipment and will contaminate successive brews unless the urn is cleaned frequently.

1. Clean the urn immediately after a batch of coffee has been used up or disposed of.
2. Rinse with enough water to remove the sediment and old coffee from bottom of urn, drain lines and faucet.
3. With a gallon or more of hot water in the urn, brush the sides carefully with a bristle brush. Drain and flush out with some more hot water until the water runs clean. It is now ready for the next pot of coffee.

**Daily - At the end of the day or when securing the urn:**

1. Carry out the procedure above except it must be brushed and cleaned more thoroughly. Use an accurately measured solution of 1 ounce of dishwashing compound, Type 1 completely dissolved in 1 gallon of hot water. Detergents are also good for cleaning but require a more extensive rinse to remove all traces of the detergent. Baking soda is good for "sweetening" the urn but it is a relatively poor cleaning agent.
2. Clean the gauge glass with a narrow brush. Check to see that the vents at the top of the gauge glasses are not fouled. A clogged vent will cause inaccurate readings of the coffee level.
3. Rinse thoroughly to remove all traces of the cleaning agent. Flush out the entire urn, including the faucet, with 180° F. water for sterilization. Leave about 1 gallon of water in the urn when it's secured.
4. The lid of the urn must be cleaned also since it is exposed to the coffee vapors which will eventually cause a buildup on the lid. Leave the lid ajar when the urn is secured.
5. Remember to drain the old water out of the urn prior to making up a new batch of coffee.

**SAFETY NOTE:** Never place any solid cleaning compounds directly into a coffee urn. Some of the solid material may become entrapped in the drain lines or faucet. This material would cause serious illness.

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### Destaining Procedures:

1. Persistent stains may be removed by the periodic use of a destaining compound.
2. Be sure the jacket is at least 3/4 full of water, then turn on the heat.
3. Fill the liner with hot water to the coffee line. Add the destaining compound in accordance with the instructions which come on the package.
4. Allow the solution to remain in the liner approximately 60 minutes at about 180° F. Pass some of the solution down into the drain line and faucet.
5. Drain and thoroughly rinse until all traces of the compound have been removed.
6. Leave about a gallon of water in the urn.

**SAFETY NOTE:** Hang a warning tag on the faucet while the urn is soaking with cleaning solutions.

**NOTE:** To destain vacuum-type coffee makers, use a solution of one teaspoon of destaining compound per quart of warm water. Fill lower bowl to within two inches from top. Assemble unit, apply heat, and allow it to go through a regular cycle. Let stand five minutes (longer if badly stained), drain, and dry.

**S-2-31 CONVECTION OVEN**

**OPERATING AND SAFETY PRECAUTIONS**

1. Put in proper number of shelves to give shelf spacing for the product to be cooked.
2. Set speed switch; high for solid products like meats, low for cakes and other fragile items.
3. Close doors, turn on main power switch and set thermostat for proper cooking temperature.

**NOTE:** Fan and heating elements will not operate unless doors are closed. Oven takes approximately ten minutes to preheat.

4. When the doors are open, ovens lose temperature very rapidly. Load and unload as quickly as possible. Use interior lights and glass doors to observe cooking progress.
5. Use damper control wisely. Wide open dampers waste heat, cause heating elements to run continuously and produce lower cooked yields for meat products. For cakes, open damper enough to exhaust moisture so that cakes will rise properly.

**Convection Ovens With Stainless Steel Liners**

<b>Step</b>	<b>Procedure</b>
1. Clean oven liners, shelves and shelf supports.	Clean daily when oven is cold with mild detergent or soap and water. For burnt on foods and grease which resist simple soap and water cleaning, an abrasive cleaner, sized into a paste, may be employed. Apply with stainless steel wool, always rubbing with the "grain." Rinse with clear water and dry.
2. Remove shelves and shelf supports. To clean liners and to occasionally clean blower wheel.	Remove all shelves by pulling forward, lifting up and out. Remove both right and left shelf supports by lifting out. When cleaning blower, remove blower baffle by lifting up and pulling out. Wire brush the wheel and wipe it up with a moist cloth. Remove all loose particles.
3. Replace the hardware.	Reverse the disassembly procedure.
4. Clean oven exterior.	Wash all exterior surfaces daily with warm water and mild soap or detergent.

**S-2-32 CONVEYOR BROILER**

**OPERATING AND SAFETY PRECAUTIONS**

1. Turn master control switch, conveyor switch and all heating element switches to "ON."
2. Allow broiler to preheat 15 to 20 minutes.
3. Use only thawed meat (38°- 40° F. internal temperature) on the broiler.
4. Follow manufacturer's instructions for guide settings on the conveyor speed control. Run a test hamburger pattie. If a hamburger is completely done throughout but is burned on the surface, speed up the conveyor. If hamburger is rare throughout, slow down the conveyor. Optimum speed produces a hamburger which is slightly pink at the center with a center temperature of 160° F. The hamburger will finish cooking while being assembled into the bun and wrapped.

**CAUTION:** Do not use utensils around the broiler which may be caught in the conveyor belt or serious damage will result.

5. Keep grease drip pan emptied.

**Cleaning:**

1. Clean gross soil from conveyor belt periodically during use. Use a metal sponge (NOT STEEL WOOL).
2. After cooking is completed, turn conveyor control to lowest setting at which the belt still moves. With full heat on, allow to run for ten minutes. Use metal sponge to clean belt as above.
3. Turn machine off and secure power at the breaker panel.
4. When the broiler has cooled, unhook the conveyor at the open links provided and soak in a strong detergent solution to aid in cleaning.
5. Outer top housing, inner heat shield and hanging baffles lift off for soaking and cleaning. Note position for reassembly.
6. Conveyor support rods slide out for cleaning. Note correct positions for reassembly.
7. Loosen screws and remove side housing on the control box side to expose heater connection plugs. Unplug heater assemblies and remove. Heater frames may be cleaned but do not submerge in water as electrical connections are inside the end frames.
8. Slide out drip chutes and pan for cleaning.
9. Reassemble in order of disassembly.

**S-2-33 DEEP FAT FRYER (COMPUTER TYPE)**

**OPERATING AND SAFETY PRECAUTIONS**

1. Follow operating instructions on the decal on the front of the fryer and in the manual furnished by the manufacturer.
2. Set the thermostat knob on the left hand front panel to the required temperature.
3. Set the doneness control on the right hand front panel to get the proper coils for the food being fried. This knob controls the computer.
4. Filter fat daily after use. Add at least 7-1/2 pounds of new fat to kettle daily. If equivalent weight has not been absorbed by food fried, remove sufficient old fat to assure new fat bringing fat level up to normal.
5. If the fryer is not used for 30 minutes, it will shut off automatically and must be restarted. Time to heat fat to operating temperature at start-up approximately 6 minutes.
6. When the fryer is not in use, power should be shut off and the cover should be placed on the fryer.

**Safety Precautions:**

1. Fryer shuts off automatically if fat temperature reaches 430° F. - 460° F. for any reason. However, periodically check the temperature while the fryer is in operation. Never leave a fryer unattended while it is turned on.
2. Handle food only with the implements provided for that purpose.
3. Avoid spattering hot fat. Foods which have been in water should be well drained before immersion in the fat. Keep all other water sources away from the operating fryer.
4. Wipe up spilled fat immediately. At all times keep fat level above the top of the heating coils and thermostat bulb.

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### Directions For Cleaning Deep Fat Fryers:

Step	Procedure
1. Turn off heating element.	Allow fat to cool to 150° F.
2. Drain and filter fat (after each use).	Open drain valve and catch drained fat in container. Drain entire kettle contents and filter into a container. Place a clean fat container into well or wash and replace original one.
3. Remove baskets.	Scrape off oxidized fat with a knife. Remove loose food particles from the heating units with a spatula or a wire brush. Flush down sides of kettle with a scoop of the hot fat. Soak basket and cover in deep sink in hot detergent water.
4. Remove strained sediment container cup as often as necessary for cleaning.	Clean off sediment and place back in kettle. Stir hot fat and whirl cleaning sediment to center to permit settling in sediment container. Drain fat and wipe off excess.
5. Close drain.	Fill tank with water, add water up to fat level. Add 2 ounces dish compound.
6. Turn on heating element.	Set heat control at 250° F. and boil 10-20 minutes, depending on need.
7. Turn off heat.	Open drain. Draw off cleaning solution.
8. Scrub interior.	Using long-handled brush, scrub interior. Flush out with water. Clean basket with nylon brush and place back in kettle.
9. Rinse and sanitize.	Fill kettle with water. Add 1/2 cup vinegar to neutralize remaining detergent. Turn on power and boil for 5 minutes. <b>TURN OFF HEAT.</b> Drain. Rinse with clear water.
10. Air dry parts.	Expose baskets and strainer to air and dry.
11. Clean exterior.	While kettle is cool, wipe off exterior with grease solvent, or detergent solution. Rinse.

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### Weekly Cleaning:

#### Destain Deep-Fat Fryer:

1. Fill the kettle to fat level with water. Heat to at least 175° F., or allow it to boil for 5 to 10 minutes. Turn off heat.
2. Add 2 tablespoons of destaining compound per gallon of water. Let stand up to 1 hour. Agitate solution and loosen particles remaining on the sides of kettle.
3. Place screens and strainers in 175° F. water containing 2 tablespoons of destaining compound per gallon. Make sure water covers. Allow to stand overnight. Rinse thoroughly and air dry.
4. Drain kettle and rinse thoroughly before replacing cleaned screen and strainer.

#### Self-Cleaning Units:

1. Lift calrod heating units and drain thoroughly.
2. Turn on fryer; set thermostat at 400° F. for 2 minutes to allow heating units to burn clean.
3. Turn off fryer and brush carbon from heating units with a soft wire brush.

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### S-2-34 DOUGH DIVIDER/ROUNDER

#### OPERATING AND SAFETY PRECAUTIONS

1. Do not allow any part of the body to come in contact with working parts when the machine is in operation. Keep hands free from under the divider heads.
2. Scale dough to proper weight, place in dough pan and pull down handle to divide and round.
3. Weight of the finished dough pieces is controlled by the scaled weight of the bulk dough.
4. Shut machine off while removing dough pieces.

#### Directions for Cleaning Dough Divider:

Step	Procedure
1. Shut off power.	Disconnect switch when knife and ram are in the extreme backward position, or turn divider by hand or move knives to the rear.
2. Prepare divider for cleaning.	DAILY Thoroughly clean these parts: Sifter Scaling plunger Measuring chamber Ram Knife Hopper Conveyor belt Remove parts in this order: Remove pan. Remove pins and pull lever forward. Depress trip to release knives. Remove dropped knives with care. Release ram with care. Remove all plungers. WEEKLY Remove frame, trip, bed plate, knife frame and clean thoroughly.

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### Directions for Cleaning Dough Divider (cont):

Step	Procedure
3. Clean parts.	<p>DAILY</p> <p>Base and frame: Clean with hot machine dishwashing detergent solution; rinse and dry. Pistons: Soak in bucket containing a solution of soda and water. When dough has loosened, remove and rinse under hot running water. Dry. Dip each piston in divider oil and wipe off excess before replacing cylinders that have been wiped or scraped free of all dough.</p> <p>WEEKLY</p> <p>Soak pressure stems, all screws and removable parts in hot machine dishwashing detergent solution. Scrub. Rinse and air-dry.</p>
4. Brush and clean frame.	<p>DAILY</p> <p>Vacuum or blow out all flour from divider, conveyor belts, drives, and switchboxes. Clean face of yoke and floor divider, scraping if necessary. Clean frame with mild detergent solution. Rinse, dry.</p> <p>WEEKLY</p> <p>Clean flour sifter hoppers. Wipe off all exposed parts of divider and oil unpainted surfaces with divider oil.</p>
5. Replace parts.	<p>Reposition all parts and return pressure stems and screws. Replace washed pan under divider head to protect the conveyor belt.</p>
6. Test for operation.	

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### S-2-35 DOUGH SHEETER/MOLDER

#### OPERATING AND SAFETY PRECAUTIONS

1. Refer to manufacturer's manual for adjustments and special instructions.
2. Adjust drag boards for size of piece to be molded.
3. Scale pieces to use correct weight from Duchess Divider.

**NOTE:** It may be necessary to use more than divided piece from the duchess machine to round to desired finished weight.

4. Turn machine on and place dough pieces on the belt between the drag boards.
5. For sheeting only, use roller part of the machine.

#### Directions for Cleaning Molder:

Step	Procedure
1. Shut off power.	Clean once daily; cleaning should proceed with machine turned off for maximum safety.
2. Blow out dough particles and flour.	Use air hose to clean hard to reach areas.
3. Clean.	Use wet cloth to soften hardened dough on rollers, scrapers, deflectors. <b>DO NOT USE TOOLS OR COARSE ABRASIVES.</b>
4. Check conveyor belts.	Clean daily after shutdown, and during operating if dough particles stick.
5. Paint rollers with divider oil.	Apply oil to soften any remaining dough after shutdown. <b>DO NOT USE RAGS</b> to wipe up oil during operation. Use a brush to apply oil every hour during run.

## S-2-36 DOUGHNUT ACCUMULATING CONVEYOR

### OPERATING AND SAFETY PRECAUTIONS

1. Prior to assembly, the parts should be washed thoroughly with hot water and a mild detergent solution. Rinse and dry. Assemble in accordance with manufacturer's instructions.
2. The conveyor is operated by a simple on-off switch located on the control center gear box.
3. When the machine is in use, if the product is too large to pass under the sweep end, remove the locating pin and elevate the sweep end.

**CAUTION:** Do not operate machine without plexiglass cover in place.

4. Conveyor speed is pre-set by the manufacturer. If it is necessary, however, the conveyor speed may be changed by changing gears in the control center gear box.
5. Pay particular attention to manufacturer's lubrication instructions.

### Cleaning:

Daily or after each use:

1. Disconnect machine from power source.
2. Remove drip pans and exit chute for cleaning. Conveyor and sweep assembly may be cleaned in place or removed as required. Wash all parts with mild detergent and warm water solution. Rinse and dry.
3. Wipe down the rest of the machine with mild detergent and warm water solution. Rinse.

**CAUTION:** Do not at any time spray the control center gear box with water or allow water to enter.

4. Reassemble machine parts.
5. Before each day's use, wash with warm water and mild detergent solution, rinse thoroughly, and dry all machine parts coming into contact with food products.

**S-2-37 DOUGHNUT GLAZER**

**OPERATING AND SAFETY PRECAUTIONS**

1. Prior to assembly, the parts should be washed thoroughly with hot water and a mild detergent solution. Rinse and dry. Assemble in accordance with manufacturer's instructions.

2. The glazer operates with two separate control systems; one for the conveyor and one for the glass pump. Each is independently adjustable for speed. The conveyor speed is pre-set by the manufacturer. If it is necessary, however, the conveyor speed may be changed by changing gear sets in the control center gear box. The adjustable drive system of the glass pump is used to control the flow of glaze to the glaze distribution trough. The speed is changed by turning the crank on the motor housing.

**CAUTION:** Do not operate the glaze pump without fluid in the pump or serious damage to the neoprene impeller will result.

3. Operating the machine with the flood plate installed will give product an all-over glaze. Removal of the flood plate will finish the product with glaze on one side only.

4. Pour the glaze into the glaze kettle until about two-thirds full. Turn the glaze pump motor on and adjust the speed of the pump to keep the distribution trough full without overflowing.

5. Turn the conveyor drive switch on.

6. Pay particular attention to manufacturer's lubrication instructions.

**Cleaning:**

**Daily or after each use:**

1. Remove the glaze distribution trough from the end of the glaze tube.

2. Place a suitable container under the opening in the glaze tube and pump the glaze out of the kettle.

3. Replace the glaze distribution trough on the glaze tube. Pour about 2 gallons of hot water in the glaze kettle.

4. Switch the glaze pump and conveyor on, and using a soft brush, brush the glaze from the conveyor and side panels.

5. Remove the glaze distribution trough from the glaze tube and pump the water out of the glaze tank into a suitable container.

6. Start the conveyor and stop with the conveyor coupling pin in an "UP" position.

7. The entire conveyor assembly can now be removed and washed with hot water. The drip pan, which is under the conveyor assembly, should be removed and washed separately.

8. Before each day's use, wash with warm water and mild detergent solution, rinse thoroughly, and dry all machine parts coming into contact with glaze and food product.

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### Weekly:

1. To clean the pump and tank, use the special large wrench provided to release the three nuts that tie the tank to the pump and the pump to the glaze tube.
2. Release the clamp and remove pump body. Disassemble pump.
3. Examine the pump impeller and "O" rings for wear and damage.
4. Wash parts in hot water, dry, and lubricate with white mineral oil.
5. Reassemble by reversing the above procedure.

**S-2-38 FOOD WASTE DISPOSAL SYSTEM: SOMAT NAVY MODEL 3**

**OPERATING AND SAFETY PRECAUTIONS**

**General:**

The operator should become thoroughly familiar with the equipment and the operating instructions prior to starting the machine since visual observation of abnormal operation and rapid reaction to shut the machine down when conditions require it is essential to safe and sanitary operation.

**Start-Up Procedure:**

1. Serious damage to the cutting mechanism or the drive system can result from attempts to pulp metals or other non-pulpable objects. Before starting the system, remove the feed chute and inspect inside of pulper tank for non-pulpable items.

**NOTE:** Non-pulpable items must be removed prior to start-up of the system.

2. The feed chute contacts an electrical interlock switch, therefore the chute must be correctly positioned before the system can be started.

3. When the unit is started, the water level in the pulper should stabilize approximately two-thirds of the way up the inside of the pulper tank with a large vortex in the center of the pulper. Water level may be observed by momentarily depressing the feed chute flexible curtain. Do not attempt to feed food waste into the machine until normal water level is established.

**Start-Up Procedure**

<b>Operation</b>	<b>Result</b>
1. Remove feed chute.	Inspect interior of pulper for non-pulpable items.
2. Fully close drain valve by turning handle 90° from open position.	Closes bypass port to ship's drain system.
3. Fully open water shut-off valve (gate) by turning hand wheel fully counter-clockwise.	Water admitted to inlet side of electrically operated water inlet valve.
4. Turn system disconnect handle on electrical control panel to "ON" position.	Power available to pulper motor starter and water inlet valve (red light on).
5. Move drain switch control arm to opposite rotation position from last previous run.	Equalize use of all cutting edges.
6. Replace feed chute.	Green indicator "Run" light comes on.
7. Move detent over "STOP" button to out-of-way position.	"START" button in ready position.

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- |   |   |
|---|---|
| 8. Depress "START" button.                        | Water inlet valve opens. Pulper motor starts.       |
| 9. Wait one minute.                               | Water level stabilize in pulper tank and water dam. |
| 10. Check water level.                            | Indicates proper water level.                       |
| 11. Begin feeding food waste into the feed chute. | Food waste ground and discharged.                   |

### Shut-Down Procedures:

1. The shut-down procedures described herein assumes that the Food Waste Disposal System is used continuously in a single run daily for disposal of all accumulated food waste. However, shipboard conditions may make it desirable to operate for more than one period during a day. In such cases, it is recommended that the interrupted runs in a single day be considered as temporary shut-down in which case it is necessary to accomplish the following:

### Temporary Shut-Down Procedure:

This procedure should be used if the equipment will be operated for particular time periods. For instance, a breakfast period, a lunch period, and a dinner period. In between each period the following shut-down procedure should be used.

#### Temporary Shut-Down Procedure

Operation	Result
1. Allow the pulper to run for 5 minutes after last pieces of waste are fed to the machine.	Clears the machine, dam and associated piping of any accumulations of waste.
2. Depress "STOP" button and move detent over "STOP" button	Closes the water inlet valve and stops the pulper motor.

### WARNING:

**DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO CLEAN THE MACHINE OR PLACE YOUR HANDS INSIDE THE PULPER TANK DURING THIS TEMPORARY SHUT-DOWN CYCLE.**

2. Use an approved, clear liquid detergent to wash the interior/exterior surfaces of the machine. Detergent should be mixed with hot fresh water in accordance with instructions for its use.

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### Shut-Down Procedure (End-of-Day)

Operation	Result
1. Allow the Pulper to run for 5 minutes after last pieces of waste are fed into the machine.	Clears the machine, dam and associated piping of any accumulations of water.
2. Fully open drain valve by turning handle 90° from the closed position.	Opens bypass port to ship's drain system, drain pulper.
3. Depress "STOP" button and move detent over "STOP" button.	Closes the water inlet valve and stops the pulper motor.
4. Fully close water supply shut-off valve.	None.
5. Turn system disconnect switch to "OFF" position.	Green indicator "Run" light goes off and all power is removed from system.
6. Remove feed chute.	Exposes interior of pulper for inspection and cleanout.

#### WARNING:

**FOOD WASTES HAVE A HIGH BACTERIA CONTENT. BROKEN GLASS OR OTHER SHARP REFUSE MAY BE PRESENT INSIDE THE PULPER TANK AND JUNK BOX AND CUTTING MEMBERS HAVE SHARP EDGES. EXERCISE EXTREME CAUTION WHEN REACHING INTO THESE AREAS. WEAR RUBBER GLOVES WHILE PERFORMING THE FOLLOWING STEPS. DO NOT DRINK, EAT OR SMOKE.**

7. Remove accumulated debris from the pulper tank.	Clear interior of extraneous material.
8. Fully close drain valve by turning handle 90° from open position.	Closes bypass port to ship's drain system.
9. Dump bucket full (2 gal) of hot fresh water/detergent solution into pulper tank.	Washes lower part of the pulper tank/impeller assembly.
10. Wash down the feed chute, the interior of the and pulper tank, the gasket area with a bristle brush and hot detergent solution.	Ensures that all interior faces are cleaned.
11. Turn system disconnect handle on electrical control panel to "ON" position.	Red indicator "Power On" light comes on.
12. Replace feed chute.	Red indicator "Power On" light goes out and green indicator "Run" light comes on.

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13. Move detent over “STOP” button to out-of-way position. “START” button in ready position, will permit system’s operation without water input.
14. Depress “START” button and run pulper for 2 minutes. Pulper drive motor starts. Water inlet valve opens but no water enters. Part of wash water is “pumped” out through dam assembly.
15. Depress “STOP” button move detent over “STOP” button. Pulper drive motor stops; water inlet valve closes.
16. Fully open drain valve by turning handle 90° from closed position. Open bypass port to ship’s drain system, drains pulper.
17. Fully close drain valve by turning handle 90° from open position. Closes bypass port to ship’s drain system.
18. Remove feed chute. Provides access to pulper interior. Red light comes on.
19. Fill pulper tank with approximately 5 gallons of hot fresh water, rinse feedchute and allow to set for 2 minutes. Rinses feed chute, pulper tank and dam assembly.
20. Replace feed chute. Red indicator “Power On” light goes out and green indicator “Run” light comes on.
21. Move detent over “STOP” button to out-of-way position. Will permit system’s operation without water input.
22. Depress “START” button and run pulper for 2 minutes. Pulper drive motor starts. Water inlet valve opens but no water enters. Part of rinse water is “pumped” out through dam assembly.
23. Depress “STOP” button; move detent over “STOP” button. Closes the water inlet valve and stops the pulper motor.
24. Fully open drain valve by turning handle 90° from closed position. Opens bypass port to ship’s drain systems, drains pulper.
25. Scrub all exterior surfaces faces with bristle brush and hot detergent solution. Ensures that all exterior surfaces are cleaned.
26. Rinse all exterior surfaces faces with hot fresh water. Remove wash water and water. Dislodge waste particles.
27. Turn system disconnect switch to “OFF” position. Shut-down completed.

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### Preparation for an Extended Period of Inactivity:

1. The Navy Model 3 Pulper assembly disposes of food waste which contain solids or semi-solids which may dry into rigid solids. The procedure described in the shut-down procedure (end-of-day) must be extended to include a more thorough cleansing of the internal passages if the unit is to remain idle for periods beyond 7 days.
2. Either of the chemical disinfecting agents listed herein are recommended for use in sanitizing the Food Waste Disposal System:
  - a. Disinfectant, Food Service, (Chlorine-Iodine type), NSN 6840-00-810-6396. Complete directions for use are given on the package.

**WARNING: HAZARDOUS REACTIONS TO THE CHEMICAL OCCUR UPON EXPOSURE TO ACETONE, M-E-KETONE, AMMONIA, ANILINE (ALKALINE), PYRIDINE AND FLAME OR SPARK.**

- b. Sodium Hypochlorite Solution, NSN 6810-598-7316 (one gallon bottle) recommended dosage levels are.

GALLONS OF WATER	AMOUNT TO ADD
25	7 OZ
10	3 OZ
5	2 OZ

**NOTE:** Rinsing is not required after completing the following steps.

### SHUT-DOWN PROCEDURE FOR EXTENDED PERIOD

Operation	Result
1. Fully close drain valve by turning handle 90° from open position.	Close bypass port to ship's drain system.
2. Remove feed chute.	Provides access to pulper for scrubbing.
3. Dump 5 gallons of hot fresh water/sanitizing solution into pulper tank.	Washes lower part of the pulper shell/impeller assembly.
<b>WARNING: FOOD WASTES HAVE A HIGH BACTERIA CONTENT. WEAR RUBBER GLOVES WHILE PERFORMING THE FOLLOWING STEPS. DO NOT DRINK, EAT OR SMOKE.</b>	
4. Scrub feed chute and exposed gasket area with a bristle brush and hot sanitizing solution.	Ensures that all interior surfaces are cleaned.
5. Leave sanitizing solution in pulper tank for 10 minutes.	Ensures that all crevices are soaked to sanitize interior.

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### SHUT-DOWN PROCEDURE FOR EXTENDED PERIOD (cont)

Operation	Result
6. Turn system disconnect handle on electrical control.	Red indicator "Power On" light comes on.
7. Replace feed chute.	Red indicator "Power On" light goes out and green indicator "Run" light comes on.
8. Remove detent over "STOP."	"START" button in ready position, will permit systems operation without water input
9. Depress "START" button and run pulper for 2 minutes.	Pulper drive motor starts. Water inlet valve opens but no water enters. Part of sanitizing water is "pumped" out through dam assembly.
10. Depress "STOP" button move detent over "STOP" button.	Pulper drive motor stops, water inlet valve closes.
11. Fully open drain valve by turning handle 90° from closed position.	Opens bypass port to ship's drain system, drains pulper.
12. Turn system disconnect switch to "OFF" position.	Shut-down completed.

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### S-2-39 GRIDDLE

#### OPERATING AND SAFETY PRECAUTIONS

1. The griddle has separate thermostatic controls for each 9 to 12 inches of width. Turn on only the amount of griddle surface required for the operation. Set thermostats to required temperature and allow to preheat approximately twenty minutes.
2. Turn all thermostats to "OFF" when not in use. Allowing a griddle to heat unused for long period of time wastes energy and results in premature burn-out of heating elements.
3. Periodically check the calibration of the thermostats by using an accurate surface thermometer or pyrometer. Have thermostats calibrated as necessary.

#### Directions for Cleaning Griddles:

Step	Procedure
1. Shut off power.	Use manual switch.
2. Turn off heat. Remove carbonized grease (after each use).	NEVER clean surface plate while hot. Allow plate to cool. NEVER POUR WATER ON HOT PLATE. Scrape surface with spatula or pancake turner. Wipe clean with dry paper towels. Use pumice stone block to clean hard to remove burned areas on plate after each use.
3. Clean grease and/or drain troughs.	Pour hot detergent solution into small drain and brush. Rinse with hot water.
4. Empty grease receptacles.	Remove grease from scrapings and supporting name with hot detergent solution; rinse and dry.
5. Scrub guards, front, and sides of griddle.	Using hot detergent solution, wash off grease, splatter, and film. Rinse and dry.

**S-2-40 HIGH COMPRESSION STEAM COOKER (MARKET FORGE)**

**OPERATING AND SAFETY PRECAUTIONS**

1. Make sure drain plug is in place. Pour 6 quarts of water into cooking chamber. Note water level and keep replenished during operation.
2. Turn main power switch on, turn timer to maximum setting and let cooker preheat approximately twenty minutes. When water starts to boil, cooker is ready for operation. Turn timer "OFF."
3. Put in pans of food, close and latch door and set timer at cooking time. Cooking pressure is 9 to 10 pounds.
4. When cooking cycle is complete, steam will be automatically exhausted and buzzer will sound. Turn timer to "OFF" to silence buzzer.
5. Unlatch door and wait a few seconds for vapor to clear, then open door and remove food.

**CAUTION:** NEVER attempt to open door when cooker is pressurized.

6. With cooker pressurized and before starting to cook, manually operate pressure relief valve briefly.

**Directions for Cleaning High-Speed Steam Cookers (Routine Daily Cleaning):**

<b>Step</b>	<b>Procedure</b>
1. Turn off main power switch. Let chamber cool. Disassemble.	Remove anti-spill pan. Drain chamber and replace drain plug.
2. Wash interior chamber walls, door, spray nozzle.	Use a mild detergent solution. Scrub interior with plastic brush to remove stubborn food particles.
3. Soak cooking chamber, shelves, and anti-spill pan. Rinse.	Add about 2 quarts of detergent solution and let remain for short time. Drain. Rinse with clean hot water.
4. Clean exterior.	Scrub with brush and hot detergent solution, legs, side, top, back, outside and inside of doors, space between door and handle, and gasket. Rinse with hot water; dry. Polish stainless-steel exterior with non-abrasive cleaner. <b>DO NOT USE STEEL WOOL.</b>
5. Replace parts.	Fill chamber with 6 quarts of water; close chamber door. Operate for a 5-minute cooking cycle.

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### **Cleaning After Use (or as needed):**

Thoroughly clean cookers in which meat and starchy foods are cooked frequently. Remove pan racks, door, and anti-spill pan. Wash with a solution of hot detergent water. Rinse with clean hot water. Replace parts.

## S-2-41 HOT CHOCOLATE DISPENSER

### OPERATING AND SAFETY PRECAUTIONS

**CAUTION:** For initial operation and whenever dispenser experiences loss of water supply, press and hold “HOT WATER” button until water flows from the dispensing spout before turning on the power switch. This will fill the water tank and prevent premature heater burnout.

1. Turn power switch on. Red light will glow. Tank should preheat in 15 minutes.
2. Set beverage quantity selector switch: small is for 6 oz. cup, large for 8 oz. cup.
3. Lift off cabinet hood, remove hopper cover and loosely fill hopper with chocolate mix. Replace cover and housing hood.
4. Press and release “CUP” button. Dispenser fills and shuts off automatically. For hot water only, press and hold hot water button until cup is almost full.
5. For drink strength and quantity adjustments, refer to the service manual.

#### **Cleaning:**

1. The product handling system is basically self-cleaning, since each time the product is dispensed, hot water flushes the water system.
2. Weekly, a complete cleaning should be accomplished. Since a number of interrelated parts must be removed and replaced properly, refer to the operating manual for complete instructions.

**WARNING:** Do not use hot water for cleaning plastic parts; use warm soapy water. Rinse all parts thoroughly and dry. Do not use abrasives and do not run through dishwashing machine.

## S-2-42 ICE TEA DISPENSER

### OPERATING AND SAFETY PRECAUTIONS

**CAUTION:** If dispenser will be without power supply for more than 45 minutes, remove the tea jar to avoid clogging. Duct heater must be operative to keep tea powder dry and free flowing.

1. Lift off machine front cover, lift jar and dispensing head out of the unit. Unscrew jar and fill with powdered iced tea.

**NOTE:** Jar must be clear and completely dry for proper dispensing. Reinstall jar and dispensing head assembly and replace front cover.

2. To adjust drink strength, remove jar and dispensing head as above, tap lightly on dispensing head with hand to remove tea from dispensing wheel, invert the jar and turn strength adjuster on the dispensing head toward higher number to increase strength or to lower number to decrease strength of drinks. Turn the adjuster until it snaps into the next notch. Refer to manual for exploded view of parts of dispensing head. Reinstall dispensing assembly and cabinet front before operation.

3. If dispenser malfunctions, refer to troubleshooting chart in the operating manual.

### Cleaning:

Remove cup rest and drip tray and empty drip tray. Remove front panel from unit. Lift jar and dispensing head up and out of unit. Remove mixing bowl by lifting front edge up and out. Wash cup rest, drip tray, mixing bowl, and all outside surfaces of unit with mild detergent/warm water solution. Rinse with clean water and dry with soft lint-free cloth. Do not use abrasive cleaners. To clean dispensing head, remove jar ring and disassemble dispensing head as shown in operator's manual. Wash disassembled parts in water, then dry thoroughly with clean lint-free cloths. Reassemble dispensing head and attach to jar with jar ring. **MAKE SURE PRODUCT TUBE SEALS OFF DISPENSING HEAD PRODUCT CHUTE.** Position mixing bowl in unit. Invert and position jar on jar support so rotor shaft of dispensing head seats on motor drive.

**S-2-43 COMBI-OVEN**

The Combi-Oven/Steamer can cook using (1) Steam, (2) Hot Air, or (3) Steam and Hot Air Combined. These modes of operation can be used separately, combined, or in sequence. Check manual for detailed instructions.

**Four Function Selector Switch:**

**Steam Mode:** Steam, Stew, Blanch, Poach, Reheat, and Thaw.

**Hot Air Mode:** Roast, Broil, or Bake.

**Combi Mode:** Defrost, Roast, Bake, Rethermalize, or Reheat.

**Cool Down Mode:** Allows unit to cool down rapidly with door open or shut.

**OPERATING AND SAFETY PRECAUTIONS**

1. Turn power on, indicator light will come on.
2. Set mode: Steam, Hot Air, or Combi (Steam & Hot Air).
3. Set time for desired cooking time. When timer time expires, the unit shuts off and the buzzer rings. Move the selector to Stay On to stop the buzzer ringing.
4. For Hot Air and Combi modes, set the temperature. The heat indicator light illuminates and stays lit until temperature is reached.
5. For the Steam mode the adjustment knob controls the rate of steam production. Turn clockwise to increase the steam.
6. Use the Cool Down mode in preparation for cleaning. In the Cool Down mode, neither the temperature dial nor the timer will be operational. The blower will function with the door open or closed.

**Cleaning the Exterior:**

1. When the unit has cooled down, wipe the exterior with a soft cloth saturated with light oil.
2. Wipe dry with a clean soft cloth.

**NOTE:** Do not spray exterior with water.

**Cleaning the Interior (daily when used):**

1. Cool oven to 140 degrees Fahrenheit. If oven is cold, turn on Steam mode for 3 to 4 minutes to warm the oven interior surfaces.
2. Spray the interior of the oven with recommended cleaning detergent.

**NOTE:** Never spray water into the unit when the temperature is above 212 degrees Fahrenheit.

3. Let cleaner work for 15 to 20 minutes.
4. Set oven on Steam mode and adjust timer for 20 minutes.
5. Use the exterior hose to rinse the oven interior with water.

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6. Set oven on Steam mode and set timer for 5 minutes to remove all detergent residues.

**NOTE:** Never scrape or scour the oven interior.

**S-2-44 CLAM SHELL GRIDDLE**

**OPERATING AND SAFETY PRECAUTIONS**

1. Manually adjust Top-Platens to thickness of product being cooked.
2. Slowly pre-heat griddle to 400 degrees Fahrenheit to prevent warping.
3. Season griddle surface with oil or fat to prevent sticking.

**Cleaning:**

1. After each use, clean the griddle with a spatula or griddle scraper.
2. Periodically check the grease container; empty when necessary.
3. Once daily, thoroughly clean the griddle, backsplash, sides, front, grease container, and platens.
4. Clean steel surface with a damp cloth and polish with a soft dry cloth.
5. Re-season griddle and platens with a light coat of oil or grease.
6. Wipe platen surfaces with a soft cloth moistened with water after each use.

**NOTE: Do not use chemicals or abrasive materials on the Teflon coated surfaces.**

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### S-2-45 SKITTLE

#### OPERATING AND SAFETY PRECAUTIONS

##### Operating:

1. Press rocker switch to the ON position.
2. Set thermostat to the desired temperature.
3. Close lid until HEATER POWER ON light goes out.
4. Start cooking.
5. To shut down the unit, turn thermostat and rocker switch to OFF position.

##### Cleaning (Disconnect Power Before Cleaning):

##### Exterior:

After each use, clean the stainless steel with a good commercial stainless steel cleaner or polish.

##### Interior:

1. Use mild detergent, plastic scouring pads, and soft cloths.
2. Rinse off cleaning agent with water; wipe dry with soft cloth.

**NOTE:** Never use cleaners containing chlorides or abrasive compounds.

##### Draw-Off Valve:

1. Make sure stem is in the open position.
2. Unscrew the hex bonnet nut.
3. Carefully remove the nut and stem assembly.
4. Clean valve body and tube using draw-off brush provided with Legion Care Kit.
5. Re-assemble; tighten bonnet nut by hand only.

##### Maintenance:

See manual for specific maintenance of unit, such as actuator tension adjustment and re-packing actuator with grease.

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