

FOOD SERVICE MANAGEMENT PROGRAM

1. REASON FOR ISSUE. This Veterans Health Administration (VHA) Handbook provides procedures for the management of food service operations at Department of Veterans Affairs (VA) facilities.

2. SUMMARY OF MAJOR CHANGES. This VHA Handbook:

a. Outlines the procedure for the purchase, storage, receiving, and delivery of food products and supplies from a commercial food service contractor.

b. Provides guidelines for the preparation, storage, transport, and delivery of nutritious, appetizing, and safe food at those facilities that operate advanced food preparation and food service systems.

c. Recommends an effective orientation and ongoing training program requirement for all employees and food handlers working in Nutrition and Food Services operations.

d. Includes emergency preparedness guidelines for food service operations in the event of disasters and/or other emergencies.

3. RELATED DIRECTIVE. VHA Directive 1109.

4. RESPONSIBLE OFFICE. The National Director, Nutrition and Food Services (111N), Office of Patient Care Services, is responsible for the contents of this Handbook. Questions may be addressed to 202-273-8516.

5. RESCISSION. VHA Administrative Manual, M-2, "Clinical Programs," Part III, "Dietetic Service," Chapter 3, "Food Service Management," is rescinded.

6. RECERTIFICATION. This VHA Handbook is scheduled for recertification on or before the last working day of April 2012.

Michael J. Kussman, MD, MS, MACP
Acting Under Secretary for Health

DISTRIBUTION: CO: E-mailed 4/12/07
FLD: VISN, MA, DO, OC, OCRO, and 200 – E-mailed 4/12/07

CONTENTS**FOOD SERVICE MANAGEMENT PROGRAM**

PARAGRAPH	PAGE
1. Purpose	1
2. Background	1
3. Responsibilities of the Chief, Nutrition and Food Services, or Program Manager	1
4. Responsibilities of the Nutrition and Food Services' Field Advisory Committee (NFAC)	2
5. Responsibilities of the Nutrition and Food Services' Food Safety Subcommittee	2
6. Responsibilities of the Nutrition and Foods Services' Clinical Managers Advisory Subcommittee (CMAC)	2
7. Definitions	2
8. Type of Meal Service	4
9. Menus	4
10. Meal Hours	5
11. Supplemental Feedings	5
12. Patient and Resident Satisfaction	5
13. Food Safety Program	6
14. Procurement	7
15. Subsistence and Supplies Receiving	8
16. Storage	9
17. Food Production	12
18. Storage of Prepared Food Products (Food Bank)	17
19. Reheating (Rethermalization) of Food	17
20. Transportation of Prepared Food Items Within A Medical Center	18

CONTENTS Continued

PARAGRAPH	PAGE
21. Transportation of Bulk or Plated Products Outside of a Medical Center	19
22. Tray Assembly and Meal Service	20
23. Sanitation	24
24. Training.....	28
25. Emergency Preparedness	29
26. References	33

FOOD SERVICE MANAGEMENT PROGRAM

1. PURPOSE

This Veterans Health Administration (VHA) Food Service Management Handbook provides procedures for the food service management components and the responsibilities for operation of the Nutrition and Food Services Program.

2. BACKGROUND

a. The Nutrition and Food Services Program must provide quality meals that are nutritionally adequate, meet the regulatory requirements for food safety, and are acceptable to veterans in a health care and residential environment. The highest standard of quality and safety must be maintained in accordance with the Food and Drug Administration (FDA) Food Code and the Department of Veterans Affairs (VA), VHA-established food safety program. Continuous quality improvement, assessment, and monitoring ensures that operational and cost-effective measures are maintained.

b. The regulations cited in this Handbook are based on established food service industry safety standards. Facilities that choose to deviate from these standards need to provide adequate documentation and references to substantiate any variations to their local management staff. These guidelines are accurate and based upon the 2001 FDA Food Code and the 2003 Supplement to the 2001 FDA Food Code. **NOTE:** *Any future changes to the FDA Food Code take precedence over this Handbook.*

3. RESPONSIBILITIES OF THE CHIEF, NUTRITION AND FOOD SERVICES, OR PROGRAM MANAGER

The Chief, Nutrition and Food Services, or Program Manager is responsible for:

a. Establishing guidelines and ensuring compliance to provide a safe food supply for all patients and residents according to their medical and/or nutritional needs. This individual must be a Registered Dietitian. Guidelines established are to conform to accepted professional practices and the current FDA Food Code safety standards.

b. Performance improvement activities. Performance improvement activities are conducted to ensure standardization of processes and procedures, and the delivery of quality and cost-effective nutrition care to all patients and residents.

c. The day-to-day foodservice operations. This person must demonstrate knowledge of food code requirements, Hazard Analysis Critical Control Point (HACCP) principles, and other preventive actions to protect patients from food-borne illnesses. Certification in a food safety program is recommended.

d. Ensuring that local and state requirements, in relation to the minimum level of ServSafe employee certification are met by the facility. **NOTE:** *VHA Recommends ServSafe Certification for all food service and production supervisors.*

e. Ensuring that contractors abide by food safety standards, for example in the transportation of food.

f. Maintaining food safety and sanitation both on-site and off-site, in accordance with HACCP guidelines.

g. Ensuring the effectiveness of procedures, products, and/or equipment.

h. Publishing a plan for emergency feeding, i.e., to provide meal service for patients and residents, casualties, and authorized staff during internal and/or external disasters. This must be coordinated with the facility's disaster plan.

i. Documenting all training and monitoring activities.

4. RESPONSIBILITIES OF THE NUTRITION AND FOOD SERVICES' FIELD ADVISORY COMMITTEE (NFAC)

The NFAC is responsible for providing guidance, advice, and assistance to the National Director, Nutrition and Food Services, VA Central Office on matters relating to policy formulation and program development.

5. RESPONSIBILITIES OF THE NUTRITION AND FOOD SERVICES' FOOD SAFETY SUBCOMMITTEE

The Nutrition and Food Services' Food Safety Subcommittee (the advisory group of NFAC) is responsible for the implementation and interpretation of the FDA Food Code and HACCP Food Safety System, and provision of food safety guidelines.

6. RESPONSIBILITIES OF THE NUTRITION AND FOOD SERVICES' CLINICAL MANAGERS ADVISORY SUBCOMMITTEE (CMAC)

The CMAC, a sub-group of the NFAC, is responsible for oversight of communications with Veterans Integrated Service Network (VISN) Clinical Liaisons in order to facilitate consistent clinical nutrition practice throughout the continuum of care.

7. DEFINITIONS

a. **Blast Chillers.** Blast chillers are units designed to move food through the temperature danger zone, 5°C (41°F) to 57°C (135°F), quickly through the use of cold, convected air. Most units allow the operator to set target chill temperatures and monitor the temperature of food throughout the chill cycle.

b. **Blast Freezers.** Blast freezers are units designed to move food through the temperature danger zone very quickly, enabling frozen food items to be stored in a conventional freezer.

c. **Critical Control Point.** The Critical Control Point is a step at which control can be applied, and is essential to prevent or eliminate a food safety hazard, or to reduce it to an acceptable level.

d. **Hazard Analysis Critical Control Point (HACCP) Food Safety System.** An HACCP plan is a preventive approach to food safety that involves identifying potential hazards, establishing preventive or control measures, and continuous monitoring to ensure that standards or critical limits are met.

e. **Hermetically-Sealed Container.** A hermetically-sealed container is designed and intended to be secure against the entry of microorganisms and, in the case of low-acid canned foods, to maintain the commercial sterility of its contents after processing.

f. **Highly-Susceptible Population.** A highly-susceptible population is a group of persons who are more likely than other populations to experience foodborne disease because they are immunocompromised, and/or older adults in a facility that provides health care or assisted living services, such as a hospital or nursing home.

g. **Material Safety Data Sheets (MSDS).** MSDS are information sheets designed to provide both workers and emergency personnel with the proper procedures for handling or working with a particular substance. MSDS include information such as physical data (melting point, boiling point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill and/or leak procedures.

h. **Occupational Safety and Health Administration (OSHA).** OSHA is a Federal agency directed to saving lives, preventing injuries, and protecting the health of America's workers.

i. **Potentially-Hazardous Food.** A potentially-hazardous food is a food that requires temperature and time control because it is in a form capable of supporting: the rapid and progressive growth of infectious or toxigenic microorganisms; the growth and toxic production of *Clostridium Botulinum*; or the growth of *Salmonella Enteritidis*, and *E. Coli*.

j. **Rethermalization.** Rethermalization is the rapid reheating of potentially-hazardous foods to 74°C (165°F) or higher before being served or before being placed in hot food storage equipment.

k. **Safe Temperature Zone.** Based on the latest information outlined in the FDA Food Code, a safe temperature zone means temperatures at, or below, 5° C (41°F) or at, or below, 57°C (135° F), which prevent the growth and proliferation of microorganisms. ***NOTE: As this definition is revised and updated in the FDA Food Code, its application supersedes this VHA Handbook reference.***

l. **Standardization.** Standardization means making, to the maximum extent possible, the types and kinds of supplies and equipment purchased, consistent with clinical and practitioner needs, facilitating the delivery of cost-effective, high-quality health care.

m. **Subsistence.** Subsistence is defined as food products, purchased from approved and/or mandatory sources, for the provision of meals to the veteran beneficiary.

n. **Tumble Chillers.** Tumble chillers are units designed to move food through the temperature danger zone quickly by placing prepackaged hot food into a drum which rotates inside a reservoir of chilled water. The tumbling action increases the effectiveness of the chilled water in cooling the food.

8. TYPE OF MEAL SERVICE

a. The types of food preparation and meal delivery systems available are:

- (1) Cook, Serve, Conventional.
- (2) Cook, Serve, Restaurant Style.
- (3) Cook, Chill.
- (4) Cook, Freeze.
- (5) Commissary.
- (6) Ready-to-Serve.

b. Sites need to evaluate costs and quality issues on an ongoing basis to determine the most efficient type of food service operation for their VA facility or VISN. Any proposed changes in the types of food production and service systems from conventional systems (cook, serve) to Advanced Food Preparation (AFP) and/or Advanced Delivery Systems (ADS) need to include conducting a comprehensive cost benefit analysis study with approval from the VISN Director, and concurrence from the National Director, Nutrition and Food Services, VA Central Office, Washington, DC.

9. MENUS

a. Cycle menus, using standardized recipes as applicable, need to consist of at least a 3-week cycle pattern for facilities with a long-term care program or a domiciliary. Cycle menus for less than 3 weeks may be used for acute medical and/or short-stay patients. The menus need to be carefully planned to provide essential nutrients and adhere to diet prescriptions. Meals and snacks need to be appetizing, meet individual food preferences, provide variety, aesthetic value, and allow for seasonal variations of food items.

b. A nutritional analysis must be completed when new menus are planned or, at least annually, for the regular menu and two selected modified diet menus. Analysis must include at least a minimum of 1 week for the following nutrients for the population served: calories, carbohydrates, protein, fat, cholesterol, fiber, sodium, potassium, calcium, and iron.

c. Menus must be approved by a registered dietitian; and menu substitutions must be approved in advance by a registered dietitian. If a substitution must be made and the dietitian is not available, a supervisor, dietetic technician, or diet aide needs to determine the appropriate substitution. All menu substitutions must be of equivalent nutrient value.

10. MEAL HOURS

a. Three meals a day are provided at times comparable to regular meal hours in the community. There must be no more than 14 hours between a substantial evening meal and breakfast the following day. When a supplemental feeding is offered at bedtime, up to 16 hours may elapse between a substantial evening meal and breakfast the following day. **NOTE:** *The local policy needs to publish the schedule of specific meal times as applicable to the patient and/or resident units in the facility.*

b. Meal hours for Nutrition and Food Services' employees are scheduled so that they do not interfere with the regular patient meal service.

11. SUPPLEMENTAL FEEDINGS

a. The registered dietitian, in consultation with the physician, reviews all orders for supplemental feedings, including those used for medications on an ongoing basis.

b. Ready-to-serve commercial medical nutrition supplement products must be used. If not available, reconstitution of powdered medical nutrition supplements from recipes are acceptable. However, care must be taken to prepare them under safe and sanitary conditions separate from raw food production.

c. Individually labeled food and beverage items are also provided as supplemental feedings. Each portion must be marked with an expiration date and the method used to identify the patient.

d. Fluids and foods used for medication may be delivered in bulk and need to be labeled appropriately including an expiration date. Nutrition and Food Services provides only those bulk fluids and foods required as a vehicle for various oral medications.

12. PATIENT AND RESIDENT SATISFACTION

a. Nutrition and Food Services seeks to improve the quality and acceptability of food and nutrition services by conducting and appropriately responding to VA Form 10-5387, VA Nutrition and Food Services Patient Satisfaction Survey. The latest edition of the survey tool for Nutrition and Food Services is to be used by VA facilities to survey the quality and acceptability of nutrition and food services to inpatients, residents, and patients recently discharged.

b. Quarterly random surveys are to be completed with effective quality improvement and follow-up on any issues identified. Patients and residents need to be randomly selected for participation. The random survey sampling needs to include at least 25 percent of the local average daily census (ADC). Results must be tracked and reported as part of the service performance improvement program.

c. If a facility has a large population incapable of completing these surveys, another mechanism needs to be in place to determine overall acceptability of food services. This could include documented plate waste studies, observation at meal rounds, or input from patient and resident councils.

13. FOOD SAFETY PROGRAM

a. All Nutrition and Food Services Programs, and any other entity providing any type of food service to patients and residents, must have an effective, proactive food safety plan and/or program based on preventing food safety hazards before they occur. Serving safe food is vital to all facilities providing care to a highly susceptible population. Each entity providing food items to patients and residents must establish a food safety plan to ensure safe food. The food safety plan must provide guidance, policies, and standard operating procedures (SOPs) regarding safety, sanitation, procurement, storage, preparation, handling, and service of all food according to the current FDA Food Code.

b. HACCP is a preventive system of control procedures and training programs. HACCP plans are developed and implemented at facilities in accordance with FDA Food Code guidelines and Joint Commission on Accreditation of Healthcare Organization (JCAHO) standards. HACCP plan development is based on HACCP principles combined with SOPs, a training program, and a monitoring program to oversee compliance.

c. An appointed HACCP team or coordinator establishes a plan using:

- (1) Principle #1: Hazard Analysis,
- (2) Principle #2: Identification of Critical Control Points,
- (3) Principle #3: Establish Criteria for Control and Critical Limits,
- (4) Principle #4: Establish Procedures to Monitor Critical Control Points,
- (5) Principle #5: Determine Corrective Actions,
- (6) Principle #6: Establish Effective Record Keeping Systems, and
- (7) Principle #7: Establish Verification Procedures.

- d. An HACCP Food Safety Plan needs to be developed and incorporated into service policies and SOPs. The plan includes a monitoring system, a corrective action plan, and a verification process.
- e. The Food Safety Plan and/or the HACCP Plan must be evaluated on an annual basis for effectiveness and compliance.

14. PROCUREMENT

- a. Nutrition and Food Services is responsible for the identification and purchasing of all subsistence items and food service supplies needed for patient food service. All products are purchased in accordance with the Subsistence Prime Vendor (SPV) Contract, and other authorized procurement sources, as needed.
- b. Funds allocated for subsistence and food service supply products are used to provide subsistence, meals, or beverages for patients only. **NOTE:** *Exceptions to allow non-patients to receive these products may be authorized by the Medical Center Director.*
- c. In accordance with the VA Procurement Task Force Report and the policy of the VHA Clinical Logistics Office (CLO), the SPV contract is the mandatory (Tier One) source for subsistence and food service supplies. The National Dietary Supplement and Tube Feeding Contract is the mandatory source for the products contained within this contract and can be distributed through the SPV contract.
- d. To promote and achieve cost effectiveness in food and food service supply procurement, national subsistence and/or supply standardization agreements have been established for selected product categories. Examples of these categories are: frozen entrees, canned soups, cookies, crackers, meats, coffee, ware-washing chemicals, paper and plastic products, etc. Any facility wanting to deviate from the standardized agreements and/or dietary supplement or tube feeding contract must submit a waiver to the VHA Logistics Office (or other designated procurement office) for authorization to purchase from a non-mandatory source. **NOTE:** *Contact the medical center or VISN Chief Logistics Officer (CLO) for the current appropriate procedure for filing a waiver.*
- e. Any new food and/or convenience products, not covered under the standardized agreements, need to be evaluated prior to being added to the patient menu. Products need to be evaluated for quality, variety, flavor or taste, nutritional content, and cost. A form, such as VA Form 10-7983, Sensory Evaluation of Convenience Foods, may be used as an evaluation tool to screen foods for acceptability. Whenever possible, patient and/or resident participation in sensory evaluation of products needs to be utilized. Increased portion cost needs to be justified by increased quality, decreased waste, and reduced labor expenditure. A nutritional analysis must be provided from the vendor on convenience products and reviewed for menu and/or dietary compliance.
- f. All product recalls received by the SPV contractor from manufacturers or the United States Department of Agriculture (USDA) that involve products delivered to a VA medical

center, must be communicated to the involved medical centers within 24 hours of notification receipt from the source. The recalled items must be handled according to the guidelines provided by the SPV contractor. If specific procedures are not indicated, segregate and mark the product by indicating it does not need to be used, and return identified products (or destroy, if designated) as soon as possible to the SPV contractor for proper credit and/or replacement.

g. All juices and dairy products, regardless of packaging, including apple and orange juice, apple cider, milk, ice cream, processed cheese (American Cheese), and liquid, frozen, and dry eggs and egg products need to be pasteurized.

(1) Only pasteurized shell eggs or pasteurized liquid, frozen, or dry eggs, or egg products are to be used.

(2) Fluid and dry milk, and milk products, including those used in cooking, must comply with Grade A pasteurized standards and be procured pasteurized. Milk must be procured in machine-filled and sealed containers of appropriate capacity for daily needs, but does not need to exceed 19 liter (5 gallon) containers.

h. Meat, poultry, and seafood must be purchased in accordance with the facility HACCP plan. Seafood and poultry need to be purchased frozen. Meat (beef and pork) may be purchased chilled, within the proper HACCP temperature ranges, and securely sealed to prevent contamination.

i. Commercially-produced bread, rolls, and baked goods from local bakeries are purchased in accordance with required specifications. Bread used for tray service is commercially wrapped or protected from contamination and dehydration through the use of food grade plastic bags or other protective covering.

j. Ice cream and sherbet are purchased in accordance with required specifications.

k. Food purchased in hermetically-sealed containers must be obtained from a food processing plant that is regulated by the food agency that has jurisdiction over the plant.

15. SUBSISTENCE AND SUPPLIES RECEIVING

a. Subsistence items are received and inspected in accordance with the terms and conditions of the SPV contract and local HACCP guidelines. The inspection requirements are cited in 48 Code of Federal Regulations (CFR) Chapter 8; VA Acquisition Regulations (VAAR), Subpart 852.210-72(b), and VAAR, Subpart 870.111-4. Subsistence and supplies must be received under sanitary and safe conditions.

b. All food purchased must be delivered in clean vehicles capable of maintaining temperatures which optimize product safety and quality according to food safety and HACCP Food System guidelines.

c. Orders on the delivery truck need to be palletized and stacked according to fragility of product with the most fragile on top and sturdier on bottom. Chemicals must be separate from foodstuffs. Pallets must not be stacked higher than 60 inches when received by the facility. Pallets on trucks can be higher but must be reduced to 60 inches when received by VA.

d. Upon receipt, all foods are inspected for conformance to the purchasing agreement and for signs of deterioration or contamination. Perishable food items are to be delivered within the safe temperature zone as reflected in the HACCP plan or purchase requirement.

e. Any items received which do not meet the purchase requirements, or show signs of deterioration or contamination, are to be refused and returned to the vendor for corrective action and/or account credit. Recurring problems with product quality, pricing, etc. need to be reported to the VISN SPV Leader for assistance in resolution.

f. All items need to be clearly labeled and indicate the expiration date, as appropriate, when received. Facilities may add receipt date for inventory tracking purposes, first-in, first-out (FIFO).

g. Potentially hazardous food must be received at a temperature at, or below, 5° C (41° F). Perishable food items are to be received within the safe temperature zone as reflected in the HACCP plan or purchase requirements.

h. Frozen products must be hard frozen with no signs of defrosting, and temperature of product must be at, or below, -12° C (10° F).

i. Shelf stable items must be protected from heat, shipped, and stored at a temperature at, or below, 21° C (70° F).

j. Additionally, all food must be free of evidence of previous temperature abuse.

k. Dry goods must be received in good condition and be free of evidence of moisture abuse. All packaging must be intact, without holes, tears, or punctures.

l. Monitoring criteria must be established to ensure that delivery temperatures and conditions are within the required range, and according to the HACCP Food Safety Plan.

m. Foods previously rejected for receipt must not be accepted on subsequent deliveries. A procedure needs to be in place to clearly mark and identify rejected items. Foods that cannot immediately be returned to the vendor need to be segregated and a log needs to be maintained for any rejected products.

16. STORAGE

a. General Storage Principles

(1) Facilities need to provide safe, sanitary, and secure conditions for storage of subsistence, non-food supplies and chemicals (see par. 18).

(2) Items in storage need to be labeled with an expiration date and/or date of receipt. The FIFO method of inventory control needs to be used to ensure that the newer supplies are positioned for use.

(3) Proper lighting must be maintained throughout the storage areas.

(4) The use of slatted shelves allows for air circulation around food in storerooms, refrigerators, and freezers. Adequate shelving is necessary to eliminate the need to stack boxes and crates on the floor or on top of each other, etc. In order to promote good air circulation, storage shelves must not be overloaded.

(5) Cardboard cartons used in shipping food need to be discarded as soon as possible once the cans, cartons, etc. have been removed. Cardboard cartons do not need to be brought into the food preparation or tray assembly areas.

(6) Food needs to be stored in the original container unless the packaging is damaged, exposing the contents to contamination. If re-packaging is necessary, a single-use, sanitary container that is leak-proof and non-absorbent with a tight fitting lid needs to be used.

(7) To maintain optimal quality of subsistence and supplies, products must not be stored past their recommended shelf life, or as indicated by expiration dates.

(8) All food items need to be stored six inches off of the floor and at least 18 inches from sprinkler heads. The exception to the 18" rule is from National Fire Protection Association (NFPA) Section 13, which permits storage against walls above the 18" plane, as long as the stored materials or shelves are not directly below the sprinkler deflector.

(9) Only authorized persons are to have access to storage areas.

b. Subsistence Dry Storage

(1) Dry storage areas must be well ventilated and pest free.

(2) The temperature needs to be 10°-21.2° C (50°-70° F). Relative humidity needs to be at 50 to 60 percent.

(3) Food needs to be protected from direct and other sources of bright light. Windows and openings need to be covered or the glass painted opaque to protect from sunlight.

c. Refrigerated Storage

(1) The equipment for refrigerated storage needs to maintain food at a temperature at, or below, 5° C (41° F). Each storage area needs to be equipped with a thermometer that is accurate +/- 1.7° C (3° F). Refrigeration units that do not have a read-out display of the temperature need to have thermometers placed in the warmest area of the unit. Temperatures must be recorded and monitored. Any variances require corrective action.

(2) If any refrigeration unit exceeds 7.2° C (45° F), potentially hazardous foods need to be relocated immediately to another operational refrigeration unit. The temperature of the food products in a refrigeration unit that has been out of the proper temperature range need to be tested with a thermometer. If food products are in the 5° C (41° F) to 21° C (70° F) range for more than 1 hour or exceed 21° C (70° F), they must be discarded.

(3) Separate refrigeration units are recommended for raw meat, dairy, and fruits and vegetables. At a minimum, separate refrigeration needs to be provided for cooked foods and raw foods. Raw foods are not to be stored above ready-to-eat foods, cooked foods, fruits, or vegetables.

(4) In order to support proper cooling of the units, fan coils, and electrical parts must be monitored daily to prevent dust or debris build up.

d. **Freezer Storage**

(1) Freezer temperatures need to be maintained at, or below, -17.8° C (0° F)

(2) Freezer temperatures need to be monitored several times during a 24-hour period, and a process needs to exist for temperature documentation. Any variances noted require corrective actions.

(3) Frozen foods need to be moved from the receipt area to the freezer as soon as possible or before signs of thawing occur.

e. **Chemical Storage.** Chemicals must be packed separately from food items or paper goods used for food packaging.

(1) Only those poisonous or toxic materials that are required for the operation and maintenance of a food establishment, such as for the cleaning and sanitizing of equipment and utensils, and the control of insects and rodents, are to be allowed in a food establishment.

(2) Chemicals and cleaning supplies need to be stored in their original containers and labeled with the contents and hazards. MSDS that describe the contents, hazards, and handling procedures for chemical products need to be readily available, as required by OSHA. Chemicals and cleaning supplies are stored separately from subsistence and operating supplies.

(3) Poisonous or toxic materials must be stored to avoid contamination of food, equipment, utensils, linens, single service, and single use articles by:

(a) Separating the poisonous or toxic materials, by spacing or partitioning, and

(b) Locating the poisonous or toxic materials in an area that is not above food, equipment, utensils, linens, and single service, or single use articles.

(4) Poisonous and toxic materials must be stored in secured, locked areas and/or cabinets. If it is necessary to transfer chemicals, store them in sturdy containers clearly labeled with the contents and their hazards.

(5) Poisonous or toxic materials must be used in accordance with the manufacturer's instructions.

(6) All spray bottles, and/or containers with toxic or poisonous substances, such as sanitizers, must be clearly labeled.

(7) Corrosive and flammable products must always be stored separately.

(8) Proper signage must be posted in the area to ensure employees are aware that potentially toxic and/or poisonous chemicals are stored within the area.

(9) All hazardous chemicals need to be inventoried monthly, or more often.

(10) Containers with diluted cleaning agents need to be labeled with the name of the product.

(11) Empty chemical containers are to be discarded and are not to be used for storage.

17. FOOD PRODUCTION

a. General Principles

(1) Emphasis is placed on the techniques of food preparation and service to retain nutrients, flavor, and eye appeal.

(2) Food prepared in a private home must not be used or offered for patient or resident consumption. Exceptions may be made on an individual basis where family and/or friends provide food items for an inpatient or resident, if approved by nursing staff and/or the registered dietitian.

(3) HACCP principles must be utilized for the procurement, setup, and dispensing of all enteral feeding products. Only commercially prepared ready to use enteral feedings are used. Commercial enteral products that require mixing are handled in a sanitary manner, properly labeled, and discarded within 24 hours of preparation in accordance with HACCP guidelines. When enteral feeding modification requires mixing, it is highly recommended that the mixing be accomplished at the patient or resident bedside, directly into the feeding bag. When this is not possible, the enteral feeding preparation needs to be accomplished in a supplemental feeding preparation unit separate from food service and production areas.

(4) Pureed foods and any other mechanically-altered foods must have a shelf life of no more than 24 hours, if prepared and held for service on a hot trayline at appropriate holding temperatures. If prepared and blast chilled, shelf life is in accordance with the section on

advanced food preparation. Leftovers must not be used in the preparation of these products. If commercially prepared products are purchased, the manufacturer's expiration date must be strictly followed.

(5) For purposes of quality, cost control, and food safety, standardized recipes must be used. HACCP guidelines must be incorporated into standardized recipes.

(6) Centralized control of issues (food and non-food supplies) is established and maintained.

(7) Food-grade seamless hard rubber or acrylic, separate labeled or colored cutting boards must be used for raw and cooked foods. Boards need to be washed, rinsed, sanitized, and air dried after each use, after each food, after an interruption, and after 4 hours of continued use. Cutting boards must be replaced on a regular basis or when the board has cuts, scratches, or cracks. **NOTE:** *Wooden cutting boards may be allowed by local codes, however, the use of wooden cutting boards, utensils, and utensils with wooden handles is discouraged. If wooden cutting boards, cutting blocks, baker's tables, and utensils are allowed, they need to be made from seamless, close-grained, nontoxic hardwoods.*

(8) For foods requiring refrigeration (chilled foods), the time out of the refrigerator is restricted to 30 minutes or less. The critical safety limit for chilled foods is 10°C (50°F). If the internal temperature of chilled food rises above 10°C (50°F) during storage, preparation, or distribution, the food must be discarded. Food preparation work must be completed away from heat sources such as ovens.

(9) Ice used for food or a cooling medium must be made from drinking water which is safe for consumption (potable). A closed system for ice making and automatic dispensing is used.

(10) Raw and partially-cooked animal foods, such as rare meats, raw fish, etc., must not be served. Raw animal foods such as eggs, fish, meat, poultry, and foods containing these raw animal foods, must be cooked to heat all parts of the food to a temperature and for a time that complies with HACCP guidelines. Refer to the current FDA Food Code for cooking, reheating, holding times, and temperatures.

(11) Fruits and vegetables that are cooked for hot holding must be cooked to a minimum temperature of 57° C (135° F).

(12) Sulfating agents must not be applied to any product, including fresh fruits and vegetables intended for raw consumption.

(13) Foods do not need to be cooked in a microwave. Foods may be heated in a microwave provided that all parts of the food reach a temperature of at least 74° C (165° F) and the food is rotated and stirred, covered, and allowed to stand covered for 2 minutes after heating.

(14) Any raw or undercooked eggs in any form, including pasteurized eggs, are not to be served to patients or residents. An egg is considered undercooked when the white is not firm and the yolk has not thickened.

- (15) All poultry dressing and stuffings must be baked separately.
- (16) All types of broth must be handled with the same care as meat or poultry.
- (17) Facility-prepared foods may not be frozen unless a blast chiller is utilized to bring the food temperatures into the safe temperature zone within recommended times.
- (18) Single-use items such as metal cans, crimped-aluminum pans, plastic bags, and cartons, etc., are not to be reused after the original contents have been removed. These items must be discarded as trash.

b. Tempering and/or Thawing

- (1) Frozen items need to be tempered or thawed in a refrigerator at, or below, 5° C (41° F), and never tempered or thawed at room temperature. No food is to be refrozen after it has been tempered and thawed.
- (2) Alternate thawing methods may include completely submerging the product under running cold water at a temperature at, or below, 21°C (70° F) or below. The water must have sufficient velocity to agitate and float off loose particles into the overflow. The product needs to be thawed within 2 hours using this method. This method is not to be used for whole turkeys, large cuts of meat, or any other item that cannot be completely thawed within 2 hours.

c. Cook, Serve

- (1) Only the foods needed for immediate service are cooked at one time by relay cooking, or batch cooking in small quantities. All vegetables, cooked eggs, cereal, toast, and hot beverages are prepared using the relay cooking method. Grilled food items are prepared to provide an even flow of grilled items from tray assembly to cafeteria service.
- (2) Leftovers, those foods that have been heated to serve to patients or residents, but have not left the food service area, are to be kept to a minimum and may be used within 24 hours (except those mentioned in subparagraph 17c(2)(a)) if they have not been out of the safe temperature zone and properly chilled.
 - (a) Leftovers, such as diced or ground meat, fish and poultry, creamed food mixtures for croquettes; sandwich fillings; bacon and meat drippings; convenience entrees; and cream soups must not be used.
 - (b) Labels, with product name and expiration date, must be visibly placed on leftovers.
- (3) Only fresh-cooked meat and poultry are to be used for grinding or dicing to serve patients or residents requiring a modified texture diet. Meats and poultry must be thoroughly cooked and handled as little as possible.

(4) Potentially-hazardous foods requiring refrigeration after preparation must be rapidly cooled to an internal temperature of 21° C (70° F) within 2 hours. Within 6 hours total time the food needs to reach 5° C (41° F). Potentially-hazardous foods of large volume, or foods prepared in large quantities, need to be rapidly chilled in small, shallow pans so that a safe temperature zone is reached (see subpar. 16c).

d. **Cook, Chill, AFP**

(1) AFP is a system, in which food is prepared or cooked in advance, rapidly chilled immediately after preparation, held under tightly-controlled refrigeration until time of service, and rethermalized, either in bulk or on individual trays, for service. AFP is completed separately from meal service and needs to be scheduled to utilize staff, space, and equipment to best advantage.

(2) There are several types of AFP systems. Methods vary in how foods are chilled, packaged, and stored.

(3) In all types of AFP models, food remaining after rethermalization and service must not be used as ingredients in other food products.

e. **Blast Chilling, 5-Day Storage System**

NOTE: *Although the 2001 FDA Food Code states that food can be stored for up to 7 days, due to the highly-susceptible population served within VHA, food must not be kept for more than 5 days. This includes the day of preparation and the day of service.*

(1) In a cook-chill system using mechanical or “blast” chilling, foods are prepared 1 to 5 days in advance of service to the required degree of doneness, and then rapidly chilled using the blast chiller. Food must be cooled to:

(a) Below 21° degrees C (70° F) within 2 hours, or

(b) Between 21° C (70° F) and 5° C (41° F) or below within an additional 4 hours.

(2) Foods may be stored up to 5 days, including the day of preparation and the day of service, if food is maintained at 1-2° C (33-36° F). If existing refrigeration equipment is not capable of maintaining 33-36° F or less, food may be stored between 5° C (41° F) and 7° C (45° F) for a maximum of 4 days. However, the facility must make plans to upgrade or replace the refrigeration unit.

(3) It is essential to maintain and monitor production schedules. Planning for blast chilling requires an analysis of production schedules, pan capacity of blast chillers, and chilling times. Once food has finished preparation, it must go immediately to the blast chillers.

(4) Procedures for blast chilling state that:

- (a) Manufacturer's guidelines must be strictly followed at all times.
- (b) Food production must be scheduled in accordance with the blast chiller capacity.
- (c) Foods need to be placed into sanitary, moisture-proof containers.
- (d) Product depth per pan does not need to be more than 2 inches.

(5) Food temperatures need to be recorded before entering the blast chiller and again at the end of the cycle to ensure the product has reached the appropriate temperature. Core temperature of the pan (center of the pan, which is approximately 1 inch deep) needs to be the position monitored. Temperature must be monitored throughout the chilling process to allow for corrective actions to occur in a timely manner.

- (6) Cut large pieces of meats such as roasts, into maximum portions of 6-8 pounds or less.

(7) Pans need to be spaced to allow for adequate air circulation in the blast chiller. A minimum of 1 inch of free space above and below the pan or product surface is recommended, unless equipment requirements vary.

(8) Returned products from a cold trayline must not be held longer than 24 hours. Any pureed foods, ground meat, or any item containing milk or eggs need to be discarded after the intended meal service.

f. **Tumble Chilling - 45-Day Storage System**

(1) Manufacturers guidelines for all steps in the tumble chill process must be strictly followed at all times.

(2) Food is processed in specially-designed packaging that allows for extended shelf life of cooked foods. The products can be safely stored for up to 45 days, assuming that food handling techniques are carefully observed and enforced.

(3) Pumpable food products are cooked in a special kettle, pumped at 82° C (180° F) into aseptic casings, and then rapidly chilled in a rotational ice bath chiller. Solid meats are packaged in aseptic casings, cooked in a hot water bath "cook tank," and then chilled in a circulating ice water bath.

- (4) Cooked potentially hazardous foods must be cooled to:

- (1) Below 21° C (70° F) within 2 hours, and
- (2) Between 21° C (70° F) and 5° C (41° F) within an additional 2 hours

18. STORAGE OF PREPARED FOOD PRODUCTS (FOOD BANK)

- a. Food bank refrigerators must maintain an internal temperature of between -2.2° and 0° C (28° and 32° F) for tumble-chilled products and $1 - 2^{\circ}$ C ($33-36^{\circ}$ F) for blast chilled products.
- b. A clearly visible thermometer must be provided, and needs to be placed in the warmest part of the unit. Temperature logs must be maintained.
- c. Length of time for holding cooked and/or chilled food and consumption needs to be no more than 5 days for blast-chill systems, or 45 days for tumble chill systems (including the day of production to the day of service).
- d. All containers need to be clearly labeled with the product name and the expiration date.
- e. Food containers need to be stacked according to distribution points and production orders. Use FIFO principles.
- f. Never use a food bank for storing items other than food.
- g. Access to a food bank needs to be limited to ensure that the door is not opened too frequently. Open doors for the shortest possible time to avoid undue temperature fluctuations.

19. REHEATING (RE THERMALIZATION) OF FOOD

- a. Due to the variation among equipment used in the rethermalization process, the manufacturer's instructions must be carefully followed.
- b. Hot foods need to be reheated to an internal temperature of at least 74° C (165° F) for at least 15 seconds. Individually-portioned food (i.e., plated food from the trayline) must reach this temperature within 1 hour or it must be discarded. Food heated in bulk must reach 74° C (165° F) within 2 hours or be discarded.
- c. A monitoring system needs to be in place to check tray rethermalization equipment.
 - (1) This can be:
 - (a) A computerized monitoring system that alerts staff if a module is out of temperature, or
 - (b) A manual system where cart temperatures are checked during each rethermalization cycle period.
 - (2) If a module is found out of temperature range, the module needs to be taken out of service and repaired before using again.

(3) Monitoring must take place at all times the system is in use. This includes overnight if the carts are docked and held refrigerated.

(4) Preventive maintenance needs to be performed on rethermalization equipment (modules and carts) to ensure accuracy and appropriate temperatures.

d. Potentially hazardous food reheated in a microwave oven must be reheated so that all parts of the food reach a temperature of at least 74° C (165° F) and the food is rotated or stirred, covered, and allowed to stand covered for 2 minutes after reheating.

20. TRANSPORTATION OF PREPARED FOOD ITEMS WITHIN A MEDICAL CENTER

***NOTE:** This paragraph is intended for food transport within food trucks or carts in the medical center facility (i.e., delivery of trays to patient care areas or resident areas, or delivery of bulk food to a cafeteria setting). It is not intended for the transport of food off-site or long distances away from the facility. Food products are intended to be used for immediate service.*

a. Food trucks and/or carts designed specifically for food transportation must be used. They need to be:

(1) Capable of being tightly closed and must be designed to hold food at appropriate temperatures, regardless of delays.

(2) Sturdy and, when appropriate, sectioned so food items do not mix.

(3) Leak proof.

(4) Easy to clean and sanitize.

b. Cold bulk foods must remain at, or below, 5°C (41°F) throughout the transportation process. This requires short transportation time frames.

c. Hot bulk foods must remain at 57°C (141°F) throughout the transportation process. This requires short transportation time frames.

d. Cook, Serve assembled meal trays need to be delivered immediately upon leaving the tray line.

e. Cook, Chill ADS assembled meal trays need to be delivered immediately upon completion of the rethermalization cycle.

f. If motor vehicle operators are required for transportation (i.e., cart tugger), operators must have current training in safe operation of vehicles.

g. Transportation carts must be inspected and sanitized on a routine basis.

21. TRANSPORTATION OF BULK OR PLATED PRODUCTS OUTSIDE OF A MEDICAL CENTER

NOTE: This paragraph is intended for food transport outside of the medical center facility (i.e., delivery of pre-made meal trays or delivery of bulk food to a remote setting). It is not intended for transport of food on-site, which usually requires a motorized vehicle as a means of delivery.

- a. The food transportation process must be included in the Nutrition and Food Services HACCP plan.
- b. Food containers designed specifically for food transportation must be used. They need to be:
 - (1) Capable of being tightly closed and designed to hold food at appropriate temperatures regardless of delays;
 - (2) Sturdy and, when appropriate, sectioned so food items do not mix;
 - (3) Leak proof; and
 - (4) Easy to clean and sanitize.
- c. Food sent in original case packaging (i.e., crates of milk or cases of canned goods) may be placed on a pallet or flatbed hand truck and contained with shrink wrap for added protection.
- d. Transport vehicles need to have the ability to tightly secure food containers to prevent them from shifting during delivery.
- e. All food must be tightly and securely covered. Food covers need to prevent and protect food from contamination during all stages of the transportation process. Covers need to be such that they do not become torn or ripped at any time. All food must be properly labeled with product name and expiration date.
- f. Foods must remain at, or below, 5°C (41°F), or at, or above, 57°C (135°F), throughout the transportation process.
 - (1) For cold foods, this requires refrigerating transportation vehicles or containers that allow all foods to remain at, or below, 5°C (41°F) at all times.
 - (2) For hot foods, this requires the use of insulated containers or heat generating cabinets that maintain temperature of at least 57°C (135°F) during the entire transportation process. Transportation of hot food needs to take no more than 1 hour to prevent deterioration in quality of food.

g Chemicals must not be packed with food items or with paper goods used for food packaging. They must be kept separate.

h. **Trucks**

(1) Truck Inspection procedures need to be established. These inspections need to be conducted and documented on a daily basis, and must include a mechanical inspection for safety and an inspection for sanitation.

(2) Motor vehicle operators must have a current and appropriate drivers' license, (Class B license where required), and must be properly trained.

(3) If the truck is used to transport items other than food, it must be sanitized before being re-loaded with food items.

(4) Trucks need to be locked and not left unattended.

i. When food is received, temperatures are to be taken and logged. Food needs to be inspected for safety and quality. Foods that do not meet standards must not be accepted and need to be discarded.

j. Control systems must be in place to ensure the integrity and safety of the food. Emergency plans need to be established if the system fails at any point of this process.

k. If an outside contractor is used for transportation, the preceding standards apply, and there must be a system in place to ensure the contractor is abiding by food safety standards.

22. TRAY ASSEMBLY AND MEAL SERVICE

a. **General Guidelines**

(1) Proper employee sanitation and personal hygiene must be followed at all times during tray assembly and service in accordance with paragraph 23 "Sanitation".

(2) Dining room tray service is recommended for Nursing Home Care Unit (NHCU), psychiatry, spinal cord injury, rehabilitation, and domiciliary patients to meet treatment needs. Other ambulant patients are served in dining rooms or provided tray service as determined by the medical center. ***NOTE: Due to the highly-susceptible nature of the medical center population, it is recommended that family style service or self-service areas be used with caution. This is to decrease the risk of contamination from multiple patients handling serving utensils.***

(3) Heated unitized pellet bases, plate covers, or other industry tested and approved heat retention and/or rethermalization systems are used for tray service to maintain food at acceptable temperatures. Monitoring of food temperatures needs to be an ongoing process to ensure that hot and cold food temperatures are being properly maintained during meal service. Food must be

transported only in enclosed carts. Appropriate precautions must be taken to preserve the quality and safety of all food items on the tray; this may require covering individual items.

(4) Quality indicators and monitors for tray assembly and food service need to be included in the Nutrition and Food Services Quality Improvement Program. These indicators and/or monitors need to be based on specific food temperatures and/or times and tray delivery standards established by the local medical center (i.e., random sampling of patients' meals, point of service food temperatures, tray accuracy, trays served per minute, etc.).

(5) When Nutrition and Food Services issues food to patients and residents for off-site activities, procedures must be established to maintain food safety and sanitation in accordance with HACCP guidelines.

(6) When refrigerated bulk milk and juice dispensers are used:

(a) The dispenser cabinet must be provided with adequate mechanical refrigeration and suitable automatic controls capable of maintaining the temperature of the cabinet at, or below, 5 °C (41°F). It needs to be cleaned every day and kept under constant refrigeration. Safeguards need to be in place to prevent contamination. Appropriate food-grade tubing needs to be used and secured when not in use.

(b) Whenever patients and residents are permitted to draw hot beverages, the urn or dispenser must be equipped with a self-closing spigot in good working order. If a touch pad dispenser system is utilized, Nutrition and Food Services staff must ensure that the appropriate fill levels are programmed to prevent overflow.

(c) All bulk beverage dispensers must be disassembled and cleaned daily. Any beverage not held under refrigeration (i.e., tea) needs to be discarded at the end of the service period.

b. Tray Assembly Guidelines

(1) Tray assembly needs to take place in a central location, if possible.

(2) Tray tickets or diet cards need to be utilized to ensure appropriate food items are served for each diet, according to the facility diet manual.

(3) Proper portioning and serving utensils must be used.

(4) All food items on the trayline and on the tray need to be protected from contamination, which may include covering individual items to preserve sanitation standards.

c. **Hot Food Tray Assembly (Trayline).** Food must be maintained at, or above, 57° C (135° F) in order to be served. To prevent time and/or temperature abuse and to preserve quality, food must not be held greater than 2 hours on a hot trayline. Any hot food leftover at the end of the trayline needs to be discarded if it cannot be used for immediate service (i.e., in a cafeteria). Trays need to be delivered immediately upon completion of assembly.

d. **Cold Food Tray Assembly (Trayline).** Food must be maintained at, or below, 5°C (41°F). If food is maintained at proper temperature during trayline, leftover food may be used for subsequent meal service according to guidelines in paragraph 17.

e. **Meal Service Guidelines**

(1) Nutrition and Food Services personnel must correctly deliver trays to the patient's and resident's bedside in appropriate areas as determined by the medical center. In some areas trays may be delivered to the ward for other staff members to pass to patients and residents (i.e., psychiatry, nursing home, etc.). Nutrition and Food Services may also deliver trays to the patients' and residents' dining rooms. Tray set-up and patient assistance need to be provided by nursing service or trained facility staff. This may be food service workers if they have received proper training in patient and resident tray set-up and feeding techniques. The medical center infection control policy must be followed by all staff when delivering trays and nourishments to patients and residents.

(2) Nutrition and Food Service coordinates the time and sequence of tray delivery with Nursing Service and any other medical center staff receiving meals.

(3) Patients and residents are allowed adequate eating time from tray delivery at bedside or dining room, before trays are retrieved by facility staff. This needs to be, at the very minimum, no less than 30 minutes. Additional time needs to be allowed if the patient or resident requires it. Dirty trays need to be retrieved from patient or resident care service areas in a timely manner. For trays that cannot be picked up in a timely manner, an enclosed cart must be provided in the area for nursing to leave the soiled trays. Staff can also place the dirty tray in a bag (not a hazardous material red bag), and securely tie it, until it can be retrieved, if a cart is not available.

f. **Bedside Tray Service.** Patient trays are identified according to VHA and facility privacy policy.

(1) Tray passers (food service workers, nursing, etc.) must be trained and instructed to follow the facility's infection control policy (see par. 24).

(2) Employees must not touch patient's or resident's belongings on the bedside table. Touching these items can lead to cross contamination and the spread of infectious disease.

(3) Tray service needs to begin immediately after food is plated on a hot trayline or immediately after completion of a rethermalization cycle for a cold trayline.

(4) Tray transport must be accomplished only in enclosed carts (see par. 20).

g. **Dining Room Tray Service**

(1) If Nutrition and Food Services delivers patient or resident trays to a dining room, facility guidelines must be followed with respect to tray passing and/or service (i.e., who sets up trays, assists patients and residents, etc.).

(2) If Nutrition and Food Services' staff are responsible for cleaning tables and/or removing trays, this needs to be done in a timely manner at the conclusion of meal time.

(3) Single serve items are recommended to decrease the risk of contamination. If bulk containers (i.e., bottles of ketchup, salt and pepper on tables) are used, food safety and sanitation guidelines must be followed.

(4) Tray service needs to begin immediately after food is plated on a hot trayline or immediately after completion of a rethermalization cycle for a cold trayline.

(5) Tray and/or food transport needs to be accomplished only in enclosed carts.

h. **Cafeteria (Bulk Food) Service**

(1) Food prepared for cafeteria service needs to be monitored for temperature and time adherence. Foods need to be cooked to the appropriate internal temperature as specified in paragraph 14. Hot food needs to be maintained at, or above, 57° C (135° F). Cold food needs to be maintained at, or below, 5°C (41° F). If food is found to be out of the temperature range for greater than 60 minutes, it must be discarded.

(2) Monitors must be in place to ensure proper sanitation in the serving area.

(3) Single serve items are recommended to decrease the risk of contamination. If bulk containers (i.e., bottles of ketchup, salt and pepper on tables) are used, food safety and sanitation guidelines must be followed.

(4) If bulk food is being transported to a cafeteria, not adjacent to the preparation area, it must be done only in enclosed carts to prevent contamination from outside sources. If bulk food is transported to a cafeteria adjacent to the preparation area, the food must be covered during transport; it does not necessarily need to be in an enclosed cart.

(5) Hot food items need to be discarded after cafeteria service is complete. Cold food items, if held at appropriate temperatures, can be saved for later use within the expiration date.

(6) Due to the nature of the medical center's highly-susceptible population, self-service and/or family-style service areas are not to be utilized including salad bars where multiple people are handling the serving utensils. **NOTE:** *This is to decrease the risk of cross contamination between patients.*

23. SANITATION

a. General Guidelines

(1) All Nutrition and Food Services areas are maintained in a clean, safe, and orderly working environment. A comprehensive sanitation program must be established that assures a procedure for cleaning and sanitizing equipment and work areas. The food service area must be cleaned as often as necessary to maintain cleanliness. Cleaning must be done during periods when the least amount of food is exposed. This requirement does not apply to cleaning that is necessary due to a spill or other accident. Working surfaces, utensils, equipment, and other food-contact surfaces are thoroughly cleaned and sanitized after each period of use or at four-hour intervals, if the utensil or equipment is in constant use. The food contact surfaces of cooking equipment and pans must be kept free of encrusted grease deposits and other soil accumulations.

(2) Traffic of unauthorized individuals through the food service and preparation areas must be controlled at all times.

(3) Live animals are not allowed in the food preparation and service area(s). **NOTE:** *Exceptions may be allowed if the contamination of food, clean equipment, utensils, linens, unwrapped single-service and single-use articles can be avoided. For example: fish in aquariums, patrol dogs accompanying police, service animals for disabled persons, pets in the common dining areas of institutional care facilities.*

(4) Nutrition and Food Services personnel are responsible for their own personal hygiene. Personal hygiene includes:

(a) Hand Washing. Following the proper steps and using the sinks designated for hand washing immediately before engaging in food preparation; after touching bare human body parts; after using the toilet; after coughing and/or sneezing; after using a handkerchief and/or tissue; using tobacco; eating; drinking; after handling soiled equipment or utensils; during food preparation when switching between raw food handling and ready-to-eat food handling; and immediately before putting on and after removing disposable gloves.

(b) Fingernails. Nails must be kept clean and trimmed at all times. Food service workers and/or cooks may not wear fingernail polish or artificial nails when working with exposed food.

(c) Jewelry. Jewelry can harbor microorganisms and may pose a safety hazard around equipment. Rings, (except for plain bands), bracelets (including medical information jewelry), watches, earrings, necklaces, and facial jewelry (such as nose rings, tongue piercing, etc.) must be removed.

(d) Hair Restraints. Hats, hair coverings or nets, beard restraints, and clothing that covers body hair are to be worn in food production and food service areas.

(e) Uniforms. Uniforms must be clean and changed daily. When working in refrigerated units, only jackets or coats issued as part of the uniform may be worn.

(f) Grooming. Daily bathing is required, with the use of deodorant. Perfume and cologne must not be used.

(g) Aprons. A clean apron needs to be worn daily. Aprons need to be removed when leaving food preparation areas, and properly stored prior to using the restroom and/or taking out the garbage.

(5) A procedure must be established to ensure that employees are not allowed to work if they have open skin lesions, have been diagnosed with a communicable disease, or *Salmonella*, *shigella*, *E. coli*, *hepatitis A*, or have symptoms of an intestinal illness. Employees excluded from work for these reasons can only be reinstated with proper medical documentation that states the employee is free of symptoms, and cleared for food service work.

(6) Employees must not chew gum while preparing or serving food, while in the food preparation areas, or in areas used for equipment and utensil washing. **NOTE:** *Employees must only eat, drink, chew gum, or use tobacco products in designated areas. Beverages in covered containers with a straw are allowed by some local regulatory agencies.*

(7) If foods must be tasted during preparation, they must be placed in a separate dish and tasted with a clean utensil. The dish and utensil need to then be removed from the food preparation area for cleaning and sanitizing.

(8) Employees must never spit in the food service establishment.

(9) If used, single-use gloves must be used for only one task such as working with ready-to-eat-food or with raw animal food, and then discarded. Gloves must be discarded when damaged or soiled, or when interruptions occur in the food operation. **NOTE:** *Latex rubber gloves do not need to be used.*

(a) Gloves may be worn during tray retrieval from the patient or resident care area(s).

(b) Gloves must be discarded, and hands washed immediately, between each patient or resident care area, to reduce the risk of cross contamination.

(c) Gloves must not be worn in elevators and common hallways.

(10) Exhaust air ducts must be kept clean, and filters need to be changed so they are not a source of contamination for dust, dirt, and other foreign materials.

(11) Cleaning cloths used for wiping food spills must be used for no other purpose. Dry or wet cloths used with raw animal foods must be kept separate from cloths used for other purposes. Cloths must be free of food debris and visible soil, and laundered daily.

(12) Disposable articles must be stored in closed cartons or containers, which protect them from contamination.

(13) Single service supplements and nourishments provided on patient or resident trays, or retrieved from patient or resident rooms and/or bedsides, need to be discarded if returned to the service, even if unopened.

(14) Foods from patient or resident trays may only be retrieved for re-use if the tray has not been served to the patient or resident and has remained under Nutrition and Food Services control, the food has been maintained within acceptable temperature according to HACCP guidelines, and the food is totally wrapped and in its original packaging.

b. Sanitation in Production Areas

(1) Precautions must be taken to avoid any possible cross-contamination of food by separating raw animal foods during storage, thawing, preparation, holding, and display from other raw ready-to-eat foods such as vegetables, fish, meat, poultry, and from cooked ready-to-eat foods.

(2) All equipment must be National Sanitation Foundation (NSF) approved.

(3) Coordination is required between Nutrition and Food Services and Engineering Service for the inspection of all hoods, grease traps, and drains to ensure that they are safe and operating properly. Cleaning needs to be coordinated with assigned services.

c. Sanitation During Ware Washing

(1) Local management is responsible for the examination of dishes (chipped or worn dishware needs to be discarded), equipment, and working surfaces. When new dish and utensil sanitizing, handling, and storage procedures are established, or new detergents and cleaning equipment used, examinations must be employed to determine the effectiveness of procedures, products, and/or equipment.

(2) All ware washing machines must be equipped with easily-readable thermometers in each tank of the machine. **NOTE:** *Low temperature ware washing machines equipped with chemical sanitizers are not recommended for use. Such ware washing machines do not need to be included as a future replacement item.*

(a) The Celsius needs to be accurate within $\pm 1.7^{\circ}$ when calibrated, or if a Fahrenheit thermometer, it needs to be accurate within $\pm 3^{\circ}$.

(b) In addition, a thermometer of equal accuracy must be provided, which indicates the temperatures of the final rinse water as it enters the manifold.

(3) The wash water temperature for a single tank ware washer must be at, or above, 57°C (135°F), and final rinse water is at, or above, 82°C (180°F) at the entrance to the manifold.

(4) The wash water temperature for a double tank ware washer must be at, or above, 66° C (150° F), and the final rinse water must be at, or above, 82° C (180° F) at the entrance to the manifold.

(5) The applicable temperatures are recorded, according to local policy, by meal and are checked by Food Service Management. These temperatures for multiple tank ware washers are:

- (a) Pre-wash, from 37.8° C – 60° C (100 – 140° F),
- (b) Wash from 66 – 71° C (150 – 160° F),
- (c) Pumped Rinse, from 71 – 82° C (160 – 180° F), and
- (d) Final Rinse, from 82 – 90.5° C (180 – 195° F)

(6) Conveyors in dish washing machines must be accurately timed to ensure proper exposure times in wash and rinse cycle per manufacturers' recommendations.

(7) Procedures for handling and storage of clean dishes and utensils must be followed to prevent re-contamination.

(8) The ware washing area must be set up to provide a dirty and clean area to prevent cross contamination of dishes, utensils, etc., during the ware-washing process.

d. **Hand Washing Sinks and Eye Wash Stations.** Hand washing sinks and eye wash stations need to be easily accessible to all areas of the department. There needs to be documentation of inspections and testing according to facility policy. Hand washing sinks and eye wash stations must not be used for food and/or beverage preparation.

e. **Waste Management**

(1) Storage areas for refuse, recyclables, and returnables must be separate from food preparation and service areas, and maintained in good repair. Storage areas must also be clean and free of unnecessary items.

(2) Garbage cans or receptacles need to be durable, leak-proof, nonabsorbent, and insect and rodent resistant. Garbage cans need to be kept covered with tight-fitting lids, and plastic bags may be used to line the receptacles. ***NOTE: Foot-pedal operated containers are recommended to prevent touching the lid while discarding trash.***

(3) Soiled receptacles and waste handling units for refuse, recyclables, and returnables must be cleaned at a frequency necessary to prevent them from developing a buildup of soil or becoming attractants for insects and rodents.

(4) Refuse, recyclables, and returnables must be removed from the premises at a frequency that minimizes the development of objectionable odors and other conditions which attract or harbor insects or rodents.

f. **Pest Control**

(1) The presence of insects, rodents, and other pests needs to be controlled and minimized by routinely inspecting incoming shipments of food and supplies, routine departmental inspections, and eliminating harborage conditions. **NOTE:** *Shelf and drawer liners and paper displayed on walls serves as harborage for pests and is not recommended.*

(2) Packing cases within the kitchen area need to be kept to a minimum. Foods need to be unpacked to the extent possible prior to shelving.

(3) Additional measures include:

(a) Sealing all cracks in floors and walls to prevent rodents from entering,

(b) Repairing gaps and cracks in doorframes and thresholds, and

(c) Inspecting behind refrigerators, freezer, stoves, sinks, and floor drains for signs of pests.

(4) Outer openings are to be protected from the entry of insects and rodents, for instance:

(a) Windows must be closed and tight-fitting; if needed for ventilation, the opening needs to be covered with 16 meshes per 1 inch screening.

(b) Doors must be solid, tight fitting, and self-closing. **NOTE:** *Exit doors need not be self-closing if they are designated for use only during an emergency.*

(c) If doors are opened to an outside area, air curtains or other effective means of controlling insects need to be used.

(d) Elevators must have solid, tight-fitting doors when closed; if opened to an outside area, air curtains, or another effective means of controlling insects, need to be used.

24. TRAINING

a. Nutrition and Food Services must conduct on-going training programs, formal orientations, continuous on-the-job training, and group classes designed to maintain and improve knowledge and skills of employees, volunteers, Incentive Therapy (IT), and other work therapy patients.

b. Training subjects covered include all of the topics required by JCAHO, as well as those required by VHA, and local medical centers.

c. Employees must be trained in food safety as it relates to their assigned duties. Food handlers require training in:

(1) **Safety.** The importance of food safety.

(2) **Personal Hygiene.** Health, personal cleanliness, proper work attire, and hygienic practices, including hand washing.

(3) **Food Preparation.** Time and temperature control, the prevention of cross-contamination, and safe practices for preparing, cooking, holding, serving, cooling, and reheating food.

(4) **Cleaning and Sanitizing.** Procedures for cleaning and sanitizing food-contact surfaces.

(5) **Chemicals.** Procedures for safely handling the chemicals used in the Nutrition & Food-Service.

(6) **Pests.** Pest identification and preventive measures.

d. The learning objectives for staff are based on the competencies required to maintain and improve job performance, and address the knowledge, skills, and abilities appropriate to an individual's job responsibilities.

e. The effectiveness of orientation, training, and education provided is evaluated through quality assessment and improvement techniques.

25. EMERGENCY PREPAREDNESS

The Chief, Nutrition and Food Services is responsible for establishing and publishing a plan for emergency feeding to provide meal service for patients, residents, casualties, and authorized staff during internal and/or external disasters. The activation of the plan needs to be in coordination with the medical center disaster plan. The key elements of the plan to be addressed are the logistics of the food and water supply, loss of utilities, loss of communication, waste management, employee support, and security.

a. Food and Supplies

(1) Food items for an emergency food inventory need to be canned, shelf-stable, and ready-to-use, requiring minimal processing, and little or no additional water. Facilities that utilize the cook chill system of food preparation must be able to pull prepared food products from the food bank. The food bank refrigerator must be linked to the emergency power system. Food stores must be adequate to serve a pre-determined number of people for a length of time set by the medical center policy. Facilities that are receiver sites must maintain an emergency food inventory, in case of a disruption in the normal delivery from the production center.

(2) Additional supplies to have on hand include: flashlights, batteries, manual can openers, heavy-duty trash bags, and a portable radio.

(3) An inventory of disposable service items required for meal service that need to be kept in stock are: plates, cups, bowls, and utensils.

(4) Chemicals needed for chemical sanitizing of dishware, cooking utensils, and waterless hand washing solution also need to be kept in stock.

(5) **Emergency Feeding Menu.** An emergency feeding menu is dependent on availability of utilities, food inventory, and number of food service workers.

(a) A menu that requires a minimal number of staff for preparation and assembly is recommended when planning for a worse case scenario.

(b) The emergency menu needs to be planned with food items that do not require cooking or heating before service.

(c) The food inventory for the emergency menu needs to be stored apart from routine subsistence. The items need to be labeled, dated, and rotated according to the shelf life of the product. The location needs to be dry and secure from theft or tampering. Air tight storage containers need to be used to protect the food from insects and pests. An off-site or remote storage location needs to be given consideration in the event that the Nutrition and Food Services warehouse is damaged or destroyed.

(6) **Prime Vendor**

(a) An automatic emergency delivery from a prime vendor may be pre-arranged in the event that normal lines of communication are disrupted. These deliveries are used primarily for weather disasters where future deliveries may be delayed.

(b) A communication tree and emergency food plan needs to be shared with the Prime Vendor. Both parties need to have multiple contacts in the event an emergency occurs. This communication tool and plan needs to be reviewed annually.

b. **Water Supply**

(1) The standard daily water ingestion quantities used by many federal agencies, including the Environmental Protection Agency (EPA), is 3 liters for a 70 kilogram adult and 1 liter for a 10 kilogram child per day. In addition, the minimal amount of water required for food preparation and sanitation needs to be determined.

(2) To conserve water, recipes that require little or no water need to be used; disposable utensils and plates also need to be used. Coordination with Engineering Service needs to take place so that there is a supply of water in an emergency.

(3) If the medical center does not have its own on-site source of water, a pre-arranged contract with an outside hauler, such as a dairy, would be the emergency source of water.

(4) A cooperative effort is needed to determine which service orders and maintains an inventory of bottled water. Bottled water for drinking must be in a sealed, plastic container with a shelf life of 1 year, before it must be rotated.

c. **Utilities**

(1) In case of an electrical failure, emergency power outlets need to be available in the service for key electrical systems and equipment.

(a) A plan needs to be made with Engineering Service for emergency power sources for essential kitchen equipment, i.e., walk-in refrigerators, ovens, food banks, dishwashers, etc.

(b) An emergency lighting system needs to be available as a back-up to normal lighting in the areas where food preparation, tray assembly or service takes place, and in routes of egress. The alternative would be to have a source for portable lighting that may be brought into the work areas.

(2) In the event of a steam failure, an alternate method must be required for sanitizing dishware and utensils, and for steam-operated equipment, for the length of time the steam is shut down. **NOTE:** *Chemicals for cleaning and sanitizing may be considered as an option in place of the dish machine.*

(3) Flashlights and batteries need to be available for use in areas such as storerooms, locker rooms, and bathrooms that are not on emergency power.

(4) Routes of egress need to be free and clear of obstacles that staff could trip over in dim lighting.

d. **Transport**

(1) The interruption of utilities (electricity, lighting) may impact the vertical delivery of meals and supplies to the patient units. A medical center plan for the disruption of utilities needs to include an action plan for Nutrition and Food Services meal delivery.

(2) Such a plan may require a change in the normal schedule for meal delivery, and/or utilizing staff from the labor pool to assist in delivery.

(3) When elevators that are used for the transport of patient and resident meals are out of service, manpower from a labor pool must be used to form a human chain to transport trays on the stairway.

e. **Communication**

(1) In the event of a disruption in telephone service, patient or resident information can be obtained from the Veterans Health Information Systems and Technology Architecture (VistA) computer system. Staff with cell phones need to be identified if cellular phone service is functioning.

(2) If the computer system is disrupted, all patient and resident care units need to be contacted prior to each meal to obtain critical, operational information required to feed the patients and residents. This could be accomplished by using food service employees or a runner from the labor pool. Referral to the most recently printed ward diet order list would facilitate validation of most information. All orders and changes received from nursing service must be in writing.

f. **Waste Management.** An interruption of utilities (water, electricity) may have an impact on the method used for waste removal. Disposals and pulpers may not be operational. Food waste and disposables must be manually collected in heavy-duty trash bags. Additional barrels and dumpsters need to be made available.

(1) More scheduled trash collections need to be added.

(2) In the event that the normal trash collection is unavailable, an alternate on-site location for the storage of bagged trash needs to be planned.

g. **Employee Support.** During a disaster, employees need to respond according to the local medical center Nutrition and Food Service disaster plan.

(1) Employees must wear their identification badges at all times.

(2) The supervisor on duty needs to identify the employees available for assignment to the medical center manpower pool, as well as for determining the needs of the service.

(3) The number of staff available impacts the type of food preparation and the type of meal service provided during a disaster.

(4) When an emergency situation exists that warrants the return of staff to the medical center, a systematic method for notifying staff needs to be activated through a telephone cascade calling system.

(a) An up-to-date master cascade calling list is maintained in Nutrition and Food Service. Each person on the list needs to be trained in the use of the telephone cascade calling system.

(b) The system is to be tested on a periodic basis, according to facility policy.

(5) When the Medical Center Director issues an order for the emergency feeding of staff, the type of menu to be served needs to be considered, as well as the location for meal service.

h. **Security.** Procedures need to be established to identify preventive measures minimizing the risk that food could be subject to, such as, but not limited to tampering and criminal or terrorist actions.

(1) The components of the operations that need to be addressed are: physical, facility security, employees, computer systems, raw materials and packaging, operations, and finished products.

(2) Strategies and procedures are to be developed in response to a breach in the security of the operation.

(3) The plan of action needs to be tested on a regular basis to ensure all employees are trained for their role in the plan.

26. REFERENCES

- a. Hospital Accreditation Standards, JCAHO.
- b. 2005 FDA Food Code. Department of Health and Human Services (HHS).
- c. ServSafe Coursebook, 2nd Edition, National Restaurant Association Educational Foundation, 2002.
- d. Investigation of a Complaint of Suspected Food Borne Illness or Contamination Template, <http://vaww.va.gov/nfs>.
- e. Receipt, Storage, and Distribution of Food Items Obtained from Sources Other Than Nutrition and Food Service Template, <http://vaww.va.gov/nfs>.
- f. HACCP Program for External Feedings Template <http://vaww.va.gov/nfs> .
- g. Food Security Preventive Measures Template, <http://vaww.va.gov/nfs> .
- h. The Complete HACCP Manual for Institutional Food Service Operations, 2nd Edition.
- i. NFPA Manual, Section 13.