



Army Center of Excellence, Subsistence Food Safety Newsletter

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ACES food safety quarterly newsletter for foodservice personnel. Point of contact for future topics and suggestions is the Senior Food Safety Officer, ACES at DSN 687-4286 or Comm. (804) 734-4286.



Basic Food Safety

Keeping foods safe from harmful bacteria is as easy as following 4 simple steps: (1) clean, (2) separate, (3) cook and (4) chill. Let's look at key points in each step.

STEP 1: Clean

- Employee hands and contact surfaces should be washed often
- Discard cutting boards that are excessively worn. Bacteria can harbor in the crevices and grooves of old boards that have become hard to clean.
- Wash and sanitize fresh fruits and vegetables (FF & V) prior to use. Cut away any damaged and bruised areas. Rinse FF & V thoroughly with potable water. IAW TB MED 530, the core/heart of leafy items will be removed. Completely immerse FF & V for 30 seconds in a 100-ppm (1/2 tbl/gal) chlorine solution. An exception to this is ready-to-eat (RTE) salads and any fruit intended to be peeled or washed by diners.

(See TB MED 530 Sect III for emergency feeding situations in areas where "night soil" is utilized).

Did you know? -20% of consumers do not wash hands & kitchen surfaces prior to preparing foods!
(FDA/USDA Consumer Survey, 1998)

STEP 2: Cook

- Foods are considered properly cooked when they are heated for a long enough time at a high enough temperature to kill harmful bacteria that can cause food borne illness. See TB MED 530, Sect. IV for time/temperature requirements for foods of animal origin.
- When cooking products use a clean food probe thermometer (baby dial) that is calibrated within +/- 2° F.
- When using a microwave oven, ensure there are no cold spots in the food.
- Once cooked, the holding temperature of foods must be 140° F or more to prevent bacterial growth.

Did you know? – Only 2% of consumers regularly use a food thermometer when cooking ground meat!
(Food Marketing Institute, 1999)

STEP 3: Separate

- Cross-contamination is a means by which bacteria spreads from one food product to another or from an employee to a food product.
- Separate raw foods from cooked or RTE food at all times
- Store raw foods on bottom shelves in refrigeration so that raw product juices do not drip onto other products.
- Use separate equipment and utensils for raw and cooked/RTE foods.
- Foodservice employees must wash hands when moving from one food product to another (especially from raw to cook/RTE).
- Foodservice employees **may not** contact exposed RTE foods with bare hands.

(See TB MED 530, section III on the prevention of cross contamination).

STEP 4: Chill

Cold temperatures will keep most harmful bacteria from multiplying. The following procedures will help to ensure the safe chilling and thawing of foods.

- Cooked potentially hazardous foods (PHFs) must be cooled from 140°F to 70°F within 2 hours, and then further reduced from 70° to 40°F within 4 hours.
- Quick chill of cooked foods is achieved by:
 - Placing product in shallow pans
 - Dividing food into smaller portions
 - Placing container of food into an ice bath and stirring continuously

(See TB MED 530, Section V for additional cooling methods)

- Maintain proper airflow in refrigeration units. Over packing can inhibit air circulation.
- Potentially hazardous foods must only be thawed using one of the following methods:
 - In a refrigeration unit that maintains food at 40°F or below.
 - As part of the cooking process (specific to frozen foods)
 - Microwave then **immediately** cook
 - Completely submerged in **running** water that is 70°F or below.

Did you know? – 23% of consumer's refrigerators are not cold enough!
(Audits International, 1998)

ARNG/USAR Point of Concern

Commanders who do not have foodservice assets (kitchen, foodservice personnel and equipment) and are using commercially catered hot meals for armory and reserve centers must ensure that hot foods are received and maintained at the proper holding temperature, 140°F, until the last soldier is served. If the hot catered meals are not maintained at that holding temperature, it is to be reheated to at least 165°F (internal temp.) for 15 sec. or discarded. All refrigerated potentially hazardous foods (PHFs) are to be maintained at a temperature of 40°F (internal temp.) or below.