

# Safe Food Handling Practices

**At each step in the flow of food through a food service establishment there are general food safety procedures that should be followed to help reduce the risk of contamination and mishandling and could consequently lead to food-borne illness outbreaks. The following are the basic procedures that help keep all food safe.**

## Purchasing and Receiving

All food served in a food service establishment must come from an approved source. Food service establishments should work with their suppliers to ensure the foods they are using meet the food safety standards.

Temperature and time are the two most important factors to control. Foods need to be received and stored as soon as possible. The staff of the food service establishment should be checking for temperatures and conditions of incoming foods.

All refrigerated foods should be put away quickly to prevent time and temperature abuse. Frozen foods should not have large ice crystals, be discolored or dried-out. Canned goods should have labels, no swelling and flawed seams, rust or dents. Never accept home-canned foods because of the risk of botulism.

## Dry Storage of Goods

All canned foods and dry ingredients are stored in a designated area. Foods should not be stored in areas such as restrooms, furnace rooms, stairwells or hallways. Foods should be stored off the floor and in closed containers.

Storage areas should be well ventilated and pest free. Dry storage areas can become a food source for rodents and insects. Keeping containers closed, in a sound condition and off the floor help to keep the storage area pest free. Stock rotation is a good management practice.

Foods and chemicals need to be store separately. Chemicals should be stored below and away from foods to prevent chemical contamination.

## Cold holding of food

Cold holding is storing food under refrigeration at 41° F or below. Refrigeration prevents food from becoming a hazard by slowing the growth of most microbes. Some organisms like listeria monocytogenes is significantly slowed but not stopped by refrigeration.

## Walk-in refrigerator temperature

The walk-in refrigerator is the major cold storage area in a food service establishment. The temperature of a walk-in refrigerator must be sufficient to adequately hold the food temperature at 41° F or below. The temperature of a walk-in refrigerator is usually colder than 41° F to compensate the opening and closing of the doors and demands of adding additional foods for storage and cooling.

Foods need to be stored to prevent contamination. All cooked foods and foods that will receive no further cooking should be stored above other foods. Foods Need to be stored to allow enough space for air to circulate around them.

## Thawing Foods

Thawing foods may take several hours or days depending on the size of the food item being thawed. Thawing must be done so that the risk of cross-contamination is reduced, and the time that potentially hazardous food is in the temperature danger zone (41° F – 140° F) is kept to minimum.

To thaw food safely:

- Thaw under refrigeration (41° F or below)
- Under cold running potable water (safe to drink) of 70° F or less as part of the cooking process.
- In a microwave then transferred to conventional cooking equipment with no interruption in the process.

## Cooking Temperatures

Cooking is the thermal heating of foods at sufficient temperature over time to kill microorganisms in the food.

The following are the requirements for the different foods:

- Beef, fish, seafood, eggs – 145° F
- Rare roast Beef – 130° F
- Pork – 145° F
- Poultry, food containing poultry, stuffed meats or stuffing containing meat, casseroles, containing potentially hazardous foods – 165° F
- Ground or fabricated meat – 155° F

Cooking requirements are based on the biology of pathogens. Different species of microorganisms have different susceptibilities to heat.

To effectively eliminate pathogens, there are a number of factors to consider: the level of pathogens in the raw product and the initial temperature of the food and the bulk of the food. Another factor to consider, to kill the pathogenic organisms in food, cooking must heat all parts of the food to the required temperatures.

## Reheating Foods

Reheating is the thermal process to heat foods that have been previously cooked and cooled in a food service establishment. Proper reheating can eliminate a major portion of pathogens. Proper reheating is heating a food to 165° F within two hours.

The more a food is processed, the greater the risks. When a food is held, cooled and reheated, there is an increased risk from contamination caused by personnel, equipment, procedures and other factors. When food is cooked and cool the product goes through the danger zone (optimal temperature range for microorganisms to grow) several times which also increases risks.

## Hot Holding Foods

Once a food is heated or cooked, the food must be maintained at a temperature to limit the growth of bacteria. The correct hot holding temperature is 140° F.

The potential for growth of pathogenic bacteria increases once a food is reheated that the potential in raw foods. The spoilage organisms that may be present in raw foods inhibit the growth of pathogenic organisms by competition. Once a food is cooked these spoilage organisms are reduced.

## Cooling Foods

Cooling is a process of removing heat from food quickly enough to prevent microbial growth. One method is done by placing foods in shallow containers no deeper than 2 inches and leaving them uncovered until cold, 41° F or below.

When potentially hazardous food is cooled for an extended period, the food is subject to the growth of a variety of pathogenic microorganisms. Bacteria grow ideally between 70° - 120° F (the human body temperature falls in this range). The longer the time the food is allowed to be held in this range, the greater the risk of microbial growth. Excessive time for cooling potentially hazardous food has consistently been identified as one of the leading contributing factors to food borne illness.

## Cross-contamination

Bacteria (pathogens) can be transferred to food from utensils, surfaces (cutting boards), food workers hands, raw meats, poultry, fish and seafood.

Contamination is the presence of disease-causing microorganisms or harmful substances in food. Food can become contaminated at any time and can be contaminated by other foods. To help prevent cross-contamination, raw meats, fish, poultry must be kept away from cooked and ready-to-eat foods (i.e. separate cutting boards, separation of duties, preparing vegetables before preparing meats).

Employees need to minimize bare hand contact with cooked and ready-to-eat foods. Equipment, utensils, and food contact surfaces must be washed, rinsed and sanitized.

## **Room Temperature Storage**

Temperature is one of the prime factors that control the growth of bacteria in food. Many types of pathogens and spoilage bacteria are prevented from multiplying to significant levels that cause food-borne illness with proper holding practices. All foods need to be stored cold 41° F and below or hot 140° F or above.

Preparation procedures should have built in barriers to limit the time potentially hazardous foods are in the temperature danger zone. (41° - 140° F)

Control measure to ensure foods are out of the temperature for limited times include:

- Refrigerate foods before preparation.
- Prepare foods not further in advance than necessary.
- Prepare small batches of food and return them to the refrigerator before cooking and serving.

## **Final Cook Temperatures**

Cooking requirements are based on the biology of pathogens. The amount of heat required to destroy the organisms will vary. Different species of microorganisms are susceptible to varied levels of heat.

To kill all pathogens in foods, cooking must be all parts of the food to required temperature for a correct length of time. The temperatures listed in our code are high enough to take in consideration the time requirement.

## **Serving Procedures**

Develop good serving procedures to protect food and customers.

- Employees/Volunteers should wash their hands after bussing and cleaning tables and after touching any item that can contaminate their hands.
- Avoid touching ready-to-eat foods with bare hands. Use a utensil such as a tong, deli tissue or glove.
- Do not re-serve unwrapped bread, rolls, crackers, salad dressings, or desserts.
- Avoid touching the food-contact surfaces of glasses, cups, plates, or tableware.

## Personal Hygiene

Good personal hygiene of each food service worker is important to good food handling practice. Improper hand washing is known to be the number one cause of food-borne illness.

Food service workers should wash their hands by applying soap and using warm water, scrubbing thoroughly, rinsing, and then drying using paper towels or drying device.

Food service workers must wash:

- before starting to work
- during work as necessary to prevent contamination of foods
- after handling unclean items
- after handling raw meat, poultry, or aquatic foods
- after using the restroom
- after eating or smoking

Food service workers are required to use utensils to handle ready-to-eat foods. (i.e. tongs, spoons, tissues, foil, gloves). No bare hand contact of ready-to-eat foods.

Food service workers must maintain a high degree of personal cleanliness and restrain hair as necessary.