

## Environmental Health & Safety Department Sanitarian's Office Food Safety Tips

- **Infected food handlers are the # 1 source of germs that cause foodborne illness.** Anyone who suspects or knows they have a disease that is transferable through food should refrain from preparing or handling food that will be consumed by others. Symptoms such as recent vomiting, diarrhea, severe sore throat accompanied by a fever (strep throat) are outward signs of an individual potentially having an illness that is transferable through food.



- **Poor personal hygiene is the # 1 contributing factor to foodborne illness.** Washing hands properly is one of the most important things a food handler can do to prevent spreading disease. Prior to preparing or handling food, an individual should wash their hands for at least 20 seconds with plenty of soap and warm water using a thorough scrubbing action. Rinse hands completely with clean running water followed by thorough drying with a single use towel or air dryer. Hand sanitizers are not a satisfactory substitute for soap and water hand washing. Hand sanitizer can be used after hand washing, but cannot be used in place of it. Clean, disposable gloves should be worn any time food has to be touched that will not be thoroughly cooked. Gloves cannot be washed and must be changed when they become contaminated. Hand washing should take place when changing gloves. Keep cuts or hand infections well bandaged and wear gloves at all times. If the cut or infection is too large, refrain from any food handling altogether. Other good practices involving personal hygiene include keeping fingernails clean and short, and wearing a hat/hair restraint and clean clothing or apron when preparing food. If you smoke, saliva can contaminate hands so proper hand washing is necessary after smoking.



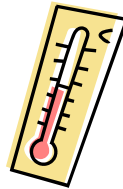
- **Proper temperature control of “potentially hazardous foods” is critical to prevent harmful bacteria growth and proper cooking is important to kill harmful germs.** A potentially hazardous food is one that can rapidly grow bacteria and includes meat, poultry, fish, dairy products, tofu, high protein salads, high protein plants such as cooked rice or beans, and even cut cantaloupe and honeydew

melons. It is important to keep these kinds of foods either cold or hot to minimize or prevent bacteria growth. The goal is to keep foods out of the “temperature danger zone” (45 –140° F) as much as possible. The following is a list of activities that involve proper temperature control of potentially hazardous foods:

- **Storage:** Refrigerators should be capable of maintaining food at 45° F. at all times. It is suggested to use a hanging type thermometer sold inexpensively at most grocery stores. Freezers should be under 10° F. and close to zero if possible. Remember to rotate your food out of storage using the FIFO (First In-First Out) method, keeping close watch on product dates. Dry storage should be 6” off the floor and away from the wall and keep in a relatively cool, low humidity environment.
- **Cold food prep:** Take food out of the refrigerator in small batches to minimize the length of time it is not refrigerated. Plan ahead for high protein salads and actually **pre-chill** in a refrigerator all your ingredients such as mayonnaise, tuna fish, cooked macaroni, hard-boiled eggs, etc. before assembling.
- **Thawing:** Do not thaw food on a countertop! Thawing gradually in a refrigerator is the safest way. If something needs to be thawed quicker than in a refrigerator, place the food item in a clean pan in a sink and run cold water over the food item until it thaws. Don’t turn off the water during this process; however, once the pan is filled with water you can turn the water stream to a trickle and run over the top of the pan and into the sink. Another way to thaw food if it is small enough is by a microwave oven. However, once you thaw it in a microwave, you must continue cooking it in the microwave or through another cooking process. Do not put it back in the refrigerator to cook at a later time if using the microwave thawing process.
- **Cooking:** This is a critical step to kill germs that may be present. The following are minimum Fahrenheit cooking temperatures and all parts of that food should reach that temperature for at least 15 seconds. Food “pocket type” thermometers are inexpensive and can be purchased from most grocery stores. Don’t rely on the big meat thermometers as they are not as accurate and can’t get into relatively thin pieces of meat.
  - Poultry = 165°
  - Stuffing and stuffed meat = 165°
  - Ground Beef = 158°
  - Pork = 150°
  - Shell eggs = 145°
  - Fish = 140°
  - Whole cut beef = 140°
  - Vegetables = 135°
  - Rare roast beef = 130°
  - The internal temperature of any of the above foods when a microwave is the sole source of cooking = 165°
- **Cooling:** Believe it or not, improper cooling at one time was the number # 1 contributing factor to food borne illness and still is a major one. In order to cool food properly, it should be placed in **shallow** pans with the product no deeper than a few inches using the coldest and largest refrigerator possible. Do not place

very hot food in the refrigerator until the initial heat is released, as you want to minimize warming up the refrigerator as much as possible. The pan should be left **uncovered** until the food reaches a minimum of 45°F, even if that means leaving it overnight. However, try to keep it on the highest shelf while cooling to keep it protected from other foods. Roasts and other big pieces of foods should be cut in half or quartered to help speed the cooling process.

- **Reheating:** Any food once it has been cooked and then cooled needs to be reheated to a minimum of 165°F. for 15 seconds.
- **Holding or displaying potentially hazardous foods:** Hot foods should be held or displayed **above 140°F** and cold foods **below 45°F**. If these temperatures cannot be maintained, then the food should not be served after a total cumulative time of **two hours** of being out of temperature. Make sure you include transportation time when calculating the two hours if the food is not being kept hot or cold during this period of time.



- **Cross-contamination is infecting an uncontaminated food product with one that has some source of contamination.** Cross contamination is either direct or indirect. Direct cross-contamination may occur during storage when a raw product such as chicken is stored directly over ready to eat foods such as lettuce in a refrigerator. Indirect cross- contamination occurs when a piece of equipment such as a cutting board, knife or even hands are not properly cleaned and sanitized between uses. Also, never use the same plate or utensil for cooked foods that was used to hold raw foods.



- **Cleaning and Sanitizing:** Cleaning is the removal of visible food, soil, grease and other materials. Sanitizing is reducing harmful microbes to a safe level. In homes, most people just clean, however more and more people are concerned about germs in the kitchen that they are also sanitizing. Regarding cleaning, it is recommended not to use sponges as they absorb germs and are difficult to remove. If you like using sponges, heat them up in the microwave or wash them in the dishwasher on a frequent basis. Always rinse food matter out of a sponge as best as possible. Regarding sanitizing, this can be achieved through very hot water from a dish machine (180°F.) or through a chemical sanitizer such as household bleach. It takes very little bleach (slightly less than 1 capful of bleach to one gallon of water) to achieve the correct concentration for sanitizing. After washing food contact equipment, it can be sanitized using cleaning cloths and a sanitizer

solution. Make sure you keep the washing and sanitizing steps separate, as it really is not effective trying to perform both steps together. Lastly, rinse out well the food containers that you are going to recycle and remove trash from the kitchen regularly, especially if there is not a garbage disposal available. This will help minimize pest problems.



- **Final Tip:** We cannot taste, smell or see germs that cause foodborne illnesses. Many times you must rely on good common sense of proper food handling and know if a product may have been handled in a manner where harmful microbes are present. A good rule of thumb is **“When in doubt, throw it out!”**

