

## Safe Food Handling

Safe practices in food handling, cooking, and storage are essential to prevent food-borne illness. You can't always see, smell, or taste harmful bacteria that can cause illness. In every step of food handling, follow the four Fight BAC! guidelines from the Partnership for Food Safety Education and the FDA to keep food safe:

- Clean: Wash hands and surfaces often.
- Separate: Don't cross-contaminate.
- Cook: Cook food to proper temperatures.
- Chill: Refrigerate food promptly.

### Purchasing Food

- Select nonperishable foods at the beginning of a grocery shopping trip and refrigerated or frozen foods at the end.
- Never choose meat or poultry in packaging that's torn or leaking.
- Don't buy food after the Sell By or Use By date printed on the package.
- Carefully check the packaging of shelf-stable foods. If it's torn, don't purchase the item.
- Put raw meat and poultry in plastic bags so their juices won't contaminate other foods.

### Transportation

- Drive directly home from the grocery store to refrigerate perishable foods as quickly as possible. Take a cooler or insulated bag with ice or an ice pack to keep food cool while transporting it during warmer months. Never let high-risk foods sit directly in the sun.
- If a cooler or insulated bag isn't an option for transporting high-risk foods, consider using low-risk foods such as fruits, hard cheese, canned meats or fish, peanut butter, jelly, bread, crackers, or chips instead.
- Keep hot foods in a thermos or an insulated dish.

### Food Storage

- Always refrigerate perishable food within two hours of cooking and serving (one hour when the temperature is above 90° F).
- Check refrigerator and freezer temperature with an appliance thermometer. The refrigerator temperature should be at 40° F or below and the freezer temperature should be at 0° F or below.
- Cook or freeze fresh poultry, fish, ground meat, and variety meats within two days of purchase; cook other beef, veal, lamb, and pork within two to five days.
- Perishable foods such as meat and poultry should be wrapped securely to maintain quality and prevent juices from dripping onto other foods.
- To maintain quality when freezing meat and poultry in its original package, wrap the package again with foil or plastic wrap that's recommended for the freezer.
- High-acid canned foods such as tomatoes, grapefruit, and pineapple can be stored on the shelf for 12 to 28 months. Low-acid canned foods such as meat, poultry, fish, and most vegetables will keep for two to five years if the can

remains in good condition and is stored in a cool, clean, and dry place. Discard cans that are dented, leaking, bulging, or rusted.

### **Cleaning Produce**

- Before eating or preparing fresh produce, wash it under cold tap water to remove excess dirt. Produce with a firm surface, such as apples, melons, or potatoes, can be scrubbed with a brush.
- Produce washes are safe and effective. They're designed to remove soil, wax, and pesticides. It's important to rinse produce well after using these washes. They're not a requirement for safe food handling, though. Don't wash fruits and vegetables with detergent or soap because the FDA hasn't approved their use on foods.
- Discard the outer leaves of leafy vegetables such as lettuce and cabbage.
- When preparing fruits and vegetables, cut away any damaged or bruised areas because bacteria can grow in these crevices. Be sure to use a clean cutting board that hasn't been contaminated by raw meat. Immediately refrigerate any fresh-cut items such as salad or fruit for food safety and best quality.
- Store produce on a shelf or in a drawer that's above raw meat so there's no risk of meat juice contaminating the produce.

### **Food Preparation**

- Always wash hands before and after handling food.
- Don't cross-contaminate. Keep raw meat, poultry, fish, and their juices away from other foods.
- After cutting raw meat, wash hands, the knife, the countertop/surface, and cutting board with hot soapy water.
- Use a separate cutting board for meats and vegetables (plastic only).
- Sanitize cutting boards in the dishwasher or in a solution of one teaspoon of chlorine bleach in one quart of water.

### **Thawing**

- Foods should never be thawed or stored on the counter or outdoors, or defrosted in hot water. This allows the food to reach the danger zone (between 40° F and 140° F) in which harmful bacteria can grow.
- Meat and poultry defrosted in the refrigerator may be refrozen before or after cooking. If thawed by other methods, cook before refreezing.
- Thawing in the refrigerator, cold water, or microwave allows for safe thawing. Make sure when thawing meat and poultry that the juices don't drip onto other items. Instead, place food in a leak-proof plastic bag if thawing in the refrigerator; submerge in cold tap water and change the water every 30 minutes; or cook meats immediately after thawing in the microwave.

### **Cooking**

- Harmful bacteria are destroyed when foods are cooked to the proper temperatures. Use a meat thermometer because it's the only way to confirm foods are cooked to the proper temperature.

- Cook ground meats to 160° F and ground poultry to 165° F. Cook beef, veal, lamb steaks, roasts, and chops to 145° F and all cuts of fresh pork to 160° F. Whole poultry should reach 180° F in the thigh and 170° F in the breast.
- Roast meat and poultry at 325° F or higher.
- Reheat hot dogs, cold cuts, and deli-style meats.

### **Serving**

- Hot food should be held at 140° F or warmer, and cold food should be kept at 40° F or cooler.
- When serving food at a buffet, keep food hot with chafing dishes, slow cookers, and warming trays. Keep food cold with nesting dishes in bowls of ice or use small serving trays and replace them often.
- Perishable food shouldn't be left out for more than two hours at room temperature (one hour when the temperature is above 90° F).

### **Leftovers**

- Discard any food left out at room temperature for more than two hours (one hour when the temperature is above 90° F).
- Place food in shallow containers and immediately put in the refrigerator or freezer for rapid cooling.
- Use cooked leftovers within four days (one day for bone marrow transplant patients).

### **High-Risk Foods to Avoid**

- Raw or undercooked eggs, meat, poultry, or fish (including sushi, sashimi, carpaccio, and ceviche) and foods that contain these raw ingredients (eg, dressings, cookie dough)
- Cold smoked or pickled fish or lox
- Unpasteurized milk, cheese, and juice
- Soft cheeses made from unpasteurized milk (veined cheeses such as blue cheese, camembert, brie, feta, and queso fresco), including salad dressings containing these cheeses
- Raw sprouts (eg, alfalfa, bean, radish)
- Unwashed fruits and vegetables
- Hot dogs, deli meats, and luncheon meats that haven't been reheated
- Unpasteurized, refrigerated pates or meat spreads

### **Resources**

FIGHT BAC!: [www.fightbac.org](http://www.fightbac.org) or [www.fooddetectives.com](http://www.fooddetectives.com) (for children)

Academy of Nutrition and Dietetics Home Food Safety: [www.homefoodsafety.org](http://www.homefoodsafety.org)

Food Safety for People With Cancer:

[www.fda.gov/downloads/Food/FoodbornellnessContaminants/UCM312761.pdf](http://www.fda.gov/downloads/Food/FoodbornellnessContaminants/UCM312761.pdf)