



Food Safety

Foodborne Illness in the United States

When certain disease-causing bacteria, viruses or parasites contaminate food, they can cause foodborne illness. Another word for such a bacteria, virus, or parasite is “pathogen.” Foodborne illness, often called food poisoning, is an illness that comes from a food you eat. Food safety is important for everyone—but it’s especially important for you.

Food Safety: It’s Especially Important for You

- A properly functioning immune system works to clear infection and other foreign agents from the body.
- A side effect of cancer and cancer treatments therapies is that they may weaken your immune system. Aging also weakens the immune system.
- A weakened immune system raises your risk of getting an infection.
- These infections include those that can be brought on by disease-causing bacteria and other pathogens in foods.
- To avoid contracting a foodborne illness, you must be very careful when handling, preparing, and consuming foods.



Making Wise Food Choices

If you are not sure about the safety of a food in your refrigerator, don’t take the risk. ***When in doubt, throw it out!***

All consumers need to follow the Four Basic Steps to Food Safety: ***Clean, Separate, Cook, and Chill.***



It is especially important that you – or those preparing your food – are always careful with food handling and preparation. **Never taste a food to determine if it is safe to eat.**

Four Basic Steps to Food Safety

1. Clean: Wash hands and surfaces often

Bacteria can spread throughout the kitchen and get onto cutting boards, utensils, counter tops, and food.

To ensure that your hands and surfaces are clean, be sure to:

- Wash hands in warm soapy water for at least 20 seconds before and after handling food and after using the bathroom, changing diapers, or handling pets.
- Wash cutting boards, dishes, utensils, and counter tops with hot soapy water between the preparation of raw meat, poultry, and seafood products and preparation of any other food that will not be cooked. As an added precaution, sanitize cutting boards and countertops by rinsing them in a solution made of one tablespoon of unscented liquid chlorine bleach per gallon of water, or, as an alternative, you may run the plastic board through the wash cycle in your automatic dishwasher.
- Use paper towels to clean up kitchen surfaces. If using cloth towels, you should wash them often in the hot cycle of the washing machine.
- Wash produce. Rinse fruits and vegetables, and rub firm-skin fruits and vegetables under running tap water, including those with skins and rinds that are not eaten.
- With canned goods: remember to clean lids before opening.

2. Separate: Don't cross-contaminate

Cross-contamination occurs when bacteria are spread from one food product to another. This is especially common when handling raw meat, poultry, seafood, and eggs. The key is to keep these foods—and their juices—away from ready-to-eat foods.

To prevent cross-contamination, remember to:

- Separate raw meat, poultry, seafood, and eggs from other foods in your grocery shopping cart, grocery bags, and in your refrigerator.
- Never place cooked food on a plate that previously held raw meat, poultry, seafood, or eggs without first washing the plate with hot soapy water.
- Don't reuse marinades used on raw foods unless you bring them to a boil first.
- Consider using one cutting board only for raw foods and another only for ready-to-eat foods, such as bread, fresh fruits and vegetables, and cooked meat.

3. Cook: Cook to safe temperatures

Foods are safely cooked when they are heated to the USDA-FDA recommended safe minimum internal temperatures, as shown on the “Is It Done Yet?” chart (see next page).

To ensure that your foods are cooked safely, always:

- Use a **food thermometer** to measure the internal temperature of cooked foods. Check the internal temperature in several places to make sure that the meat, poultry, seafood, or egg product is cooked to safe minimum internal temperatures.
- Cook **ground beef** to at least 160 °F and **ground poultry** to a safe minimum internal temperature of 165 °F. Color of food is not a reliable indicator of safety or doneness.
- Reheat **fully cooked hams** packaged at a USDA-inspected plant to 140 °F. For fully cooked ham that has been repackaged in any other location or for leftover fully cooked ham, heat to 165 °F.
- Cook **seafood** to 145 °F. Cook **shrimp, lobster, and crab** until they turn red and the flesh is pearly opaque. Cook **clams, mussels, and oysters** until the shells open. If the shells do not open, do not eat the seafood inside.
- Cook **eggs** until the yolks and whites are firm. Use only recipes in which the eggs are cooked or heated to 160 °F.
- Cook all raw **beef, lamb, pork, and veal steaks, roasts, and chops** to 145 °F with a 3-minute rest time after removal from the heat source.
- Bring **sauces, soups, and gravy** to a boil when reheating. Heat other leftovers to 165 °F.
- Reheat **hot dogs, luncheon meats, bologna, and other deli meats** until steaming hot or 165 °F.
- When cooking in a microwave oven, cover food, stir, and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking. Always allow standing time, which completes the cooking, before checking the internal temperature with a food thermometer. Food is done when it reaches the USDA-FDA recommended safe minimum internal temperature.

Is It Done Yet? Use a food thermometer to be most accurate. You can't always tell by looking!

The infographic is titled "Is it *done* yet?" in a large, stylized font. Below the title, it says "You can't tell by looking. Use a food thermometer to be sure." A horizontal bar lists the USDA Recommended Safe Minimum Internal Temperatures: 145°F, 145°F, 160°F, 160°F, and 165°F. Below each temperature is an image of a food item with a thermometer inserted. The food items are: Beef, Pork, Veal & Lamb Steaks, Roasts & Chops (with a 3-minute rest time); Fish; Beef, Pork, Veal & Lamb Ground; Egg Dishes; and Turkey, Chicken & Duck Whole, Pieces & Ground. At the bottom, the website www.FoodSafety.gov is listed, along with the USDA Meat & Poultry Hotline (1-888-MPHotline (1-888-674-6854)). A small graphic shows the four steps of food safety: CLEAN, SEPARATE, COOK, and CHILL. The USDA logo is in the top left corner.

USDA United States Department of Agriculture

"Is it *done* yet?"

You can't tell by looking. Use a food thermometer to be sure.

USDA Recommended Safe Minimum Internal Temperatures

145°F	145°F	160°F	160°F	165°F
with a 3-minute rest time				
Beef, Pork, Veal & Lamb Steaks, Roasts & Chops	Fish	Beef, Pork, Veal & Lamb Ground	Egg Dishes	Turkey, Chicken & Duck Whole, Pieces & Ground

www.FoodSafety.gov

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CLEAN SEPARATE COOK CHILL

Food Safety and Inspection Service

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4. Chill: Refrigerate promptly

Cold temperatures slow the growth of harmful bacteria. Keeping a constant refrigerator temperature of **40 °F or below** is one of the most effective ways to reduce risk of foodborne illness. Use an appliance thermometer to be sure the refrigerator temperature is consistently 40 °F or below and the freezer temperature is 0 °F or below.

To chill foods properly:

- Refrigerate or freeze meat, poultry, eggs, seafood, and other perishables within 2 hours of cooking or purchasing. Refrigerate within 1 hour if the temperature outside is above 90 °F.
- Never thaw food at room temperature, such as on the counter top. It is safe to thaw food in the refrigerator, in cold water, or in the microwave. If you thaw food in cold water or in the microwave, you should cook it immediately.
- Divide large amounts of food into shallow containers for quicker cooling in the refrigerator. Follow the recommendations in the abridged USDA-FDA Cold Storage Chart. The USDA-FDA Cold Storage Chart in its entirety may be found at [www.fsis.usda.gov/Fact_Sheets/Refrigeration & Food Safety/index.asp](http://www.fsis.usda.gov/Fact_Sheets/Refrigeration_&_Food_Safety/index.asp)

In addition to this guide, please check with your health care provider to identify foods and other products that you should avoid.