

## Refrigeration and Food Safety

...Refrigeration slows bacterial growth. Bacteria exist everywhere in nature. They are in the soil, air, water, and the foods we eat. When they have nutrients (food), moisture, and favorable temperatures, they grow rapidly, increasing in numbers to the point where some types of bacteria can cause illness. Bacteria grow most rapidly in the range of temperatures between 40 and 140 °F, the "Danger Zone," some doubling in number in as little as 20 minutes. A refrigerator set at 40 °F or below will protect most foods....

There are two completely different families of bacteria: *pathogenic* bacteria, the kind that cause foodborne illness, and *spoilage* bacteria, the kind of bacteria that cause foods to deteriorate and develop unpleasant odors, tastes, and textures. *Pathogenic* bacteria can grow rapidly in the "Danger Zone," the temperature range between 40 and 140 °F, but they do not generally affect the taste, smell, or appearance of a food. In other words, one cannot tell that a pathogen is present. *Spoilage* bacteria can grow at low temperatures, such as in the refrigerator. Eventually they cause food to develop off or bad tastes and smells. Most people would not choose to eat spoiled food, but if they did, they probably would not get sick. ...

- Food that has been left too long on the counter may be dangerous to eat, but could look fine.
- Food that has been stored too long in the refrigerator or freezer may be of lessened quality, but most likely would not make anyone sick. (However, some bacteria such as *Listeria monocytogenes* thrive at cold temperatures, and if present, **will** multiply in the refrigerator over time and could cause illness.)

.... Refrigerators should be set to maintain a temperature of 40 °F or below. .... Foods held at temperatures above 40 °F for more than 2 hours should not be consumed. ...A large pot of food like soup or stew should be divided into small portions and put in shallow containers before being refrigerated. A large cut of meat or whole poultry should be divided into smaller pieces or placed in shallow containers before refrigerating.... Raw meat, poultry, and seafood should be in a sealed container or wrapped securely to prevent raw juices from contaminating other foods...

When food is removed from the freezer for defrosting and the unit is turned off, it's important to keep refrigerated foods cold and frozen foods from thawing. To do this, place the food in a cooler with a cold source or pack it in a box and cover it with blankets for insulation.

One very important step in keeping your food safe is keeping your refrigerator clean. Wipe up spills immediately - clean surfaces thoroughly with hot, soapy water; then rinse....Once a week, make it a habit to throw out perishable foods that should no longer be eaten. A general rule of thumb for refrigerator storage for cooked leftovers is 4 days; raw poultry and ground meats, 1 to 2 days. Refer to the cold storage chart for storage of meat, poultry, and egg products in the home refrigerator....The front grill should be kept free of dust and lint to permit free air flow to the condenser. Several times a year the condenser coil should be cleaned with a brush or vacuum cleaner to remove dirt, lint, or other accumulations. ...

### Storage Times For Refrigerated Foods

NOTE: These short but safe time limits will help keep home-refrigerated food from spoiling.

<b>Ground Meat, Turkey, Veal, Pork, Lamb</b>	
Ground beef, turkey, veal pork, lamb	1-2 days
Stew meats	1-2 days
<b>Fresh Meat (beef, veal, lamb, and pork)</b>	
Steaks, chops, roasts	3-5 days
Variety meats (tongue, kidneys, liver, heart, chitterlings)	1-2 days
<b>Fresh Poultry</b>	
Chicken or turkey, whole	1-2 days
Chicken or turkey, parts	1-2 days
Giblets	1-2 days
<b>Bacon and Sausage</b>	
Bacon	7days
Sausage, raw from meat or poultry	1-2 days
Smoked breakfast links, patties	7 days

Summer sausage labeled "Keep Refrigerated"	Unopened, 3 months; Opened, 3 weeks
Hard sausage (such as pepperoni)	2-3 weeks
<b>Ham, Corned Beef</b>	
Ham, canned, labeled "Keep Refrigerated"	Unopened, 6-9 months; Opened, 3-5 days
Ham, fully cooked, whole	7 days
Ham, fully cooked, half	3-5 days
Ham, fully cooked, slices	3-4 days
Corned beef in pouch with pickling juices	5-7 days
<b>Hot Dogs and Luncheon Meats</b>	
Hot dogs	Unopened package, 2 weeks; Opened package, 1 week
Luncheon meats	Unopened package, 2 weeks; Opened package, 3-5 days
<b>Deli and Vacuum-Packaged Products</b>	
Store-prepared (or homemade) egg, chicken, tuna, ham, and macaroni salads	3-5 days
Pre-stuffed pork, lamb chops, and chicken breasts	1 day
Store-cooked dinners and entrees	3-4 days
Commercial brand vacuum-packed dinners with USDA seal, unopened	2 weeks
<b>Cooked Meat, Poultry, and Fish Leftovers</b>	
Pieces and cooked casseroles	3-4 days
Gravy and broth, patties, and nuggets	3-4 days
Soups and stews	3-4 days
<b>Fresh Fish and Shellfish</b>	
Fresh fish and shellfish	1-2 days
<b>Eggs</b>	
Fresh, in shell	3-5 weeks
Raw yolks, whites	2-4 days
Hard-cooked	1 week
Liquid pasteurized eggs, egg substitutes	Unopened, 10 days; Opened, 3 days
Cooked egg dishes	3-4 days