

When the Power Is Out

Bacteria that cause foodborne illness multiply rapidly on food kept at room temperature for more than 2 hours. Do not rely on the appearance or odor to determine if the food is safe. This guide tells you how long food stays cold when the power goes off to help you decide what to salvage and what to discard.

Refrigerator

Food in a refrigerator is generally safe if the power is out for less than 4 to 6 hours. The length of time that the food will be safe depends on:

1. How cold the refrigerator was when the power went off. The colder the refrigerator, the longer the food will stay cold.
2. How warm the room is. The colder the room, the longer the refrigerator will stay cold.
3. How often the refrigerator door is opened, especially if the room is warm. Keep the door closed as much as possible.
4. Placing a block of ice on a pan in the refrigerator helps keep the temperature low and extends the time food will be safe.

Discard the following perishable foods if kept above refrigerator temperature (40 degrees F) for more than 2 hours:

- raw or cooked meat, poultry or seafood
- milk/cream, yogurt, soft cheese
- cooked pasta, pasta salads
- custard, chiffon, or cheese pies
- fresh eggs, egg substitutes
- meat or cheese-topped pizza, luncheon meats
- casseroles, stews, soups
- tartar sauce and creamy dressings
- refrigerated cookie dough
- cream-filled pastries

The items listed below are generally safe without refrigeration for a few days. These foods lose quality and spoil more rapidly at room temperature than when cold. So double-check each food and throw it out if it turns moldy or has an unusual look or odor.

- butter, margarine
- fresh fruits and vegetables
- dried fruits
- opened jars of peanut butter, jelly, relish, taco sauce, barbecue sauce, ketchup, mustard, oil-based salad dressings, commercial mayonnaise, olives,
- fruit juices
- hard and processed cheeses
- baked products, except those noted above

Freezer

Food in a freezer will stay cold longer than in the refrigerator. With the door closed, items in most freezers stay frozen for 24 to 48 hours, even in the summer. How long the food stays frozen depends on:

1. The amount of food in the freezer -- Food in a full freezer will stay frozen for at least 2 days. Items in a half-loaded freezer may not stay frozen for more than a day.
2. The kind of food -- A full freezer of meat will stay colder than a freezer full of baked goods.
3. The temperature of the food -- The colder the food, the longer the food will stay frozen.
4. The size of the freezer -- The larger the freezer, the longer the food stays frozen.

Power Outage Procedures

1. Keep the freezer door closed. This is the most important step you can take to keep the food from defrosting. Opening the door greatly reduces the time food stays frozen without power.
2. Add dry ice to the freezer. The more dry ice, the longer the food will stay frozen. If dry ice is placed in the freezer soon after the power goes off, 50 pounds added to a 20 cubic-foot cabinet should keep the temperature of food below freezing for 3 to 4 days in a fully loaded freezer and 2 to 3 days in a cabinet with half a load or less. Twenty-five pounds of dry ice should hold the temperature of a half-full 10 cubic foot cabinet below freezing for 2 to 3 days. (Note - Place dry ice on thick cardboard or boards on top of the frozen food or on shelves, not directly on packages. Always wear gloves when handling dry ice. Never touch dry ice with hands. Be sure room is well ventilated. Do not breathe the carbon dioxide gas from the dry ice.
3. Move food to another low-temperature storage space. If the trouble is a breakdown of your freezer, your neighbors may have enough space to hold your food.
4. Place blankets, quilts, or some other covering over the freezer for extra insulation. Do not block the air-vent opening.

Foods held above refrigerator temperatures (40 degrees F) for more than two hours may not be safe to eat. Discard these items. You may safely refreeze most foods if they still contain ice crystals, or if they have been kept cold (40 degrees F or less) and have been thawed no more than 24 to 48 hours.

Know the condition of the food before refreezing it!

Most people's immediate reaction is to get the food refrozen immediately.

When the power returns, immediately check the temperature and condition of the food before it refreezes. Otherwise, you will not be able to tell if the food is safe for refreezing.

Throw out any food on which juices from raw meat, poultry, fish or shellfish has dripped. Foods for discarding include cooked meat, poultry, fish or shellfish; fruits; vegetables; and baked goods. Be especially careful with any items that are not thoroughly heated before eating.

Use the following guidelines for completely thawed foods.

- Fruits (such as strawberries, peaches, apples) - Refreeze if they smell good. If the item is beginning to ferment, it is still safe to eat although the flavor will be changed. Use these items in cooking.
- Vegetables - Refreeze or cook and serve thawed vegetables immediately. Considerable loss in quality will occur.
- Meat and poultry - Look at each package separately. If item still has ice crystals or has not been thawed for more than 48 hours (assuming it has not been held above 40 degrees F), refreeze or thoroughly cook and refreeze. Otherwise, discard. Exception: Discard any stuffed poultry or meats.
- Fish and shellfish (such as shrimp, crabs, or lobster) - These items are extremely perishable. Discard unless ice crystals remain.
- Baked goods (such as breads, cookies and cakes) - Refreeze.
- Nuts - Refreeze.
- Ice cream - Do not use or refreeze melted ice cream.

Refreeze food quickly. Mark on the package of food that it has been refrozen. This will permit you to know which foods to carefully examine for any off-odors or color before preparing.

If your freezer has an adjustable temperature control, turn it to the coldest position. The freezer will run continuously and the food will freeze quicker.

Place warmer packages against freezer surface if possible. Make sure that air can circulate around the packages of food. After the food is frozen, turn the temperature control to its normal setting.

When using any food that has been refrozen, check the appearance and odor of the product. Although the overall quality of refrozen products will be poorer than the original food, there should be no off-odors or colors.

Remember, for any food ***if in doubt, throw it out!***

Refrigerator Food: When To Save *- When To Throw It Out

Held above 40° F.

Dairy

Milk, cream, sour cream, buttermilk, evaporated milk, yogurt

Discard

Butter, margarine	Safe
Baby Formula, opened	Discard

Eggs

Eggs, fresh	Discard
Hard-cooked in shell	Discard
Egg Dishes, Custards and puddings	Discard

Cheese

Hard cheeses, processed cheeses	Safe
Soft cheeses, cottage cheese	Discard

Fruits

Fruit Juices, opened	Safe
Canned fruits, opened	Safe
Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates	Safe

Vegetables

Vegetables, cooked	Discard after 6 hours
Vegetable juice, opened	Discard after 6 hours
Baked potatoes	Discard
Fresh mushrooms, herbs and spices	Safe
Garlic, chopped in oil or butter	Discard

Meat, Poultry, Seafood

Fresh or leftover meat, poultry, fish or seafood	Discard
Thawing meat or poultry	Discard if warmer than refrigerator temperatures
Meat, tuna, shrimp, chicken, egg salad	Discard
Gravy, Stuffing	Discard
Lunchmeats, hotdogs, bacon, sausage, dried beef	Discard
Pizza - meat topped	Discard
Canned meats (NOT labeled "Keep Refrigerated") but refrigerated after opening	Discard
Canned hams labeled "Keep Refrigerated"	Discard
Casseroles, soups, stews	Discard

Pies Pastry

Pastries, cream filled	Discard
Pies -- custard, cheese filled or chiffons	Discard

Pies, fruit Safe

Bread, Cakes, Cookies, Pasta

Bread, rolls, cakes, muffins, quick breads	Safe
Refrigerator biscuits, rolls, cookie dough	Discard
Cooked pasta, spaghetti	Discard
Pasta salads with mayonnaise or vinegar base	Discard

Sauces, Spreads, Jams

Mayonnaise, tartar sauce, horseradish	Discard if above 50° F. for over 8 hours.
Peanut butter	Safe
Opened salad dressing, Jelly, relish, taco and barbeque sauce, mustard, catsup, olives	Safe

(All food still cold, held at 40° F. or above under 2 hours is considered safe.)*

Frozen Food – When to Save- When to Throw It Out

	Still contains ice crystals and feels as cold as if refrigerated	Thawed. Held above 40° F for over 2 Hours
Meat, Poultry, Seafood		
Beef, veal, lamb, pork and ground meats	Refreeze	Discard
Poultry and ground poultry	Refreeze	Discard
Variety meats (liver, kidney, heart, chitterlings)	Refreeze	Discard
Casseroles, stews, soups, convenience foods, pizza	Refreeze	Discard
Fish, shellfish, breaded seafood products	Refreeze. Some texture and flavor loss.	Discard
Dairy		
Milk	Refreeze. Some texture loss.	Discard
Eggs (out of shell) and egg products	Refreeze	Discard
Ice Cream, Frozen Yogurt	Discard	Discard
Cheese (soft and semi-soft), cream cheese, Ricotta	Refreeze. Some texture loss.	Discard
Hard cheeses (cheddar, Swiss, Parmesan)	Refreeze	Refreeze
Casseroles containing milk, cream, eggs, soft cheeses	Refreeze	Discard

Cheesecake	Refreeze	Discard
Fruits		
Juices	Refreeze	Refreeze Discard if mold, yeasty smell or sliminess develops.
Home or commercially packaged	Refreeze. Will change in texture and flavor.	Refreeze. Discard if mold, yeasty smell or sliminess develops.
Vegetables		
Juices	Refreeze	Discard if held above 40° F. over 6 hours.
Home or commercially packaged or blanched	Refreeze. May suffer texture and flavor loss.	Discard if held above 40° F. over 6 hours.
Breads, Pastries		
Breads, rolls, muffins, cakes (without custard fillings)	Refreeze	Refreeze
Cakes, pies, pastries with custard or cheese filling	Refreeze	Discard
Pie crusts	Refreeze	Refreeze
Commercial and homemade bread dough	Refreeze. Some quality loss may occur.	Refreeze. Considerable quality loss.
Other		
Casseroles - pasta, rice based	Refreeze	Discard
Flour, cornmeal, nuts	Refreeze	Refreeze

Source *Food News for Consumers, USDA/FSIS. Vol 6, No 2. Summer, 1989.*