

Safety of Frozen Food After a Power Outage

If you think you might lose power, turn the freezer and refrigerator thermostats to the coldest settings. If you've already lost power, use these tips to keep food cold and safe to eat.

Keep the Freezer Closed

With the freezer closed, foods usually will stay frozen at least a day, perhaps two or three days, depending on the quantity of insulation. Food in well-fitted, well-insulated four-cubic-foot home freezers will not begin to spoil in fewer than three days. In 12- to 36-cubic-foot freezers, food will not begin to spoil in fewer than five days, and may be all right for seven or eight days if the food is very cold.

Open the freezer only to take out the food, to move it to a cooler or to add dry ice. With the door closed, food in most unopened freezers will stay below 40 degrees F up to three days, even in the summer.

Thawing rate depends on:

- the amount of food in the freezer (a full freezer stays cold longer than one half full);
- the kind of food (a freezer filled with meat stays cold longer than a freezer filled with baked goods);
- the temperature of the food (the colder the food, the longer it will stay frozen. Never put hot or warmed foods into the freezer since this will increase the temperature. Keep hot food covered, and throw out if you don't eat it within two hours. Meat should be kept above 140 degrees F);
- the freezer (a well-insulated freezer keeps food frozen longer than one with little insulation); and
- the size of freezer (the larger the freezer, the longer food stays frozen).

Use Emergency Measures

Cover the freezer with blankets, quilts, or crumpled newspaper. Do not cover the air vent openings. If alternate working mechanical refrigeration is available, use it. Use dry ice if it is available. (See section on **Using Dry Ice.**)

Use Caution if Food has Thawed

Partial thawing and re-freezing can ruin the quality of foods, like fruits, vegetables and prepared foods. Red meats are affected less than many other foods. However, it may still be safe to eat. If a frozen, potentially hazardous food is thawed and still at or below 40 degrees, the food may be cooked and used immediately.

You may safely re-freeze some foods if they still contain ice crystals or if they have been kept at 40 degrees F or below for no more than two days.

Follow these guidelines for completely thawed foods:

- **Fruits.** Re-freeze fruits if they taste and smell good. Fruit that is beginning to ferment is safe to eat, but will have an off-flavor. Use off-flavor fruit in cooking.
- **Frozen dinners.** Do not re-freeze frozen dinners that have thawed. Cook and eat thawed frozen foods and frozen dinners right away if they are still cold. If any foods are warm or smell bad, don't eat them.
- **Vegetables.** Do not re-freeze thawed vegetables. Bacteria in these foods grow fast. Spoilage may begin before bad odors develop. Some spoilage may be very toxic. Re-freeze vegetables only if ice crystals remain throughout the package. But, **when in doubt, throw them out.**
- **Meat and Poultry.** Meat and poultry become unsafe to eat when they start to spoil. Examine each package of thawed meat or poultry. If odor is offensive or questionable or if the freezer temperature has exceeded 40 degrees F for two hours or longer, don't use the meat. It may be dangerous! Discard all stuffed poultry. Cook thawed but unspoiled meat or poultry right away. After cooking, meat can be re-frozen, but it's not recommended.
- **Fish and shellfish.** These spoil easily. Do not re-freeze unless there are ice crystals throughout the package. Seafood may be spoiled, even if it doesn't smell bad.
- **Ice cream.** Do not re-freeze melted ice cream. Throw it out or eat it as a liquid before an off-flavor develops.

FROZEN FOODS

When to save and when to discard:

FOOD	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	Refreeze	Discard
Fish, shellfish, breaded seafood products	Refreeze. However, there will be some texture and flavor loss.	Discard
DAIRY Milk	Refreeze. May lose some texture.	Discard
Eggs (out of shell) and egg products	Refreeze	Discard
Ice cream, frozen yogurt	Discard	Discard
Cheese (soft and semi-soft)	Refreeze. May lose some texture.	Discard
Hard cheeses	Refreeze	Refreeze
Shredded cheeses	Refreeze	Discard
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 after held above 40 °F for 6 hours.
Home or commercially packaged or blanched	Refreeze. May suffer texture and flavor loss.	Discard after held above 40 °F for 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, commercial and homemade bread dough	Refreeze. Some quality loss may occur.	Refreeze. Quality loss is considerable
OTHER Casseroles – pasta, rice based	Refreeze	Discard
Flour, cornmeal, nuts	Refreeze	Refreeze
Breakfast items – waffles, pancakes, bagels	Refreeze	Refreeze
Frozen meal, entree, specialty items (pizza, sausage and biscuit, meat pie, convenience foods)	Refreeze	Discard