

# Keeping Food Safe in an Emergency

## Tips for Keeping Food Safe in an Emergency

Always keep meat, poultry, fish, and eggs refrigerated at or below 40 °F and frozen food at or below 0 °F. This may be difficult when the power is out.

Keep the refrigerator and freezer doors closed as much as possible to maintain the cold temperature. The refrigerator will keep food safely cold for about 4 hours if it is unopened. A full freezer will hold the temperature for approximately 48 hours (24 hours if it is half full) if the door remains closed. Obtain dry or block ice to keep your refrigerator as cold as possible if the power is going to be out for a prolonged period of time. Fifty pounds of dry ice should hold an 18-cubic foot full freezer for 2 days. Plan ahead and know where dry ice and block ice can be purchased.

Be prepared for an emergency by having items on hand that don't require refrigeration and can be eaten cold or heated on the outdoor grill. Shelf-stable food (food that does not need to be refrigerated), boxed or canned milk, water, and canned goods should be part of a planned emergency food supply. Make sure you have ready-to-use baby formula for infants and pet food. Remember to use these items and replace them from time to time. Be sure to keep a hand-held can opener for an emergency.

Consider what you can do ahead of time to store your food safely in an emergency. Coolers are a great help for keeping food cold if the power will be out for more than 4 hours—have a couple on hand along with frozen gel packs. When your freezer is not full, keep items close together—this helps the food stay cold longer.

Digital, dial, or instant-read food thermometers and appliance thermometers will help you know if the food is at safe temperatures. Keep appliance thermometers in the refrigerator and freezer at all times. When the power is out, an appliance thermometer will always indicate the temperature in the refrigerator and freezer no matter how long the power has been out. The refrigerator temperature should be 40 °F or below; the freezer, 0 °F or lower. If you're not sure a particular food is cold enough, take its temperature with a food thermometer.

## Frequently Asked Questions

### **A snowstorm knocked down the power lines, can I put the food from the refrigerator and freezer out in the snow?**

No, frozen food can thaw if it is exposed to the sun's rays even when the temperature is very cold. Refrigerated food may become too warm and foodborne bacteria could grow. The outside temperature could vary hour by hour and the temperature outside will not

protect refrigerated and frozen food. Additionally, perishable items could be exposed to unsanitary conditions or to animals. Animals may harbor bacteria or disease; never consume food that has come in contact with an animal. Rather than putting the food outside, consider taking advantage of the cold temperatures by making ice. Fill buckets, empty milk cartons or cans with water and leave them outside to freeze. Then put the homemade ice in your refrigerator, freezer, or coolers.

## Some of my food in the freezer started to thaw or had thawed when the power came back on. Is the food safe? How long will the food in the refrigerator be safe with the power off?

**Never taste food to determine its safety!** You will have to evaluate each item separately. If an appliance thermometer was kept in the freezer, read the temperature when the power comes back on. If the appliance thermometer stored in the freezer reads 40 °F or below, the food is safe and may be refrozen. If a thermometer has not been kept in the freezer, check each package of food to determine the safety. Remember you can't rely on appearance or odor. If the food still contains ice crystals or is 40 °F or below, it is safe to refreeze . Refrigerated food should be safe as long as power is out no more than 4 hours. Keep the door closed as much as possible. Discard any perishable food (such as meat, poultry, fish, eggs, and leftovers) that have been above 40 °F for 2 hours.

## May I refreeze the food in the freezer if it thawed or partially thawed?

Yes, the food may be safely refrozen if the food still contains ice crystals or is at 40 °F or below. You will have to evaluate each item separately. Be sure to discard any items in either the freezer or the refrigerator that have come into contact with raw meat juices. Partial thawing and refreezing may reduce the quality of some food, but the food will remain safe to eat. See the attached charts for specific recommendations.

Refrigerator Foods - When to Save and When to Throw It Out	
FOOD	Held above 40 °F for over 2 hours
<b>MEAT, POULTRY, SEAFOOD</b> Raw or leftover cooked meat, poultry, fish, or seafood; soy meat substitutes	Discard
Thawing meat or poultry	Discard
Meat, tuna, shrimp, chicken, or egg salad	Discard

Gravy, stuffing, broth	Discard
Lunchmeats, hot dogs, bacon, sausage, dried beef	Discard
Pizza – with any topping	Discard
Canned hams labeled "Keep Refrigerated"	Discard
Canned meats and fish, opened	Discard
<b>CHEESE</b> Soft Cheeses: blue/bleu, Roquefort, Brie, Camembert, cottage, cream, Edam, Monterey Jack, ricotta, mozzarella, Muenster, Neufchatel, Queso blanco fresco	Discard
Hard Cheeses: Cheddar, Colby, Swiss, Parmesan, provolone, Romano	Safe
Processed Cheeses	Safe
Shredded Cheeses	Discard
Low-fat Cheeses	Discard
Grated Parmesan, Romano, or combination (in can or jar)	Safe
<b>DAIRY</b> Milk, cream, sour cream, buttermilk, evaporated milk, yogurt, eggnog, soy milk	Discard
Butter, margarine	Safe
Baby formula, opened	Discard
<b>EGGS</b> Fresh eggs, hard-cooked in shell, egg dishes, egg products	Discard
Custards and puddings	Discard
<b>CASSEROLES, SOUPS, STEWS</b>	Discard
<b>FRUITS</b> Fresh fruits, cut	Discard
Fruit juices, opened	Safe
Canned fruits, opened	Safe
Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates	Safe
<b>SAUCES, SPREADS, JAMS</b> Opened mayonnaise, tartar sauce, horseradish	Discard if above 50 °F for over 8 hrs.
Peanut butter	Safe

Jelly, relish, taco sauce, mustard, catsup, olives, pickles	Safe
Worcestershire, soy, barbecue, Hoisin sauces	Safe
Fish sauces (oyster sauce)	Discard
Hoisin sauce	Discard
Opened vinegar-based dressings	Safe
Opened creamy-based dressings	Discard
Spaghetti sauce, opened jar	Discard
<b>BREAD, CAKES, COOKIES,PASTA, GRAINS</b> Bread, rolls, cakes, muffins, quick breads, tortillas	Safe
Refrigerator biscuits, rolls, cookie dough	Discard
Cooked pasta, rice, potatoes	Discard
Pasta salads with mayonnaise or vinaigrette	Discard
Fresh pasta	Discard
Cheesecake	Discard
Breakfast foods –waffles, pancakes, bagels	Safe
<b>PIES, PASTRY</b> Pastries, cream filled	Discard
Pies – custard, cheese filled, or chiffon; quiche	Discard
Pies, fruit	Safe
<b>VEGETABLES</b> Fresh mushrooms, herbs, spices	Safe
Greens, pre-cut, pre-washed, packaged	Discard
Vegetables, raw	Safe
Vegetables, cooked; tofu	Discard
Vegetable juice, opened	Discard
Baked potatoes	Discard
Commercial garlic in oil	Discard
Potato Salad	Discard

## Frozen Foods - When to Save and When To Throw It Out

FOOD	Still contains ice crystals and feels as cold as if refrigerated	Thawed. Held above 40 °F for over 2 hours
<b>MEAT, POULTRY, SEAFOOD</b> 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
<b>DAIRY</b> 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
<b>FRUITS</b> Juices	Refreeze	Refreeze. Discard if mold, yeasty smell, or sliminess develops.
Home or commercially packaged	Refreeze. Will change texture and flavor.	Refreeze. Discard if mold, yeasty smell, or sliminess develops.
<b>VEGETABLES</b> Juices	Refreeze	Discard after held above 40 °F for 6

Home or commercially packaged or blanched	Refreeze. May suffer texture and flavor loss.	hours. Discard after held above 40 °F for 6 hours.
<b>BREADS, PASTRIES</b> 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.
<b>OTHER</b> 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