Food Tips for Power Outages

Knowing what to do reduces your risk of a food-borne illness and minimizes the amount of food lost to spoilage. Bacteria grow rapidly at temperatures between 40–140° F, making food unsafe to consume. **Before:**

- 1. Keep an appliance thermometer in the refrigerator (making sure temperature is 40° F or lower) and freezer (0° F or lower) at all times.
- 2. Keep gel packs in freezer and freeze water in covered containers or 1-quart plastic storage bags for use in coolers or during emergencies.
- 3. Freeze leftovers, milk, and fresh meat (including poultry or seafood) you don't intend to use immediately (to keep them at a safe temperature longer in case the power goes out).
- 4. Keep foods close together in the freezer to help them stay cold longer.
- 5. Egg shells can be rubbed with mineral oil, placed back into their cardboard container, and set on a shelf in a cool, dark storage room for use within 3 months. (If you buy, store, and label an extra dozen eggs each time you purchase eggs, you can build up a 3-month supply.)
- 6. Have coolers on hand to keep refrigerated food cold if the power will be out 4 hours or more.
- 7. Store food on higher shelves that will be out of the way of contaminated water during flooding.
- 8. Know where to buy dry ice or block ice.
- 9. Have a few days' worth of ready-to-eat foods that require no cooking or cooling (like shelf-stable foods and canned goods with a manual can opener).

During the power outage:

- 1. Keep refrigerator and freezer doors closed as much as possible to maintain colder temperatures.
 - a. An unopened refrigerator keeps food cold for about 4 hours.
 - b. A full freezer with the door closed holds its temperature for about 48 hours (half-full for 24 hours, if packages are grouped together to protect each other).
- 2. Place meats on a tray in case they begin thawing, so the liquid doesn't drip on other items.
- 3. Place frozen gel packs, plastic storage bags, or small containers around items in refrigerator and freezer to help them stay cold or inside coolers if power is expected to be out longer than 4 hours.
- 4. Buy dry or block ice if the power is expected to be out for an extended period. (A fully stocked 18cubic-foot freezer can be kept cold for 2 days with 50 pounds of dry ice.)
- 5. Never place food outdoors in the snow where it can be exposed to variable temperatures, unsanitary conditions, or animals (may harbor bacteria or disease). (Frozen food can thaw when exposed to the sun's rays, even when temperatures are very cold.)
- 6. Use snow to make ice by filling containers with water, placing them outside to freeze, and using them in the freezer, refrigerator, or coolers.

When power is restored:

- 1. Check the temperature inside the refrigerator and freezer.
- 2. Discard any perishable food (meat, poultry, seafood, eggs, deli items, leftovers, soft cheeses, milk) that has been above 40° F for 2 hours or more (or after 4 hours without power).
- 3. Discard all items that have come in contact with raw meat juice.
- 4. Check each refrigerated item and discard if it feels warm to the touch or has an unusual color, odor, or texture. Don't rely solely on odor or appearance. When in doubt, throw it out.
- 5. Check freezer to see if it's 0° or lower. If not, check each item for ice crystals. Partially or completely thawed food may be safely refrozen if it still contains ice crystals or is below 40° F.
- 6. Take the temperature of any questionable foods with a food thermometer.
- 7. Dispose of all spoiled or questionable foods. <u>Never taste a food to decide if it's safe</u>.
- 8. If spoiled food has left an odor in the refrigerator or freezer, try this procedure:
 - a. Remove shelves, crispers, and ice trays and wash thoroughly in hot water and detergent.
 - b. Make a sanitizing solution of 1 tablespoon plain, unscented chlorine bleach per gallon of water.
 - c. Rinse shelves, crispers, and ice trays in the sanitizing solution.
 - d. Wash the interior of the refrigerator and freezer, including the door and gasket with hot water and baking soda and rinse with the sanitizing solution.
 - e. Leave the door open for 15 minutes to allow for air circulation.
 - f. Repeat the procedure until the odor is gone.

© Copyright 2020 by the Disaster Discovery Center (DDC). All rights reserved.

Food Safety during a Power Outage

Refrigerated Foods

Refrigerated foods need to be kept below 40° to be safe, so in the event of a power outage, temperatures may rise above this recommended temperature.

If over 40° for over 2 hours, take the recommended action. Keep a thermometer in fridge. Remember, when in doubt, throw it out.

* Indicates food with longer storage life and what to do if the refrigerator is 50° or higher for over 8 hours.

Food Item	Action	Food Item	Action
Baby formula - opened	Discard	Cream	Discar
Bacon	Discard	Cream cheese	Discar
Bagels	Safe	Cream-filled pastries	Discar
Barbecue sauce	Safe	Custard	Discar
Biscuit dough	Discard	Dates	Safe
Blue cheese	Discard	Dressings, creamy - opened	Discar
Bread	Safe	Dressings, vinegar-based - opened	Safe
Brie (soft cheese)	Discard	Dried beef	Discar
Broth	Discard	Dried fruits	Safe
Butter	Safe	Edam (soft cheese)	Discar
Buttermilk	Discard	Egg dishes	Discar
Cake	Safe	Egg products	Discar
Camembert (soft cheese)	Discard	Egg salad	Discar
Candied fruits	Safe	Eggnog	Discar
Canned fish - opened	Discard	Eggs, fresh	Discar
Canned fruit - opened	Safe	Eggs, hard-cooked in shell	Discar
Canned ham labeled "keep refrigerated"	Discard	Evaporated milk	Discar
Canned meat - opened	Discard	Fish, raw or cooked	Discar
Casserole	Discard	Fish sauce	Discar
Catsup	Safe	Fruit, dried	Safe
Cheddar cheese	Safe	Fruit, fresh	Safe
Cheesecake	Discard	Fruits, fresh, cut	Discar
Cheese, low-fat	Discard	Fruit juices, opened	Safe
Cheese, processed	Safe	Garlic in oil	Discar
Cheese, shredded	Discard	Gravy	Discar
Chicken, cooked or raw	Discard	Greens, fresh pre-cut	Discar
Chicken salad	Discard	Greens, fresh pre-washed	Discar
Coconut	Safe	Greens, packaged	Discar
Colby cheese	Safe	Ham	Discar
Cooked meat	Discard	Herbs, fresh	Safe
Cookie dough	Discard	Hoisin sauce	Safe
Cottage cheese	Discard	Horseradish - opened	Discarc

Adapted from: <u>https://www.foodsafety.gov/food-safety-charts/food-safety-during-power-outage</u>

Food Safety during a Power Outage

Refrigerated Foods (continued)

* Indicates food with longer storage life and what to do if the refrigerator is 50° or higher for over 8 hours.

Food Item	Action	Food Item	Action
Hot dogs	Discard	Quiche	Discard
Jelly	Safe	Quick breads	Safe
Lettuce, pre-washed, packaged	Discard	Raisins	Safe
Lunchmeat	Discard	Raw meat	Discard
Margarine	Safe	Refrigerator biscuits, raw	Discard
Mayonnaise - opened	Discard*	Relish	Safe
Meat, cooked	Discard	Rice, cooked	Discard
Meat, raw	Discard	Ricotta (soft cheese)	Discard
Meat, thawing	Discard	Roll dough	Discard
Milk	Discard	Rolls	Safe
Monterey Jack cheese	Discard	Romano cheese, block or grated	Safe
Mozzarella cheese	Discard	Roquefort cheese	Discard
Muenster (soft cheese)	Discard	Sausage	Discard
Muffins	Safe	Seafood, cooked or raw	Discard
Mushrooms, fresh	Safe	Shredded cheese	Discard
Mustard	Safe	Shrimp salad	Discard
Neufchatel (soft cheese)	Discard	Soft cheese	Discard
Olives	Safe	Soup	Discard
Oyster sauce	Discard	Sour cream	Discard
Pancakes, cooked	Safe	Soy meat substitutes	Discard
Parmesan cheese, block or grated	Safe	Soy milk	Discard
Pasta with mayo or vinaigrette	Discard	Soy sauce	Safe
Pasta, cooked or fresh	Discard	Spaghetti sauce - opened	Discard
Pastries, cream-filled	Discard	Spices, fresh	Safe
Peanut butter	Safe	Stew	Discard
Pickles	Safe	Stuffing	Discard
Pie, chiffon or custard	Discard	Swiss cheese	Safe
Pie, fruit	Safe	Taco sauce	Safe
Pizza with any topping	Discard	Tartar sauce, opened	Discard*
Potato salad	Discard	Tofu	Discard
Potatoes, cooked or baked	Discard	Tortillas	Safe
Poultry, cooked or raw	Discard	Tuna salad	Discard
Poultry, thawing	Discard	Vegetable juice - opened	Discard
Processed cheese	Safe	Vegetables, cooked	Discard
Provolone cheese	Safe	Vegetables, raw	Safe
Pudding	Discard	Waffles	Safe
Queso blanco (soft cheese)	Discard	Worcestershire sauce	Safe
Queso fresco (soft cheese)	Discard	Yogurt	Discard

Food Safety during a Power Outage

Frozen Foods

Many food items are safe if they still contain ice crystals and feel like they've been refrigerated. Some thawed foods held above 40° for over 2 hours are still safe, but others will need to be discarded.

* Discard after 6 hours above 40°.

** May have a loss of flavor or texture, but are still safe to eat.

Food Item	Ice Crystals	Thawed
Bagel	Refreeze	Refreeze
Bread	Refreeze	Refreeze
Bread dough	Refreeze**	Refreeze**
Cake	Refreeze	Refreeze
Casserole	Refreeze	Discard
Cheese, hard	Refreeze	Refreeze
Cheese, shredded	Refreeze	Discard
Cheese, soft/semi-soft	Refreeze**	Discard
Cheesecake	Refreeze	Discard
Convenience foods	Refreeze	Discard
Cornmeal	Refreeze	Refreeze
Custard or custard-filled cake, pie, or pastry	Refreeze	Discard
Dough	Refreeze	Refreeze
Egg (out of shell)	Refreeze	Discard
Entrée or frozen dinner	Refreeze	Discard
Fish	Refreeze**	Discard
Flour	Refreeze	Refreeze
Frozen yogurt	Discard	Discard
Fruit juice	Refreeze	Refreeze
Fruit, home or commercially packaged	Refreeze	Refreeze**
Ice cream	Discard	Discard
Meat pie	Refreeze	Discard
Meat (beef, pork, lamb, veal, ground meat)	Refreeze	Discard
Milk	Refreeze**	Discard
Muffins	Refreeze	Refreeze
Nuts	Refreeze	Refreeze
Pancakes	Refreeze	Refreeze
Pie crust	Refreeze	Refreeze
Pizza	Refreeze	Discard
Poultry (chicken, turkey)	Refreeze	Discard
Rolls	Refreeze	Refreeze
Shellfish	Refreeze	Discard
Soup/stew	Refreeze	Discard
Vegetable juice	Refreeze	Discard*
Vegetables, home or commercially packaged	Refreeze	Refreeze**
Waffles	Refreeze	Refreeze