

Eating and Keeping Food Safe During Summer and Winter Storm Emergencies

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How to Cook If the Power Goes Out

During an emergency, cooking and eating habits change to fit the situation. You may not have a refrigerator or a stove, and your water supply may be limited. In addition, health risks from contaminated or spoiled food may increase. When preparing food, consider the following:

Cooking time needed for a particular food. For example, ground beef needs to reach 160 degrees Fahrenheit inside the meat. Color change is not enough to tell you if a safe temperature has been reached. You need to use a thermometer. Whole poultry should be cooked to 180 degrees Fahrenheit for doneness. If there is limited fuel for cooking, choose food that cooks quickly, or serve food that requires no cooking.

Amount of food to prepare. Prepare only the amount of food you need for one meal. When left at room temperature, milk, meat, soups, pasta, legumes and vegetables can spoil and cause foodborne illness when eaten.

Cooking methods available. These include:

Fireplace or wood stove. You can cook in a fireplace if the chimney is sound. Don't start a fire in a fireplace that has a broken chimney. If you're cooking on a wood stove, make sure the stovepipe has not been damaged. You can grill food or wrap it in foil to cook. Fuels for cooking include: wood, tightly rolled newspapers, and logs made of pressed wood particles. **Never use charcoal as fuel for indoor fires; the carbon monoxide from the burning charcoal is very dangerous.** Be sure the flue is open.

Camp stove. Use only outside the house, not indoors or in the garage. Propane and butane fires are difficult to extinguish and could easily get out of hand. A dry chemical extinguisher puts out gasoline or oil fires, but not butane or propane fires. There is little you can do to put out propane or butane fire except shut off the gas. Learn where the shut-off valve is before lighting a camp stove.

Charcoal grill. You can use charcoal to cook meats and vegetables in foil and prepare one-pot meals. Do your charcoal cooking outside. Inadequate ventilation makes indoor cooking with charcoal dangerous.

Gas grill. Never use a grill indoors. Use the grill at least 10 feet away from any building. Do not use the grill in a garage, carport, porch, dry vegetation or under a surface that can catch fire.

Outdoors fire. If you have to build a fire outside, build it away from buildings never in a carport. Sparks can easily get into the ceiling and start a house fire. Make sure any fire is well contained. A metal drum or stones around the fire bed are good precautions.

A charcoal grill is a good place in which to build a wood fire. Never use gasoline to get a wood or charcoal fire started. Be sure to put out any fire when you are finished with it.

Fondue pot or chafing dish. You can use these pieces of equipment inside as long as the fuel heating them is approved for indoor use, such as sterno. Do not plan on using these to cook raw foods that have to be thoroughly cooked to be safe—for example, raw meats, poultry, seafood, eggs and dishes containing them.

Small electrical appliances. If you have access to an electrical generator you may be able to use these to prepare meals.

No-Cook Food Suggestions

You can also prepare peanut butter sandwiches, crackers with commercially canned meats and fish, chips, fresh fruits or vegetables and unopened cans of fruit or pudding.

Commercially canned meats and vegetables and all canned fruits can be eaten right out of the can. Home canned meats and vegetables need to be boiled at least ten minutes before they are tasted to eliminate the risk of botulism poisoning. If you are located at an elevation over 1,000 feet, add one minute per thousand feet of altitude to the boiling time. If you heat the food in the can, be sure to open the can and remove the label first. When cooking is not possible, many commercially canned foods and home canned fruits can be eaten cold.

Keeping Food Safe During A Power Outage

Sooner or later, every home has a power outage. The electricity may have gone off during a winter storm, thunderstorm, or tornado or the refrigerator may simply quit working. Whatever the cause, dealing with the food involved when the unit is off requires knowledge of food safety.

Use the following guidelines to save as much food as safety permits:

Keep the freezer door closed.

Keep what cold air you have inside. Don't open the door any more than necessary. You'll be relieved to know that a full freezer will stay at freezing temperatures about 2 days; a half-full freezer about 1 day. If your freezer is not full, group packages so they form an "igloo" to protect each other. Place them to one side or on a tray so that if they begin thawing, their juices won't get on other food. And, if you think power will be out for several days, try to find some dry ice (see box below). Although dry ice can be used in the refrigerator, block ice is better. You can put it in the refrigerator's freezer unit along with your refrigerated perishables such as meat, poultry, and dairy items.

Handling Dry Ice

- To locate a distributor of dry ice, look under "ice" or "carbon dioxide" in the phone book.

- Buy 25 pounds of dry ice to keep a 10 cubic-foot freezer full of food safe 3 to 4 days; half full, 2 to 3 days. A full 18 cubic-foot freezer requires 50 to 100 pounds of dry ice to keep food safe 2 days; half full, less than 2 days.
- Handle dry ice with caution and in a well-ventilated area. Don't touch it with bare hand; wear gloves or use tongs. Wrap dry ice in brown paper for longer storage. One large piece lasts longer than small ones.
- The temperature of dry ice is -216°F ; therefore, it may cause freezer burn on items located near or touching it. Separate dry ice from the food using a piece of cardboard.

Even if food has started to thaw, some foods can be safely kept.

The foods in your freezer that partially or completely thaw before power is restored may be safely refrozen if they still contain ice crystals or are still 40°F or below. You will have to evaluate each item separately. See the attached charts for different frozen and refrigerated foods. Generally, be very careful with meat and poultry products or any food containing milk, cream, sour cream, or soft cheese. When in doubt, throw them out.

Many foods can be refrozen without much change in taste.

Partial thawing and refreezing may reduce the quality of some foods. Raw meats and poultry from the freezer can usually be refrozen without too much quality loss. Prepared foods, vegetables, and fruits can normally be refrozen, but there may be some quality loss. Fruit juices can be refrozen safely without much quality loss, but frozen fruit will become mushy.

In general, refrigerated items 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 foods (such as meat, poultry, fish, eggs, and leftovers) that have been above 40°F for 2 hours or more, and any food that has an unusual odor, color, or texture, or feels warm to the touch.

Keep an appliance thermometer in the refrigerator and freezer at all times.

This will remove the guesswork of just how cold the unit is because it will give you the exact temperature. The key to determining the safety of foods in the refrigerator and freezer is to know how cold they are. The refrigerator temperature should be 40°F or below and the freezer 0°F or lower.

Be prepared for all power outages. If you live in an area where loss of electricity from summer or winter storms is a problem, you can plan ahead to be prepared for the worst.

- Stock up on shelf-stable foods—canned goods, juices, and "no-freeze" entrees.
- Plan ahead how you can keep foods cold. Buy some freeze-pak inserts and keep them frozen. Buy a cooler. Freeze water in plastic containers or store bags of ice.
- Know in advance where you can buy dry and block ice.

- Develop emergency freezer-sharing plans with friends in another part of town or in a nearby area.

These are rule-of-thumb guides. For the actual handling of specific foods, follow the instructions in the OSU Facts publications F- “Refrigerated Foods: When to Save and When To Throw Out” and F- “Frozen Foods: When to Save and When To Throw Out.” Be sure to discard any fully cooked items in either the freezer or the refrigerator that have come into contact with raw meat juices. Remember, you can’t rely on appearance or odor. Never taste food to determine its safety! Some foods may look and smell fine, but if they’ve been at room temperature too long, bacteria that cause foodborne illness can begin to grow very rapidly. Some types will produce toxins that are not destroyed by cooking.

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