

FactSheet

Para Su Información

Keeping Food Safe During and After a Power Failure

During a power failure, cooking and eating habits must change to fit the situation. You may have no heat, no refrigeration, and limited hot water. In addition, health risks from contaminated or spoiled food may increase. Symptoms of foodborne illness may include nausea, vomiting, stomach cramps and diarrhea. These symptoms can appear from four hours to 96 hours after eating suspect food.

Following are guidelines for storing and preparing food during a power outage. Keep in mind that many of these tips are applicable only in the event of a prolonged power outage.

Conserve Fuel

Consider the amount of cooking time needed for particular foods. If you have limited heat for cooking, choose foods that cook quickly. Prepare casseroles and one-dish meals, or serve no-cook foods.

Alternative cooking methods include:

- A fireplace. Many foods can be skewered, grilled or wrapped in foil and cooked in the fireplace.
- Candle warmers. Devices using candle warmers such as fondue pots may be used if no other heat sources are available.
- Camp stoves and charcoal burners. These may be used outside your home. NEVER use fuelburning camp stoves or charcoal burners inside your home, even in a fireplace. Fumes from these stoves can be deadly.

Do not cook frozen foods unless you have ample heat for cooking. Some frozen foods require considerable more cooking time and heat than

canned goods. Also, if power is off, it is best to leave the freezer door closed to keep food from thawing.

Commercial canned foods can be eaten straight from the can. Do not use home canned vegetables unless you have the means to boil them for 10 minutes before eating.

Observe Health Precautions

If you are without refrigeration, open only enough food containers for one meal. Some foods can be kept a short time without refrigeration. If available, packaged survival or camping foods are safe. Do not serve foods that spoil easily, such as ground meats, creamed foods, hash, custards and meat pies. These are potential sources of foodborne illness.

Canned milk will keep safely for many hours after being opened and can be substituted for fresh milk. If you are using canned milk to feed a baby, however, open a fresh can for each bottle. Use powdered milk immediately after it is mixed if you have no refrigeration. If safe water or water disinfectants are unavailable, use canned or bottled fruit juices instead of water. Prepare and eat foods in their original containers, if possible. This will help if hot water for washing dishes is limited.

Safety of Frozen Foods

When anticipating a power failure set the refrigerator and freezer temperature to the coldest setting to build up a cooling reserve and keep your freezer door closed. Food in well-fitted, 4-cubic-foot home freezers will not begin to spoil in fewer than five days, and may be all right seven or eight days if the food is very cold.

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Thawing Rate

With the door closed, food in most freezers will stay below 41°F up to three days, even in summer. Do not put hot foods into the freezer since this will increase the temperature. Thawing rate depends on:

- The amount of food in the freezer. A full freezer stays cold longer than a partially full one.
- 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.
- The freezer. A well-insulated freezer keeps food frozen longer than one with little insulation.
- Size of freezer. The larger the freezer, the longer food stays frozen.

When the Food has Thawed

Partial thawing and re-freezing does reduce the quality of foods, particularly fruits, vegetables and prepared foods. Red meats are affected less than many other foods. You may safely re-freeze some foods if they still contain ice crystals or if they have been kept at 41°F or below for no more than two days. If the temperature is above 50°F, throw food away. Foods that cannot be re-frozen but are safe to use may be canned immediately.

Treat completely thawed foods as follows:

- 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. Such fruit could be used in cooking.
- Frozen foods and dinners. Cook thawed frozen foods and frozen dinners immediately if they are still cold. Do not re-freeze. If any foods have an offensive or questionable odor, do not eat.
- Vegetables. Do not re-freeze thawed vegetables. Bacteria in these foods multiply rapidly. Spoilage may begin before bad odors develop. Such spoilage may be very toxic. Re-freeze vegetable only if ice crystals remain throughout the package. If you question the condition of any vegetables, 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 41°F for two hours or longer, don't use. It may be dangerous! Discard all stuffed poultry. Cook immediately thawed but unspoiled meat or poultry. After cooking, meat can be re-frozen.
- Fish and shellfish. These are extremely perishable. Do not re-freeze unless ice crystals remain throughout the package. Seafood may be spoiled, even it has no offensive odor.
- Ice cream. Do not re-freeze melted ice cream. Discard or consume it in the liquid form before off-flavor develops.

Using Dry Ice

If it seems likely that your freezer will not be operating properly within one or two days, dry ice may help keep some frozen food from spoiling. The more dry ice you use, the longer the food will stay frozen. If a power outage is anticipated, and you decide to use dry ice, locate a source in advance, and obtain it quickly.

Follow these guidelines for using and handling dry ice:

- Wear gloves when handling dry ice. Do not touch it with your bare hands, because it cause severe frostbite and tissue damage.
- Allow 2 ½ to 3 pounds of ice per cubic foot of freezer space (more will be needed for an upright freezer, because ice should be placed on each shelf). Gas given off by the dry ice needs a place to escape. Open windows or doors to vent out gas from dry ice.

Safety of Refrigerated Foods

You can extend your food supply by cooking all unspoiled meat immediately. Cooked meat needs to be kept above 135°F if it cannot be cooled below 45°F within two hours.

- Large, solid, unboned pieces of fresh beef or lamb, such as rump roast or leg of lamb, are least susceptible to quick spoilage.

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- Most chopped meats, poultry and seafood sandwich fillings should be discarded after two hours without refrigeration.
- Uncured sausage is vulnerable to contamination because it is free of preservatives. Keep frozen as long as possible and then cook before it is completely thawed.
- Raw chopped meats, like hamburger, spoil quickly. Pork, fish and poultry spoil quickly. Dispose of them if they have been in the refrigerator without power for 12 hours or more. Do not trust your sense of smell.
- Hard cheese usually keeps well at room temperatures. Other cheeses, such as cream cheese, opened containers of cheese spreads and cottage cheese, spoil quickly. Throw out when off-flavor develops. If surface mold develops on blocks of cheese, slice 1-inch below the surface and discard.
- Milk spoils quickly without refrigeration. Throw out spoiled milk.
- Custard, gravies and creamed foods should be disposed of if they have warmed to room temperatures. Spoilage is difficult to detect since there may be no offensive odor or taste.
- Commercially made baked goods with cream fillings and all foods containing high protein and moisture are not safe unless they have been stored in a cold place such as a cooler with ice.



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