

Emergency Food Storage

Most of us have experienced an unplanned power outage in our homes. During the winter months the likelihood of this happening increases due to wind or ice storms that can cause interruption to the electrical service. Keeping food safe is a concern during periods without refrigeration. Bacteria can grow quickly when perishable foods are kept in the temperature danger zone (40° to 140° F.)

A power outage of less than two hours is not considered hazardous to food that is stored under safe conditions when the outage begins. Unfortunately, when the power goes out, we don't usually know how long the outage will last. There are some important food safety issues to consider even before a power outage occurs.

These steps will help you prepare for a possible weather emergency:

- Keep an appliance thermometer in the refrigerator and freezer. It will indicate the temperature in the refrigerator and freezer in case of an outage and help you determine the safety of the food.
- Make sure the freezer is at 0°F or below and the refrigerator is at 40°F or below.
- Freeze containers of water for ice to help keep food cold in the freezer, refrigerator or coolers if the power goes out. An additional advantage of this practice is that a full freezer is more efficient than one with empty space.
- If possible, know where dry ice and block ice can be purchased in case you need it.

Being prepared will help you deal with a power outage in the event you experience one. When you unexpectedly lose electricity, here are some steps to follow during and after the outage:

- Never taste a food to determine its safety!
- Keep the refrigerator and freezer doors closed as much as possible to maintain the cold temperature. Open these appliances only to take out the food or to add ice. A significant amount of cold air is lost when the door is opened.
- 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 and the door remains closed).
- Obtain block ice or dry ice to keep your refrigerator and freezer 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. Obtain more detailed instructions and cautions before using dry ice.
- If the power has been out for several days, then check the temperature of the freezer with an appliance thermometer or food thermometer. If the food still contains ice crystals or is at 40 °F or below, the food is safe.
- If a thermometer has not been kept in the freezer, then check each package of food to determine its safety. If the food still contains ice crystals, the food is safe.
- Discard refrigerated perishable food such as meat, poultry, fish, soft cheeses, milk, eggs, leftovers, and deli items after 4 hours without power.
- When in doubt, throw it out!

Storing food outside isn't a good idea, even though the outside temperature is below 40°F. Frozen food can thaw if exposed to the sun's rays, even when the temperature is very cold. Since the outside temperature could vary hour by hour, refrigerated food may become too warm and bacteria that cause food borne illness could grow. Perishable items left outside could be exposed to unsanitary conditions or to animals. Rather than putting the food outside, consider taking advantage of 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.

The cost of food creates a tendency to try to save it, but safety must be the primary consideration. Meat, poultry and seafood that have been above 40°F for over two hours should be discarded. This includes lunchmeats, egg salad, canned hams labeled "keep refrigerated," raw or leftover cooked meats, chicken, fish or seafood. Other leftovers such as pizza, gravy, stuffing, soups, stews or casseroles should also be thrown away.

Hard cheeses like cheddar, Colby, Swiss and provolone would still be safe to use, as well as grated Parmesan and Romano. Shredded cheeses and soft cheeses, such as Brie, mozzarella, cottage cheese, cream cheese or ricotta should be discarded. Butter or margarine should be safe, but other dairy products, including milk, yogurt, sour cream and baby formula should not be used.

Fresh, raw vegetables might lose nutrients but should be safe to eat, but cooked vegetables should be discarded. Fresh fruits that have been cut should also be discarded.

Frozen foods can be safely refrozen if there are still ice crystals and the food feels as cold as if it had been refrigerated. However, ice cream and frozen yogurt should be discarded. Refreezing foods will normally cause some texture changes and flavor loss. But, if the frozen foods have thawed and were held above 40°F for over 2 hours they should be thrown out.

For a more complete listing of when to save and when to throw out foods, check the link at our website www.berkeleyextension.com or consult the Food Safety and Inspection Service unit of USDA at www.fsis.usda.gov.

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