

Emergency storage tips

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Editor's note: Following are excerpts from two Nutrition Update columns written by Sue Pierce, registered dietitian, for the Sentinel food pages in January, 1983.

It has been a year since the Big Storm. One of the aftermaths that affected many county residents was the widespread electrical power failure. In the days that followed, there were many questions about the safe use of foods that needed refrigeration or were in freezers.

Here are some guidelines to follow the next time there is an extended power failure so you can minimize food losses without risking illness from spoiled foods.

In refrigerator storage, for bacteria to grow and thrive, three elements need to be present; food, moisture, and a temperature in the range of 40 degree F to 140 degree F (referred to as the temperature danger zone). If one of these elements is missing or is in short supply, the growth of bacteria will be eliminated or slowed down, not eliminated. This is why highly perishable foods spoil in the refrigerator after a few days.

Time is also a factor. Once highly perishable foods (milk products, meats, mayonnaise) reach the temperature danger zone, bacterial growth is rapid. After four hours at such temperature, there may be enough bacterial growth in highly perishable foods to cause food poisoning and therefore, should be discarded.

When the power goes off, help your refrigerator keep foods inside cold (below 40 degree F) for as long as possible. Keep the refrigerator door closed as much as possible. Since most of us do not have thermometers in our refrigerators, a general guideline is if the food is cold to the touch, it is probably safe to eat. However, if in doubt, throw it out! The colder a refrigerator is before the power goes off, the longer it will take for foods to reach temperatures above 40 degrees F.

The highly perishable foods which are most likely to cause food poisoning and should be used first are: 1. Milk products: fresh milk, opened canned milk, cream, sour cream, yogurt, soft cheeses like cream cheese, ricotta and cottage cheese, or any other foods that contain a milk product (custards, puddings, cream pies, milk-based sauces).

2. Meats or any foods that contain meat (casseroles, soups, etc.); if you have any leftovers use them first. The next priority should be to use any ground meats or variety meats (liver, kidney, etc.). Then use any fish, poultry or red meats. Meats like cold cuts have preservatives, which slow down bacterial growth a little. Smoked and cured meat (like bacon) spoil the slowest.

3. Mayonnaise, mayonnaise-based salad dressings, or any food that requires mayonnaise (potato salad, macaroni salad) should be used quickly or discarded if they reach the temperature danger zone.

Following are foods that are moderately perishable. If kept fairly cool, they usually keep for several days without spoiling.

1. Eggs: Don't cook until ready to use; uncooked eggs last longer.

2. Hard cheeses: Cheddar, Swiss, Colby, etc. Use opened packages first.

3. Fruits and vegetables: Use until they start showing signs of deterioration, such as wilting.

The last group of foods are not very perishable and will keep for a long time without refrigeration.

1. Condiments, like catsup, mustard, pickle relish, pickles and olives.

2. Butter or margarine.

3. Jams and jellies.

4. Breads and baked goods (except those with a cream filling.)

Before the power does go off, make sure that the temperature of the freezer is at 0 degrees F or below. The lower the temperature of the food, the longer it will take to thaw. Also, the fuller a freezer is filled with food, the longer it will keep the food frozen.

When the power goes off, avoid opening the freezer. Keep the cold air in and the warm air out. Cover the freezer with blankets. This will act as an additional layer of insulation. A fairly full freezer that is normally kept at 0 degree F or below and insulated with some blankets, should keep foods frozen for two to four days.

The length of time a freezer can maintain foods in a frozen state will depend on many things. As mentioned, the temperature of the foods, how much food is in the freezer, as well as other factors (such as the temperature outside the freezer), all affect the length of time the food will remain frozen.

Questions arise about what to do with the food when it begins to thaw, or has thawed. Can it be refrozen? Can it be eaten? Or, does it have to be discarded?

If the power stays off long enough for foods to begin thawing, steps should be taken to either start using the foods or to keep them from thawing further.

If foods are only partially thawed (ones that still contain ice crystals) they can be refrozen. At this point immediate action should be taken. Your options might include:

Transferring the partially thawed foods to nearby freezers (commercial locker or a friend's freezer) that are operating. If you do this, do all you can to keep the food cold as possible during transport to prevent further thawing.

If the food has completely thawed, do not refreeze it. At this point, you need to determine if the food is still safe to eat or if it should be discarded.

Or hooking the freezer up to a generator to get it running. Considering the expense, this is not practical solution for most people.

Remember, if handled properly, foods will be safe to eat, but the quality of the food deteriorates after partially thawing and then refreezing. Make a point of using these foods as soon as possible.