

# When the Home Freezer Stops

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When the freezer stops running, the power supply may be off or the freezer itself may be broken. Don't worry if you know the freezer will be off only a few hours.

## Steps to follow first

1. If the power is off, try to find out how long it will be off. Check plug and circuit breaker before proceeding.
2. Consult freezer manual to determine if there is something you can do to put the freezer back into operation.
3. Find out how long it will take to get a technician to get the freezer running.

If the home freezer will be off for some time, here are some things you can do to prevent food spoilage.

## Keep the freezer closed

A closed freezer acts like an insulated ice chest. Food usually will stay frozen in a fully loaded cabinet for two days if the freezer is kept closed. A freezer that's partially full will not keep more than one day.

How long the food in your freezer will stay frozen depends on:

- The amount of food.
- The kind of food. (A freezer full of meat or other dense foods will not warm up as fast as a freezer full of baked food.)
- The temperature of the food. (The colder the food, the longer it will stay frozen.)

- The freezer itself. (A well-insulated freezer with good gaskets will keep food frozen much longer than one with little insulation or poor gaskets.)
- Size of freezer. (The larger the freezer, the longer the food will stay frozen.)

## Use dry ice

If locker space is not available and it looks as though the freezer will be out of service for more than a day, use dry ice if available. The more dry ice used, the longer the food will stay frozen.

Dry ice may be available from the grocery store; check the yellow pages under "Dry Ice" or "Carbonic Gas." Have the dry ice company cut it into convenient sizes. Never touch dry ice with your hands. Don't try to cut or chip the ice yourself. To prevent burns, wear gloves when handling dry ice. Do not inhale the vapors.

The temperature of a half-full, 10 cubic-foot cabinet can be kept below freezing for two to three days with about 25 pounds of dry ice. Food in a fully loaded cabinet will stay frozen three to four days if the dry ice is added soon after the freezer shuts down.

Use 50 pounds of dry ice for a 20 cubic-foot freezer. Put heavy cardboard directly on the packages of frozen food, then put dry ice on the cardboard. Don't open the freezer again until you need to replace the dry ice or until the freezer is working again.

Cover the freezer with blankets or quilts to provide extra insulation. Be sure to pin or fasten the coverings so air-vent openings are not blocked. The power may go on unexpectedly and ventilation will be needed.

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## Do Not Refreeze

- Food that has thawed completely (about 40°F)—especially meat, poultry and seafood
- Prepared, cooked foods such as pizza, casseroles and stew
- Any food that has poor or questionable color or odor
- Thawed vegetables
- Creamed foods, puddings or other low-acid foods that have thawed
- Melted ice cream

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## Safe To Refreeze

- Foods that still contain ice crystals
- Thawed fruit if it still tastes and smells good
- Bread, cake, cookies, plain doughnuts
- Nuts, flour, cereal
- Raw meat and poultry that has thawed but is still cold (40°F or less) can be refrozen raw or cooked thoroughly and refrozen
- Juice
- Margarine
- Cheese

## What to do if food thaws

Generally, perishable foods held above 40 degrees for over 2 hours should be discarded. Bacteria that cause food poisoning can multiply to unsafe levels under these conditions. Thawed food can safely be refrozen if it still contains ice crystals or if it has thawed, but is still cold (about 40°F) and has been kept at refrigerator temperature not more than one or two days.

Partial thawing and refreezing reduces the quality of foods, especially fruits and vegetables.

## Handling odor problems

If food has thawed and spoiled in the freezer, a thorough cleaning job may not remove the lingering odor. Try the following methods:

- Wash the interior walls with a solution of 2 tablespoons of baking soda per quart of water.
- Pour activated charcoal or baking soda onto jelly roll pans and place in freezer in two or more areas. Run freezer for several days. Activated charcoal can be purchased in quantity from stores that sell aquarium supplies. Small amounts are available from appliance stores.
- If these methods do not solve odor problems, wet drippings may have seeped into the insulation. This problem requires service by a technician who may have to remove and replace the insulation.

## Be prepared

- Identify a source of dry ice in your community.

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## How to refreeze food

### 1. Clean freezer thoroughly before refilling.

Wash all removable parts, gasket and door liner with warm water and mild detergent. Rinse well. Disinfect using a solution of 1 tablespoon chlorine bleach per quart of water. Rinse well.

### 2. Mark foods that are being refrozen.

### 3. Refreeze thawed food quickly.

The best way is to take the food to a commercial locker plant so it can be chilled to 0°F or below. Wrap the food well

with newspapers and blankets before moving it to or from the freezer plant.

If you must refreeze food at home, set the temperature control of the freezer to its coldest position. When power is restored, the freezer will run continuously and food will freeze quicker. Make sure cold air can circulate freely. After the food is frozen, return the temperature control to its usual setting.

### 4. Use refrozen food as soon as possible.

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- During the seasons when power failure is frequent in your community, it's good insurance to run the freezer between -10°F and -20°F
- When buying a freezer, select one with good insulation. A well-insulated freezer will keep food cold longer. Replace worn gaskets that might prevent a tight seal.
- Use care in preparing, packaging and freezing food. Sanitary preparation means fewer bacteria to cause spoilage. Frozen bacteria are not dead; when the temperature increases they become active and can cause spoilage and foodborne illness.
- Check the condition of frozen food when the power returns. It is difficult to know if food has thawed after several days have passed.

## For more information

Additional help is available from

- ISU Extension's Answer Line by e-mail at [answer@iastate.edu](mailto:answer@iastate.edu) or by phone at 1-800-262-3804 (to use TDD telecommunications devise for deaf, call 1-800-854-1658). [www.extension.iastate.edu/families/answerline](http://www.extension.iastate.edu/families/answerline)

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.