Power out? Here’s how to keep food safe

K-State food safety expert gives guidelines on food storage during bad weather

By Taylor Jamison, K-State Research and Extension news writer

MANHATTAN, Kan. – Keeping food safe during a power outage begins well before winter storms hit, said Kansas State University food scientist Karen Blakeslee.

Before the power goes out, Blakeslee advised keeping an appliance thermometer in the refrigerator and freezer. According to guidelines from the U.S. Food and Drug Administration, the temperature inside the refrigerator should be 40 degrees Fahrenheit or lower, and the freezer at 0 F or below.

Blakeslee, who also is coordinator of K-State’s Rapid Response Center for food safety, said having a thermometer in place before the power goes out helps to assure the appliance temperature does not stray outside the recommended range.

It may also be a good idea to stock up on canned and non-perishable goods.

“Dried foods, such as fruit and crackers, are great for snacks,” Blakeslee said. “Keep foods that family members enjoy, but also healthful foods to provide nutrient-dense nourishment.”

Blakeslee recommends storing pantry foods in a cool, dry, dark location.

When power is first lost, leave the door of the refrigerator and freezer closed to preserve cold temperatures as long as possible. If the power stays out for a longer period of time and the refrigerator is not staying cold, Blakeslee has some additional ideas for protecting food.

“Coolers filled with ice are very helpful in an emergency,” Blakeslee said. “Make sure ice surrounds the food for the best chilling effect.”

For food in the freezer, dry ice can be used if available – but thick gloves should always be worn when handling dry ice to prevent skin damage. Dry ice should then be kept in a ventilated area.
Food spoilage may be unavoidable if the power outage is lengthy. Blakeslee outlines key factors that may be an indication of foodborne illness:

- Color changes.
- Unusual odors.
- Texture changes.

The most susceptible foods are meat, dairy, eggs and cut fruits and vegetables. Extra care should be taken when examining these food items.

“Don’t taste any questionable food that has thawed out,” Blakeslee said. “When in doubt, throw it out.”

If a power outage lasts more than four hours at temperatures greater than 40 F, refrigerated or frozen food kept without another cold source should be thrown out.

For more information on food safety during the power outages, Blakeslee recommends consulting the U.S. Centers for Disease Control and Prevention webpage.

Blakeslee publishes a monthly newsletter called You Asked It! that provides numerous tips on being safe and healthy. More information is also available from local extension offices in Kansas.

### Sidebar

**Extra Advice During a Power Outage**

Kansas State University food scientist Karen Blakeslee urges safety first when preparing for possible power outages this winter:

- If using a gas appliance or grill, be sure to use it in a well-ventilated area. Carbon monoxide poisoning can be an unfortunate outcome.

- If you own a generator, keep it well maintained. Check weather forecasts so it can be ready to go in case of an outage.

Blakeslee emphasized the importance of food safety.

“With any questionable food, be smart. When in doubt, throw it out.”
Is it safe to store food in the snow?

Although it may seem like a sensible solution during a power outage to keep food cold by storing it outside in snow, there are several risks associated with the practice.

One in particular: The food can begin to thaw – defeating the entire purpose.

“Frozen food can thaw when exposed to the sun’s rays, even when the temperature is very cold,” said Kansas State University food scientist Karen Blakeslee. “Food may become too warm and foodborne bacteria could grow.”

In addition, the temperature outdoors can vary by hour, which will not protect refrigerated or frozen food.

In addition, the outdoors may harbor unsanitary conditions and animals – both factors can lead to risky food when consumed.

“Animals may harbor bacteria or disease. Never consume food that has come in contact with an animal,” Blakeslee said.

The takeaway: Storing packaged food in the snow may work in a pinch, but it is not advised for long-term. To completely avoid the risks, keep food cold, safe and indoors.

FOR PRINT PUBLICATIONS: Links used in this story
Rapid Response Center for food safety, https://www.rrc.k-state.edu


You Asked It! monthly newsletter, https://www.rrc.k-state.edu/newsletter

K-State Research and Extension statewide offices, https://www.ksre.k-state.edu/about/statewide-locations.html
K-State Research and Extension is a short name for the Kansas State University Agricultural Experiment Station and Cooperative Extension Service, a program designed to generate and distribute useful knowledge for the well-being of Kansans. Supported by county, state, federal and private funds, the program has county extension offices, experiment fields, area extension offices and regional research centers statewide. Its headquarters is on the K-State campus in Manhattan. For more information, visit www.ksre.ksu.edu. K-State Research and Extension is an equal opportunity provider and employer.

Story by:
Taylor Jamison
mtjamison@ksu.edu

For more information:
Karen Blakeslee
785-532-1673
kblakesl@ksu.edu