



Food Safety After a Fire

Fire!

Few words can strike such terror. Whether the result of a forest fire, residential fire or fire in the kitchen only, people often try to save what they can - including food. But generally, **saving food that's been in a fire is not a good idea.**

Food exposed to fire can be compromised by four factors: the heat of the fire, exposure to the smoke itself, chemicals used to fight the fire, and power outage as a result of fire.

Heat

Food in cans or jars may appear to be fine, but if they have been close to the heat of a fire, they may not be edible. Heat from a fire can activate food spoilage bacteria. If the heat is severe, the cans or jars can split or rupture, and the result is unsafe food.

Smoke

Toxic substances which may be released in the smoke from burning materials are one of the most dangerous elements of a fire. The smoke can be hazardous and can also contaminate food. Any food stored in permeable packaging such as cardboard or and plastic wrap should be thrown away. Toxic smoke can permeate the packaging and contaminate the food. Discard any raw foods stored outside the refrigerator, such as potatoes or fruit, as they too could be contaminated by exposure to the smoke. Even food stored in the refrigerator or freezer can become contaminated by smoke exposure as the seals are not necessarily airtight. **If food from your refrigerator or freezer has an off-flavor or odor when it is prepared it should be discarded and not eaten.**

Chemicals Used to Fight Fires

Chemicals used to fight fires contain toxic materials that can contaminate food and cookware. While some of the chemicals may be listed as non-toxic to humans, they can be harmful if swallowed.

Chemicals on food

Fire-fighting chemicals cannot be washed off exposed foods. Foods that are exposed to chemicals should be thrown away. This includes food stored at room temperature, such as fruit and vegetables, as well as foods stored in permeable containers like cardboard and screw-topped jars and bottles.

De-contaminating canned goods, kitchen appliances

Canned goods, cookware, and kitchen equipment such as refrigerators or freezers, exposed to chemicals can be decontaminated as follows:

1. Wash canned goods, cookware, and surfaces of refrigerators and freezers that have been exposed to chemicals with soap and hot water.
2. Rinse the surfaces with clear water.
- 3.** Dip cans and cookware in a bleach solution (1-2 teaspoons bleach per gallon of water) for 15 minutes and then let air dry. Refrigerator and freezer surfaces can be wiped with the same concentration of bleach solution.

Power Outage

The main concern with perishables stored in the refrigerator and freezer is the availability of electrical power. If a power outage has occurred, keep the refrigerator and freezer doors closed. Open the refrigerator as little as possible. Refrigerated items should be safe as long as the power is off no more than about 4 hours. A full freezer should keep foods safe for about two days; a half-full freezer, about one-day. If foods still contain ice crystals and/or if the freezer temperature is 41° F or lower and has been at that temperature no longer than one to two days, food that was safe when it was originally frozen should still be safe. These foods can be refrozen or cooked and eaten.

Guidelines

- Discard any perishable food that has been held at temperatures above 41° F for more than 2 hours, or any food that has an unusual odor, color or texture.
- Never taste food to determine its safety.
- If you have returned from being evacuated and are not sure if the power was shut off and then turned back on, check with your utility company.
- Check for suspicious signs in your refrigerator and freezer, such as the presence of liquid or refrozen meat juices, soft or melted and refrozen ice cream, or unusual odors.
- **Remember** that food unfit for human consumption is also unfit for pets.
- **If in doubt, throw it out!**

For additional information on food safety, contact

- Colorado State University Extension at (970) 498-6000; www.larimer.org/ext
- USDA Meat and Poultry Hotline (recorded messages and assistance is available in both English and Spanish) at 1-800-535-4555.
- Larimer County Department of Health and Environment at 970 498-6775;
www.larimer.org/health

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Source: Adapted from After a Fire, Is the Food Safe? Consumer Information from USDA-FSIS, December 1996 and Keeping Food Safe in an Emergency, USDA-FSIS, April 2002, and Food Safety Issues After a Fire, Pat Kendall, PhD, RD, Professor and Extension Food Safety Specialist Colorado State University Extension, May 2010.