



Safe Food Tips

1. Wash hands before handling food.
2. Don't eat foods from damaged containers.
3. Keep foods clean.
4. Keep cold foods cold and hot foods hot.
5. Boil all home-canned, low-acid vegetables and meats 10 minutes plus one minute per 1,000 feet in altitude before tasting.
6. Don't leave cooked or opened cans of food at room temperature longer than 2 hours.

Plan an Emergency Food Supply

To keep food safe and avoid food-borne illness, we need to know what foods to store and how to handle food afterwards.

- Experts advise keeping on hand a three-day supply of food and water per person.*
- Stock foods that require no refrigeration.
- **Store foods your family normally eats, plus favorite treats. A crisis is not the time to learn to eat new foods.**
- Avoid too many foods high in salt, as this will increase thirst.
- Store single servings or one-meal size to avoid leftovers, as refrigeration may not be available.
- Canned foods keep almost indefinitely as long as cans are undamaged. The can also will work as the cooking and serving dish. Open the can and remove the label before heating. Do not place metal cans in the microwave.

*Recommended by the Federal Emergency Management Agency (FEMA) and the American Red Cross.

Food Storage

Foods recommended for storage:

- Water – one gallon per person per day for drinking, cooking and personal hygiene.
- Ready-to-eat canned foods – vegetables, fruit, beans, meat, fish, poultry, meat mixtures, pasta.
- Soups – canned or “dried soups in a cup”.
- Smoked or dried meats – commercial beef jerky.
- Dried fruits and vegetables – raisins, fruit leather.
- Juices (vegetable and fruit) – bottled, canned or powdered.
- Milk – powdered, canned, evaporated.
- Staples – sugar, salt, pepper, instant potatoes and rice, coffee, tea, cocoa mix.
- Ready-to-eat cereals, instant hot cereals, crackers, hard taco shells.
- High-energy foods – peanut butter, jelly, nuts, trail mix, granola bars.
- Cookies, hard candy, chocolate bars, soft drinks, other snacks.

Store one or two manual can openers with your emergency food supply. Canned foods can be heated indoors with canned heat (such as Sterno). Charcoal grills, hibachis, and camp stoves must be used outside.

Optimum Length of Storage for Quality and Nutrition
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Examples:	
Fish, canned	18 months
Canned potatoes	30 months
Dehydrated potatoes	30 months
Canned fruits and vegetables	24 months
Canned fruit juice	24 months
Canned vegetable juice	12 months
Pickles	12 months
James and jellies	18 months
Rice, dried	24 months
Cornmeal	12 months
Pasta, dried	24 months
Cold breakfast cereal	12 months
Prepared flour mixes	8 months
Packaged dry beans, peas, and lentils	12 months
Canned evaporated milk	12 months
Dry milk products	24 months
Source: Utah State University Extension	

For more information, call Colorado State University Extension in your county and request fact sheet 9.310 — *Food Storage for Safety and Quality*.

The Food Storage Area

The storage area should be located where the average temperature can be kept above 32 degrees Fahrenheit and below 70 F. Remember that the cooler the storage area, the longer the retention of quality and nutrients.

The storage area should be dry (less than 15 percent humidity), and adequately ventilated to prevent condensation of moisture on packaging material. Food should not be stored on the floor; the lowest shelf should be 2-3 feet off the floor. Date and rotate food every 6-12 months. Replace foods as used.

When designing and building a food-storage area, minimize areas where insects and rodents can hide. As practical, seal all cracks and crevices. Eliminate any openings that insects or rodents may use to gain entrance to the storage area.

Electrical equipment such as freezers, furnaces and hot water heaters should not be housed in the storage area. These appliances produce heat, which unnecessarily increases storage temperatures.

Front Range Healthy Lifestyles Issues Team, Colorado State University Extension. 1999.

Food Storage Containers

Food should only be stored in food-grade containers. A food-grade container is one that will not transfer non-food chemicals into the food and contains no chemicals that would be hazardous to human health. Examples of containers NOT approved for food use are trash or garbage bags, paint or solvent cans, industrial plastics and fiber barrels that have been used for non-food purposes. Don't assume all plastic containers are food grade. For example a plaster bucket and a pickle bucket look the same but only one of them is safe to hold food.

If you're not sure, don't use it. The safety of storage containers can be determined by contacting the manufacturer and asking if a particular container is approved for food use. Many manufacturers are beginning to indicate on the container label if it is approved for food use.

Package dried foods in airtight, moisture-proof, insect-proof containers such as glass jars or plastic freezer boxes or bags. Metal cans with tight-fitting lids can be used if the dried food is first placed in a plastic bag. Package dried foods in small amounts because once the package is open, the food can absorb moisture from the air and quality will deteriorate. Store containers of dried foods in a dry, cool, dark place. Low storage temperatures extend shelf life of dried products. Exposure to humidity or air decreases shelf life. If packaged correctly, foods stored at temperatures below 60 F maintain good quality for about one year.

Food Safety: Perishables

The main concern with perishables is when electrical power is unavailable. When the power goes off, and you have no idea when it will be back, then it's time to think food safety.

The key to determining the safety of foods in the refrigerator and freezer is their temperature. Bacteria that multiply rapidly at temperatures above 40 F cause most food-borne illness.

- Keep the refrigerator and freezer doors closed. Open the refrigerator as little as possible. Every time you open the refrigerator door, cold air escapes. Refrigerated items should be safe as long as the power is off no more than about 4-6 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 is 40 F or less 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. **Discard any perishable food that has been stored at temperatures above 40 F for 2 or more hours, or any food that has an unusual odor, color or texture.**
- Never taste food to determine its safety. Some foods may appear fine, but harmful bacteria and or toxins, which can be tasteless and odorless, might be present.

Water Storage

Store one gallon of water per person per day, for drinking, cooking and personal hygiene.

Options for safe water in an emergency include, bottled water, tap water stored in sterilized containers, uncontaminated water drained from your hot water heater/plumbing system, or water you purify after an emergency.

Contact your local Health Department for additional information on water storage and safety.

Front Range Healthy Lifestyles Issues Team, Colorado State University Extension. 1999.

Hotlines

- USDA Meat & Poultry Hotline: 1-800-535-4555
- Federal Consumer Y2K Helpline: 1-888-872-4925

Food Safety Resources

- Put Knowledge to Work: Home and Garden (XCD11 / \$40) – Contact The Other Bookstore at (970) 491-6198.
- Federal Emergency Management Agency (FEMA): <http://www.ready.gov/food>
- Food Safety and Natural Disasters: <http://ccesuffolk.org/>
- Washington State University Food Safety: <http://foodsafety.wsu.edu/>
- Food Storage in the Home: http://extension.usu.edu/files/publications/publication/FN_502.pdf
- A Management Plan for Home Food Storage: http://extension.usu.edu/files/publications/publication/FN_500.pdf
- Emergency Resource Guide: http://www.doh.wa.gov/Portals/1/Documents/Pubs/821-001_ResourceGuide.pdf

References

- Food Storage In the Home, Utah Extension
- Storing Dried Food, The National Food Safety Database
- Ready or Not Newsletter, University of California – Extension.
- CSU Extension [fact sheet 9.310](#) – *Food Storage for Safety and Quality*
- CSU Extension [fact sheet 9.357](#) – *If Your Freezer Stops*
- CSU Extension [fact sheet 9.348](#) – *Canning Vegetables*
- Storing Food and Water Supplies in Preparation for Emergencies and Disasters, Washington State University Extension
- Food Safety and Natural Disasters; Cornell University Extension
Front Range Healthy Lifestyles Issues Team, Colorado State University Extension.