

Stay Safe and Stocked: Food Preparation for Disasters

Quadarius Whitson
Culinary Nutrition & Food
Safety Program Associate
- Family & Consumer
Sciences

No refrigeration? No elec-
tricity? Limited water supply?

Regardless of the cause, these problems can significantly affect what foods we eat. Proper planning makes sure that good and nutritious foods are available for our families when disaster strikes.

Where Do I Start?

Following a disaster, there may be power outages and a limited water supply that could last several days. Creating an emergency preparedness kit containing essential items such as food, water, personal hygiene products, flashlights/candles, blankets, and other commonly recommended items is critical to ensure individuals and families can meet their needs during harsh times. Experts generally recommend that a three-day emergency food supply is sufficient for most disasters. However, depending on the severity of the disaster and the area in which you live, a one to two-week emergency food supply may be reasonable.



*Arkansas Is
Our Campus*

Visit our website at:
<https://www.uaex.uada.edu>

Emergency Food Supply Considerations

When beginning to prepare your emergency food supply, consider the following:

- **Family food preferences** – Make sure your family's favorite foods are included. Canned and dried foods are important for any emergency food supply, so if these products are not part of your regular meals, be sure to introduce them before an incident so they are readily accepted when eating them is a necessity.
- **Special dietary needs** – Stock up on foods that meet nutritional needs and those that cater to food allergies (ex., peanut allergy) and medical conditions (ex., diabetes).



In addition, be sure to add paper plates, paper cups, paper towels, and eating utensils.

- **Ease of preparation** – Avoid items that require special preparation, long cooking times, lots of ingredients, or large amounts of water.
- **Shelf-life** – The shelf-life of the food in your emergency food supply can be labeled as “best by” or “use by.” “Best by” shows when a food is at its peak quality and freshness, meaning it can still be eaten but may not taste as good. “Use by” is a safety date, meaning you can’t consume the food after the date as eating may be unsafe.
- **Specialty items** – Don’t forget to include treats like candy or cookies as a moral booster and quick energy source.

Emergency Food Supply (Three-Day)

An emergency preparedness kit for short-term use should contain at least a three-day food supply consisting of mostly non-perishable food items, including canned, boxed, or bottled foods, dry mixes, and other staples that do not require refrigeration. Avoid items requiring special preparation, long cooking times, many ingredients, or large amounts of water. Periodically check the expiration dates of food and rotate items in your pantry. The following items are suggested when selecting emergency food supplies. You may already have many of these on hand:

- Bread
- Canned foods (soups, beans, sauces, fruits, vegetables, etc.)
- Condiments
- Crackers
- Dried fruits
- Nuts and seeds
- Food for infants (if applicable)
- Instant hot cereal
- Protein or fruit bars
- Dry cereals or granola
- Instant rice or noodles
- Bouillion cubes or canned/boxed broth
- Oil, vinegar, or lemon juice concentrate

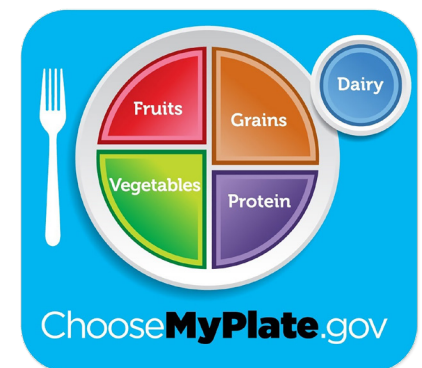
- Hard cheese (Parmesan)
- Peanut butter or other nut butters
- Instant beverages (coffee, cocoa, 100% fruit juices)
- Non-perishable pasteurized milk (or nut milks) in boxes or cans

Make sure that you have a can opener, scissors, or knife for cutting open foil and plastic pouches. Pack all these items into plastic bags (ziplock bags also work) to keep them dry and as airtight as possible. Keep a list of dates when food items need to be inspected and used and replaced with newly purchased items.

Emergency Food Supply (One to Two Weeks)

An emergency preparedness kit for a longer-term emergency where power can be off for long periods of time, a one-to-two-week supply is usually sufficient. The same general suggestions for a three-day food supply will work for the one-to-two-week food supply. However, due to the longer duration of the emergency, more focus should be on nutrition. Plan your food supply to have at least one well-balanced meal consisting of all five major food groups daily.

Whether you’re preparing for a short-term or long-term disaster, our [Preparedness and Resiliency Cookbook](#) is a resource to help individuals and families stock and make healthy, tasty, quick, and safe food for hardships or natural disasters.



Water Storage

Following a disaster, clean drinking water may not be available. All emergency preparedness kits should include at least one gallon of water per person daily. A normally active person needs approximately three-quarters of a gallon of fluid daily. Individual needs may vary due

Method	Description	Kills Microbes	Removes Other Contaminants (Heavy Metals, Salts, Chemicals)
Boiling	Safest method. Boil water for 1 minute (longer at higher altitudes). Let cool before drinking. To improve taste, aerate by pouring between containers.	Yes	No
Chlorination	1/8 tsp of regular liquid bleach (5.25–6.0% sodium hypochlorite) per gallon of water. Let stand for 30 minutes. Avoid scented or additive-laden bleach.	Yes	No
Distillation	Boil water and collect condensed vapor by hanging a cup under an inverted lid. Removes microbes, heavy metals, salts, and most chemicals.	Yes	No

Table adapted from the U.S. Department of Homeland Security

to age, physical activity, diet, climate, health, and physical condition. One way to have water during a disaster is to buy commercially bottled water in the sealed original container in a cool, dark place. If preparing your own containers of water, purchase food-grade water storage containers. Clean these containers with dish-washing soap and sanitize the bottles with one teaspoon of non-scented liquid household chlorine bleach to a quart before filling them with water. Water that is not commercially treated should be replaced every six months.

Water Treatment

If your stored water supply becomes scarce, you may have to treat contaminated water not only to drink but also to wash/prepare food, wash dishes, or brush your teeth. Contaminated water can not only have a bad odor and taste, but it can also contain germs that cause diseases such as hepatitis, typhoid, cholera, and dysentery. Three different methods are commonly used to treat water: boiling, chlorinating, and distilling.

Outlook

Preparing food and water for a disaster is critical to ensure safety and well-being during emergencies. Taking proactive measures—such as creating an emergency preparedness kit containing non-perishable foods and a sufficient water supply, can minimize risks and maintain access to essential resources when needed. Remember, preparedness today provides peace of mind for tomorrow.

References:

- Address, E., & Harrison, J. (2020, March). **Preparing an emergency food supply, short-term food storage.** University of Georgia Cooperative Extension. Retrieved from <https://www.fcs.uga.edu/extension/preparing-an-emergency-food-supply-short-term-food-storage#elec>.
- Build a kit.** (2024, July). Ready.gov. Retrieved January 14, 2025, from <https://www.ready.gov/kit>.
- Ellis, E. (2019, September). **Food safety after a natural disaster.** Academy of Nutrition and Dietetics. Retrieved from <https://www.eatright.org/food/home-food-safety/safe-food-storage/food-safety-after-a-natural-disaster>.
- Food Safety and Inspection Service. (2021, February). **Emergencies and food safety.** United States Department of Agriculture. Retrieved January 14, 2025, from <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/emergency-preparedness>.
- Natural disasters and severe weather.** (2024, February). Centers for Disease Control and Prevention. Retrieved January 14, 2025, from <https://www.cdc.gov/natural-disasters/index.html>.
- University of Arkansas Division of Agriculture Cooperative Extension. (2024, December). **UADA preparedness & resiliency cookbook.** Arkansas Emergency Preparedness Resources. Retrieved from <https://www.uaex.uada.edu/life-skills-wellness/docs/FRM-Resiliency-Cookbook-EFNEP.pdf>.

Appreciation is extended to Easter H. Tucker, original author, and to Utah State University Extension who provided content.

QUADARIUS WHITSON is a culinary nutrition & food safety program associate in Family and Consumer Sciences with the University of Arkansas System Division of Agriculture Cooperative Extension, Little Rock.

FSHED81R-PD-1-2025

Pursuant to 7 CFR § 15.3, the University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services (including employment) without regard to race, color, sex, national origin, religion, age, disability, marital or veteran status, genetic information, sexual preference, pregnancy or any other legally protected status, and is an equal opportunity institution.