

Family Food Stockpile for Survival 1977

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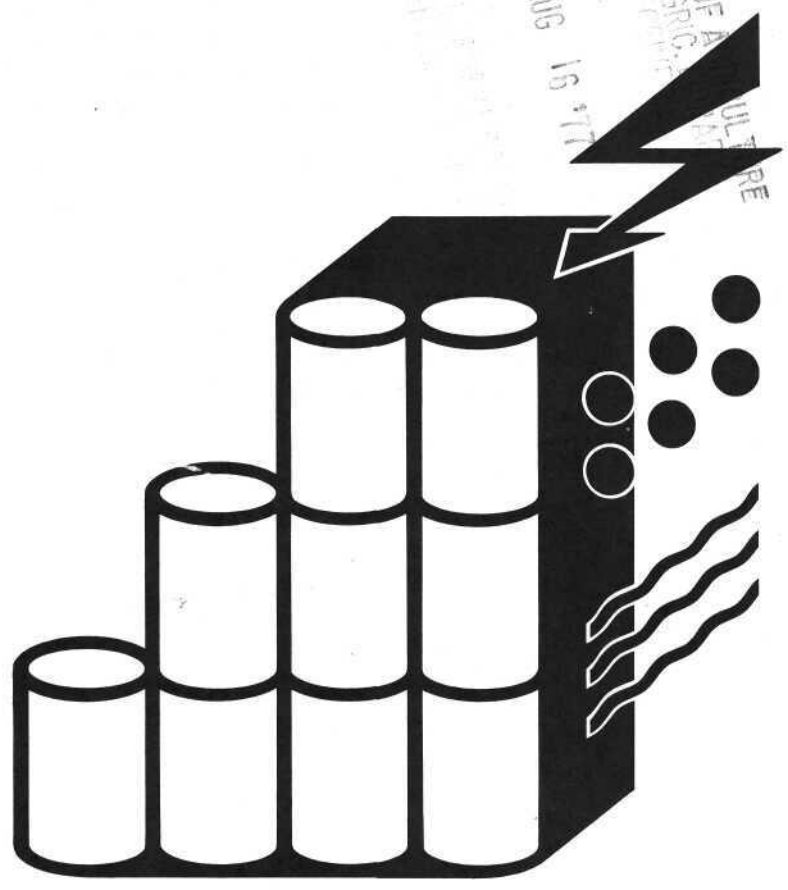
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Family Food Stockpile for Survival

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UNITED STATES
DEPARTMENT OF
AGRICULTURE

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Foreword

The very act of living involves risk. In the morning we are not completely certain that we will return home safely at night. But by taking precautions, we reduce the degree of risk we are exposed to and often our level of anxiety is reduced or eliminated.

We live in an age when at least the threat of nuclear attack is a reality. Other disasters are also within the realm of possibility, disasters that could isolate homes until rescue workers arrive. As a precaution, Defense Civil Preparedness authorities recommend that you purchase and store at least a 2 weeks' supply of food.

These stockpile foods should be in cans, jars, or sealed paper or plastic containers. Select foods that will last for months without refrigeration and that can be eaten with little or no cooking.

As many of your stored foods as possible should be useful in your normal diet so that you use and replace your reserve supply and thereby be sure of its freshness.

The needs and preferences of family members are an important consideration as you prepare your list of emergency foods. Do not buy more food than you have cool, dry, secure storage space for. Buy foods you and your family are familiar with.

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Food

Suggested foods are in table 1. The amounts indicated will supply the calories needed by one adult for 2 weeks. If your family consists of four adults, store 4 times the amount suggested in table 1. Teenagers are likely to eat more than the amount in the table. Younger children need less.

By including, each day, foods from the eight groups listed, members of your family can have a reasonably nutritious diet.

If necessary, include special kinds of milk and strained, chopped, or other specially prepared foods required for infants, toddlers, elderly persons, and others on limited diets.

Whenever possible, choose cans and jars in sizes that will fill your family's needs for only one meal. This is especially desirable for meat, poultry, fish, vegetables, evaporated milk, and other foods that deteriorate rapidly after a container is opened.

If your home freezer is located in your basement or where you would have safe access to it after an emergency, you might count foods in it as some of your reserve supply.

Food spoilage in a well-filled, well-insulated home freezer does not begin until several days after power goes off. Food in large freezers will keep longer than food in small freezers. Once the freezer has been opened, foods should be used as promptly as possible.

Sample Meal Plans

Sample meal plans are presented on pages 11 and 12. These plans suggest the kinds of meals you could serve from the foods shown in the table on pages 9 and 10.

Half of the meals fit a situation where there are no cooking facilities. The other meals require facilities for heating water or food but not for any extended cooking.

If you have provided a sufficient variety of canned foods in your reserve

supply, it is possible to have reasonably well-balanced meals. However, because of limited space and in order to use fewer dishes, it may be more practical to serve fewer foods at a meal and make the servings more generous.

Storing and Replacing Foods

Foods should be stored in a dry, cool, secure place in your basement. In homes without basements, and in apartments, your food stockpile should probably be stored in the kitchen or in a storage closet.

To maintain the eating quality of your reserve food supply, keep foods in cans or jars in a dry place, where the temperature is fairly cool—preferable not above 70° F and not below freezing.

Protect food in paper boxes from rodents and insects by storing boxes in tightly closed cans or other metal containers; leave the foods in their original boxes. Keeping these foods in metal containers also extends the length of time they can be stored.

Eating quality was the first consideration in setting the maximum replacement periods given on this page. Many food items will be acceptable for a much longer period if storage temperatures do not usually exceed 70° F. Most of the foods suggested in table 1 would be safe to use after longer storage periods.

It is a good idea to draw regularly on the food stockpile so that foods are used while they are still of good eating quality. As food items are used, replace them in the stockpile with fresh supplies. When you put in fresh supplies, put them at the back of the stockpile; keep older supplies in front.

Here are suggested replacement periods for the kinds of food listed in table 1:

You may want to label cans and containers with the date of purchase and the approximate date when the

particular item should be replaced by a new supply. Suggested charts for keeping a record of your family food reserves are given on pages 13, 14, and 15 of this bulletin.

Canned foods are generally safe to eat as long as the seal of the can is not broken. Food spoilage may have occurred if a can has bulging ends, is leaking, or if, when the can is opened, there is spurring liquid, off-odor, or mold on the food.

When food in glass containers becomes spoiled, the cover may bulge or the container may show leakage of the food through the broken seal. Gas bubbles, cloudiness, and films of growth that can be seen through the glass may indicate bacterial growth.

If the seal has broken on jars of baby food, the "safety button" in the center of the lid will be pushed upward instead of drawn downward.

Food from containers showing any signs of food spoilage should be discarded immediately *without tasting*.

Equipment for Cooking and Serving

You need to have ready certain

equipment for emergency cooking and serving.

A suggested list includes a small, compact cooking unit, such as the ones used by campers; one or two cooking pans; disposable knives, forks, and spoons; paper plates, towels, cups, and napkins; can and bottle openers; nursing bottles and nipples if there is a baby in the family; measuring cup; medicine dropper for measuring water purifier; matches; and a pocket knife.

If you already have plastic dishes, cups, forks, knives, and spoons, you may want to use them instead of disposable tableware. They would probably take less space to store, but water for washing them might not be available, depending on the nature of the emergency.

If disposable serving dishes and eating utensils are used, each family will need to estimate the number required for a 2 weeks' period.

Store your emergency cooking and serving equipment with your reserve food supply or near it.

Replacement Periods for Foods Listed in Table 1

Use within 6 months:

Evaporated milk
Dried fruit, in metal container
Dry crisp crackers, in metal container
Gum

Use within 1 year:

Nonfat dry or whole dry milk, in metal container
Canned meat, poultry, fish
Mixtures of meat, vegetables, and cereal products, in sealed cans or jars
Canned condensed meat-

and-vegetable soups
Dehydrated soups, in metal container
Canned fruits, fruit juices, and vegetables
Cereal:
Ready-to-eat cereals, in metal container
Uncooked cereal (quick-cooking or instant), in metal container
Hydrogenated fats, vegetable oils
Sweets and nuts:
Hard candy

Nuts, canned
Instant puddings
Miscellaneous:
Coffee, tea, cocoa (instant)
Dry cream products (instant)
Bouillon products
Flavored beverage products
Flavoring extracts
Soda, baking powder

May be stored indefinitely:
Sugar
Salt

Equipment Checklist:

Water

You and your family can get along for quite a while without food, but only for a short time without water. Store a 2 weeks' supply of water for each member of your family.

Allow at least one-half gallon of water per person each day, or 7 gallons for a 2-week period, for drinking purposes in moderate weather. Extra water should be stored where temperatures are above the comfort zone.

If a family member needs more than the minimum amount of water specified because of chronic illness or other condition, be sure to consider his needs in planning your supply of water.

Some of the need for liquids can be met by storing large quantities of fruit juice and soft drinks.

If you want to have water available for bathing, brushing teeth, and dish-washing, it should be of the same quality as water stored for drinking, and must be stored in addition to the amount mentioned above. Another 7 gallons of water is recommended for such purposes.

Some of your water requirements could be met by making use of the water in home hot-water tanks and toilet tanks.

Water in these tanks would be safe to use. Know the location of your main incoming water valve so you can shut it off if directed to do so by local health authorities to prevent the entrance of contaminated water. As a safety measure the valve on the gasline to your hot-water heater should be turned off also.

Water from a hot-water tank can be obtained by opening the drain cock at the bottom of the tank. To get a free flow of water with the water inlet valve turned off, you may need to vent the tank by turning on a faucet somewhere on the waterline. Some hot-water tanks are automatically vented.

Safe Sources of Water for Storage

It is of the utmost importance that water stored for emergency use be clean. Any water that has been tested and approved by health authorities would be safe to store.

If there is any question about the safety or cleanliness of the water you intend to store, or if it has not been tested and approved by health authorities, it must be purified before it is stored.

How to Purify Water

Boiling.—The safest method of purifying water is to boil it vigorously for 1 to 3 minutes to destroy bacteria that might be present. Boiling, however, does *not* destroy radioactivity. To improve the taste of the water after it has been boiled, pour the boiled water from one clean container to another several times.

Easy bleach method.—Any household bleach solution that contains hypochlorite, a chlorine compound, as its only active ingredient will purify water easily and inexpensively.

Bleach solutions with 5.25 percent of sodium hypochlorite are most common. They are available in grocery stores. Add the bleach solution to the water in any clean container in which it can be thoroughly mixed by stirring or shaking. The following table shows the proper amount of a 5.25 percent solution to add to water.

Amount of water	Amount of solution to add to—	
	Clear water	Cloudy water
1 quart (¼ gallon) _____	2 drops.	4 drops.
1 gallon _____	8 drops.	16 drops.
5 gallons _____	½ tea- spoon.	1 tea- spoon.

Add the chlorine solution to the water and stir, then let the mixture stand for 30 minutes. After this length

of time the water should still have a distinct taste or smell of chlorine. If this taste or smell is not present, add another dose of the solution to the water and let the water stand another 15 minutes. The taste or smell of chlorine in water thus treated is a sign of safety. If you cannot detect chlorine in the water you are trying to purify by this method, do not store it. The chlorine solution may have weakened through age or for some other reason.

Iodine or tablet purification.—If you have ordinary household 2 percent tincture of iodine in your home medicine chest, you can use it to purify small quantities of water. Add 3 drops of tincture of iodine to each quart of clear water, 6 drops to each quart of cloudy water. For a gallon, add 12 drops for clear water, 24 drops for cloudy water. Stir thoroughly.

Water purification tablets that release chlorine or iodine can be used safely to purify water. They are inexpensive and can be bought at most sporting goods stores and some drugstores.

If you use water purification tablets, follow the directions on the package. Usually one tablet is sufficient for 1 quart of water; double the dosage if the water is cloudy.

Storing Water Reserves

Store your water reserves in thoroughly washed, clean containers, preferably of heavy plastic with tight-fitting caps, or in glass jugs or bottles with screw tops. Metal containers tend to give water an unpleasant taste.

You may want to buy 5-gallon containers of rigid plastic or glass for water storage. The plastic containers have the advantage of being shatter-proof and lighter in weight than glass jugs.

Pack glass containers tightly against damage or shock. Put newspapers, excelsior, or other packing material between the containers to

keep them from coming in contact with one another.

Clean water stored in this way should remain palatable for an indefinite period. It is advisable to check the containers every few months for leaks. At the same time check the water for cloudiness or other undesirable appearance or undesirable taste. If undesirable appearances or tastes have developed, the water should be changed.

WARNING

Water that has been contaminated by radioactive material should not be used unless no alternate supply is available. The danger from water contaminated in this way is greatest immediately after fallout deposition. Infants and children are more at risk from such water than are adults.

Water from springs and covered wells could be used.

FURTHER INFORMATION

In Time of Emergency: A Citizen's Handbook on . . . Nuclear Attack . . . Natural Disasters. H-14, March 1968. This handbook, prepared by the Defense Civil Preparedness Agency, U.S. Department of Defense, contains comprehensive information on the effects of nuclear weapons and natural disasters, and how people can protect themselves. Descriptions of home fallout shelters and methods of improvising shelter are included. You can obtain copies from your State or local civil defense office, or from DCPA, The Pentagon, Washington, D.C. 20301.

Introduction to Civil Preparedness. CPG-1-1, July 1975. This publication, prepared by the Defense Civil Preparedness Agency, U.S. Department of Defense primarily for local civil defense directors, briefly describes the nationwide civil defense program. Copies are available from State or local defense offices, or from DCPA, The Pentagon, Washington, D.C. 20301.

Defense Against Radioactive Fallout on the Farm. Farmers' Bulletin 2107. Presents easily understood information on the effects of radioactive fallout on the farm. Includes recommendations for the protection of the farm family, for livestock, and for land and crops. Further information on radioactive fallout may be obtained from your county agricultural agent or from U.S. Department of Agriculture, Washington, D.C. 20250.

The following motion pictures on defense and radioactive fallout are available:

Fallout and Agriculture. (USDA, 16 mm., sound, color, 23 minutes.)

The Safest Place. (USDA, 16 mm., sound, color, 13½ minutes.)

These films may be borrowed from the film library of your State land-grant college. For the address of the land-grant college in your State, write to Motion Picture Service, Office of Communication, U.S. Department of Agriculture, Washington, D.C. 20250.

About Fallout. (DCPA, 16 mm., sound, color, 24 minutes.)

This may be borrowed from your Army Audio-Visual Communication Center (formerly Army Film and Equipment Exchange).

Additional films are listed in the DCPA *Motion Picture Catalog*, MP-6, July 1975 (updated periodically), available from State or local civil defense offices, or from DCPA, The Pentagon, Washington, D.C. 20301.

Table 1 Guide for Reserve Food Supply

Kind of food	Amount per person		Remarks
	1 day	2 weeks	
1. Milk.	Equivalent of 2 glasses (fluid).	Equivalent of 7 quarts (fluid).	Each of the following is the equivalent of 1 quart of fluid milk: Evaporated milk: three 6-ounce cans; one 14½-ounce can. Nonfat dry milk or whole dry milk: 3 to 3½ ounces.
2. Canned meat, poultry, fish, cooked dry beans, and peas.	2 servings.	28 servings (8 to 9 pounds).	Amounts suggested for one serving of each food are as follows: Canned meat, poultry: 2 to 3 ounces. Canned fish: 2 to 3 ounces. Canned mixtures of meat, poultry, or fish with vegetables, rice, macaroni, spaghetti, noodles, or cooked dry beans: 8 ounces. Condensed soups containing meat, poultry, fish, or dry beans or dry peas: one-half of a 10½-ounce can.
3. Fruits and vegetables.	3 to 4 servings.	42 to 56 servings (about 21 pounds, canned).	Amounts suggested for one serving of each food are as follows: Canned juices: 4 to 6 ounces, single strength. Canned fruit and vegetables: 4 ounces. Dried fruit: 1½ ounces.
4. Cereals and baked goods.	3 to 4 servings.	42 to 56 servings (5 to 7 pounds).	Amounts suggested for one serving of each food are as follows (selection depends on extent of cooking possible): Cereal: Ready-to-eat puffed: ½ ounce. Ready-to-eat flaked: ¾ ounce. Other ready-to-eat cereal: 1 ounce. Uncooked (quick-cooking): 1 ounce. Crackers: 1 ounce. Cookies: 1 ounce. Canned bread, steamed puddings, and cake: 1 to 2 ounces. Flour mixes: 1 ounce. Flour: 1 ounce. Macaroni, spaghetti, noodles: Dry: ¾ ounce. Cooked, canned: 6 ounces.

Table 1 Guide for Reserve Food Supply (continued)

5. Spreads for bread and crackers.	According to family practices	Examples: Cheese spreads. Peanut and other nut butters. Jam, jelly, marmalade, preserves. Sirup, honey. Apple and other fruit butters. Relish, catsup, mustard.
6. Fats and vegetable oil.	Up to 1 pound or 1 pint.	Amount depends on extent of cooking possible. Kinds that do not require refrigeration.
7. Sugars, sweets, and nuts.	1 to 2 pounds.	Sugar, hard candy, gum, nuts, instant puddings.
8. Miscellaneous.	According to family practices and extent of cooking possible.	Examples: Coffee, tea, cocoa (instant). Dry cream product (instant). Bouillon products. Flavored beverage powders. Salt and pepper. Flavoring extracts, vinegar. Soda, baking powder.

Sample Meal Plans No Cooking Facilities

First day	Second day	Third day
Morning		
Citrus fruit juice. ¹	Fruit juice. ¹	Grapefruit segments. ¹
Ready-to-eat cereal.	Corned beef hash. ¹	Ready-to-eat cereal.
Milk, cold coffee, ² or tea. ²	Crackers.	Vienna sausage. ¹
Crackers.	Spread.	Milk, cold coffee, ² or tea. ²
Peanut butter or other spread.	Milk, cold coffee, ² or tea. ²	
Noon		
Spaghetti with meat sauce. ¹	Baked beans. ¹	Chile con carne with beans. ¹
Green beans. ¹	Brown bread. ¹	Crackers.
Crackers.	Tomatoes. ¹	Fruit. ¹
Spread.	Fruit. ¹	Cookies.
Milk, cold coffee, ² or tea. ²	Milk, cold coffee, ² or tea. ²	Milk, cold coffee, ² or tea. ²
Between Meals		
Fruit-flavored drink or fruit drink.	Milk.	Tomato juice.
Night		
Lunch meat. ¹	Pork and gravy. ¹	Sliced beef. ¹
Sweetpotatoes. ¹	Corn. ¹	Macaroni and cheese. ¹
Applesauce. ¹	Potatoes. ¹	Peas and carrots. ¹
Milk, cold coffee, ² or tea. ²	Instant pudding.	Crackers.
Candy.	Fruit juice. ¹	Milk, cold coffee, ² or tea. ²

¹ Canned. ² Instant.

Sample Meal Plans Limited Cooking Facilities

First day	Second day	Third day
Morning		
Citrus fruit juice. ¹ Ready-to-eat cereal. Milk. Hot coffee, ² tea, ² or cocoa. ²	Citrus fruit juice. ¹ Hot cereal (quick-cooking). Milk. Hot coffee, ² tea, ² or cocoa. ²	Prunes. ¹ Ready-to-eat cereal. Milk. Crackers. Cheese. Hot coffee, ² tea, ² or cocoa. ²
Noon		
Vegetable soup. ¹ Potato salad. ¹ Crackers. Ham spread. ¹ Milk. Candy bar.	Beef-and-vegetable stew. ¹ Green beans. ¹ Crackers. Peanut butter. Milk.	Chile con carne with beans. ¹ Tomatoes. ¹ Crackers. Hot coffee, ² tea, ² or cocoa. ²
Between Meals		
Fruit-flavored drink or fruit drink.	Tomato juice. ¹	Fruit-flavored drink or fruit drink.
Night		
Beef and gravy. ¹ Noodles. ¹ Peas and carrots. ¹ Instant pudding. Hot coffee, ² tea, ² or cocoa. ²	Tuna fish, ¹ cream of celery soup, ¹ mixed sweet pickles ¹ —combined in one dish. Fruit. ¹ Cookies. Hot coffee, ² tea, ² or cocoa. ²	Lunch meat. ¹ Hominy. ¹ Applesauce. ¹ Cookies. Hot coffee, ² tea, ² or cocoa. ²

¹ Canned. ² Instant.

Our Family Food Reserve

Kind of food	Amount stored	Date purchased	Suggested replacement date
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14 **Our Family Food Reserve** (continued)

Kind of food	Amount stored	Date purchased	Suggested replacement date
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