

Food Storage for Survival!



Prepare for the Crisis!

—Survival Press—

Food Storage in the Home

by

Flora Bardwell

Extension Food/Nutrition
Specialist

Reed S. Roberts

Professor Zoology
Extension Entomology

D. K. Salunkhe

Professor
Plant Science

General Recommendations

The ability to store food is an indication of modern man's technical advancement. He no longer has to seek food as the caveman did — every time hunger demanded. He can, with a little advance planning, have on hand food in quality and quantity sufficient to meet his biological and nutritional needs for some time. He must exercise, however, the skill necessary to meet these needs with good quality food and eliminate waste.

Food storage requires good planning and housekeeping. Planning involves selecting the right kind of food for the desired purpose. Good housekeeping means to have a place to keep the food in good condition — free from contamination, infestation from insects, molds, moisture and other deteriorating influences.

What to store depends largely on the family's established food patterns, which should be directed by sound nutritional principles to maintain adequate nutrition for good health. Family members who have special diet concerns will need to have their requirements satisfied. Quantities to store should be determined by the number of family members, space, food and resources available.

No food can be stored forever. Store foods that will be eaten and eat the foods stored. This is the only way to keep foods in good condition and assure the family of foods they like and are accustomed to. It is extremely expensive and unwise to store any quantity of food that the family does not normally eat, or food that is not acceptable in the family food pattern.

Your Daily Food Plan

Any sound food program should keep in mind the National Research Council recommendations for adequate nutritional balance. Follow-

ing is a brief outline of the recommended diet for maintaining good health. For one day the diet should include:

Milk or milk products.....	adults, 2 cups children and teens, 3 to 4 cups
Meats, fish, eggs, beans, peas, or nuts as alternates.....	2 servings
Vegetable-fruit group	4 or more servings one serving of citrus fruit, one serving of dark green or yellow vegetables at least every other day
Cereal and bread group	4 or more servings of whole wheat or enriched product

Your Yearly Food Plan

Interpreting the recommended daily diet into a plan for the year's

food supply the following may be used as a guide.

	Approximate amount for one person for one month	Approximate amount for one person for one year
Milk Products		
Milk — one quart for children, two or more cups for adults	30½ qts.	365 qts.
Meat and Eggs Total 2 servings per day — may come from the following:		
Eggs — four per week	2½ doz.	30 doz.
Meat, including fish and poultry — one four-ounce serving per day	12½ lbs.	150 lbs.
Dried beans, peas and nuts	1¼ lbs.	15 lbs.
Vegetables and Fruits Four Servings per day, as follows:		
Vegetables — two servings, one green or yellow		
Carrots and cabbage	3 lbs.	35 lbs.
Other vegetables	12½ lbs.	150 lbs.
Potatoes — one or more servings	12½ lbs.	150 lbs.
Fruits — two servings, one citrus or tomato		
Tomatoes and citrus fruits	10 lbs.	120 lbs.
Apples	6 lbs.	75 lbs.
Other fruits	17½ lbs.	200 lbs.
Cereals and Breads		
Cereal and breads — four or more servings half of which are whole grain or enriched (count 1½ lbs. bread as 1 lb. flour)	17½ lbs.	200 lbs.

This is a basic plan and forms the foundation to a good diet. Other foods may be needed to supply calories to complete food energy needs.

This requirement can be met by such foods as butter, fats and oils, sugar, syrups, preserves, and jellies.

Miscellaneous Foods

Sugar, syrup, preserves, jelly candy (Includes sugar for canning)	5 lbs.	60 lbs.
Butter and other fats and oils	5½ lbs.	65 lbs.

At the present time the Defense Civil Preparedness Agency recommends that every family have a two-week food supply on hand in case of a natural or man-made disaster.

This can be done by one of two methods to take care of home food storage for emergencies. The first is to increase the regular food supply so that there will always be a two-

week supply of food on hand. The second is to store, maintain and rotate an emergency supply of food in a fallout shelter. A number of commercial concerns are preparing and packaging food for just this purpose. This type of food is generally more expensive, and does not always fit the normal food pattern. It is convenient and carefully packaged. With a little planning this can be made part of the basic food pattern.

Food Preservation

Utah State University Extension Services has always encouraged families to plan ahead and preserve, as far as feasible, a year's supply of fruits and vegetables so that an adequate supply of these perishable foods can be available for use in family meals.

Methods of preserving and storing meat, by canning, freezing, drying and salting, have made it possible to have meat supplies on hand year around.

Families have been encouraged to preserve seasonal foods by home preservation methods when these foods are abundant. These, added to a daily supply of fresh food, especially fruits and vegetables, will provide a nutritionally adequate diet.

To maintain high quality in home stored foods, the following recommendations are made:

Plan Your Food Storage

It is difficult to solve individual storage problems. This booklet is intended to give scientific information to guide individual efforts in storing food.

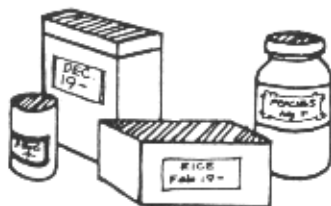
Plan Kinds and Amounts of Food

Planning will help to avoid both waste and spoilage. Store only the kinds and amounts of food that your family will normally eat. People eat what they like and what they are used to. If food is not eaten, its nutritional value is of little importance, and it is a waste of money.

Plan a Rotation System

Preserved food will not keep forever. Time is a related factor. The longer the time the greater the deterioration of the food stored. The main thing is to preserve the nutrients in food to the highest degree.

Date the cans, jars, and packages



as they are stored; then use the stored supplies and replace them. Plan a complete rotation system so that no food will be kept longer than a year.

Where and How to Store Food

Generally, there is a place in the home that can be used for storage and that meets the requirements for maintaining the quality of the stored products. It should be cool, dark, away from dust, smoke, water pipes, moisture or steam. It should be free from any products such as kerosene, paints, oil, and other substances which might affect the flavor or odor of food. It should be well ventilated and clean.

Do not place food or food containers directly on cement floors. Place slats of lumber under the food to prevent moisture damage.

Many plastic, metal and glass containers are available, which can be used to keep food in good condition.

Milk

Non-Fat Dry Milk

Non-fat dry milk and unopened canned milk keep well at room temperature. Dry milk takes up moisture and becomes lumpy and stale



when exposed to air. This necessitates keeping it stored in a dry place.

Dry milk will develop flavor and odor changes in storage if the moisture content is too high. For stor-

age longer than a week's supply, buy dried milk in moisture-proof packages of the size and shape that can be placed in airtight containers. A five-gallon square can with a large opening is good for this purpose. Storing the package of milk in a can will give the milk added protection from moisture and other damage.

If you buy powdered milk in quantity, repackage it in smaller containers that can be tightly closed to keep out the moisture. Use a container that will hold approximately one week's supply of powdered milk. Glass jars or tightly closed cans are best for this storage.

Non-fat dry milk stored at:

40°F. will keep for 24 months

70°F. will keep for 12 months

90°F. will keep for 3 months

A practice which will keep the powdered milk in constant rotation is one of mixing one part of reconstituted powdered milk solution with one part of the family's daily fresh milk. The resulting drink is highly acceptable as well as economical. Occasional use of dry milk in the diet will help the family become accustomed to its use and flavor.

Canned Evaporated Milk

Store in as cool a place as possible. Do not freeze. Turn the cans



or case over every 30 days and use the oldest first.

Milk at 40°F. may be kept for a year without any apparent ill effects. Do not try to keep it longer. High temperatures in storage may

cause fat separation and a strong flavor in the milk. A dark color develops as the storage period lengthens.

If there has been any fat separation, a few vigorous shakes before opening will make it go back into a smooth solution that pours readily. Milk is not spoiled even though it will not pour out or is watery and lumpy.

Cheese

Cheese keeps best in the refrigerator. How long it will keep depends on the kind of cheese and the wrapping. Soft cheeses, such as cottage, cream, and Neufchatel, are highly perishable. Hard cheeses — Cheddar and Swiss — keep much longer than soft cheese if protected from drying out.

Leave cheese in its original wrapper, if possible. Cover cut surfaces tightly with waxed paper, foil, or plastic to protect the surface from drying out, or store the cheese in a tightly covered container. If you want to store a large piece of cheese for an extended time, dip the cut surface in melted paraffin.

Cheese that has dried out and become hard may be grated and stored in a tightly covered jar.

Cheddar, Swiss, and other hard varieties may be stored if refrigerated tightly wrapped. They will keep for several months unless mold develops.

Cheese spreads and cheese foods can be stored unopened in jars at room temperature; after opening, refrigerated, and tightly covered, they will keep for several weeks.

Meats, Fish, Eggs, Beans, Peas

Canned Meat

For emergency storage, canned meat is recommended. There is a large number of these products to choose from. Keep in mind that these products need to be stored in a cool, dry place. Here the temperature should be kept between 40°F. to 60°F. for best quality. It is important to rotate these products every year, more often if the temperature of the storage area is not kept this low.

Dried Eggs

Eggs are available in sealed cans in a dry powdered form. Keep dried eggs cold and dry in tightly closed glass or metal containers. Two and one-half tablespoons of dried eggs and 2½ tablespoons of water equal one egg. This product is usually available at grocery stores or bakeries.

Dried eggs kept at:

40°F. will keep 12 months

70°F. will keep 6 weeks

Dry Beans, Dry Peas

Dried beans and peas can be stored at room temperature. They should be kept tightly covered in containers to keep out dust, mois-



ture and insects. Most varieties become increasingly dry upon long storage and require longer cooking time. They keep good, however, for years.

Nuts

All varieties of nuts keep better unshelled than shelled, unless the kernels can be sealed in vacuum, which permits them to be kept even longer than in the shell. Nuts are high in fat, and are susceptible to rancidity. Generally, they should be

stored at 32°F. in sealed cans or jars. The relative humidity in the storage room should not be above

75 per cent, or mold will result. When the storage area is too dry, the nuts become shrivelled.

Vegetables and Fruits

There are a number of ways that vegetables and fruits can be stored. These are canned, frozen, dried or fresh. Storage for any length of time requires canned or dried products. Also, in the event of a man-made or natural disaster, refrigeration may not be available.

Canned Vegetables and Fruits

Chemical changes take place in canned products during storage. These changes are relatively complicated, and the greatest factor to speed up these changes is the temperature at which the food is stored.



The reactions in fruits and vegetables are approximately doubled with each 18°F. increase in temperature. These reactions bring about changes in the flavor, color, textures and nutritional value of the canned product.

The ideal temperature for canned products is 50° to 58°F., and at this temperature canned goods may be safely stored for two years. If the temperature of canned goods can be held at 40°F. or lower, the majority of products will keep in good condition for five years.

Make sure that only high quality canned goods are stored. If food is in glass containers, they should be placed in a dark place for storage, since light will speed up chemical changes that will alter the color, flavor, and texture of the product. A curtain hung on the shelf to keep out the light, or wrapping the jars in paper and placing in a box will help. Moisture will cause corrosion to the metal of canned products.

Canned foods that have been in storage for some time and still show no signs of bulging or leakage are safe to eat. The flavor, color, texture and nutritional value may be somewhat inferior, however.

Proper storage and planned rotation will keep stored food in good condition and minimize spoilage and loss of food value.

Dried Fruits and Vegetables

FRUITS: For preservation of natural color in storage, dried fruits



should be kept at a temperature of about 32°F. They must be kept dry. Packages of dried fruit may be kept in their original package and stored in metal cans to protect them from light, dust and insect contamination. Dried fruits can be kept for a year at 32°F., and for six months at 40°F.

VEGETABLES: Dry vegetables contain a lower percentage of moisture than do dried fruits, and are subject to rapid deterioration at high temperatures.

Dry vegetables should be kept in airtight containers in a cool, dry place. They should not be stored for more than one year.

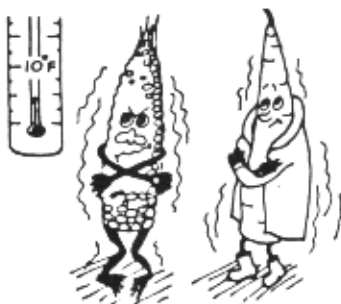
Before being stored, all products that have been home dried in the air or in the sun should be given a final heating at 165°F. to 170°F. to kill any microorganisms that may be adhering to the surface. This may be accomplished by spreading the food on trays and reheating in an oven for 10 to 15 minutes before packaging, or by placing the dried product in a sealed jar and processing in a hot water bath for 10 minutes.

Pack the food into dry, insect-proof containers which are as nearly moisture proof as possible. The dried products should be packed into the cans or jars as tightly as possible without crushing, then stored in a cool, preferably dark place. Glass jars should be wrapped in paper to keep out light.

All dried vegetables and fruits deteriorate in flavor, color and odor during storage.

Dried vegetables in airtight containers will keep one year at 68° to 70°F. If the containers are not airtight, the temperature should be kept at 50°F. or below to delay deterioration and also prevent insect infestation.

Frozen Fruits and Vegetables



Fruits and vegetables can be held at -10° to 0° F. for a period of 6 to 12 months. It is important that

this temperature does not fluctuate and that these products are rotated for best quality.

Fresh Fruits

Fruits are relatively perishable in normal home storage conditions. Apples, perhaps, can be kept fresh for the longest period of time in commercial storage plants where controlled atmosphere storage is available. Since apples require cool, humid air, short-time storage can be accomplished by placing them in plastic bags in a cool place. For most practical purposes, fruit is better stored in the home either canned, dried or frozen.

Fresh Vegetables

Some vegetables can be stored if the temperature and the humidity can be controlled. Different vegetables require different handling practices.

General rules are as follows:

1. Select varieties suitable for storage, discard all showing signs of decay or mechanical injury.
2. Allow at least one-half inch of stem to remain attached to all root crops. Allow two inches of stem to remain attached to pumpkins and squash.
3. Learn storage requirements for specific crops.

SQUASH AND PUMPKIN—warm, dry storage. Harvest with at least two inches of stem attached.



Harvest when frost threatens and store at a temperature of 55° to 60°F.

ONIONS — cool, dry storage. When tops have become dry, cut off with scissors, or knife, leaving one inch of stem attached to the onion. Prevent from freezing and keep dry.

POTATOES — cool, moist, dark place. Covered containers will reduce the evaporation of moisture and will control shrinkage. Warmth will cause them to sprout. Dry air will cause them to wilt, and light will cause the surface to turn green.

Potatoes should be held at a temperature of 55° to 60°F. If the storage temperature is too low, potatoes acquire a disagreeable sweet taste. Potatoes thus cooled may be returned to a more edible condition by placing them in a warm place for about three weeks before using them.

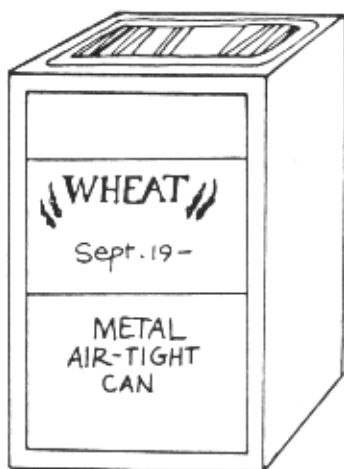


Grain and Cereal Products

Wheat

Purchase wheat from a reputable miller. Use only clean, insect-free, dry (less than 12 per cent moisture), high-protein wheat. If properly stored, wheat can be preserved ten years or longer without undergoing deterioration.

A good container for storage is a metal, airtight, five-gallon square can that has a seven-inch diameter opening in the top and a friction lid. This container is a good barrier



to insects, rodents, moisture and air. Three five-gallon cans will store approximately 100 pounds of wheat.

Store the cans of wheat under the same conditions of temperature and moisture as canned foods. Take precautions to eliminate possible insect infestation in the wheat which may not be evident at the time of purchase. One of the following treatments is suggested.

1. Spread two ounces of crushed dry ice over the bottom of the can and put the wheat immediately over the top of the dry ice. Allow sufficient time for the dry ice to evaporate before placing the lid on the can (approximately 30 minutes). Should pressure develop within the can (bulging), remove the lid cautiously for about two minutes and then replace it. Follow this procedure in a dry atmosphere to reduce the condensation of moisture on the bottom of the can.
2. Place wheat in a shallow pan at a depth of not greater than $\frac{3}{4}$ inch in an oven at a temperature of 150°F. for 20 minutes. Leave the oven door slightly open to prevent

overheating. This treatment will destroy all stages of insect pests if the wheat is thoroughly heated. This same procedure may be followed if the wheat has too high a moisture content.

Flour

Flour is more difficult to store than wheat, and develops a stale off-flavor after long storage. White flour has a longer storage life than whole wheat flour. Do not try to store more than amount of flour normally used in a one-year period. Store flour in metal cans to avoid insect infestation, rodent damage, and flavor changes. Purchase only

enriched flour for nutritional value. It is best to keep flour containers up from cement floors and away from direct contact with cement walls. Otherwise, they may collect moisture.

Rice, Cereal Products, Dried Beans and Peas

These foods can be stored for relatively long periods of time without deterioration. However, they must be kept dry and cool during storage. Insect infestation can be eliminated by heating the beans or peas as described under wheat. Metal containers are recommended for storage. Brown rice does not store as well as white polished rice.

Miscellaneous Storage

Fats and Oils

Fats and oils eventually may go rancid even though the container is tightly closed. They keep best at a temperature below 60°F. Commercial shortenings contain an anti-oxidant, which retards the rancid action. Two or three pounds of commercial shortening may be mixed with 50 pounds of home-rendered lard to slow down the development of rancidity.



COOL AND AIRTIGHT

Rancid lard often develops from poor rendering. It is important that all the water is evaporated. To test for moisture, place a lid on the kettle when the cracklings are a deep golden brown. Continue cooking as long as moisture accumulates inside the lid. Keep lard cold and store in small airtight containers.

Butter

To keep butter, it needs to be melted and heated to a point where the oil can be separated from the moisture or whey. The oil should then be poured off and be strained through several layers of cheese cloth into clean, sterile jars and sealed. Keep butter cold and sealed until ready for use.

Peanut Butter

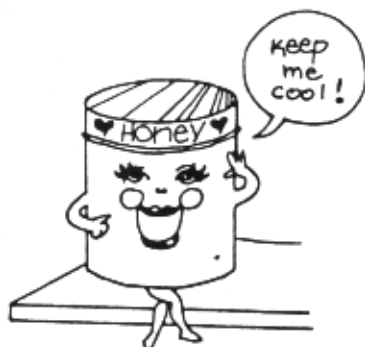
Peanut butter, because of its high fat content, would qualify for storage under the same recommendations as fat. Storage life for this product is rather short and should be kept at temperatures below 60°F. Storage can be up to six months.

Honey

Honey that is properly ripened and stored correctly will keep for a long time. It will crystallize and become darker in color and stronger in flavor with aging. This, however, is a natural process and it is still safe and usable.

Honey should be stored in convenient sized containers with tight lids and stored in a dry place. The

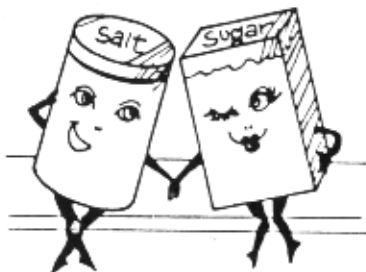
temperature of the storage place should be between 45° and 75° F. Honey stored above this temperature will be subject to rapid flavor, color and texture changes. Honey loses aroma and flavor and absorbs moisture and odors readily when exposed to air.



To bring crystallized honey back to liquid form and prepare honey for storage, place the container of honey in a pan of hot water and heat until the crystals disappear. Heat until honey reaches a temperature of 155°-160° F. Keep it at this temperature for 30 minutes after the honey liquefies. Shake the container to make sure the honey is heated evenly and all the granules have disappeared. Pour the liquid honey into convenient sized containers, cover with a tight lid and store.

Sugar and Salt

White granulated sugar can be kept almost indefinitely if kept away from contamination and moisture.



It should be stored in metal containers with a good fitting lid. This will prevent damage from smoke, dust or moisture.

Salt, like sugar, is one item that can be stored almost indefinitely if protected against dust, smoke and moisture. For this area, iodized salt should be used for all table and cooking uses.

Yeast

Yeast remains active several years if stored in a cool place and if the container is sealed. Four-ounce sealed jars and larger size cans are available and ideal for storage. The home freezer is an ideal place to store yeast.

Gelatin Products

Gelatin can be stored for years if kept dry. Some caking may result, especially in citrus flavors, but will not affect quality. After two years there may be some flavor loss.

Syrups and Jams

Fruit and berry syrups and jellies and jams may be kept according to the recommendations under fruit. Color, flavor and texture changes take place faster as temperatures rise. Some sugar crystallization may occur upon long storages. Syrups of various flavors are safely kept for two years in sealed containers at temperatures not exceeding 60° F.

Package Mixes

Prepared mixes such as cakes and biscuit mixes are subject to rancidity because of their fat content. They keep best if they are kept cool and dry. One year of storage time is possible under these conditions.

Spices

Spices lose strength when stored in warm, humid conditions. They can be kept in good condition for two years at low temperatures away from moisture.

Some foods are vacuum sealed to protect them from spoilage.

Vacuum packing - means that oxygen has been removed or reduced in the containers. This restricts the growth of spoilage organisms requiring oxygen to grow. Vacuum in containers help protect color and flavor, assist in retaining vitamins and help prevent rancidity. Once the container is opened, the vacuum is destroyed, and the food should be used.

Freeze-dried foods are one of the newer methods of preserving foods. It is frozen at very low temperatures and then dried while still frozen. This type of drying method results in

a product that is easier to rehydrate than regularly dried food. It is relatively expensive to buy. Freeze-dried foods must be kept dry.

Soybean products-These are sold either flavored with meat flavors or unflavored. They are available in a variety of forms, from chips to chunks of different sizes and types. There is some variation in the quality of the products from different processors. Unflavored products have better keeping qualities. It is only necessary to keep them in a dry place, such as you would keep other beans. Flavored products may not be so stable in storage due to the fact that flavor changes are unpredictable for long storage.

Protecting Stored Food From Insects

In the interests of the family budget, food conservation and health, stored foods should be protected from damage and contamination by insects. Sawtoothed grain beetles, larder beetles, flour beetles, weevils, several kinds of moths and many other insects readily infest, consume, or destroy accessible food supplies. It is important to prevent or reduce these kinds of losses whenever possible.

Prevent Insects Infestations:

To prevent insect infestations of bulk foods, keep all stored foods in tight, clean, metal, plastic, or glass insect-proof containers that have tight-fitting lids. Store food off the floor and away from damp areas. Clean, cool, dry storage areas are preferred. Avoid storing food in open containers on shelves. Keep food storage areas free of spilled food and food particles. Good housekeeping often helps prevent insect infestations.

If possible, store foods at low temperatures. Storing food at 32°F.

to 40°F. will retard most insect activity.

In Case of Infestation:

Lightly infested raisins, dried prunes, and home-dried fruits may be placed in a small cheesecloth bag and dipped into boiling water for five minutes to destroy the insects present. Following this treatment, the contents should be thoroughly dried, then stored in insect-proof containers.

When packaged goods such as beans, cereals, whole grains, nut meats, and similar dry foods become infested, they may be "sterilized" by heating in an oven at a temperature of 140°F. for half an hour or by freezing in a home freezer held at 0°F. or below for 3 or 4 days. Small packages may be heated as they are. The contents of large packages should be spread on cakepans or piepans so the heat can penetrate easily. The oven door should be left slightly open to avoid overheating. This treatment will destroy all stages of the insect if the food containers are not too large nor

the food too bulky for complete penetration by the heat.

If the infestation is extensive, dispose of the contaminated food. Clean the shelves, then spray with a household formulation of an approved insecticide such as pyrethrum or malathion using a low dosage. Spray the cracks, crevices, under the shelves, and mopboards. Do not spray the insecticide directly on food, food preparation surfaces like breadboards, nor on food utensils. Wait until the spray dries, then cover the shelves with clean paper or foil before returning food packages to the shelves. In some situations, chlordane, lindane, methoxychlor, or ronnel can be used. Read label instructions for details.

Kerosene-based household sprays should not be used around flour since the flour may absorb the kerosene flavor. If treating an area where flour is stored, remove the flour before treating and place it back on

the shelves after the kerosene odor is gone. Do not spray oil-base insecticides on asphalt-tile floors.

Household formulations of chlordane or diazinon may be used behind radiators, on floors, and in ant runs to destroy ants, roaches, earwigs, silverfish, and roaming flour-infesting insects. Do not use these chemicals to treat large areas in the home.

NOTE: Pesticides are poisons. Follow instructions on the label. Do not store pesticides near foods or medicines. Keep all pesticides out of reach of children, pets, and livestock.

Dry Ice: Dry ice is sometimes used to fumigate stored cereals and similar foodstuffs in large containers, such as 5 or 10 gallon cans. Handle with care and keep lid slightly ajar to avoid explosions. For further details on the use of dry ice, contact your local Extension office.



Storing Water



The storage of a two-week supply of water is recommended by the Defense Civil Preparedness Agency. Calculating needs on the basis of $\frac{1}{2}$ gallon per day per person (for drinking and food preparation) amounts to seven gallons of water for each person for a two-week period.

If water is desired for other uses, such as bathing, brushing teeth, washing dishes, etc., additional water must be stored. Another seven gallons of water per person is recommended for this purpose.

It is important that the water stored for emergency use be clean. As with any other food, water must

be periodically checked as to its condition and replaced to keep the stored water in good condition. Water that has been tested by a health authority and determined safe for drinking is safe to store.

Water reserves may be stored in any number of ways. Thoroughly washed, clean plastic jugs with tight fitting caps, or glass jugs or bottles with screw caps, are good selections. Metal containers often give the water an unpleasant taste. Plastic containers have an advantage of being shatter proof, and are usually lighter in weight than glass containers.

One easy and effective way to store and sterilize water is to fill

clean fruit jars with water, leaving one inch of headspace at the top of the jar. Place clean sterilized lids on the jar and process the water in a boiling water bath as fruit juice is processed. Quart jars should be processed 20 minutes, two quart jars 25 minutes.

The glass containers in which water is stored should be packed carefully with newspaper, excelsior or some materials to keep them from touching each other and to protect them from shock.

Inspect all home stored water at monthly intervals. When objection-

able flavors or odors develop, or cloudiness or other indication of poor quality develops, the water should be replaced with a fresh supply.

Canned water is available from commercial sources for drinking. This has directions for storage and care.

To learn recommended methods of purifying water in emergency situations, secure a copy of instructions from your local DCPA office.

Defense Civil Preparedness Agency Recommendations

The Civil Preparedness Agency urges every family to safeguard its survival by planning and storing food and water stockpiles. Their recommendation is to have and maintain at least a two-week supply of food and water in the home or in a fallout shelter.

This two-week supply of food should be planned by taking into consideration the needs and preferences of family members.

Foods recommended by the DCPA are those that can be stored in kinds and quantities that need no refrigeration and that require little or no cooking. This must take into consideration the needs of family

members if they require special diets, medicines or foods different than the usual family needs. If necessary, they should include special baby foods for infants, toddlers or elderly persons. The food should be in cans and jars that will fit the family needs for one meal, since at the time of use there may be no refrigeration available to handle leftovers.

Following is a storage rotation schedule for foods from the four food groups with recommendations by the DCPA. These recommended times are suggested to maintain the best eating qualities of the food stored.

Food Rotation Schedule *

Food	Months of Storage Time					
	1	6	8	12	18	24
Milk						
Evaporated		X				
Non - fat - dry, metal containers		X				
Dry cream products (instant)				X		
Meat (canned)						
Poultry					X	
Fish				X		
Meat and mixtures					X	
Meat and vegetable soup			X			
Vegetables and Fruits						
Canned Fruit		X				
Berries and cherries		X				
Citrus juices					X	
Other fruit and fruit juices, canned					X	
Tomatoes		X				
Canned vegetables					X	
Dried fruit (metal containers)		X				
Cereals and Baked Goods						
Ready - to - eat cereals						
IN metal containers				X		
IN paper package	X					
Uncooked (Quick - cooking or instant)						
IN metal containers						X
IN original paper package				X		
Dry beans and peas (canned)					X	
Miscellaneous						
Fat, hydrogenated or anti-oxidant treated				X		
Sugar and salt				INDEFINITELY		
Hard candy - gum					X	
Nuts (canned)				X		
Instant puddings				X		
Coffee, tea, cocoa					X	
Soda, baking powder				X		
Flavorings (pepper, spices)						X
Bouillon products				X		
Flavored beverage powder (instant)						X

* -Defense Civil Preparedness Agency