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Old Mother Hubbard
went to her cupboard
to get her poor dog a bone.
But when she got there
the cupboard was bare,
and so her poor dog had none.

— Nursery Rhyme

Why Store Food?

Although the value of a food supply in case of disaster is obvious, disaster insurance is not the best reason to start a home storage program. And it can be the cause of the worst sort of storing. A 'doomsday' food supply often turns out to be just that—undesirable food fit only for the doomed. In a stressful, emergency situation, drastic changes in the food you eat may cause severe discomfort or even illness. Home storage works best when it is part of a family preparedness effort that includes education, career development, money management, health care, and emotional support. It is part of a sensible way to meet the ordinary requirements of day-to-day living. A family living daily from a supply of food

stored (and constantly replenished) at home will benefit from a balanced and planned diet, enjoy a feeling of security, and reap the economic advantages of careful management—besides being prepared for occasional emergencies.

What to Store

In simplest terms, you should store whatever you need. How much and what kinds of food to store will depend on where you live, what is available for storage, what you normally eat, your usual activities, your health, your individual tastes, the climate, and the size and ages of your family. All of these variables are usually built right into your everyday diet. So the first rule of home storage is: store what you are accustomed to eating.



By storing what you are accustomed to eating, you will automatically follow two more important rules for home storage. Second, you will include a variety of foods. Most families demand a certain amount of variation in what they eat every day, but their food storage program won't reflect that need unless they store foods from their normal diet. Third, you will store foods that are readily available and not too costly: A family's everyday eating habits are shaped by what food is available and how expensive different foods are. It would hardly be wise to build a food storage program around foods so rare or so expensive that the family would not normally eat them. While building a food storage program, you will probably find improvements you can make in your family's eating habits according to variety, cost, and availability.

The fourth principle for home stor-

age is good nutrition. Choose foods for storage according to their part in a balanced diet. No single food has all the nutrients needed in a good diet. While most foods contain a combination of nutrients, they are sometimes classified according to the nutrient present in the most significant amount. Energy foods supply carbohydrates and fats, building foods are high in protein, and protective foods provide many of the vitamins and minerals. A combination of these three types of foods will usually provide all the nutrients needed for a healthful diet. The following chart suggests some possible combinations of the major types of food in the amounts required by one person in a year.

Suggested Combinations for Yearly Requirements per Person

Energy and Building	Wheat 300 lbs (136 kg)	or	Rice 370 lbs (168 kg)	or	Corn 370 lbs (168 kg)
Building	Dry Milk 50 lbs (23 kg)	or	Dried Fish 50 lbs (23 kg)	or	Beans 90 lbs (41 kg)
Protective	Fruit or Vegetables* Fresh (Home Garden) 370 lbs (168 kg)	or	Pickled, Canned, Bottled 370 lbs (336 kg)	or	Dried 90 lbs (41 kg)

* 365 vitamin and mineral tablets and 100 lbs (45 kg) of sugar or honey or 35 lbs (16 kg) of fats in some form can be substituted for fruits and vegetables. Store extra water for use with dried foods. 5 lbs (2 kg) of salt and other seasonings may be necessary to make the food palatable.

In a home storage program, the quality and storability of food and its container are very important. The storage life of food varies with the quality—the higher the initial quality, the longer the storage life. This is especially true of foods canned in liquid. High-quality cherries may still be good after 5 years, while lower-quality cherries may lose their palatability after 3 years or less. Lower-quality powdered milk will develop an "off flavor" sooner than high-quality milk.

As you shop, be careful of "sale" items. Sales may be held to get rid of older stock or lower-quality food, as well as to reduce excess inventory. If there's any doubt, purchase a can and sample the food before buying in quantity.

Buy food in the best containers possible (see section on containers, p. 8), or plan to provide additional storage protection. You should choose packages in the size normally used by your family. Although smaller packages often cost slightly more per ounce than institutional-sized containers, you will save money in the long run. Using smaller containers prevents

waste and contamination of large amounts of food after containers are opened. Smaller packages are also easier to rotate and move when necessary.

In summary, the principles for what to store are:

Store what you are accustomed to eating.

Store a variety of foods.

Store foods that are readily available and not too costly.

4, Store foods that supply all the nutrients needed in a balanced diet.

5. Store only the highest quality or grade of food in the best containers.

How To Store

Priorities. Build your supply through an orderly and systematic plan consistent with your family's means and needs. Don't borrow money to acquire food storage. Your first priority for storing food should be the basics.

Give second priority to fruits and vegetables. These can be stored in dried, home-canned, commercially canned, or freeze-dried forms.

Finally, store other food items that



Suggested Basic Storage Items		
Grains	Legumes	Flour
Corn Oats Rice Wheat etc.	Dry Beans Soy Beans Split Peas Lentils etc.	Whole Enriched Flour Corn Meal etc.
Dry milk, dried fish, or a live source of meat Sugar or honey Salt Vegetable oil, shortening, lard, butter, or margarine Water		

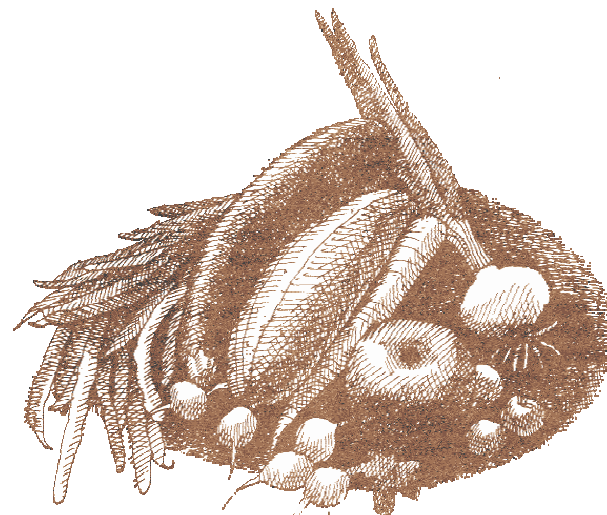
are normally eaten by the family. such as eggs, cheese, meat, or meat substitutes,

Determining Your Needs. One suggestion for making your food storage match your usual needs is to work with your normal menu. Plan out a typical menu for a 2-week period. Multiply the quantity of the basic ingredients in each meal by 26 (the number of 2-week periods in a year). Then, tally all ingredients by commodity. The re-sulting list will show you which commodities you need in what amounts to feed your family for a year. You may prefer to use 2 menu sets—summer and winter—to take advantage of seasonal variations. In this case, multiply quantities of ingredients by 13.

If you find it difficult to work with

a full year's planning at once, you may want to apply a similar technique for a month at a time. Plan a 2-week menu and buy double quantities of everything. Building a supply a month at a time can also be easier on the family budget. Once a family follows the pattern for a few months, a storage program will evolve that fits the particular family's needs and is suited to its day-to-day requirements for successful living.

Preserving Foods. The methods used to preserve the foods you select for storage depend on local conditions, space and equipment available, storage conditions, climate, and cost. A combination of several methods usually works best. (See the Benson Institute pamphlet on preserving foods.)



Maintaining a live source of food is effective in many situations. Depending on the climate, a productive garden may be possible year round or seasonally. Garden produce keeps for extended periods in cool, dark storage areas. Depending on local laws, you may also raise chickens, pigs, rabbits, or other livestock. Some types of drying can be done with little equipment or cost, using a stove or the heat of the sun. This type of preservation causes losses similar to those from canning. Drying, however, causes greater losses of vitamins A and C.

Bottling or canning (heat processing of food in a closed container) will preserve a product for a year or more. This process effectively retains 70-90 percent of the vitamins and essentially all of the protein, carbohydrates, fats, and minerals. Although canning requires special equipment and uses large quantities of fuel, after an initial investment, bottles and processors can be reused numer-

ous times. Because improperly processed foods may spoil or become toxic, use caution. **Salt** may be used with drying to improve storage time (as with fish) or with water to reduce spoilage (as with vegetables). Wash away excess salt before using the food. Smoking can lengthen storage time, and curing uses a combination of curing agents with smoke to further enhance the



preservation of food. Smoked or cured foods keep only for a few months. Smoking and curing greatly alter the flavor of food and are most often used with fish and meat. Some climates allow 1- to 6-month bin storage of some fresh foods in spring houses, root cellars, or cool, dark rooms. Refrigeration and freezing are useful methods of cold storage, but *they are expensive in terms of space and fuel consumption.*

Rotation.. Whole cereal grains will store almost indefinitely (at least 20-30 years) if they contain less than 12 percent moisture and are insect free. Refined wheat, rice, or corn, however, must be used and replaced constantly by a system of rotation. Rotation ensures that your food is always acceptable in quality by reducing the chance for insect, rodent, or chemical spoilage. Dry milk with a strong "off" flavor, mushy canned peaches or cherries, and hard, brown, dried apricots are all inedible. These types of losses can be prevented by rotation. Even freeze-dried goods sealed in cans under nitrogen should be rotated within 3 to 5 years. During the drying process the natural cells of the plant or animal tissue break apart. These molecules come in contact with each other and with the air and eventually react to give food undesirable qualities.

Once again_ the principles for how to store are:

Build your food storage program systematically and according to priorities.

Determine your needs from your usual menu, planning for a year or even a month at a time. Choose food preservation methods according to your situation

space and equipment available, storage conditions, climate_ and cost.

Rotate your supply to ensure quality and prevent loss.

Where to Store

Store food so as to avoid the adverse effects of environment caused by air, light, heat, and moisture.



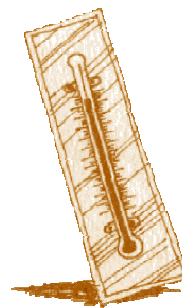
Air. Most foods contain some fat. In contact with air, fat oxidizes, producing rancid odors and flavors. The nutritional value of the food decreases, and it may become slightly toxic. This problem increases in the presence of light and warmer temperatures. To slow the development of rancidity, completely fill storage containers, making them as airtight as possible, and store them in cool, dark places.



Light.

Sunlight may bleach bottled or plastic packaged food, de-

straying food pigments, flavor, and texture and causing vitamins to deteriorate more rapidly. Never store foods packaged in glass or plastic containers in a sunlit area, even if the sun hits them for only a few minutes a day.



Heat. One of the worst enemies of good food quality is heat.

Heat causes rapid molecular activity and chemical reactions that bring about a gradual loss of color, flavor, texture, and nutritional value to stored foods. (Canned foods, dried foods, and foods in liquid form are especially susceptible to heat caused quality loss.) The rate of quality loss is twice as rapid with each 20° F (10° C) temperature rise. Thus, foods stored at 70° F (21° C) may keep for 1 year, but they will only last 6 months at 90° F (32° C). Heat may cause moisture to generate from food compounds. Where one side of a package is exposed to heat, moisture may migrate and produce "sweating" on the opposite side, allowing microbial activity. Fat oxidizes sooner, developing rancidity, and molds and other microbes grow more rapidly at warm temperatures. Heat may also dry out some foods. Shady, indoor, or even underground storage will help moderate the influence of heat.



Moisture. Most foods are not perfectly dry; high-quality whole wheat and rice contain 10 percent moisture, and even "dry" milk has 2 to 3 percent moisture. A certain amount of moisture helps maintain the quality of many foods; so manufacturers only reduce the moisture low enough to prevent microbial growth. An increase in moisture can cause mold, bacteria, and yeast to grow in packaged food and may corrode containers. Insects need moisture to multiply and can multiply in sealed containers by eating the stored food and releasing its moisture. Water also serves as the medium for chemical reactions in canned foods that cause food deterioration. The negative effects of moisture can be reduced by keeping the moisture level constant. A dry place will not add moisture, and proper packaging will keep the right amount of moisture in and extra moisture out.

Storage in the Home. In most homes the attic is hot, and lower or basement rooms are cooler. The temperature of outside walls can often vary considerably, depending on seasonal weather conditions. Food placed next to heating vents can lose quality rapidly, and containers stored near cooling vents can corrode.

As a general rule, store canned goods in the coolest, darkest, and driest place possible. To avoid rancidity, keep foods containing small

amounts of fat, such as dry milk, polished rice, cake mixes, flours, dried meat, and dry ready-to-eat cereals in a cool, dry area. Foods containing no fat or special flavors, such as sugar, salt, baking powder and soda, and whole wheat, can be stored in a warm attic without harm, but high humidity may cause them to "cake" together in one solid lump. (Whole wheat does not cake, but it may mildew at humidity levels consistently above 70 percent)_ Keep dried foods cool and dry to maintain their quality.

If you have limited space, you can store food in closets, behind sofas, and under beds. However, the storage area should be fairly accessible to allow inventory and rotation of food.

Storage Containers. A good container may be made of glass, metal, rigid plastic, wood, or clay, depending on storage conditions. It should retain moisture and natural food odors while keeping out additional moisture, rodents, insects, microbes, dust, air, and light.

Where moisture is a problem, avoid wooden or paper containers_ Rodents and insects can penetrate wood, cardboard, and thin plastic. In the right storage area, polypropylene and polyethylene bags and containers are safe, but not all plastic materials can be used to

store food. Buckles which have been used for food products may be used again, but after many years, the plastic may decompose, crack, and emit odors, making it unsuitable for storage. Use metal containers only in a dry storage area, and store glass containers in a manner that they will be protected from breakage.



Insect control. If one or two insects come undetected into the home, thousands can be present in a short time. But they can only multiply if they have food. Clean up spilled food and debris from your storage area and fill cracks where insects may hide. You need not treat grains or legumes which are clean and uninfested, but be on constant watch to discover contamination. If minor infestation occurs, use one of the following methods to destroy insects.

Pesticides and fumigants can destroy insects, but most are toxic when improperly used. Consult your county extension office or a reliable commercial company if you desire to use pesticides.

You may destroy adult insects in foods by placing them in a deep freezer at or below 15° F (-18° C) for 2 to 3 days. This may not kill all the larvae and eggs so repeat this process after a month. All insects, eggs, and larvae will be killed if frozen at 10° F (-23° C) for 2 to 3 days.



Insects can be destroyed by heating the internal temperature of a food to 150° F (66° C) and maintaining this temperature for 4 minutes (or 140° F [50° C] for 10 minutes or 120° F [49° C] for 20 minutes). Heating to higher temperatures, or for longer periods of time, will reduce germination and perhaps handling quality of subsequent flours milled from these grains. Note: Home ovens can be used, but their temperature and the temperature of the food need to be checked with mercury thermometers. Dry ice can be used to kill adult insects and larvae, but it probably will not destroy the eggs or pupae. Pour 2 inches of grain into the bottom of the container. Add dry ice; then fill with grain. Eight ounces (227 g) of dry ice is recommended for 100 pounds (45kg) of grain, or 1 pound (454g) for each 30 gallons (114 liters) of stored grain. Seal the containers loosely for 5 to 6 hours; then seal them tightly. Containers must be air tight and capable of being tightly sealed.

In summary, the principles for where to store are:

Store foods so as to avoid the effects of air, light, heat, moisture, insects, and rodents.

Choose storage areas according to the types of food you store. Remember that cool, constant temperatures and low humidity are preferable.

Store food in durable containers that best suit the conditions in your storage area. Any container that will keep out air, heat, moisture, pests, etc., is

suitable.

Control insect contamination by keeping the storage area clean and by treating insect infested foods.

Now That You're Ready

Keep in mind that an individual home storage program is as unique as your family. Using these basic guidelines, you're all set to give your special version of food storage a try.

Additional Food Storage Information

There are many ways to determine home storage needs. The following tables and charts may provide useful information in setting up your food storage program

Calories Needs Per Day

Individual	Age	Calories
Infants	0-6 months	700
	6-12 "	1100
Children	1-3 years	1300
	4-6 "	1800
	7-10 "	2400
Males	11-14 "	2800
	15-18 "	3000
	18-22 "	3000
	23+ "	2700
Females	11-14 "	2400
	15-18 "	2100
	18-22 "	2100
	23+ "	2000

1. Calorie values based on moderately active population. If physical activity is increased greatly, calorie needs could increase by as much as 1,000 calories per day.
2. Adult energy needs based on a man weighing 154 lbs (70kg) and a woman weighing 128 lbs (58kg). Adjust calories needed by 17.5 per pound (39/kg) for men and 16.5 per pound (34/kg) for women.
3. Pregnant women need 300 more calories; nursing mothers need 500 more.

Evaluating Calories Needs

1. Determine energy needs of your family for 1 day from Calorie Needs Table.
2. Total calories needed by family and add 5 percent to allow for waste.
3. From Food Value Table (p. 12) determine calories in your stored food on a daily basis (50 lbs beans=211 calories per day for a year).
4. Compare this to your family's needs (#2).

Nutritionally Balancing a Food Supply

1. Food Value Table determine grams of protein in your stored food on a daily basis and multiply by 4 to calculate calories contributed by protein. This should be 10-15 percent of the total calories.
2. Provide 5-10 lbs salt (at least iodized) per person.
3. Food storage items are usually low in vitamins A, C, and D. Vitamins A and C can be provided from a home garden. Exposure to sunshine can provide vitamin D. A vitamin supplement can alleviate deficiencies. Women may need an iron supplement.
4. The following table is a guide to the percentage of calories each type of food should provide.

Calories Percentages of Stores Foods

Food Type	Examples	% Calories
Grains¹	Wheat, corn, oats, rice, barley, flour, macaroni products	50-60
Protein Foods	Fortified dry milk, meat, fish, legumes	10-20
Fats and Oils²	Vegetable oil, shortening, lard, butter, margarine	5-10
Remaining Foods	Fruits, vegetables, sugars, miscellaneous	to bring up to 100%

¹Whole grains should provide two-thirds of the total amount of the grains.

²The American diet contains more than 40% fat, so 10% is a very low fat diet. Store more if possible. Nuts, being high in fat, are counted as 75% in the fat group and 25% in the protein group.

Proximate Value of Food When Prorated Over 1 Year on a Daily Basis					
Food	Amount for 1 year	Energy kcal/ day	Protein gm/ day	Fat gm/ day	Carbo- hydrate gm/day
Grains					
Barley, Pearled	100 lbs	434	10.2	1.2	98.0
Corn, field, dry	100 lbs	432	11.1	4.8	89.7
Flour, all-purpose	100 lbs	452	13.0	1.2	94.6
Oatmeal	100 lbs	484	17.6	9.2	84.7
Rice, brown	100 lbs	447	9.3	2.4	96.2
Rice, white	100 lbs	451	8.3	0.5	101.0
Wheat, whole	100 lbs	410	16.4	2.5	87.7
Pastas					
Macaroni	10 lbs	46	1.5	0.1	9.3
Noodles	10 lbs	48	1.6	0.5	8.9
Spaghetti	10 lbs	46	1.5	0.1	9.3
Milk					
Milk, nonfat, dry	50 lbs	223	22.2	0.4	32.1
Milk, evaporated, 14 ¹ /2 oz. can	48 cans	74	3.8	4.3	5.2
Meat and Fish, canned					
Potted meat, 3¼ oz. can	24 cans	13	0.7	1.1	trace
Treet, 12 oz. can	24 cans	65	3.1	5.8	trace
Vienna sausage, 4 oz. can	24 cans	17	1.2	1.3	0
Tuna, 6½ oz. can in oil, drained solids	48 cans	41	5.9	1.7	0
Meat Substitute					
Textured soy protein, unflavored	50 lbs	218	34.2	trace	19.9
Legumes					
Beans, common	50 lbs	211	13.9	1.0	38.1
Beans, lima	50 lbs	214	12.7	1.0	39.8
Lentils, whole	50 lbs	211	15.3	0.7	37.3
Peas, split	50 lbs	216	15.0	0.6	38.9
Soybeans	50 lbs	250	21.2	11.0	20.8

Proximate Value of Food When Prorated Over 1 Year on a Daily Basis (Continued)					
Food	Amount for 1 year	Energy kcal/ day	Protein gm/ day	Fat gm/ day	Carbo- hydrate gm/day
Nuts					
Almonds, shelled	50 lbs	372	11.6	35.8	12.1
Walnuts, shelled	50 lbs	405	9.2	39.8	9.8
Peanuts, shelled	50 lbs	350	16.2	29.5	11.6
Peanut butter	10 lbs	73	3.1	6.3	2.3
Fats					
Oil, 2 gallons	16 lbs	176	0	19.9	0
Shortening, 5 3-lb cans	15 lbs	165	0	18.7	0
Mayonnaise	10 lbs	89	0.1	9.9	0.3
Salad dressing (mayonnaise type)	10 lbs	54	0.1	5.3	1.8
Sugar					
Sugar, granulated	50 lbs	239	0	0	61.8
Sugar, brown	50 lbs	232	0	0	60
Honey	50 lbs	189	0.2	0	51.1
Jams and preserves	10 lbs	34	0.1	trace	8.7
Jello, 3 oz. pkg.	30 pkg	26	0.7	trace	6.2
Powdered drink mix	11 lbs	53	0	0	13.4
Tang, 2 # 10 cans	11 lbs	50	0	0	12.6
Fruits, bottled					
Peaches, heavy syrup	10 qts	19	0.1	trace	5.0
Peaches, light syrup	10 qts	14	0.1	trace	3.8
Apricots, light syrup	10 qts	16	0.2	trace	4.2
Pears, light syrup	10 qts	15	trace	trace	3.9
Fruits, canned					
Peaches, light syrup, #303 can	24 cans	17	0.1		4.5
Apricots, light syrup, #303 can	24 cans	20	0.2		5.0
Pineapple, light syrup, #303 can	24 cans	18	0.1		4.6
Fruits, dehydrated					
Apples, 2.5% water	25 lbs	110	0.4	0.6	28.6
Apricots, 3.5% water	25 lbs	103	1.7	0.3	26.3
Raisins, 18% water	25 lbs	89	0.7	trace	24.0

**Proximate Value of Food When Prorated
Over 1 Year on a Daily Basis (Continue)**

Food	Amount for 1 year	Energy kcal/day	Protein gm/day	Fat gm/day	Carbohydrate gm/day
Vegetables, fresh					
Potatoes , white	100 lbs	76	2.1	trace	17.2
Carrots	25 lbs	10	0.3	trace	2.5
Cabbages	25 lbs	6	0.4	trace	1.5
Vegetables, canned					
Pears, #303 can	24 cans	20	1.0	0.1	3.7
Green beans, #303 can	24 cans	5	0.3	trace	1.2
Tomatoes, #303 can	24 cans	6	0.3	trace	1.3
Vegetables, dehydrated					
Carrots	10 lbs	42	0.8	0.2	10
Onions	10 lbs	43	1.1	0.2	10
Cabbage	10 lbs	38	1.5	0.2	9.1
Potatoes, mashed, flakes	10 lbs	45	0.9	0.1	10.4
Soups, Condensed					
Chicken, cream, 10½ oz. can	25 cans	16	0.5	1.0	1.2
Chicken Gumbo, 10½ oz. can	25 cans	9	0.4	0.2	1.5
Minestrone, 10½ oz. can	25 cans	6	0.3	0.2	0.6
Mushroom, cream, 10½ oz. can	25 cans	23	0.3	1.7	1.8
Tomato, 10 ½ oz. can	25 cans	15	0.3	0.4	2.5
Vegetable beef, 11 oz. can	25 cans	13	1.3	0.3	1.3
Misc.					
Cocoa, dry	2 lbs	10	0.6	1.0	0.4
Chocolate, unsweetened, baking	5 lbs	31	0.6	3.3	0.8

Frequently Asked Food Storage Questions

1. Are there any recipes using just the "basics"— wheat, honey, salt, and milk?

Yes, but they require getting used to by the family. These basics may not contain adequate amounts of vitamins A, C, D, and fat.



2. What is the best method to prepare wheat for storage?

Buy good wheat (hard wheat is **best**) from a supplier willing to verify low moisture (less than 10%), cleanliness, and absence of living insects. Store in containers with tight lids. Check every few months for insect infestation. If infested, treat with cold, heat, dry ice, or pesticides.

3. How do you check the quality of foods from commercial food storage companies?

The quality of any food is self-indicating. Never buy in quantity until your family has sampled the food and likes it. After all, it will become a regular part of their diet. Even nitrogen-sealed foods

need to be rotated within 3 to 5 years.

4. What is the storage life of commonly stored foods?

If stored under proper conditions, grains, nonfat dry milk, dehydrated foods, sugar, and canned goods will store for a year and still retain good quality. Beyond that it is hard to know, other than by smelling, tasting, or closely examining the individual food product. Rotation is the key to successful storage.

5. Is it wise to include vitamins in a food storage supply?

No supplement contains all essential vitamins and minerals. It is better to store a variety of nutritious foods that together supply all needed nutrients. Vitamins and vitamin-containing mineral supplements do not store well and should be replaced every 2 to 3 years. (Note: despite careful planning, women may still need an iron supplement, particularly if they are pregnant)

What is the best method of storing water? How much?

Try to maintain a 2-week emergency supply, more if you have much dehydrated food. Store water in breakage-resistant containers. You need not sterilize safe tap water if it is to be stored in clean containers. Impure water may be sterilized by boiling or using bleach or iodine.

Other Important Nutrients

When planning a food storage program, carefully consider the nutrients vitamins A, C, and D, iodine, calcium, and iron in addition to calories and protein. These nutrients can be provided by food or food supplements. The following are nutrient sources that are easily included in a food storage program.

Vitamin A:	carrots, apricots, peaches, spinach, broccoli, and other dark yellow or green vegetables and fruits. You may also store seeds and grow fresh greens.
Vitamin C:	potatoes, cabbage, citrus fruit, and sprouts from seeds such as alfalfa, mung beans, etc.
Vitamin D:	fortified evaporated milk, codliver oil, and fortified dry milk (not all dry milk is fortified). If food sources of vitamin D are not available, exposure of skin to sunlight for at least 20 minutes each day is advised, particularly for children and pregnant or nursing mothers.
Iodine:	iodized salt.
Calcium:	milk in all forms.
Iron:	whole grain cereals, dry peas, dry beans, dried fruit, and red meat (if available). Women and children particularly need iron.
Niacin	should be considered if corn is a major component of the diet and is not alkali treated.
Thiamin:	should be considered if polished rice is a major component of the diet.