



Food Storage

Making the Most of Your Food Storage

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President Monson has observed, “Many more people could ride out the storm-tossed waves in their economic lives if they had their year’s supply of food ... and were debt-free. Today we find that many have followed this counsel in reverse: they have at least a year’s supply of debt and are food-free” (President Thomas S. Monson, “That Noble Gift—Love at Home,” Church News, May 12, 2001, 7). In 2007, the First Presidency introduced a new program called Family Home Storage to “...encourage Church members worldwide to prepare for adversity in life by having a basic supply of food and water and some money in savings” (The First Presidency, All Is Safely Gathered In: Family Home Storage, Feb. 2007, www.providentliving.org). If we are prepared with food, water, and some money in savings, it puts us in a position to take care of our own loved ones as well as others in need.

Here are some tips to help you as you acquire a supply of food to become more self-reliant:

1. Evaluate your current food storage

Everyone has different needs when it comes to food storage, so you should consider your own situation and what you and your family can do to become more self-reliant. As you determine what you need, you may want to consider the following questions:

What food do you have on hand? I have found it helpful to take inventory of what I have so I can decide what else I need to buy. I include foods in my

supply that I use on a regular basis (pasta, rice, canned food), as well as some that I want to incorporate more into my diet (dry beans, wheat). Store a variety of foods to enhance the nutritional value of your diet and expand your menu options. If you have a garden, it can also supplement your food supply. It doesn’t make sense to store food that you don’t like, or foods that you have particular sensitivities to.

How old is it? Would you want to eat it? Some people have food storage that they inherited from their parents, and often wonder if it is still edible. I might add here that it is a good idea to write the purchase date on your food so you know how old it is. You may be interested to know that the Department of Nutrition, Dietetics and Food Science has conducted some testing on foods such as wheat, rice, and beans stored up to 30 years or more in sealed cans and determined that they can still be edible and have nutritional value after many years of storage. If you have some old food storage, you may want to open it and perform your own taste test to determine if it is something you would want to eat in an emergency situation. Often

Food (Stored in No. 10 Cans in ideal conditions)	“Life-Sustaining” Shelf-Life Estimates (in Years)
Wheat, white rice, cornmeal	30+
Pinto beans, rolled oats, pasta, potato flakes, apple slices	30
Non-fat powdered milk, dehydrated carrots	20

the packaged food from a grocery store has a “best if used by” date which can be a good guide for how quickly you should use it, but it is often still useable past that date (although the quality will not be guaranteed by the company). Wet canned food generally lasts for several years.

How fast do you use up particular food items?

This has an impact on how much food you should have on hand. I have found it beneficial to keep track of how much food I go through in a period of time to determine how much I should have on hand.

For example, I write the date that I open up a jar of mayonnaise or a spice container and then I can determine how long it takes me to use it up.

2. Build your storage over time

Once you have determined what you want to include in your food storage, the next step is to build up your storage over time. I love the counsel that King Benjamin gave to his people in Mosiah 4:27: “And see that all these things are done in wisdom and order; for it is not requisite that a man should run faster than he has strength...” His counsel can be applied to food storage. You should not try to obtain a food supply faster than we have means. If you purchase a little each week, your food supply will grow over time. It is important to write dates on your food storage so you know how old it is and what food to use first.

Food storage can be categorized as short-term or long-term, depending on its shelf life and how quickly you plan to use it. A short-term food supply includes canned goods and other nonperishable food. Last fall, I moved to Provo from Raleigh, NC and I ended up giving away most of the food supply that I had acquired while I was there. When I arrived in Provo, I started again to build a food supply. I watched for sales at the

grocery stores on items that I normally use. I also obtained some items packaged in No 10 cans for long-term storage through one of the Home Storage Centers (see resources at the end of this article). Since these items store well, I don’t need to worry about using them up right away, and I can rotate them over

a period of many years. I learned from my master’s research that powdered milk stores well in No. 10 cans with oxygen absorber packets, so that is how I package it for storage. A No 10 can will make the equivalent of about 4-5 gallons of milk (depending on how full the can is), so I

have 6 cans to match the amount of fluid milk that I normally use in a year, which is about gallon per week. I mainly use powdered milk in baking, and it will take me several years to use up one can, but I should be able to use all of these cans over a 20 year period. Over time, my food supply has grown, and now I feel more prepared as I continue to add to it on a regular basis. Another advantage of buying food gradually is that it allows you to rotate your food without having to worry about all of it reaching its “best if used by” date at the same time.

Water storage is also important. Recently, I have acquired several 5 gallon water jugs that I have filled with water. Some people prefer larger sized drums to store water, which is also fine. I think it’s good to have both large and smaller containers because the large drums can hold a lot of water, while the smaller containers are easier to transport. You can also use soda bottles for your water storage (milk jugs are not recommended because they are difficult to clean and the plastic can break down and leak over time). According to the Federal Emergency Management Administration

(FEMA), you should wash the soda bottles with soap and water, and then sanitize them by rinsing with 1 tsp of bleach per quart of water, followed by a final rinse with water. If your city’s water supply is

Quantity for One Month for One Adult	Product
25 lbs.	Wheat, white rice, corn, and other grains
5 lbs.	Dry beans
30 gallons	Water (1/8 teaspoon or 8 drops of liquid household chlorine bleach for ever gallon of water to purify
*based on recommendations from Provident Living	



chlorinated, you can just fill up the clean bottles with water and store them. FEMA recommends rotating your water storage every 6 months. I'm not too good about doing that, but when I do, I try to use the water to water plants or the lawn, so the water isn't wasted. Storing 3 gallons (6 soda bottles) per person would be a three day supply, which is a start. If you can store more than that, wonderful! It will come in handy in an emergency situation. Be sure to write the date on the containers. Also, it's a good idea to keep a bottle of bleach on hand to disinfect water in an emergency situation.

3. Store it properly

One key to food storage is to store your food properly. Oscar Pike, a professor of Food Science, has developed the acronym HALT to help you remember how to store your food (Oscar A. Pike, "Storing Fats and Oils," *Ensign*, June 1999, 71). If you limit a food's exposure to humidity, air (oxygen), light, and temperature (heat), it will last longer. Fortunately, we don't have a problem with humidity here in Utah. Exposure to oxygen and light can be detrimental to a food's flavor as well as to some vitamins, so using oxygen absorber packets and storing food in the dark can also help extend the shelf-life. Cooking oil is very susceptible to deterioration by light, so it is a good idea to store your cooking

oil in a dark location. Of all of the factors mentioned, temperature is the biggest. Hot storage will speed up the reactions that cause the food to deteriorate, while cool storage

will slow down these reactions. You should store your food in the coolest place possible. Another issue that can come up with food storage is insects. I haven't had much of a problem with bugs in my food here in Utah (probably because the climate is so dry), but they can be a problem. Oxygen absorber packets can prevent the growth of bugs in your food when packaged in containers that are good oxygen barriers such as cans, foil pouches, and soda bottles. Wheat can also be disinfested by freezing it or by treating it with carbon dioxide (See the Utah State University Extension Publications website for details).

To preserve your food storage, keep it away from:

- Humidity (moisture)
- Air (oxygen)
- Light
- Temperature (heat)



4. Make it accessible

Foods stored in crawl spaces are generally difficult to access and are often forgotten for years. You will be more likely to rotate your food storage if you keep it in an area where you can get to it. The house where I am currently living has both a pantry in the kitchen and a food storage room in the basement. I keep most of my food in the basement, and bring the items that I use more frequently up to the pantry. To store my food, I have decided to use 5 gallon buckets because I don't have enough shelf-space to hold everything, and they stack well. I have a bucket of sugar as well as a bucket of flour that I use to refill smaller containers in my pantry. I keep some of the food that I buy in its original packages as I put it into the buckets. As an example, I have filled one bucket with various packages of pasta and another with packages of dry beans and lentils. I put the newest items at the bottom of the bucket and the oldest at the top. I really like the screw-on lids that allow easier access to the buckets. If you don't have a basement or other storage space, you may need to get creative about storing food. When I lived in an apartment, I bought a storage cabinet and some plastic totes to hold my extra food that wouldn't fit in the pantry and kitchen cupboards. Making food storage accessible can also involve getting it in a form that you will use it. For example, I don't readily use my wheat unless I grind it into flour first so that I can use it in baking. I don't like to pull out my wheat grinder very often, so when I do, I grind enough flour to last me for a while and I store it in the freezer to keep it fresh.

5. For best quality, rotate your storage

The best way I have found to rotate my food storage is to find recipes I like that help me to use food storage ingredients. Here are a few of my favorite recipes.

Granola

Modified by Michelle Lloyd from
Make-A-Mix Cookery

A great recipe using oats which can be easily modified to suit your tastes.

Mix the following ingredients in a large saucepan and heat until dissolved (don't let it boil):

- 1 1/2 cups brown sugar
- 2 cups water
- 3/4 cup vegetable oil
- 3/4 cup honey
- 1/4 cup molasses

Combine the following in a large bowl:

About 18 cups quick oats (use more or less depending on amounts of other dry ingredients)

- 1 cup wheat germ (optional)
- 1-2 cups shredded coconut
- 1-2 cups sliced or slivered almonds
- 1-2 cups walnuts

Pour the sugar solution over the dry ingredients and mix to coat. More oats can be added as long as they can still be coated with liquid. Spread out enough to form a single layer on a baking sheet and bake in a 300 °F oven for 30-45 minutes, depending on desired crunchiness. Turn granola on baking sheet halfway through baking process. Cool. Repeat baking until all the granola is done. Store in an airtight container. Use within a few weeks for best freshness. Serve with milk for breakfast or eat dry as a snack.

Savory Indian Lentils

Modified from *Emergency Food in a Nutshell*

- 3 1/4 cups water
- 1 cup dry lentils or split peas
- 1/4 cup dried minced onion
- 1 tsp. salt
- 1 tsp. turmeric
- 1 tsp. cumin
- 1/2 tsp. dried minced garlic
- 1/4 tsp. cardamom
- 1/4 tsp. sugar
- 1/2-1 cup salsa (optional)

Combine all ingredients except lime juice and salsa in 2-quart saucepan and simmer, covered, 45 minutes. Remove lid and continue simmering, stirring frequently, 20 minutes until mixture is the consistency of refried beans. Mix in salsa (if desired). Serve sprinkled with lime juice (if desired). Goes well with rice. Serves 5.

Pineapple Chicken

From *Emergency Food in a Nutshell*

- 1 cup water (include liquid from canned chicken)
- 1 cup ketchup
- 1/3 cup sugar
- 1/4 tsp. onion powder
- 1/4 tsp. garlic powder
- 1 Tbsp. soy sauce
- 1/2 tsp. bottled lemon juice
- 1/4 cup water
- 3 Tbsp. cornstarch
- 1 (20-oz.) can pineapple chunks, drained, reserving 3/4 cup juice

In medium saucepan combine first 7 ingredients and reserved pineapple juice. Bring to boil. Remove from heat. Stir cornstarch into 1/4 c. water until there are no lumps. Stir into hot pineapple sauce. Return to heat and bring to boil, stirring constantly. Stir in pineapple and chicken. Heat to boiling. Reduce heat, cover and simmer 5 minutes, stirring occasionally. Serve over hot cooked rice. Serves 5-6.

Cracked Wheat Bread

From Esther Lloyd (my mom)

- 1 1/3 cups cracked wheat (whole wheat kernels can be cracked using a blender)
- 5 cups water
- 1 1/3 cups powdered milk
- 3 1/3 cups water
- 2/3 cup margarine
- 2 Tbsp. salt
- 1 cup sugar
- 2 Tbsp. yeast
- 13-14 cups flour (bread flour preferred)

Bring cracked wheat and water to a boil in a large saucepan; then reduce heat to a simmer, cover pan, and cook for about 20 minutes. Add powdered milk, margarine (or shortening), salt, and sugar. Cool to lukewarm and add yeast. Transfer to a large bowl. Stir in flour to make a soft dough. Knead in additional flour until smooth and elastic. If dough is too difficult to knead all at once, divide it in half and knead each half separately. Cover dough with plastic wrap in bowl and let rise until double. Punch down. Shape into loaves or rolls and place in greased pans. Bake at 350 °F for 40 minutes for bread and 15-20 minutes for rolls. This dough also makes great scones. Just take a roll-sized ball dough and stretch or roll it to 1/4 inch thick and fry it until golden on each side; place scones on paper towels to soak up excess grease. Serve with honey butter.