



## Module 4

# Food Security in a Changing World

Long Term Food Storage



# Long Term Food Storage.

## Welcome

Welcome to Long Term Food storage. So what is long term food storage>

Long Term Food Storage is food that can be stored for 15 to 25 years and still be eaten. Long Term food storage is the last mile sort of thing. It is the food you may eat if there is no other food. While you can eat it anytime you want, you should think about it as last resort. You may never know when you may need it.

Think about this. You are settled in, and abruptly you must move. You are leaving behind your working garden and you need to start over in your new location. This is the thinking you should do about your long Term, food storage. If you are rich, you can purchase ready-made long Term food storage, but doing your own will be a great training exercise and will save you large amounts of money.

All Long Term food storage is stored in Mylar bags with oxygen absorbers or cans with absorbers. In your case, if you do not have the money to purchase commercial long Term food, then there are at this moment only two options to produce your own.

One is to store dry-type foods like rice, wheat, popcorn, and any other types of dry food. The other option involves drying vegetables with a food dehydrator.

# Long Term Food Storage.

Here are some foods that can be stored long term:

- White Rice
- Pasta
- Popcorn - It may be hard to get non-GMO flint corn unless you especially order it. Get a grain Grinder.
- Wheat Berries Same as above.
- Beans Legumes (Beans, lentils, chickpeas, split peas)
- Sugar
- Rolled Oats
- Potato Flakes
- Non-fat powdered milk
- Salt
- Really dry dehydrated carrots
- Dent Corn



All these items should be stored in Mylar bags with oxygen absorbers and stored in 5-gallon buckets. **Gamma seal tops are great on the buckets. Get quick access to your food.**

# Long Term Food Storage.

Here are **more** foods that can be stored long term:

- Baking Soda, Baking Powder
- Honey In bottles please
- Dried Onions – Cornmeal - Oat Groats - Oat Bran – Grits – Flax – Rye – Better to grind your own cornmeal from corn.

Foods which Should NOT Be Stored with Oxygen Absorbers

- Salt: Will become rock hard if stored with an Oxygen Absorber
- Sugar: Also will become rock hard.

Note unless you are extremely rich, there are not many options for other types of food storage unless you have a freeze drier which are really expensive or you can afford commercial long term foods.

As a prepper, long term food storage is great, but you should really learn how to grow your own food and learn how to can vegetables and fruit for short term use. That way you will be eating food you grew and preserved and will be really fresh.

# Long Term Food Storage.

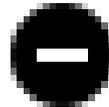


Like Beans? Here is a list that will easily store for 20-25 years.

- Adzuki Beans
- Black Bean
- Black Turtle Bean
- Black-eyed pea (Cowpeas)
- Cannellini
- Cranberry Beans (Roman Beans)
- Garbanzo or Chick Peas
- Kidney Bean
- Lentils
- Lima Bean
- Mung Bean
- Navy Bean
- Pigeon Peas
- Pink Bean
- Pinto Bean
- Split Peas



Beans, peas and lentils are all legumes and are among the most versatile and nutritious foods available. Legumes are typically low in fat and high in fiber, folate, potassium, iron and magnesium.



Dried beans take a lot of water, fuel, and time to make ready to eat,

# Long Term Food Storage.

Dry products that are **not suitable** for longer-term storage due to moisture content, oils, or other concerns include:

- Barley, pearled
- Meat, dried (such as jerky)
- Eggs, dried
- Nuts
- Flour such as whole wheat
- Rice, brown
- Grains, milled (other than rolled oats)
- Sugar, brown
- Granola and Vegetables
- fruits, dehydrated (unless dry enough, inside and out, to snap when bent)

# Long Term Food Storage.

## Mylar Bags

Mylar - Foil Pouches or bags can be used for Longer-Term Storage especially if used with oxygen absorbers. These bags are made of laminated plastic and aluminum. The bags protect food against moisture and insects. Mylar bags are used to store dry foods that contain 10% moisture or less. Botulism poisoning may result if moist products are stored in oxygen-reduced packaging.



THE CHURCH OF  
JESUS CHRIST  
OF LATTER-DAY SAINTS

Online Store  
PRODUCTS AND MATERIALS

I get my Mylar bags (pouches) from the LDS store. They are as good as you can get them [URL HERE](#)

Note: There may be an LDS store in your area check [HERE](#)

# Long Term Food Storage.

**Oxygen Absorbers** – We have covered them in a previous module (2) so this is a repeat.

Oxygen absorbers protect dry foods from insect damage and help preserve product quality when they are used with dry food items and packaged in Mylar sealed bags.

What are oxygen absorbers made of?

Oxygen absorbers contain an iron powder. When exposed to air, oxidize and the oxidation removes oxygen and moisture from the food. This then leaves the sealed bag with a nitrogen atmosphere which kills bugs and does not harm the food.

As we said previously using Mylar bags and oxygen absorbers to store LONG TERM food is a great skill and will save you money.



I also get my I get my oxygen absorbers from the LDS store as they are as good as you can get them [URL HERE](#)

# Long Term Food Storage.

## Sealing Mylar Bags

This is how I seal them. First I would be in trouble if I used my wife's good iron! That's as bad as using her really expensive scissors to cut paper or other hard materials!

When you are ready to seal up those Mylar bags for long-term storage, you need to think ahead, especially if you are doing many bags or pouches of food. I like the 1-gallon size as I later store them in 5-gallon buckets with a screw off top so I can remove one of the one-gallon sealed Mylar bags when I need them.

First, get out what you will be storing. This could just be one item or more. Open up the Mylar bag and using a scoop of your choice fill each bag. Remember that you must leave enough of the top of the bag unfilled to seal it.

Again, remember that you need to leave a few inches of headspace at the top of the bag. If it is too full you will have problems handling and sealing. When all the bags are ready, you will have created an assembly line of filled bags. You are now ready to pop in an oxygen absorber and start sealing. Place the oxygen absorber down into the food being stored. Normally a one-gallon bag will need a 300 cc O<sub>2</sub> absorber and if you are using larger bags like five-gallon ones you will need a 2,000 cc size or use multiple 300 cc absorbers.

# Long Term Food Storage.



## Sealing Mylar Bags

Note I like the smaller one-gallon sizes because if you open a five-gallon one, you must be ready to use it as it is now opened and has a limited shelf life. The remaining one-gallon bags will continue on in their 20+ year storage life.

## Sealing

I like to use a **common clothing iron on high heat**. Just make sure that the surface you will be sealing on is a heatproof surface. Some people like to use a hair straightening iron which is easier to use. Just make sure that there is enough heat to melt and seal the plastic that is sandwiched between the Mylar. One of the things I have used is to place a flat metal strip across a five-gallon bucket. The top of the bag is placed on the strip and the filled part is allowed to hang into the bucket. How and where you seal be careful and do not burn yourself. Might want to use gloves! Some people like to partially seal the top of the Mylar pouch and then push out any remaining air from the pouch and then finish sealing (a good idea).

# Long Term Food Storage.

**Note:** when pushing out remaining air from bag, make sure to not get food stuck in or on the seal.

## Sealing Mylar Bags

### Sealing Tip

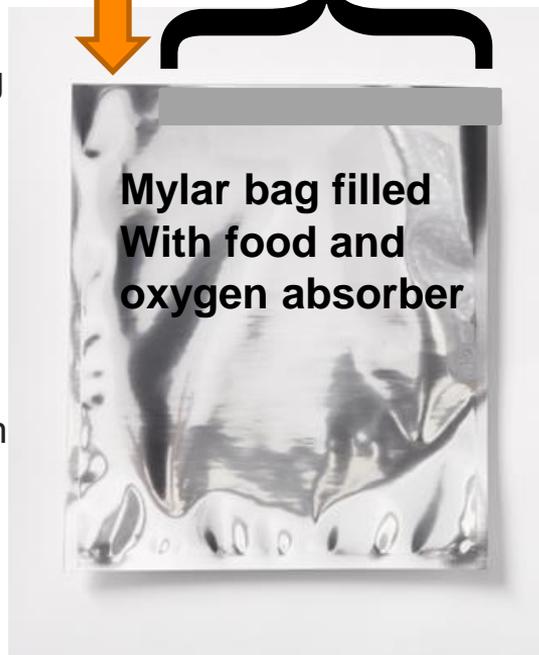
After you have filled your Mylar bag with food and an oxygen absorber, reference the graphic on the right. Note when sealing the top of the bag, do not seal it all the way. Leave a small top part unsealed. Then gently push out as much air as possible and then seal the unsealed part. This will reduce the work the oxygen absorber will have to do and will really create a good vacuum in the bag.

### Checking the seal

In a day or less, your Mylar bag or pouch should start to suck in and compact and feel brick-like. If this does not happen your seal may be defective and you will have to start over. Just cut off the sealed part and replace the oxygen absorber. You may have to reduce the amount of food you initially inserted in the bag.

Leave open

Seal Here



# Long Term Food Storage.

## Sealing Mylar Bags

### Storing

The Author likes to store his Mylar bags or pouches in a five-gallon bucket with a Gamma-Lid top. This protects your sealed bags from rodents and makes them easy to get to. Remember to label the bags and the buckets with a felt tip pen. Some people store the bags in inexpensive plastic totes which will work just fine. I like the food-grade buckets because they are easy to move as they have a handle.

Note, after nosing around Amazon for quality Mylar bags and oxygen absorbers I could only find cheap Chinese bags and absorbers that had huge amounts of unhappy customers.

I have used the LDS bags and absorbers for years and these folks are serious about food storage and their quality is first class. You will have to log in to order. Highly recommended.

**Note:** Don't get your knickers in a knot!. Gamma seal bucket lids are not normally used to completely seal the bucket. While they do this to some degree, they're mostly for convenience in getting into your wonderful sealed Mylar food storage. You SHOULD always store your long-term food in a dry environment and away from any dampness or excessive heat.

# Long Term Food Storage.

## Sealing Mylar Bags

## Grinder Mills

Being your own grocery store is a lot of work, especially off-grid. If you will be storing wheat (berries) to later grind into flour or corn into cornmeal, then you will need a grain mill, and here is where the problem starts. Grinding any large amount of flour (or anything) takes a long time with a hand-powered grinder. Also, there are really expensive and there is a lot of garbage out there that just fails with heavy use. I bake bread all the time, and I use three cups of flour per loaf. That is a bunch of grinding. This brings up the question of how do you bake a loaf of bread off-grid? Answer a Cast Iron Dutch Oven.

As a Scout Master, I cooked many delicious meals using an old cast iron Dutch Oven. From bread to complete meals were cooked in these amazing things. To bake bread, just heat up in a bed of coals (I put some on top as well) and when the oven gets to around 400° F, place the bread in the oven. Check it around 20 minutes after inserting. Bread recipe - three cups of flour, 1 and 1/2 cups of warm water, and 1 tsp of yeast. Combine water, yeast, and flour into a nice ball, add more flour or a bit of water if needed. The dough should not be very sticky and easily formed by hand. Put in a baking pan and let rise for five hours or so. Insert in heated Dutch Oven and enjoy.

# Long Term Food Storage.

## Dutch Oven Tip

NOTE NEVER PLACE ANYTHING CAST IRON IN COLD WATER WHEN HOT - IT WILL CRACK!!!!!! I have used a cast-iron skillet for the past 30 years and it originally was my mother's. Good Stuff.



# Long Term Food Storage.



## Thoughts and comments on Long Term Food storage

Making your own Long Term food storage is a good money-saving skill. Also, be sure to use food-grade buckets when storing. As we have discussed before, long Term food is just that, it will last a long time and if you ever need it, it will be available. TRY NOT TO USE IT UNLESS IT IS ABSOLUTELY NECESSARY.

Remember, while you are going over and practicing this module, you should be starting your garden. And HEY! Did you get your seeds as I suggested?



**Note:** storing your Long Term food is not rocket science as they say, but food safety should be a prime consideration every time you seal up a Mylar bag. Again, the food should be low moisture content (10% or less). Just use common sense when storing your food. Always test out and look over closely every time you open up a bag. Check for seal, and any strange smells or discoloration. Toss it out if there are any questions. Remember food safety is your responsibility.

# Food Security in a Changing World,



Welcome to Food Security in a Changing World

So thank you for taking this course. When you have finished, you will understand what you think you need to prepare for, and I will as best as I can point you in the right direction that will fit your needs.



*Dennis, owner of Crescent Hill Farm*

While you are reading this module, be sure to get your seeds. We will cover that later. Seeds may not be available soon so grab them now while you can. Later you will learn how to save your own seed, but you must start by getting your initial stock of seeds. This is not an option!

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