

## Our Recommendations – Storage of Dehydrated, Freeze Dried, MRE’s and Long-Term Storage Meats.

Homefront Emergency has been selling emergency, survival and long-term food storage products since 2005. With this lengthy history we offer the following recommendations and opinions as it relates to storage and shelf-life. Of course, always follow the manufacturers storage and use instructions. The following is of third party opinions and research testing.

### MRE Shelf-Life:

Most manufacturers estimate a shelf life of 3 to 7 years, plus or minus" for its MRE-type pouched food products. A few have advanced their shelf-life as much as 10 years. Actually, the shelf life may vary from these estimates. A key factors effecting shelf life of an MRE is the temperature of the storage environment, sun light and Humidity also can play a big factor. Storage at temperatures higher than 85°F may shorten the shelf life of MRE-type food products. On the other hand, lowering the storage temperature will help extend the products' shelf life.

Bridgford Ready to Eat Sandwiches states 3-5 years .For the majority, we tell our customers to figure on a 5–7-year shelf-life for most MRE items at room temperature. But from the below chart, you can see that the cooler you can keep your MREs, the better. If stored at room temperature (75 degrees on the high end), the taste testing indicates slightly over seven (7) years. If you keep them cooler the shelf life is over ten (10) years.

The shelf life figures below in the table for MREs are based on taste test studies conducted by the U.S. Army's Natick Research Laboratories. This study was conducted by the US Army Natick Research Laboratories without participation of the MRE manufacturers. As such, the manufacturer cannot verify the test procedures used by the NATICK labs, nor do they adopt these shelf- life figures as a guarantee of any sort. The data is useful, though, as a general indication of the effects of storage temperatures on the shelf life of MRE-type food products.

<b>MRE Shelf-Life Chart (based on taste testing at U.S. Army's Natick Research Laboratories)</b>							
<b>Storage Temperature</b>	100°F	90°F	85°F	80°F	75°F	70°F	60°F
<b>Storage Life in Months (and years)</b>	22 Mo (1.8 yrs)	55 Mo (4.5 yrs)	60 Mo (5 yrs)	76 Mo (6.3 yrs)	88 Mo (7.3 yrs)	100 Mo (8.3 yrs)	130+ Months (10.8+ years)

## **Get Maximum Shelf Life:**

Remember, the shelf life of MREs is based on taste testing, and not that the product goes bad and would be harmful to you. So, in reality, for MRE's there are really only two shelf lives to be considered: 1) the nutritional life, and 2) the palatability life.

To ensure maximum shelf life. Store your MRE's, Dehydrated and Freeze Dried Foods in a cool, dry area, avoiding long-term storage above 75° F, and be careful not to puncture or damage the packaging.

Ideally, the storage location should have a relative humidity level of 15% or less. It's best to minimize moisture (humidity) as much as possible to maintain the best shelf life and product quality, flavor, and nutritional value.

In comparison, if you've stored your food in a garage that has a temperature of 90 degrees F, you should expect a shelf life approximately half of that obtained at room temperature (70-75° F). (refer to each manufacturer recommendation).

As a special note: MRE pouches are designed to withstand tough conditions. They are easy to store and deter direct moisture and sun light. The lower the temperature the better, but above freezing. Freezing is NOT recommended for MREs, Freeze dried or Dehydrated foods. It can cause the pouches to become brittle and may damage the pouch seam seals, which can cause spoilage of the contents.

When stored in a garage, warehouse or similar containers should be kept off the floor and out of direct contact from exterior walls. It is best to use pallets or risers.

## **Will the Food Go Bad Past the "Best By Date":**

Long term storage foods do not become unsafe when stored longer than the recommended "best by date" but their nutrient quality fades and their flavor, color, and texture diminishes. In general, the most susceptible ingredients to aging are products with dairy items, shellfish, brown rice, and tree nuts.

Note: MREs do not have an expiration date. Their shelf life is based on storage temperature. You can find YouTube videos of people eating 25–30-year-old MRE's.

Testing that we did: We sampled a Bridgford Ready to eat Apple Turnover Bun and a Honey BBQ Beef Bun that were 2-3 years past their "Best By Date" and stored properly. Both actually tasted the same as a fresh new one of the same. However, testing a

Mayday food bar stored at room temperature in a closet and about 1 year past "Expires Date" had significant color and texture reduction and had little taste of the original Cinnamon flavor.

## **Freeze Dried/Dehydrated Foods:**

Freeze Dried/Dehydrated Foods are similar to MRE storage. It's all about the storage environment and temperatures and humidity. Most of these manufacturers like ReadWise state their products have a shelf-life of 10-25 years. It is important to follow the storage instructions provided by each manufacturer. You should keep in mind some products like dairy, meats, eggs although freeze dried or dehydrated their shelf life may be shorter than say the Beef Teriyaki or Mac n Cheese.

Storage temperatures higher than 85°F will shorten the shelf life. Lowering the storage temperature will help extend the products' shelf life. The thing to remember with any food preservation is M.O.L.T (Moisture, Oxygen, Light and temperature.

## **How Long will the Food Last After Opening:**

For best results and taste, we recommend using the contents of freeze-dried foods within 1 to 2 weeks of breaking the seal. However, some manufacturers state that most of their product can be used up to 1 year after opening. For MREs, please do not open the pouch until you are ready to eat!

Most importantly, all manufacturers recommend that you treat any leftover food as you would fresh food.

## **What is the shelf life of your canned meats:**

We primarily offer Survival Cave Long Term Storage Canned Meats. The packaging of these canned meats is monitored by the USDA, and there is no expiration date on the can. These meats are considered to have an indefinite shelf life. All of the meats do have a production date on the bottom of the can. There is NO expiration date; however, meats packaged with this process have been eaten as long as 25 years later.

## **What temperature should the meats be stored:**

Our meat products like Survival Cave meats should be stored in a cool dry place ideally at 55-65 degrees. However, storage of these products at room temperatures will not affect the shelf-life or quality of product. Also, the occasional high temperatures will not affect the meats since they are cooked at 240 degrees in the can. It is not recommended that the cans be frozen. Most importantly the cans and containers should not be exposed to excessive moisture as this could cause metal cans to rust over time.

