

## MREs – Understanding, Evaluating and Purchasing

By Casey Gilpin – July 2018

You may be among the many who have not yet seen or know about an MRE (Meal Ready to Eat) in this age of preparedness. This article will provide you with sufficient knowledge, so you can make an intelligent selection and purchase.

**Background** – I joined a local Search and Rescue group in 1992 that was part of NASAR (National Association for Search and Rescue). One requirement to meet NASAR certification standards required a 72-hour ready pack that included enough food to last the same duration. Because my parents were die hard “flea market” vendors, my childhood provided an early education about assembling these supplies. Free time after early morning set up provided an opportunity to search for a good deal on equipment and supplies in this bargain rich environment.

**Availability** – After the first Persian Gulf War of 1991, a vast amount of military goods arrived on the civilian markets, some with legitimate backstories and some with shady backstories. Among these items was the highly coveted MRE. I could easily locate dozens of cases with 12 individual meals to a box. Cost per box ranged between \$30.00 to \$20.00. I often had two dozen cases of MREs stacked up in my room, my attic and under my bed. Soon I became known as that *crazy survivalist* kid. I was also known as the person who could *get you the goods*. Teachers and many others enjoyed shopping at my house because they couldn’t find what I had already located. Not bad for a teenage kid running his own black market surplus ring out of his parent’s garage.



Shown is a case of government contract MRE’s.

**Avoid Bad Product** – Water damaged outer boxes meant they were submerged or left out in the field too long. Re-banded or glued together cases often indicated extended exposure to direct sunlight. Air dropped, often without a parachute, displayed frayed or split packaging.

**Meal selection** – Only 12 meal selections were available between 1988 and 1995. Four stood out in a bad way because they were the worst tasting (escaloped potatoes with ham, omelet with ham, tuna with noodles, and chicken ala king). Soldiers would often refuse to eat these selections, leaving them unopened in the original shipping case. On the civilian market you would find complete and unopened cases of MRE’s containing only these four selections. Typically, these would sell for \$20 instead of \$30.

Early production runs were easy to identify. Featuring a dark colored, heavy plastic packaging, labels were hard to read. By 1996 improvements arrived in a tan style pouch with graphic printing. A slightly thinner and lighter package had a better metallic vapor barrier for longer shelf life. Meal selection increased from 12 to 16 choices deleting three of the dreaded four rejected flavors. Unfortunately, Tuna with noodles remained until 1997.



1995 was the last year for the dark style packaging.

1996 newer tan style packaging.

Current government packaging. Note the DOD seal indicated by arrow.

Commercially produced MRE. \*Note the seal emblem is NOT a DOD designation.

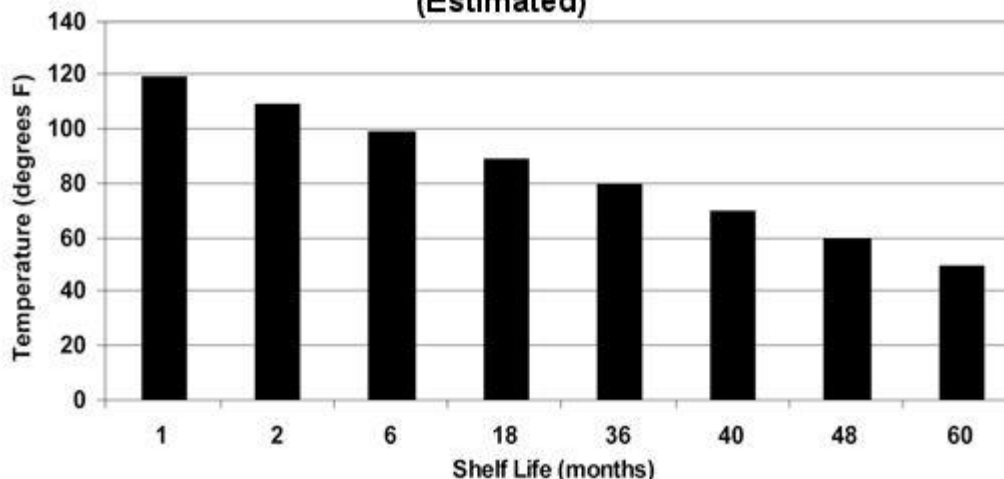
By 1998 the selection increased to 24 meal options that remain today. In 2008 packaging improved for psychological reasons. Studies indicated when you fed people meals from generic packaging, they were less likely to be consumed. Eventually manufacturers started decorating the pouch with vibrant logos and graphics that caused an increase in meal satisfaction.

**Packaging** uses a method known as the retort or retortable pouch made from a laminate of flexible plastic and metal foils. An extremely shelf stable environment for food and drink resulted. Sterile packaging by aseptic processing provides an alternative to industrial canning methods, eliminating the need for a can opener and saves handling and shipping weight.

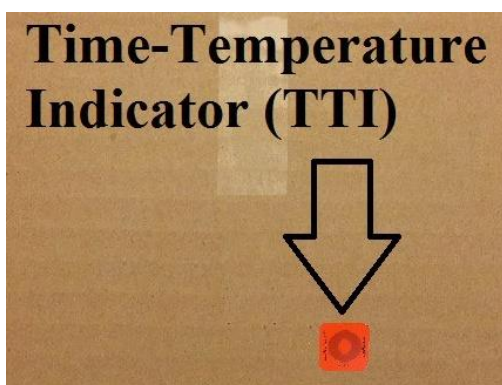
**Shelf Life** – officially, MREs useful life depends on storage time and temperature. At a minimum, they should last one month when stored at 120 degrees Fahrenheit (49 degrees Celsius) or they could last five years at 50 °F (10 °C). Below is the most current time and temperature chart as of 2010:

## MRE Shelf Life

(Estimated)



No product guarantee or warranty is implied by the chart above, nor should it be interpreted as such. It is intended for educational use only. Chart courtesy <http://www.readymeal.com/shelflifechart.html>



### Time - Temperature Indicator



Initial

Center  
Matches  
Reference

Center  
Darker Than  
Reference

The inner most circle is the indicator while the outer is reference.

### Source

Since about 1997, MRE cases have included a TTI (time and temperature indicator) on the outside of the box to assist inspectors in determining if MREs are good. There are two parts to the TTI – an outer dark circle and an inner light circle. When the inner circle is lighter than the outside circle, the MREs are deemed to be good. However, this feature is only required on government contract MRE's and not on commercially available boxes. I frequently discovered they had been tampered with, replaced or removed.

**Date Code** – military or commercial MREs use the *Julian* calendar and the date can be located on the case, the meal package, and individual items. There are no letters in this calendar, so mathematics can be used. Translate the date code using YDDD, where "Y" represents the last digit of the year and "DDD" represents the day of the year beginning from January 1 (ranging from 001-366). Officially, MREs are not meant to last longer than 10 years, so only the last digit of the year is used. For example, 5016"it would mean the MRE was manufactured on January 16, 2015. Click [here](#) for an MRE Date Code Converter:

[www.mreinfo.com/mres/mre-date-converter](http://www.mreinfo.com/mres/mre-date-converter)

**Best practice** – The safe shelf life I recommend is 3 years. That means you should be buying a fresh, current year dated, supply every 3 years to replace what you first bought 3 years earlier. You then rotate your stock and consume the older stock. This does a few things right away. One – you will have a current inventory of supplies to last for the next three years. Two – you can train your mind and body to accept these rations. Waiting for an emergency to happen only to discover that you or your household members refuse to eat these items is a bad idea.

MREs will last longer when store correctly and I am comfortable consuming MRE's past their expiration. It is also a good idea to use a permanent marker and mark the YEAR they were produced on the package for quick reference. Be aware that some brands of markers will not adhere to the packaging.

**Where can you acquire MREs?** – In 2001 the government contracts required the words "U.S. Government Property" and "Commercial Resale Is Unlawful" to be added to the packaging. This was the end of purchasing MREs for people buying products from the manufacture. The market relied on surplus and "shady" suppliers for the next several years.

Then came hurricane Katrina. The civilian MRE market picked up because tremendous pressure was on government industries to provide food for disasters. Consequently, companies began producing legitimate branded civilian MREs. Three of the major manufacturers (Ameriquel, Sopakco, and Wornick) began producing their own brand MREs. In the following years, three additional companies joined the market (MRE products, Meal Kit Supply serving both the US and Canada and MREStar) and supplied the commercial market with quality, and sometimes not so quality, MRE's until 2017.

Next came hurricane Maria of 2017, a devastating category 5 regarded as the worst natural disaster on record to affect Dominica and Puerto Rico. Overnight supplies for government contract and commercially produced MRE's were redirected towards disaster relief. This caused an immediate hardship for those people attempting to locate, restock, rotate, or resupply a stockpile. In the world of emergency preparedness this was doomsday. For months I tried to locate fresh supplies without success. Outdated surplus MRE's were going for \$120 a case.

**Lessons learned** – Make sure you have a sufficient MRE supply on hand that you continuously rotate. This accomplishes long term emergency planning and helps to buffer unexpected shortages. Just because a major disaster or emergency doesn't land on your doorstep, it can still have an impact elsewhere. The effects of an incident across the globe can literally influence your dinner table.

**Where to purchase** – In my quest to find a reliable supplier for MREs, I found the phone number of a company called NEX-XOS WORLDWIDE LLC - NEX-XOS DISTRIBUTION LLC. I decided to give them a try and the first noticeable improvement was their responsiveness to emails, something that was impossible

from other vendors, suppliers, or manufacturers. The next amazement was a complete transaction via email. Because I was often a third shifter and never up in daytime hours, this was golden. The final revelation is when they stocked all the items I wanted. Nobody, and I mean nobody had product in stock or could get me what I needed. I was even in more awe when my order arrived days after completing the process.

The order I placed was deliberately tailored to simulate a *starting point* for an emergency stockpile of food supplies. Of course, other items are required to complete a cache of foodstuffs, but the purpose of this article is for MRE style products. Often recommended is a supply of canned goods, dehydrated/freeze dried items and other shelf stabilized packages.

My first order was:

- XMRE12H - XMRE 1300XT 12 Case with Heaters (\$6.58 each) Total: \$78.90
- TBI-E-Turkey Chili with Beans – 10 individual entrees – (\$1.90 each) Total: \$19.00
- TBI-E-Vegetable Stew with Beef – 10 individual entrees – (\$1.90 each) Total: \$19.00
- TBI-E-Southwest Style Chicken – 10 individual entrees – (\$1.90 each) Total: \$19.00
- TBI-E-PASTA FAGIOLI-8 – 10 individual entrees – (\$1.90 each) Total: \$19.00
- TBI-E-Maple Brown Sugar Oatmeal – 10 individual entrees – (\$1.90 each) Total: \$19.00
- XM-Mini Chocolate Chip Cookies – 12 individual packages – (\$0.80 each) Total: \$9.60
- SF- Chipotle Tortillas S091206 – 11 individual packages – (\$0.80 each) Total: \$8.80
- XM-DRY FRUIT – 15 individual packages – (\$0.80 each) Total: \$12.00
- XM-PILOT BREAD 200 – 12 individual packages – (\$0.80 each) Total: \$9.60

Total packaging and shipping charges: \$46.17

Grand total: \$260.07

The order contains enough food to last 20 days at my regular exertion and caloric burn rate. This is not an estimate, but something I have tested and documented to assure accurate expectations. Extending to 30 days is possible when I decrease activities but can cause decreased productivity.

Calculating appropriate supplies for your household, includes factors such as age, medical issues, number of household members, and barter considerations. Barter you say? In a large-scale disaster items such as MREs become currency. You can use a surplus to acquire things like batteries, fuel, water, shelter, etc. You also need to consider stockpile protection, because others will want what you have since they did nothing to prepare themselves. But that's a topic for another article.

[Ed note: I tried six selections from this company and restaurant quality taste was a pleasant surprise. Lee Hite]

Here is a quick video overview for commercial MRE rations:

<https://www.youtube.com/watch?v=mw1qr4f8q2A&feature=youtu.be>

Below is a copy of the order.

| Ship Via | Contact   | P.O. No. | Terms                   | Invoice # |
|----------|---|----------|-------------------------|-----------|
| UPS      | S10000  |          | Credit Card             | S10000    |
| Item     | Description   | Qty      | Rate                    | Amount    |
| FB_Item  | XMRE12H - XMRE 1300XT 12 Case with Heaters<br>Lot#: 8107                            | 1        | 78.90                   | 78.90     |
| FB_Item  | TBI-E-Turkey Chili with Beans -8 - Turkey Chili with Beans 8 oz Fill Lot#: 7301     | 10       | 1.90                    | 19.00     |
| FB_Item  | TBI-E-Vegetable Stew with Beef-8 - Vegetable Stew with Beef 8oz Fill Lot#: 7065     | 10       | 1.90                    | 19.00     |
| FB_Item  | TBI-E-Southwest Style Chicken-8 - Southwest Chicken with Rice 8oz Fill Lot#: 7278DB | 10       | 1.90                    | 19.00     |
| FB_Item  | TBI-E-PASTA FAGIOLI-8 - Pasta Fagioli 8oz Fill Lot#: 7279                           | 10       | 1.90                    | 19.00     |
| FB_Item  | TBI-E-Maple Brown Sugar Oatmeal-8 - Maple Brown Sugar Oatmeal 8oz Fill Lot#: 7292DA | 10       | 1.90                    | 19.00     |
| FB_Item  | XM-Mini Chocolate Chip Cookies 2.2oz - Mini Chocolate Chip Cookies 2.2oz Lot#: 7205 | 12       | 0.80                    | 9.60      |
| FB_Item  | SF- Chipotle Tortillas S091206 - MRE Chipotle Tortillas S091206 Lot#: 7250          | 11       | 0.80                    | 8.80      |
| FB_Item  | XM-DRY FRUIT 2oz - Dry Fruit 2oz Lot#: 8109   | 15       | 0.80                    | 12.00     |
| FB_Item  | XM-PILOT BREAD200 - XMRE Pilot Bread 200 Lot#: 8078                                 | 12       | 0.80                    | 9.60      |
| FB_Item  | Shipping Charge - Shipping Charge   | 1        | 44.31                   | 44.31     |
| FB_Item  | PCA-Mastercase - 19 1/2 x 15 7/8 x 22 1/8   | 1        | 1.86                    | 1.86      |
|          |   |          | <b>Subtotal</b>         | \$260.07  |
|          |   |          | <b>Sales Tax (0.00)</b> | \$0.00    |
|          |   |          | <b>Total</b>            | \$260.07  |
|          |   |          | <b>Payments/Credits</b> | \$0.00    |
|          |   |          | <b>Balance Due</b>      | \$260.07  |

|  |
|--|
| REMIT TO:<br>NEX-XOS WORLDWIDE LLC.<br>3922 Pembroke Rd<br>Pembroke Park, FL 33021 |
|--|

Order page: [www.emailmeform.com/builder/form/50s5KeCZd5](http://www.emailmeform.com/builder/form/50s5KeCZd5)

### Supplier Contact Information:

Leslie Rubero

NEX-XOS WORLDWIDE LLC - NEX-XOS DISTRIBUTION LLC

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Website: [www.nex-xos.com/project/xmre-meals/](http://www.nex-xos.com/project/xmre-meals/)

Casey Gilpin is a member of the Warren County and the City of Mason Ohio CERT Teams. This article can be downloaded [HERE](#).