

## Mecklenburg County ARES©

### Have You Prepared Emergency Food Storage?

As ARES volunteers, we know the importance of having an adequate supply of food and water when we deploy in the field. But emergency food storage is also a vital concern for every family in a time of disaster. It is highly recommended that in addition to the food in your 72 hour Emergency Kit you should have at least a 2 weeks supply of shelf stable food.

#### **What does "shelf stable" mean?**

Foods that can be safely stored at room temperature, or "on the shelf," are called "shelf stable." These non-perishable products include jerky, canned and bottled foods, rice, pasta, flour, sugar, spices, oils, and foods sterilized in their packages and other products that do not require refrigeration until after you open them.

#### **How are foods made shelf stable?**

In order to be shelf stable, perishable food must be treated by heat and/or dried to destroy foodborne microorganisms that can cause illness or spoil food. All foods eventually spoils if is not preserved in some manner.

#### **Types of Shelf Stable Foods**

**Commercially Canned Food** - Canning is a way to store food for long periods of time. It is a method of preserving where food is placed in airtight, vacuum-sealed containers and heat processed at 250 °F. This destroys microorganisms and inactivates enzymes. As the food cools, a vacuum seal is formed that prevents any new bacteria from getting in. Since the food in the container is commercially sterile, it does not spoil. Once the container is opened, however, bacteria can enter and begin growing in the food.

**Dried foods** - Drying is the world's oldest and most common method of food preservation. Drying technology is both simple and readily available. Examples of dried foods are jerky, powdered milk, dried beans and peas, instant potatoes, dried fruits and vegetables, pasta, and rice.

**Freeze dried foods** - Freeze-drying is a commercial process that can be used to preserve such food as dried soup mixes, instant coffee, meats, fruits, and vegetables. To freeze dry, frozen food is placed in a special vacuum cabinet. There, ice changes from a solid state directly to a vapor state without first becoming a liquid. This process is called "sublimation." To use freeze-dried foods, they must be rehydrated with water.

**MREs** - MRE stands for "Meal, Ready-to-Eat." MRE's were originally designed for the U.S. government and have been used since the 1970's in the U.S. space program, U.S. military, and USDA's Forest Service. The MRE package is officially known as a tri-laminate retort pouch. It contains normal food that is ready to heat and consume, such as chili or beef stew. MREs are not available from grocery stores.

**Retort Pouch** - Many products in a retort pouches are available in our grocery stores. They are produced using the same technology as MREs. Tuna fish, seafood, meats, stews, soups and pasta meals are examples of retort pouch foods that are generally available.

**Nitrogen Packed Dried Food** – Many dried foods are available in cans that have been nitrogen packed. Nitrogen packing displaces the oxygen from the container resulting in greatly increased shelf life. Typically, nitrogen packed foods are good for at least a decade if stored in a cool dry place. Grains such as wheat and rice have a shelf life of 30 years if packaged in this manner. Nitrogen packed foods are not available from grocery stores and must be ordered online.

## **Tips**

If your water supply is going to be limited, try to avoid salty foods since they will make you thirsty. Canned or retort pouch foods with high liquid content will help you to save water.

You don't need to go out and buy unfamiliar foods to prepare an emergency food supply. You can use the canned foods, dry mixes and other staples on your cupboard shelves. In fact, familiar foods are important. They can lift morale and give a feeling of security in times of stress.

Individuals with special diets and allergies will need particular attention, as will babies, toddlers and elderly people.

Make sure you have a manual can opener and disposable utensils. And don't forget shelf stable foods for your pets.

## **Storage Tips**

Keep stored food in a dry, cool spot - a dark area if possible.

Inspect all food for signs of spoilage before use.

Use foods before they go bad, and replace them with fresh supplies. Place new items at the back of the storage area and older ones in front.

To judge how long you can store food supplies, look for an “expiration date” or “best if used by” date on the product. If you cannot find a date on the product, then the general recommendation is to store food products for six months and then replace them.

Remember, it is highly recommended that in addition to the food in your 72 hour Emergency Kit you should have at least a 2 week supply of shelf stable food in case of prolonged emergencies.

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