NEEDFUL I HIN

www.sunoven.com/everyneedfulthing

The Resource for **Emergency Preparedness** and Food Storage Specialists, and their family, friends and neighbors

Volume 3 ISSUE 4

72 Hour Kit Rotation Required



Sample 72 hour Emergency Preparation Kit

In the September 2013 "Every Needful Thing" newsletter, we included a list of items to pack in an emergency escape bag, AKA your 72-hour kit. Hope you made one! We included some things that can last a long time and others that have a shorter storage time. This month is a good time to pull out the bag and review it's contents.

- I. **Exchange the food** Did you pack some granola bars and cracker packets? How about some nuts or peanut butter items? Many of these items contain oil of one kind or another that oxidizes or goes "rancid" if kept for over six months. Take out your snacks and eat them - or at least taste them to determine if they are still fit to eat. As you eat them, add these items to a list as a reminder to replace them on your next shopping trip. It's a real disappointment to open one of these packs and find them yucky. Can you imagine how bad you would feel if you were in an emergency situation and that is all you had to eat? Do you have an 72-hour kit for your children? Are they still eating those "chicken sticks"? Have their favorite snacks changed? Staying up to date on their favorites will make a disruptive situation a little more comfortable.
- **Check clothing sizes** This is a good idea for adults as well as children. Kids are always growing and changing sizes, so make adjustments by including some currently fitting and well used clothes for them. Since disasters can happen any time of the year, a bag of extra jackets for snow or lighter weight clothes for warmer weather is a good idea. Adults, include some extra socks, "sweats" or jeans and long sleeve shirts that can be rolled up if necessary. Rain ponchos are a must, how does yours look?
- 3. Rotate Batteries & Medicines Do you have battery operated items like two way radios or flash lights in your kit? Batteries leak when stored for a long time and can ruin the item they're in. Remember to store batteries separately. Prescriptions have expirations. Rotate these, too.

Ask Billie

APRIL 2014

Our Question and Answer column, covering topics of interest to our readers.

Jan from PA Asks: Do you use real EVOO or a blend?

Answer: Pure EVOO is not a blend. It has a different flavor and health benefits. Look for the acidity percentage - should be less than 0.8% and production technique - it should be cold pressed. It also has an expiration date - use it within two years of production. A more thorough explanation can be found in "What is Extra Virgin Olive Oil?".



What is your Most Burning Question about Food Storage or Emergency Preparedness? Send your questions to editor@sunoven.com



Billie Nicholson













Order Your Sun Oven Today

What is Civil Defense? Surviving a Nuclear Attack

Billie Nicholson



image public domain

Civil Defense is the organized non-military effort to prepare Americans for nuclear military attack. Over the past twenty years the term and training has been replaced by the Federal Emergency Management Agency, FEMA. Established in 1979 and absorbed into the Department of Homeland Security in 2003,¹ the focus has shifted to protection against terrorism to create a safer, more secure America. This federal government organization provides the coordinated federal response in the event of a terrorist attack. According to their website, they are tasked with

coordinating a response to any large natural disaster or other emergency event to facilitate a swift and effective recovery effort.² Examples of their work include restoration along the East and Gulf Coast following hurricanes Sandy and Katrina. Their biggest strengths lie in an ability to unify the effort, find the needed assets to solve a problem and eventually get the work done.

A big question remains. What if someone slips through the layers of surveillance and security and launches a "nuclear attack"? What do we do?

There are six types of nuclear disasters: dirty bombs, nuclear plant meltdowns, fallout from another country's atomic bomb explosion, a singular nuclear strike in



www.DHS.gov

the US, a suitcase nuke, and all out war. There are three parts to nuclear explosions: the explosion with its initial bright flash of light and heat as mega tons of energy are released accompanied in a few seconds by a debris-filled pressure wave followed by alpha, beta and gamma radiation or chemical dust also know as fallout. If you see a bright flash, don't run to the window to see what's coming next. It will be the shattering glass from the window you're looking out.

Your first response should be duck and cover. Find the closest solid structure and duck down, covering your head with your arms. If there is no structure near, lay flat on the ground, face down. Stay down for at least 30 seconds.³ A blast wave and wind traveling at the speed of sound or about 5 seconds per mile will follow. A huge blast may cause temporary blindness resulting in disorientation. When you can, move to a protected place that is not damaged. Immediately cover your nose and mouth with an article of clothing to reduce the chance of breathing in smoke or radioactive dust. Stay away from windows because the blast wave will blow out windows and some walls. Gamma rays travel so fast you can't avoid them. Anyone within one thousand feet of a detonation will most likely be killed. If you survived, get inside. Once inside, remove your outer layer of clothing and shower and wash your hair as soon as possible. Discard all these items. This will remove up to 90% of contaminants. If you develop nausea and vomiting within 4 hours after the blast, chances are you have permanent damage. There are some medical processes that can help if you can get to a location offering them.

After the blast, the fallout is deadly. Get as far inside a structure as possible and have as much material above you as possible to block the beta radiation. Dust contaminated with radiation will be everywhere. Below ground shelters are best if they are three feet below the surface. Dust will travel with the prevailing winds. The majority of contamination will have fallen in three days. When you are ready to evacuate, cover as much of you as possible. Use a mask, gloves and wear eye protection. Duct tape your sleeves and pant legs. Remove and discard this clothing before reentering a shelter. If you travel, go in a perpendicular direction to the wind flow. Begin to take iodine tablets immediately to prevent thyroid damage. The non-radioactive iodine saturates the thyroid gland so it can't absorb radioactive iodine. If you don't have tablets, apply betadine to the skin of your abdomen and arms for 3-5 days. Stored food and water will be critical. Make sure you have some.⁴ [References]

Alternative Protein Sources

What are your plans to provide protein in your diet in an emergency situation? As you collect canned goods don't forget about this vital nutrient. The human body is nearly half protein, found in muscles, blood, antibodies and enzymes which make other body functions work. Often commercially processed meats are loaded with salt to enhance the flavor. There are other sources. Here are some items to consider adding to your supplies.

- 1. **Nuts and Seeds** are high in protein and healthy fats. If you buy them prepackaged, they are ready to eat. They only last six months to a year, depending on the type of nut. Their high oil content reduces shelf life. Peanut butter is high in protein and available dried.
- 2. **Beans** are one of the longest cultivated plants, easy to digest and high in fiber. They also help maintain stable blood sugar levels by slowing the rate of carbohydrate absorption. Dried beans are economical and store well for an extended period of time. Store them in jars or mylar bags with oxygen absorbers. They will require water for presoaking before cooking, so plan ahead when preparing them. Cook with anise or coriander seeds to reduce flatulence as they're digested by microbes in your intestine. There are lots of varieties for your culinary pleasure. Canned beans can be eaten right after opening, even cold in a power down situation.
- **3. Chia Seeds** have double the amount of protein found in other seeds. Humans began eating chia seeds around 3500 BC. Aztecs and Mayans considered them magical because they increased stamina and energy over long periods.² Chia seeds are high in fiber, omega fatty acids, calcium, and antioxidants as well. Because they absorb 12 times their weight, their expansion in your stomach will curb your appetite.
- **4. Protein Powders** are available in three common forms, whey, soy and casein. Whey is the most popular because it is a water-soluble milk protein. It contains all nine amino acids necessary to build proteins in the human body. Soy has been favored by vegans, but recently it has been associated with altering estrogen balance. Casein powder is used with cheese production.
- **5. Textured Vegetable Protein (TVP)** is produced from soy flour after the oil has been extracted. It is cooked under pressure, extruded and dried. Soy flour has a long shelf life if kept in a cool, dry place. With varying flavors added, it can taste like sausage, beef, ham, bacon or chicken. Easily rehydrated, it is economical and an excellent meat substitute or meal extender. One ounce of TVP is the equivalent of three ounces of meat.³
- **6. Freeze-dried Meat** has the water removed through sublimation, which turns water molecules into vapor. Freeze-drying food affects meat's texture more than other preservation techniques. They are extremely light and easy to carry but more expensive to purchase. While some fruits taste great freeze-dried, meat will need to be rehydrated.
- 7. Powdered Eggs and Milk made by spray drying, the process removes nearly all of the water prohibiting the growth of microorganisms. Non-fat dried milk is best for long term storage. Eggs are available as whole, yolks and whites. Store cool and dry. Refrigerate when opened. [References]

4

Bio Mass Briquettes: An Alternative Fuel Source



image iStockphoto.com

By: Tess Pennington, Ready Nutrition

We are dependent on fuel sources to provide power to run our homes and businesses, help us maintain our body temperatures in extreme weather and provide energy to prepare food. Emergency organizations suggest each household having an emergency supply of <u>fuel</u> stored away, but there is always a chance that we haven't stored enough.

Many rely on having cords of wood to use, but those in population dense areas may not have the availability of wood

to use for fuel, or they could have been caught off guard by an emergency and were not able to get to purchase charcoal briquettes or propane for their grills.

Have a Back Up For Your Fuel Supply - Knowing how to make alternative fuel sources using the items you have around is an essential survival skill to learn. Biomass bricks and/or briquettes are an alternative choice to charcoal briquettes and other emergency fuel sources. They are also considered a green fuel source and burn efficiently.

In 2006, the U.S. produced more than 227 billion kilograms (kg) of solid waste; this equates to approximately 2.1 kg per person per day, where approximately half of this amount is in the form of paper and horticultural rubbish. Conversion of these wastes into combustible biomass briquettes would provide a means to satisfy individual energy needs while alleviating landfill use. (Source)

What Are Bio Briquettes? - The bio briquettes are comprised of compressed compounds containing various organic materials, including corn husks, coconut shells, grass clippings, dried leaves, saw dust, cardboard or paper. Developing countries use other materials such as rice husks, bagasse, ground nut shells, municipal solid waste, agricultural waste, or anything that contains a high nitrogen content.

Biomass fuel sources are equivalent to that of common fuel sources when burned in an oxygenrich environment comparable to unmodified wood and wood pellet stoves, fireplaces, patio heaters and charcoal grills. This alternative fuel source could easily be used for rocket stoves, collapsible stoves and small grills.

How They Are Made? - Essentially, you get your materials and cut them up into small bits or you could use a blender and add them to a large container (a 5 gallon bucket is perfect) and allow it to soak in water for three days until it's completely saturated and broken down and has the consistency of mush. Then you form the briquettes by compacting them in a tube or container and forcing all of the water out.

Compaction is the key to achieving a successful briquette. Compacted materials burn more efficiently. The shape of the brick or briquette can also make a difference. Studies have shown that when bio briquettes molded into a hollow-core cylindrical form exhibited energy output comparable to that of traditional fuels. There is a special lever that many use to compact the briquettes; however, some people have successfully made them from old cd or dvd cases and by poking holes in the side for the water to drain out. In this video, a man used a caulk gun. Start thinking outside of the box in respect to preparedness. In emergency situations, we must modify our thoughts and adapt to the change itself. Chances are, if we are successful in this, we will find a way to survive.

Tess Pennington is the author of <u>The Prepper's Cookbook: 300 Recipes to Turn Your Emergency Food into Nutritious, Delicious, Life-Saving Meals</u>. When a catastrophic collapse cripples society, grocery store shelves will empty within days. But if you follow this book's plan for stocking, organizing and maintaining a proper emergency food supply, your family will have plenty to eat for weeks, months or even years. Visit her web site at <u>ReadyNutrition.com</u>.

You Bet Your Life: Check Your Smoke Alarm



Billie and Robert Nicholson

We are constantly bombarded with safety messages about checking the batteries in our smoke and carbon monoxide alarms. By this time most of us yawn and say, "yea, yea." Yet we constantly read or hear of preventable deaths from fires that occur in homes without effective fire alarms. But sometimes just checking batteries and pushing the test button, especially when up close to the alarm, is just not enough.

As the population ages and as some of our veterans returning from war find, a lot of people experience hearing loss. Modern hearing aids are

Image www.loudenlow.com

wonderful when worn during our busy day and evening events. But when bedtime comes we take off our hearing aids and go to sleep. Modern fire alarms emit a warning signal in the frequency range of around 3000 hertz (that's two octaves above middle C on a piano.) According to the Fire Protection Research Foundation, the typical smoke alarm fails to wake up almost 50% of those with hearing loss.

For the person with hearing deficits, more effective smoke alarms include the *Lifetone Bedside Fire Alarm and Clock* (www.lifetonesafety.com), the *Loudenlow Smoke Detector* (www.loudenlow.com), and the *Silent Call* (www.silentcall.com). These special alarms have reported to wake up about 80% of hearing impaired sleepers.

For your safety and piece of mind do the following: Test your smoke alarm to be sure that it will wake you in your bed. Don't depend on a strobe device. Strobes only alerted about 25% of sleepers. Consider purchasing an alarm that signals you in the low-pitched sound area, close to middle C on the piano and that includes one with a bed shaker.

A lot of people dream of their 15 minutes of fame. Don't let your story end with "Died of Smoke Inhalation". For more fun information on fire safety visit www.sparky.org or www.sparky.org/parents

Sun Ovens and Bio Mass Briquettes: A Partnership



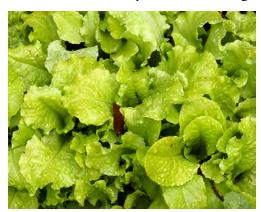
Slow Cooked Stew © 2013 Billia Nicholane

Sun Ovens® are the perfect partner to work with bio mass briquettes on rainy or overcast days. Bio mass briquettes can be burned to begin food preparations on a grill or other open fire. When the food is at least half cooked it can be transferred to a Sun Oven® to complete the process. Even indoors the retained heat of the partially cooked food in the well-insulated Sun Oven® will allow it to be used as a retained heat cooker, often referred to as a Wonder Box.

In addition, the Sun Oven® can be used during the production of bio mass pellets to help the drying process. Just set the pellets in the Sun Oven®, turn one of the door latches inward and set the glass on top leaving a gap between the gasket and the glass to allow moisture to escape.

What Vegetables Grow in the Shade?

Some of our friends have complained that their yards were so shady that they doubted they could grow anything in a garden. In answer to their questions, here are some plants that can be grown in shade. Don't give up on your yard either. Vegetables grown for their leaves, stems or buds can tolerate shade better than those grown for their fruit or roots, although some of these can tolerate light shade. Their size or yield may be affected, but they will still taste good.



Leaf Lettuce - is one of the first plants up in our garden each year. It thrives in soil of most any type, but does best in moisture retentive soil with some compost available. Our garden beds get partial shade from a neighbor's oak trees. This has been a benefit as the summer temperatures rise. Lettuce often wants to bolt, or go to bloom, as the temperatures rise. One gardener suggested planting lettuce north of a row of sunflowers that can provide partial shade making the lettuce bear longer. You don't have to wait until the plants get really large to begin harvesting. Cut the leaves individually with scissors. The plants will continue to produce new leaves. Leaves will get bitter as the plants begin to bloom.

Green Onions - are cold hardy and can tolerate partial shade. We plant green onions starting in the fall in Pensacola and add a few more bulbs each month to assure we have green onions into summer. Good companions for onions are potatoes and lettuce. Cut the green tops for sauteing or garnishing. As they grow larger, the white bulbs can be harvested, too. Onions like a little organic fertilizer or compost. Harvest before the rainy season, they don't like wet feet and will rot. Use them in potato dishes, with peas, and green beans or steam them in a foil packet on the grill. AllRecipes.com has a green onion pancake recipe.





Swiss Chard - likes sun or partial shade and is hardy to about 20°F. We planted some in January, right before the temperature dropped to 18°F. We covered them with shade cloth. They suffered some brown edged leaves, but are recovering now. A member of the beet family, they can have green, yellow or red purple stems. Chard can be eaten raw when young in a green salad, added to smoothies, or <u>sauteed in olive oil</u> with garlic and crushed red pepper. This green is best when served immediately after picking. It is loaded with nutrients, <u>second only to spinach</u>. In addition to anti-oxidants, it can also help stabilize blood sugar levels and benefit the pancreas.

Sugar Snap Peas - are one of our most favorite veggies. When the pods start developing, we start hovering with anticipation. The edible pods go a lot farther than the pea seeds. We eat them in green salads, if we can get them to the table, and as part of a <u>sauteed vegetable mix</u>. Sugar snap peas need to be trellised and last longer if grown in light shade. Keep the soil moist. We sprinkle with liquid fertilizer, once they start blooming. Peas contain vitamin C, K, niacin and anti-oxidants. They have the best food value when eaten immediately after harvesting.



Gardening with Epsom Salt

Billie Nicholson

Did your grand parents use Epsom salt for something more than a hot tub bath after a hard day's work? In addition to human health and wellness, it can help garden plants thrive, too. Epsom salt, Magnesium Sulfate, gets it's name from the town of Epsom, England, where it was first distilled from water in the late 1500's. It works to correct a magnesium or sulfur deficiency in the soil as an "organic fertilizer."

Magnesium is an essential element in the chlorophyll molecule that allows plants to be able to convert light into energy. Photosynthesis is the chemical process that makes this conversion of light into energy-rich glucose molecules using water and carbon dioxide. It is the basis for life. Magnesium aids in nitrogen and phosphorus absorption and helps seeds germinate. Sulfur is an ingredient in two of the amino acids, methionine and cysteine, necessary to synthesize proteins. It also aids in other nutrient absorption. The chemical compound, magnesium sulfate, is a highly soluble soil amendment, which means it can be absorbed by plants through their leaves as well as through their roots. It is also pH neutral, so it will not alter the soil pH. It promotes growth, color and overall plant health.²

Before you plant, add one cup of Epsom salt to every 100 square feet of soil. Mix it in thoroughly. If you have already planted, lightly sprinkle it over the newly planted area and water in with a hose sprinkler. Once plants are established, make a liquid fertilizer mixture of one tablespoon Epsom Salt to each gallon of water and apply four times during the season.³ Tomatoes and peppers are prone to magnesium deficiency. Add a tablespoon or two per hole before planting seeds or transplants and supplement with the liquid as they grow and develop fruit.

Epsom salt can revitalize your garden. It does not cause a chemical build up in the soil or harm plants when used. Many gardeners credit their garden success to Epsom salt applications. [References]





image PerSysMedical

Will the Paramedics Make It?

We can all be prepared to take the initiative to save a life, should we be faced with a life or death situation. Here are three critical first aid procedures that can be accomplished with one dressing.

Israeli Bandage - invented by an Israeli military medic and manufactured in Israel, these bandages are designed to stop blood loss in non-fatally wounded people. Since the tactic for caring for wounded on the spot has become a life saving technique, the Israeli dressing is the bandage of choice of US military medics, emergency medical services and law enforcement personnel. Available in 4, 6 and 8" wide, this bandage has a

sterile non-adhering dressing that can be removed without reopening the wound. A pressure plate is placed directly over the wound to stop bleeding. The wrapping techniques applies pressure.

It also has a C clamp to hold the bandage closed without tape that can be secured by a simple sliding motion with one hand. This can be self applied. The Israeli bandage can be used as a splint with the addition of a straight solid object to keep the broken limb immobilized or serve as a partial tourniquet. One form of this bandage has two pads to deal with through and through wounds. The exit wound often bleeds more profusely than the entrance, so place the largest pad over the exit wound and adjust the second to cover the entrance wound. Watch this <u>training video</u>.

Solar Baked Stuffed Shells from our Solar Chef



Ingredients

20 jumbo shells

2 teaspoons olive oil

1 bag (10-ounce) spinach, wilted, cooled, squeezed dry, and finely chopped

2 cloves garlic, minced

1 cup whole-milk ricotta cheese

8 ounces whole-milk mozzarella cheese, finely diced

1 egg, lightly beaten

1 tablespoon fresh basil, minced

salt and pepper to taste

1 1/2 cups tomato sauce

1/2 cup freshly grated Parmesan cheese

This dish is perfect for picnics or potlucks. It can be assembled up to a day in advance and stored in the refrigerator. Just pop it in your Sun Oven about 45 minutes before you're ready to eat.

Preparation

Set Sun Oven out to preheat.

Spray a baking dish with cooking spray. Bring a large pot of salted water to boil and cook the shells until not quite al dente, about 8 minutes. Drain, transfer to a bowl, and toss with the olive oil; set aside.

In a medium bowl, combine the spinach, garlic, ricotta, mozzarella, egg, basil, salt, and pepper mixing well. Pour half of the sauce into the prepared baking dish. Fill the shells with the cheese mixture and arrange them in a single layer over the sauce. Spoon the remaining sauce over and around the filled shells. Sprinkle the grated Parmesan cheese over the shells. Cover the pan and bake in the Sun Oven until bubbling hot, about 45 minutes.

Makes 4 servings

A Publication of Sun Ovens International (www.SunOven.com)