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

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### A Fun Barbecue is a Safe Barbecue



Summer time is grilling time. Food cooked on the grill has a totally different taste from indoor cooking. With more people cooking on their grills than ever before, the <a href="HPBA">HPBA</a> (Hearth, Patio & Barbecue Association) offers the following tips for grilling safety. Remember that any time you work with fire, there is a chance of getting burned, so take precautions.

- When using a new grill, be sure to read the owner's manual. If you assembled the grill yourself, you know where it is.
- Grills are for outdoor use. If used inside, the carbon monoxide accumulating from combustion can be fatal.
- Grills should be placed well away from the home, deck railings or overhanging branches.
- Use long handled utensils to avoid burns and spatters.
- Take care with clothing. Don't wear dangly fabric on sleeves or aprons that can catch fire.
- Keep the fire under control. If you must douse flames with a light spritz of water, remove the food from the grill first.
- Place a splatter mat beneath your grill to protect your patio or deck from dripping grease.
- Never leave a fire unattended.
- Keep children and pets away from the grilling area.
- Clean your grill before use by brushing off the charred grease AND
  THEN wipe the grill down with a wad of wet paper towels. This step
  is critical to remove any bristles that may fall out of the grill brush.
  Grill bristles unintentionally ingested will result in a visit to the
  Emergency Room. The Center for Disease Control reports several
  cases each year of patients admitted to hospitals with complaints
  ranging from bristles in the tongue or throat to penetrations of the
  small intestine as a result of eating food with bristles embedded.

#### Ask Billie

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

**Martha from AL Asks:** Can you use a Sun Oven for canning?

Answer: No. According to two canning experts, it is not possible to guarantee that the food inside jars will reach a temperature high enough to kill pathogens. For food preservation with the **Sun Oven**®, dehydrating works best.

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

# **Chilling Food Without Electricity**





Practical Action is an international non-governmental organization (NGO) that uses technology to challenge poverty in developing countries. Registered in the United Kingdom, they find out what people are doing and help them to do it better. Through technology they enable poor communities to build on their skills and knowledge to produce sustainable and practical solutions - transforming their lives forever and protecting the world around them. Practical Action works directly in more than 45 developing countries across the world. They have an extensive library of simple techniques to solve survival problems.

#### The Zeer Pot Fridge-How a clay pot refrigerator can help beat hunger

In hot climates, food doesn't stay fresh for long. Tomatoes go bad in just two days. After four days carrots and okra are rotten. With no means of preserving their crops, poverty stricken families have been battling hunger and even famine.

One ingenious solution is the zeer pot. Using this simple technology, the same vegetable can last for up to 20 days. This all natural refrigerator offers families, who already succeed in food production, their right to food preservation and really can help to improve their everyday lives; for now and for the future.

The zeer pot is a simple fridge made of local materials. It consists of one earthenware pot set inside another, with a layer of wet sand in between (about 2 inches). As the moisture evaporates it cools the inner pot, keeping up to 12kg (~26 lb.) of fruit and vegetables fresher longer. Wet down twice daily. The pots should be covered with a ceramic lid or wet cloth. They should be kept in a well ventilated area but out of direct sunlight. The pots work best when placed on a metal frame for better air circulation. The average temperature drops 23.5 ° F. below the outside temperature. Zeer pots work best in drier climates, hence the name "desert fridge."

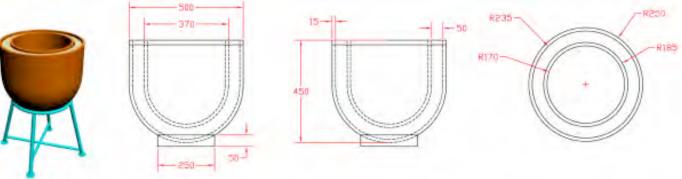
Deterioration of fruits and vegetables during storage depends largely on temperature. One way to slow down this change and so increase the length of time fruits and vegetables can be stored, is by lowering the temperature to an appropriate level. It must be remembered that if the temperature is too low the produce will be damaged and also that as soon as the produce leaves the cold store, deterioration starts again and often at a faster rate.

The ceramic refrigerator has proved very successful and it has been tested with a number of different vegetables. For example tests have shown that these foods can be kept fresh for the following amount of time:

Tomatoes – 3 weeks Okra – 2 weeks Rocket - 5 days Carrots - 20 days Meat - 14 days

In a short or long term interruption of electricity, this could make a difference in preventing food spoilage as well as providing some variety in one's diet. Zeer pots are currently being used successfully in the Arfican countries of Sudan, Gambia and Nigeria. Consider adding this technique to your knowledge base.

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References

## **Rotating Stored Water**

Billie and Robert Nicholson







There is a limit to how much water we can store. In addition to the small containers in our bug-out bags and car, we also set up a 55 gallon drum. At 8.3 lb. per gallon that 457 lb. container will be in place until it's emptied. We recently rotated a water container that was set up seven years ago. When opened the water tasted sweet with a hint of chlorine, and was clear and sediment free. To empty the drum, we created a syphon by pulling a vacuum on a hose with our Shop Vac to start the flow. Once emptied, we washed the 55 gal. drum, then placed it on untreated wooden 2x4s to keep any chemicals in the cement floor from







leaching through the food-grade plastic container. Keep in mind that bleach now comes in two strengths, 5% and 8% sodium hypochlorite. We have 8%, so we added 12 oz. into the drum before filling it with water. Once filled to the top, we sealed and labeled the container "water" and included the date. To further protect the barrel, we placed a piece of finished wood on top to serve as a flat surface for storage.







# 4

### Recovering from a Flood

Billie Nicholson



Floods are among the most frequent and costly natural disasters. Conditions that cause floods include heavy or steady rain for several hours or days that saturates the ground. Flash floods occur suddenly due to rapidly rising water along a stream or low-lying area.

Many times flooding occurs when you least expect it. This is the kind of emergency where your bug-out-bag should be

packed with a minimum of 72 hours of supplies and ready to put in your car for evacuation. Make sure you pack some cleanup clothes, hat, sturdy shoes and your camera to document damage when you return.

Listen to your area radio and television stations and a NOAA Radio for possible evacuation warnings. When a warning for your area is issued, go to higher ground and stay there. It's a good idea to plan this route ahead of time. If you come upon a flooded road while you are traveling, turn around and go another way. Traveling at night, it is hard to recognize where the road is or isn't. In a recent flood in Pensacola, we had a road wash away leaving a 25-ft. drop!

Return home only after officials have declared the area safe. Before entering your home check for downed power lines, damaged gas lines, foundation cracks or other structural damage. As you enter, check ceilings for sagging or other conditions that might lead to a collapse. If you smell or hear hissing gas, leave immediately and telephone the fire department. Don't take children into hazardous areas.

The first thing to do is contact your insurance agent to file a claim. Make sure you have the name of your insurance company, your policy number and a telephone or email address where you can be reached at all times. An adjuster should get back to you within a few days. Meanwhile, take photographs of any floodwater in your home and begin the process of saving personal property.

Make a list of damaged or lost items. These can be added to your home inventory, which already contains the purchase date and value. Take photographs of any items that need to be discarded. Do not turn on electricity until an electrician has deemed your property safe. Mold is the enemy. Remove all wet items immediately. During cleanup, you should wear protective clothing, including rubber gloves and boots.

If you have a basement full or nearly full of water, pump out 2 or 3 feet of water each day. If you drain it too quickly, the pressure outside the walls will be greater than the pressure inside the walls, resulting in cracks or collapse.

For general cleanup, follow a three-step process.

1. Remove mud – shovel out as much as possible, then use a garden hose to wash away mud on hard surfaces. This should include metal heating ducts. Remember to disconnect the

Continued on Page 5

### Recovering from a Flood

Continued from Page 4

furnace first. Discard any porous materials since they are contaminated.

- 2. Clean scrub surfaces with hot water and a heavy-duty detergent. Clean from the bottom to the top.
- 3. Disinfect Use a solution of ¼ cup chlorine bleach per gallon of water or a product that is labeled as a disinfectant to kill germs. Don't mix cleaning products as some combinations give off toxic fumes. Your house should be thoroughly cleaned and dry before you move back in.

Flood soaked dry-wall must be removed. Plaster and paneling can perhaps be saved if thoroughly dried. Air should be circulated in the wall cavities to dry studs and sills. What about insulation? Styrofoam can be hosed off; fiberglass bats should be thrown out if muddy, but can be reused if thoroughly dried. Loose or blown-in cellulose or fiberglass must be replaced.

Mold will grow in only a couple of days if the temperature and humidity are high. Bedding, rugs and clothing should be taken outside to dry as soon as possible. Open your windows and use fans to ventilate the house with outdoor air or use an air conditioner or dehumidifier. Mold can be removed from hard surfaces but not from porous surfaces like paper, drywall and carpet padding. These items must be removed and discarded. Wear a two-strap (n-95 rated or better) protective mask to prevent breathing mold spores.

To remove mold, first vacuum or brush off items outdoors to prevent spreading spores inside. Vacuum with a HEPA filtered vacuum to remove loose mold and spores. Then scrub using a stiff brush with a non-ammonia detergent. Structural wood may need to be sanded to remove all the mold growth. Then disinfect with a bleach solution diluted 1 cup per gallon of water. The surface must remain wet for 15 minutes to successfully disinfect. Then rinse with clean water and rapidly dry the surfaces. Provide adequate ventilation during the disinfecting and wear rubber gloves.

Discard any carpet or rugs if they were wet or damp for more than a couple of days. If sewage-contaminated water covered your carpets, discard them for health reasons. To clean carpets, drape them outdoors and wash down with a hose. Use a disinfecting carpet cleaner on soiled spots. Dry carpets and floors thoroughly before putting them back in place.

If you have hardwood floors, remove a board every few feet to reduce buckling. Clean and dry the wood before trying to repair it. If you have wooden subflooring, the floor covering must be removed to allow air to dry the subflooring thoroughly. This may take months.

Wooden furniture worth saving should be dried indoors to prevent warping by the sun. It can be wiped down with turpentine to remove white spots that may develop on damp wood. Wipe dry and polish with wax or furniture polish. Throw away water soaked mattresses and pillows. Wash bedding in a bleach solution as recommended on the label. Treat clothing and other washable textiles with stain removal products before washing.

Flooding contaminates or damages everything it touches. For more details on cleaning and what to save or discard, see Flood Recovery and Cleanup.

### **Green Beans Facts**

- Green beans are one of the few varieties of beans that can be eaten fresh. Since they are picked while the beans are immature, we are actually eating the seed pods.
- They are a great source for many nutrients including vitamins C & K, manganese and fiber. They are also filled with colorful pigments, carotenoids like carrots and tomatoes. We don't see these



- colors because the chlorophyll concentration is so high, it masks them, but heir benefits are there.
- 60% of all commercially grown green beans are available in the United States. You can grow them in your back yard. We planted 12 seeds of "Kentucky Wonder" bush bean variety this year and are harvesting enough beans to feed the two of us every five days. You keep picking, they keep blooming and creating new beans.
- Early summer is the best time to obtain them at the least expense.
- The highest food value is obtained from fresh beans, but you can still get valuable nutrients from green beans that are frozen or canned.
- Frozen beans, when cooked retain about 90% of their B vitamins. Canned ones lose more food value but some is better than none when you are hungry.
- Green beans have the highest antioxidant capacity of all the other members of the pea and bean families, with a diverse mixture of flavonoids and carotenoids, including lutein.
- They also are a good source of the mineral silicon, which is important for bone health and for healthy formation of connective tissue.
- Additional health benefits include cardiovascular, anti-inflammatory and prevention of type 2 diabetes.



Photos by RustyBuggy.com

- Known by their Latin name, *Phaseolus vulgaris*, beans derived from a common bean ancestor, originating in Peru. From there, they were spread to South & Central America by migrating Indian tribes. They were introduced into Europe by Spanish explorers.
- Unwashed beans stored in a plastic bag will keep refrigerated for about seven days.
- Wash before cooking and cut off both ends. Steam them for five minutes and season to taste.

Reference

10 Tips on Growing Bush Beans

## **Call for Recipes**

Many of our SUN OVEN® customers rave about how good and different beans taste when prepared in their SUN OVEN®. How do you prepare beans in your Sun Oven®? Please send your favorite recipes (along with your secret tips and a photo at least 6x4@150 ppi) to <a href="mailto:editor@sunoven.com">editor@sunoven.com</a> Your recipe could be published in an issue of our newsletter!

## **The Cloudy Day Cube Stove**

#### An Inexpensive Back Up For Your Sun Oven.

We are often asked for suggestions about preparedness cooking on overcast days and would like to introduce you to the Cloudy Day Cube Stove, a simple, low-cost-solution. The Cloudy Day Cube Stove can cook your food with a wide variety of different fuels and weighs less than one pound.

Sun Ovens International has made a bulk purchase of the last of the American made Cube Stoves. They are now available at a reduced cost as a backup for your **SUN OVEN**<sup>®</sup>.

On days when rain or overcast weather hide the sun, the Cloudy Day Cube Stove is a great solution. The stove is designed for quick, convenient setup and use, and in addition to preparedness cooking, is ideal for camping or hiking. It has been engineered to maximize burning an assortment of different fuels including twigs sticks or wood, charcoal briquettes, Sterno cans, alcohol, solid fuel tablets or QuickStove Fuel Disks.



The Cloudy Day Cube Stove is made of durable aluminized steel. It can be used in 7 different positions to accommodate different needs, such as cooking fast or slow, or cooking in a large pot or small cup.

A Cloudy Day Cube Stove can be used in conjunction with your **SUN OVEN**<sup>®</sup>. A meal can be started on the Cube Stove and when it is half way through cooking, put into your **SUN OVEN**<sup>®</sup> to complete the cooking process as it would in a Wonder Box or retained heat cooker.

For a limited time, while supplies last, you can purchase a Cloudy Day Cube Stove Kit with two QuickStove Fuel Disks for less than \$30.

To learn more:

**CloudyDayCubeStove** 



## Sun Oven Chicken, Filipino-Style from the Solar Chef



Chicken Adobo is easy to make and sure to be a crowd pleaser. Serve it with steamed rice and stir-fried vegetables.

### Sun Oven® Chicken Adobo

### Ingredients

1 (3 pound chicken) skinned and cut into 8 pieces

5 cloves garlic, peeled and crushed

2 bay leaves

3/4 cup soy sauce

1/4 cup apple cider vinegar

1 tablespoon fresh ginger, finely grated

1/4 teaspoon freshly ground black pepper

1 tablespoon brown sugar

1 tablespoon cornstarch

1/4 cup chicken broth

Green onion, sliced, for garnish

### Preparation

Set Sun Oven® out to preheat.

Place the chicken pieces in a large pot or roasting pan. In a medium bowl, mix together the garlic, bay leaves, soy sauce, vinegar, ginger, pepper, and sugar. In a small bowl, whisk together the broth and the cornstarch. Stir the cornstarch mixture into the soy sauce mixture. Pour the sauce over the chicken in the pot. Cover and cook in the Sun Oven until the chicken is fork tender, 1 1/2 to 2 hours. Garnish with the green onions.

Makes 4 servings.