

## Project Noah - Month 4

Billie Nicholson



**Project Noah** is a yearlong food storage and emergency preparedness program designed to help you set and obtain goals in the area of family preparedness. The program is divided into twelve monthly assignments touching on lots of short and long term preparedness subjects including a preparing, a reporting and a sharing segment each month. These lessons are designed to be used in church or community groups focused on preparedness. Start your own group and use these newsletters as a reference resource. Many articles will link to previous articles on SunOven.com or other sources. Click for additional information.

This FOURTH month's lesson includes a discussion of items to add to a first aid kit and reference books to add to your library. Do you know what to do if someone near you suffers from a heart attack or stroke? Continuing to add items to our 72 hour kits - including the importance of including durable, versatile and comfortable clothing and shoes.

Our non-food items this month are shampoo, conditioner & deodorant. In addition to searching for the best buys on what you like to use, we have included some alternatives to store-bought items.

As you accumulate preparedness items, about this time you are beginning to wonder where in the world you're going to put them. We have recommendations on that, including suggestions for the space challenged.

The long term storage item this month is legumes. Dried beans, peas and lentils are in this food group. We've included tips on storing, cooking and other uses for beans besides soup, plus some legume recipes.

We have also included a [three month checklist](#) to evaluate how you're doing with assignments.

**Assignments on Page 10**

### *Ask Billie*



**Q.** I have all kinds of veggies this year. Is there a way to use the Sun Oven® to preserve them?

**A.** Yes, a SUN OVEN® makes an excellent solar dryer. Set up the oven outside but not in direct sun. Place sliced produce on parchment paper on the racks that come with the oven. When the latch (which holds the door shut for cooking) is turned inward and the glass door is set on top of the latch, moist air can escape and the temperature inside the oven will remain low enough to keep the items being dried from starting to cook.

What is your Most Burning Question about Food Storage or Emergency Preparedness? Send your questions to [editor@sunoven.com](mailto:editor@sunoven.com)



Billie Nicholson



Order Your Sun Oven® Today

## First Aid Kits



Boo-boos happen when you least expect them and sometimes more than once a day. A First Aid kit contains items to help “fix” the boo-boos or at least provide a first response until professional help can be obtained. To be prepared for emergencies, have a first aid kit in your home, in your car, in your 72 hour kit, and know where to find one where you work.

They can be purchased in all sizes from the American Red Cross, your local drug store, big box stores and even online. Every family should have at least one. When you get one, be sure to open it, review the contents and decide if you need to add additional items to personalize it, for example, if you have a bee

sting allergy, you will want to include an epi-pen. Add a card with emergency phone numbers for your health-care providers. When you use an item, be sure to replace it. Make sure to include a first aid instruction book.

Give your first aid kits a regular six month check-up. Adhesive tape on bandages and pain relievers, etc. lose their usefulness over time. Replace them regularly. Add prescription medication to your 72 hour kit, too. Rotate it out and use it before it expires. If you include a flashlight in your kit, store the batteries separately in a plastic bag. Your First Aid Kit should contain the following items:

- Adhesive tape
- Allergy tablets, antihistamine (Benadryl)
- Antacid, water purification tablets
- Antibiotic ointment
- Anti-diarrhea medication
- Antiseptic solution or towelettes (alcohol wipes)
- Aspirin and non-aspirin pain relievers, thermometer
- Bandages, including rolled elastic wrap and Band-Aids in assorted sizes, compression bandage
- Burn ointment, sunscreen
- Cotton balls and cotton-tipped swabs
- CPR Mask Rescue Breather with one-way valve
- Cold compress, triangular bandage
- Tourniquet
- Disposable latex or synthetic gloves, 2 pair minimum
- Dust or filter mask
- Fingernail clippers, Safety pins
- First aid instruction manual
- Gauze pads and rolled gauze in assorted sizes
- Hydrocortisone cream
- Petroleum jelly (for lubrication)
- Plastic bags to contain contaminated materials
- Scissors, tweezers, a needle & matches
- Hand sanitizer
- Sterile eye wash
- Prescriptions

**[More Items to Include](#)**

## 72 hour Emergency Kit - Adding Versatile Clothing

How important are dry, warm clothes? Have you ever had to spend much time in wet clothes or get warm after a wet chill? Don't forget to include clothes and shoes in your 72 hour kit. What should you pack? Plan for any type of weather, especially if the emergency becomes a long-term survival situation. Consider the weather patterns in your area as well as those of an area you might be headed to in an emergency.

Survival clothing needs to help protect you in a situation that could get messy or extended. They should have the following characteristics: <sup>1</sup>

- Durable - This may be the only clothing you have access to for a while. Make sure it is made of sturdy material that is easy to repair.
- Comfortable - If you have to be in this clothing for several days, it should be easy to wear, without binding. One size bigger (two sizes bigger for kids plus some 440 paracord for a belt) will allow ease of movement and make layering an option.
- Versatile - This clothing should be adaptable to changing weather, different types of terrain and different situations.
- Inconspicuous - Select clothing that will blend in to crowds and your environment. Dark and subdued colors work best, unless you need to keep up with your kids in a crowd. In that case try to select the same color for everyone.<sup>2</sup>
- Natural Fibers - Cotton, denim, silk, wool only - avoid polysynthetic fabric blends because they are more flammable than natural fibers.

Store the clothing you pack in plastic bags and seal them tightly to squeeze out the air and to keep them dry. Wet clothing can extract heat from your body much faster than dry clothing. If you layer clothing and are exerting lots of energy, try not to perspire. If you feel like you're getting warm, let your body heat escape a little at a time. Start by removing your head gear, then loosen your collar, unzip the jacket and roll up the sleeves. The basic principle is to peel off layers to cool down and be prepared to replace them before you get chilled.

Pack clothing that can be mixed and matched should the weather change, you get wet or injured. Review them every six months to a year to make sure things still fit. Include closed toe shoes for everyone. Pack extra socks to keep feet healthy. Don't forget head protection. Include these:

- ✓ Head covering - hats, knit caps, ear covering and scarf
- ✓ Sweat pants/jeans or work pants
- ✓ Cotton shirts, short and long sleeved, waterproof jacket or poncho, sweatshirt or wool sweater
- ✓ Two - three changes of underwear
- ✓ 5-6 pair socks, sneakers or hiking boots, broken-in
- ✓ Work gloves
- ✓ Thermal underwear for cold regions
- ✓ Heavy coat if you live in region that gets cold in winter

Pack clothes for each child in your family that will fit into their individual back pack. Each person will need to be responsible for their own clothing items.

1. <https://www.thereadystore.com/diy/10509/what-type-of-clothes-to-pack-in-your-72-hour-kit/>
2. <http://foodstorageandsurvival.com/72-hour-emergency-kit-series-week-7-clothes/>

## Cardiopulmonary Resuscitation (CPR)

Mayo Clinic Staff

Cardiopulmonary resuscitation (CPR) is a lifesaving technique useful in many emergencies, including heart attack or near drowning, in which someone's breathing or heartbeat has stopped. The American Heart Association recommends that everyone — untrained bystanders and medical personnel alike — begin CPR with chest compressions.

It's far better to do something than to do nothing at all if you're fearful that your knowledge or abilities aren't 100 percent complete. Remember, the difference between your doing something and doing nothing could be someone's life.

Here's advice from the American Heart Association:

- **Untrained.** If you're not trained in CPR, then provide hands-only CPR. That means uninterrupted chest compressions of about 100 a minute until paramedics arrive (described in more detail below). You don't need to try rescue breathing.
- **Trained and ready to go.** If you're well-trained and confident in your ability, begin with chest compressions instead of first checking the airway and doing rescue breathing. Start CPR with 30 chest compressions before checking the airway and giving rescue breaths.
- **Trained but rusty.** If you've previously received CPR training but you're not confident in your abilities, then just do chest compressions at a rate of about 100 a minute. (Details described below.)

The above advice applies to adults, children and infants needing CPR, but not newborns.

CPR can keep oxygenated blood flowing to the brain and other vital organs until more definitive medical treatment can restore a normal heart rhythm.

When the heart stops, the lack of oxygenated blood can cause brain damage in only a few minutes. A person may die within eight to 10 minutes.

To learn CPR properly, take an accredited first-aid training course, including CPR and how to use an automated external defibrillator (AED). If you are untrained and have immediate access to a phone, call 9-1-1 before beginning CPR. The dispatcher can instruct you in the proper procedures until help arrives.

Before starting CPR, check:

- Is the person conscious or unconscious?
- If the person appears unconscious, tap or shake his or her shoulder and ask loudly, "Are you OK?"
- If the person doesn't respond and two people are available, one should call 911 or the local emergency number and one should begin CPR. If you are alone and have immediate access to a telephone, call 911 before beginning CPR — unless you think the person has become unresponsive because of suffocation (such as from drowning). In this special case, begin CPR for one minute and then call 911 or the local emergency number.
- If an AED is immediately available, deliver one shock if instructed by the device, then begin CPR.

**Continued on Page 5**

## **Cardiopulmonary Resuscitation (CPR)**

### **Remember to spell C-A-B**

The American Heart Association uses the acronym of CAB — compressions, airway, breathing — to help people remember the order to perform the steps of CPR.

### **Compressions: Restore blood circulation**

1. Put the person on his or her back on a firm surface.
2. Kneel next to the person's neck and shoulders.
3. Place the heel of one hand over the center of the person's chest, between the nipples. Place your other hand on top of the first hand. Keep your elbows straight and position your shoulders directly above your hands.
4. Use your upper body weight (not just your arms) as you push straight down on (compress) the chest at least 2 inches (approximately 5 centimeters). Push hard at a rate of about 100 compressions a minute.
5. If you haven't been trained in CPR, continue chest compressions until there are signs of movement or until emergency medical personnel take over. If you have been trained in CPR, go on to checking the airway and rescue breathing.

### **Airway: Clear the airway**

1. If you're trained in CPR and you've performed 30 chest compressions, open the person's airway using the head-tilt, chin-lift maneuver. Put your palm on the person's forehead and gently tilt the head back. Then with the other hand, gently lift the chin forward to open the airway.
2. Check for normal breathing, taking no more than five or 10 seconds. Look for chest motion, listen for normal breath sounds, and feel for the person's breath on your cheek and ear. Gasping is not considered to be normal breathing. If the person isn't breathing normally and you are trained in CPR, begin mouth-to-mouth breathing. If you believe the person is unconscious from a heart attack and you haven't been trained in emergency procedures, skip mouth-to-mouth breathing and continue chest compressions.

### **Breathing: Breathe for the person**

Rescue breathing can be mouth-to-mouth breathing or mouth-to-nose breathing if the mouth is seriously injured or can't be opened.

1. With the airway open (using the head-tilt, chin-lift maneuver), pinch the nostrils shut for mouth-to-mouth breathing and cover the person's mouth with yours, making a seal.
2. Prepare to give two rescue breaths. Give the first rescue breath — lasting one second — and watch to see if the chest rises. If it does rise, give the second breath. If the chest doesn't rise, repeat the head-tilt, chin-lift maneuver and then give the second breath. Thirty chest compressions followed by two rescue breaths is considered one cycle.
3. Resume chest compressions to restore circulation.
4. If the person has not begun moving after five cycles (about two minutes) and an automated external defibrillator (AED) is available, apply it and follow the prompts. Administer one shock, then resume CPR — starting with chest compressions — for two more minutes before administering a second shock. If you're not trained to use an AED, a 911 or other emergency medical operator may be able to guide you in its use. If an AED isn't available, go to step 5 below.
5. Continue CPR until there are signs of movement or emergency medical personnel take over.

## Beans Today, Soup Tomorrow from our Solar Chef



*These beans make a great side dish on their own, but be sure to set some aside (and save the cooking liquid) for a delicious soup later in the week. If you can't find cannellini, any white bean will do. Same goes for the greens, curly kale can be substituted for the Tuscan.*

### *Solar Simmered Cannellini with Kale*

#### INGREDIENTS

1 1/2 cups dried cannellini beans, picked over and rinsed  
 1 medium onion, chopped  
 3 cloves garlic, peeled  
 1 bay leaf  
 1 teaspoon dried sage  
 1 teaspoon salt  
 4 cups coarsely chopped stemmed Tuscan kale  
 6 tablespoons extra-virgin olive oil  
 3 tablespoons fresh lemon juice  
 Dried crushed red pepper

#### PREPARATIONS

Put beans in a large bowl and add enough water to cover by 3 inches, soak overnight  
 Set *Sun Oven*® out to preheat

Drain beans. Put beans in a large pot. Add 8 cups water, onion, garlic, bay leaf, and sage. Cover and place in SunOven®. Cook until beans are tender, about 2 hours. Stir in salt. Add kale, cover and cook for another 5 minutes.

Drain beans and kale. (Reserve cooking liquid and store in the fridge in a covered container for soup.) Add oil, lemon juice, add red pepper to taste. Season with salt and pepper to taste. Serve on toast points.

## Shampoo, Conditioner & Deodorant Alternatives

Washing your hair frequently has been recommended since the 1970's. Frequent shampooing removes sebum, the oil produced by your scalp. One thing we've learned is that frequent hair washing actually stimulates production of scalp oil faster. As you acquire hair care products for your emergency supplies, consider some alternatives that will be equally effective and save money as well.

**The 'No Poo' Movement** - To be a part of an environmental movement or not, if your hair needs washing and you have no commercial shampoo, use **back to basics shampoo**. Here's how to do it. Use 1 Tbs baking soda (yes, the same stuff you use to absorb odors in your refrigerator) dissolved in 1 cup of water. I also added 6 drops of lavender oil. Wet your hair and pour (I use a squeeze bottle) baking soda solution throughout your hair, rubbing as you go for at least 2 minutes. Rinse with warm water and repeat. <sup>1</sup>

Follow this rinse with a conditioner to return the pH of your hair to neutral (Sodium bicarbonate is slightly alkaline). The **back to basics conditioner** is 1 Tbs apple cider vinegar diluted into 1 cup of water. Simply shake the bottle before each use and gently massage into the hair and scalp for two to five minutes and rinse with cool water. The vinegar conditioner will smooth the hair cuticle making more manageable hair. Blot dry with a towel or comb out with a wide toothed comb. You can benefit your hair-type by adding herbs or essential oils.

**For greasy or oily hair/scalp**, add 6-8 drops of an essential oil such as bergamot, lavender, lemon, rosemary, sandalwood, tea tree, or ylang ylang.

**For dry scalp and dandruff**, you can add 6-8 drops of essential oils like tea tree, peppermint, eucalyptus, sage, or rosemary.

Rosemary is a wonderful herb **for all hair types**. Infuse your vinegar by steeping several fresh rosemary sprigs in a few cups of apple cider vinegar for 1-2 weeks. Strain out the rosemary, and use the vinegar to make your conditioner, storing leftovers for future batches. The rosemary will impart a lovely smell along with all the benefits of this herb. If you have rosemary essential oil and don't want to wait 1-2 weeks for an infused vinegar, just add 6-8 drops of rosemary essential oil to your conditioner and it's ready for immediate use!<sup>2</sup>

There are lots of other options for [conditioners](#) using common household ingredients if you would like to experiment. <sup>3,4,5</sup> You may want to try some of these depending on your hair type and other conditions. Let us know what you tried and your results.

**Deodorants and Antiperspirant** products are some of the worst offenders when it comes to the addition of hazardous chemicals in beauty products. There have been recent reports of links between these products and much higher rates of breast cancer. Antiperspirants, by sealing in moisture, are the worst. Besides putting aluminum in your body, they prevent perspiration, which is the body's natural way to eliminate toxins.<sup>6</sup>

Apocrine glands in the skin usually have an odor because the protein in sweat is broken down by surface bacteria and converted into certain acids.<sup>7</sup> One important habit to reduce underarm odor is daily washing. In addition the **back to basics deodorant** of moist baking soda rubbed under your arms may be all you need. It can also be mixed with cornstarch and dusted on. You can fill a spray bottle with dilute vinegar or isopropyl alcohol and spritz your arm pits. The vinegar smell goes away quickly.

You can make your own [deodorant](#) combining baking soda with shea butter, coconut oil, arrowroot and essential oils. <sup>8,9</sup> Give these recipes a try and let us know what you think.

---

### References

## 16 Food Storage Tips for the Space Challenged Prepper



[Gay Levy, Backdoor Survival](#)

One of the more common prepper challenges is finding room for stored food and water. Lucky you if you have a large home with a basement or cellar – you have plenty of space at just the right temperature. But the rest of us? Not so much. Many people live in apartments, condos, mobile homes, RV's or, in my case, a one bedroom cottage. This means we are cramped for normal pantry and closet space let alone space for our emergency food and water. Couple the lack of storage space

with the need to be mindful of [the six enemies of food storage](#) (temperature, moisture, oxygen, light, pests and time) and the storage problem compounds exponentially. This does not have to be an impossible situation. With a bit of creativity, almost everyone can find a bit of extra space for their emergency food storage. So with that in mind, today I would like to offer some ideas for storing food for the space challenged. *You can read Gay's commentary on each of these [here](#).*

### **16 FOOD STORAGE TIPS FOR THE SPACE CHALLENGED PREPPER**

1. Build some shelves under the stairwell
2. Shelves above the washer and dryer
3. Build some shallow shelves behind the clothes in your closet
4. Clear out the junk on the shelf above your clothes in the closet
5. Shelves on the backs of doors
6. Stack canned goods behind the sofa
7. Shelves under the sink
8. Storage in the deep recesses of your cupboards
9. Storage above the refrigerator
10. Storage in decorative baskets
11. Storage behind the books on your bookshelf
12. Storage under the bed
13. Storage under the sofa or other pieces of furniture
14. Fill up those empty suitcases
15. Store buckets in the bathtub
16. Build a loft for storage in the garage (watch out for the heat)

### **MAKING IT ALL WORTHWHILE**

There are some factors to keep in mind as you evaluate these hidden food storage locations in your home. The first is simply this: your stored food should be used, replaced and rotated. This is especially true if your storage conditions are not optimal.

Let me give you an example. You live in a warm, humid climate and do not have air-conditioning. On a hot summer day, the temperature inside your home may be 80F and the humidity may be 80%. Okay, it is what it is. Rather than fret about the diminished shelf life of your stored food, plan on using it after a year or two. As long as you replace what you use, you are fine. Your food will still be nutritious and edible so rotate it into your day-to-day food pantry and eat it.

The other thing is that your food storage is “not an inheritance for your grandchildren”. I wish I can claim credit for that statement but it belongs to Barbary Salsbury, the author of [Preparedness Principles: The Complete Personal Preparedness Resource Guide for Any Emergency Situation](#). I had the pleasure of meeting Barbara a couple of months ago and I was knocked to my senses by this statement.

It is okay to purchase what you need to get you through a one month or even a one year emergency. But use your food. Cook with it and eat it. Learn to cook your food outdoors, perhaps in a fire pit or on a rocket stove. Try eating it cold. Learn what you like and what you will take a pass on the next time around. But most of all, don't think that you have to hoard your food. Eat it, enjoy it and replace it.



## Legumes

A legume is a plant species that has seed pods that split along both sides when ripe. There are nearly 250 varieties of legumes, including beans like soy, pinto, white, kidney, lima, red, black, navy, pink, peas like black-eyed, green, and split, as well as lentils and peanuts. These can be bottled, dry-pack canned or stored in #10 cans or plastic containers. They will keep indefinitely when stored in a cool, dry place.

Legumes are tasty, cholesterol reducing and nutritionally excellent. They are high in both soluble and insoluble dietary fiber and the richest source of vegetable protein. They provide all the necessary amino acids to make complete proteins when combined with grains, rice, corn or milk products. When served this way they can replace meat, fish, poultry, eggs or dairy in your diet. They are high in B vitamins, complex carbohydrates, iron, calcium, phosphorous and potassium. They help stabilize blood sugar.

Legumes are grown agriculturally, primarily for their grain seed called **pulse**, for livestock forage and silage, and as soil-enhancing green manure. The 68th year of the United Nations General Assembly has declared 2016 “The International Year of Pulses.” Watch for emphasis on legumes during this year. Plan on adding some to your food storage.

Before cooking beans and other legumes, wash them thoroughly under cool water, then sort through them to remove any stones or other debris and any beans that float to the top of the water. Most dry beans need to be soaked before cooking, preferably overnight. You don't need to soak lentils or mung beans unless you plan on sprouting them. Split peas can be washed and cooked directly. Soaking shortens the cooking time and makes them more digestible. Soak with 4 times the volume of water. Do not add salt yet. After soaking, drain and rinse them and add fresh water for cooking. This will reduce flatulence. Add twice as much water as bean volume. Boil rapidly for 10 minutes, skim off any foam that collects at the top, then cover, lower heat and simmer for one hour. Stir in salt (1/2 tsp per cup of dry beans) and continue cooking until beans are tender. Check frequently adding more water as needed. To check doneness, cut one in half, if the color is consistent, they are done, if it's lighter in the middle, cook longer.

Legumes aren't just used for soups but can be ...

- Ground into bean flour for white sauces
- Mash up cooked beans to replace butter/oil in recipes
- Grown into sprouts for a fresh “vegetable”

### Bean Don'ts

- No storing of dry beans in the refrigerator
- Do not add baking soda to hasten soaking or cooking time as it will decrease the nutritional content
- Do not add salt, calcium, magnesium or acid to the soaking water or beans will not soften
- Do not use microwave to cook dry beans - microwaving is fine for reheating beans that are already cooked, but dry beans need to be simmered slowly in lots of water to soften, tenderize and rehydrate properly.

Alfalfa is a member of the pea family and is typically eaten by humans as sprouts.

Lentils are small, flat legumes that come in a wide variety of colors that can be flavored many different ways, like sweet salads, savory soups or casseroles. They can be used as a meat filler.

Split Peas are regular peas that have been dried after harvesting. When skin are removed, they split naturally.

**[Don't Miss These Recipes](#)**

## Project Noah - Fourth Month Assignments



[Project Noah](#)

1. First Aid Kit
  - a. Review the items in your kit; update antibiotic cream
  - b. Include bandages from small to large
  - c. Do you have a current First Aid book?
  - d. Add a first aid kit to your 72 hour kit
  - e. Include waterproof medical info for each family member
2. Pre-Disaster Preparation:
  - a. Learn basic First Aid
  - b. Take a CPR class
  - c. Complete adding food to your 72 hour kit
3. Non-Food Items: Shampoo, Conditioner & Deodorant- Goals:
  - a. Determine how much your family will need for 90 days and for a year - is this doable?
  - b. Shop for the best prices and buy what you can afford
  - c. Explore alternatives, make your own
4. Short Term: Where can I put all this stuff?
  - a. Study your home for places you can store food
  - b. Research shelving and storage ideas that will work for your home
5. Long Term Storage Item: Acquire a selection of Legumes
  - a. Store some in bulk cans or jars
  - b. Experiment with recipes
  - c. Use beans some other way than in soup

Next Month's topics will be: Emergency Evacuation meeting places & First Aid info on blood protocols

Non-food item: Dish soap and bleach

Long Term Storage: Wheat and what to do with it

Gardening: What will your fall garden look like?