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SURVIVE

AND

THRIVE

HOW TO PREPARE FOR ANY DISASTER
WITHOUT AMMO, CAMO, OR
EATING YOUR NEIGHBOR

A PDF COMPANION TO THE AUDIOBOOK

Self-Assessment

(Twenty Questions)

1. How long could you survive on the food you have if something happened right this very minute that kept you from the grocery store?
2. How much emergency water do you have and is it properly stored?
3. How full is your gas tank right now and how far would you get if there were no functioning gas stations?
4. Do you have any survival supplies at work like food, water, or clothing?
5. Do you know what wild forageable foods grow in your area and which plants are dangerous?
6. Do you know how to preserve food? (canning, salting, fermenting, pickling, or drying)
7. Do you know the best way to escape from your apartment or place of work?
8. Do you have a fire extinguisher on every floor of your home?
9. If you were separated from your loved ones in a disaster, do you have an official plan to reconnect that everyone knows? Do you have photos of your family in your wallet, not just on your cell phone?
10. How long could you survive if your car went off a rural road in a snowstorm?
11. Do you have a secondary source of heat in your home?
12. Is anyone who doesn't live with you likely to end up in your home during an emergency and are you prepared for their needs?
13. How much prescription medication do you have on hand right now?
14. How much pet food and pet meds do you have on hand?
15. What is your secondary source of power if there's a blackout?
16. Where are all your critical documents located right now and are they safe from a storm, flood, fire, or other disaster? Are they accessible on paper and digitally? (will, insurance, identification, medical information, photos, contact information)
17. Do you know how to shut off water, power, and gas to your home? Do you have the tools to do it?
18. Do you have the ingredients and know-how to cook simple basic meals with shelf-stable pantry staples?
19. How quickly could you and everyone you live with be ready to evacuate your home with all the critical items and supplies you need?
20. What's the one big obstacle to successfully navigating a disaster that you may not have been thinking about?

INTRODUCTION

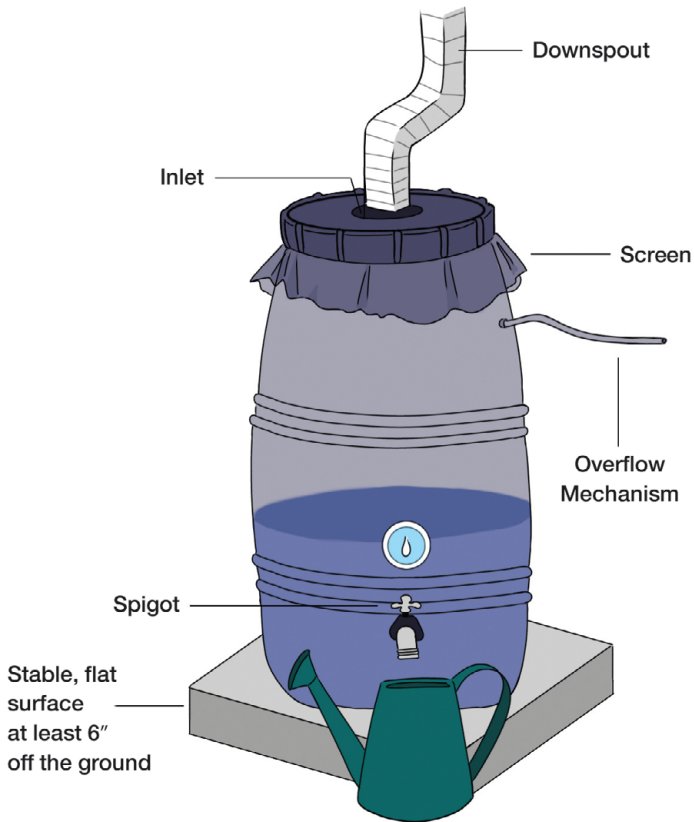
SKILLS LIST

- _____ Basic first aid including wound care and CPR
- _____ Starting a fire with or without a lighter or matches
- _____ Cooking with fire (s'mores do not count!)
- _____ Canning/preserving food
- _____ Filtering water
- _____ Foraging and knowing what toxic or poisonous plants and mushrooms grow near you
- _____ Fishing/hunting: knowing regulations and locations for your area, and understanding the basics and safety
- _____ Growing food: microgreens, container gardens, hydroponics, or garden plots
- _____ Making hardtack and other long-term portable survival food
- _____ Cooking: understanding the basics of food safety and how to prepare simple meals with pantry staples that people will want to eat
- _____ Making yeast and baking bread
- _____ Signaling for help
- _____ Map reading and navigation
- _____ How to turn off utilities safely: gas, electric, and water.
- _____ Basic car maintenance: checking fluids, checking air pressure and changing tires, using jumper cables, changing fuses and lights, basic troubleshooting
- _____ Tying simple utilitarian knots
- _____ Safely using an axe, hatchet, and knife
- _____ Being an organized leader: checking, updating, and replacing survival supplies; making sure there's an emergency plan and everyone knows their part; organizing practices or teaching/learning sessions for all of the above skills.



CHAPTER 1

WATER



A Rain Barrel

Illustration by Liliana Faiella.

EMERGENCY DISINFECTION OF DRINKING WATER

| Volume of Water | 6% Bleach Additive | 8.25% Bleach Additive |
|-----------------|--------------------|-------------------------|
| 1 gallon | 8 drops | 6 drops |
| 2 gallons | 16 drops (1/4 tsp) | 12 drops (1/8 teaspoon) |
| 4 gallons | 1/3 teaspoon | 1/4 teaspoon |
| 8 gallons | 2/3 teaspoon | 1/2 teaspoon |

ARE YOU READY?

- _____ Do you know how much water you want to store for an emergency?
- _____ Do you know how you will store it and have the proper containers?
- _____ Do you know how to purify and filter water if you run out, and do you have the supplies to do so?
- _____ Do you know the location of the nearest natural uncontaminated water source?
- _____ Do you know how to check for dehydration and its warning symptoms?
- _____ Is your water actually stored and ready to go? Because reading about it and knowing how doesn't make a difference if it's not there to drink!

The High School Science Class Magic of the Solar Still

If you're really in a jam, there's a DIY water hack that costs almost nothing and can produce clean drinkable water even in the desert.

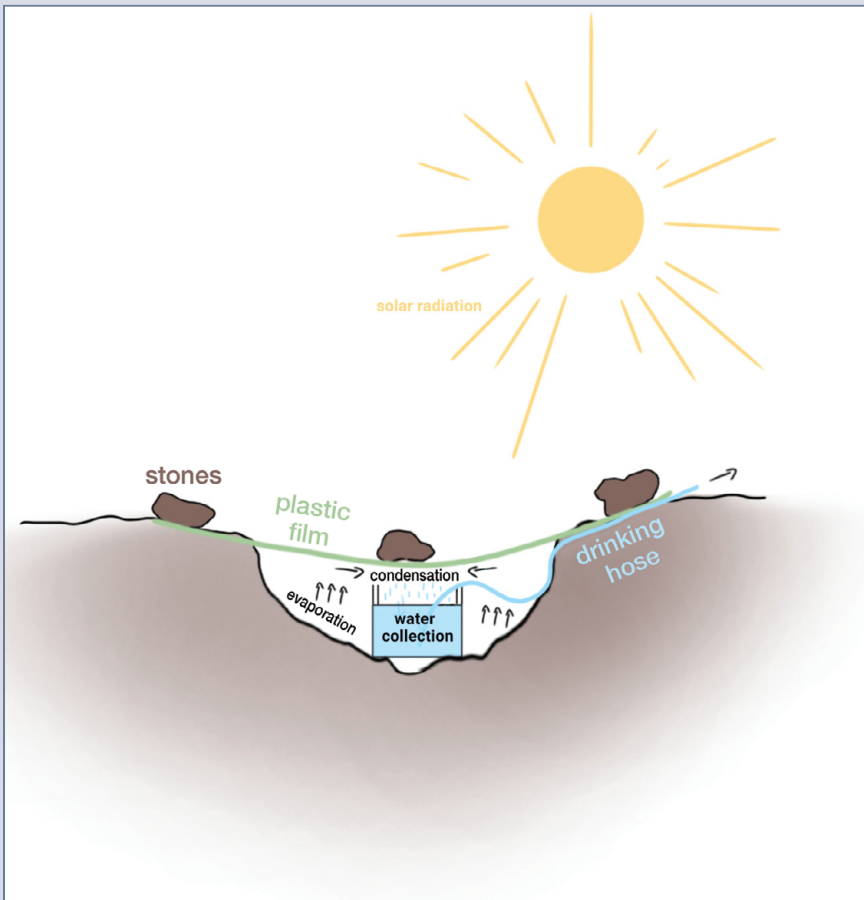


Illustration by Liliانا Faiella.

MATERIALS

- A wide-mouth container (a clean bucket, or glass jar)
- Heavy clean plastic sheeting (approximately 4'x 4' for one still)
- A shovel or trowel
- Some rocks
- Vegetation (if possible, and especially if your soil is dry)

CONSTRUCTION

1. Dig a hole. Find a fairly level spot with loose soil that gets sunshine for most of the day, if you can. Make the hole about two feet across and deep enough that your container can rest at the bottom, with the top of the hole eight to twelve inches above the rim of the container.
2. Place the container in the center of the hole. Choose a container with a wide mouth and with a base wide enough so it doesn't tip over.
3. If you have moist vegetation, like grass, weeds, or leaves, pack it around the container at the bottom of the hole.
4. Lay the plastic sheeting over the top of the hole.
5. Place rocks and/or dirt around the edge of the plastic sheeting to hold it in place over the hole, and to seal the hole as best you can.
6. Place one rock in the center of the plastic sheeting, directly over the container. Make sure you allow the rock to make a depression in the plastic and that it is located over the mouth of the container.
7. When everything is in place, leave the still for twenty-four to forty-eight hours. Don't keep checking the still or you will let out all the moisture and slow down the process.
8. As the sun penetrates the plastic it will warm the air inside the hole, like a greenhouse. The moisture from the trapped air, the soil, and the vegetation will evaporate and condense on the bottom side of the plastic sheet and run down to the center, where it will drip into your container!
9. After twenty-four to forty-eight hours, enjoy your pure, potable water!

The amount of water you get depends on several factors: the moisture in the air, the amount of vegetation you use, the weather conditions, and the moisture in the soil. If you don't get enough water quickly enough, you can always make more than one solar still.

The High School Science Class Magic of the Bucket Bio-Filtration System

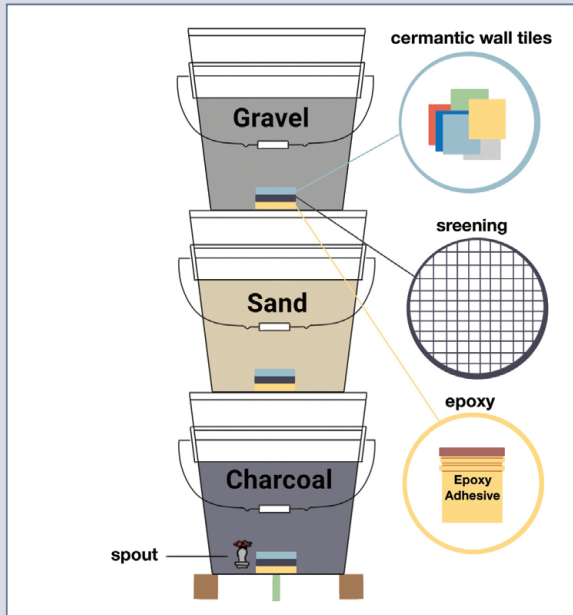


Illustration by Lilliana Faiella.

ITEMS YOU'LL NEED (YOU CAN FIND THESE AT ANY HARDWARE STORE):

- Three five-gallon buckets with lids to use for filtering media
- One extra five-gallon bucket to rinse the media
- Drill with 1" and 2" drill bit/hole saws
- Fifty-pound bag of pea gravel
- Fifty-pound bag of sand
- Twenty-five pounds of activated charcoal (small diameter if possible)
- About two feet of window screening
- Three square ceramic bathroom tiles
- Scissors
- Two cinder blocks or something to use as a sturdy stand that the bucket can straddle

FIFTEEN STEPS TO CLEAN, DRINKABLE WATER

- 1.** Drill a 1-inch hole in the center of the bottom of all three buckets.
- 2.** Change over to the 2-inch hole saw and drill a hole in the center of the lid of two of the three buckets. Don't drill the final lid.
- 3.** Cut two 3-inch squares of screen for each bucket. Epoxy the two pieces of screen on top of each other on the inside of the buckets so they cover the 1-inch holes.
- 4.** Let the epoxy cure.
- 5.** After the epoxy has cured, place a ceramic tile over the screening with its shiny side up. Use a small amount of epoxy in the corners of the tile to hold it in place.
- 6.** Choose a location for your bucket stack so you won't have to move it. If you are in an earthquake zone, make sure it won't fall on your car or essential utility infrastructure in your home. Consider leaving the three buckets side by side under a tarp until you need them.
- 7.** Make sure the activated charcoal is smashed fine. It should be .08-inch to .1-inch (2 mm) in diameter. You can buy it that way (recommended) or smash it yourself (not recommended unless you need to smash something).
- 8.** Rinse all the media separately in five- to ten-pound batches by placing it in the fourth bucket, adding water, sloshing it around, and pouring the water out. Repeat this process until the water runs clear. It may take a few times, but it will increase the efficiency of the system.
- 9.** Put the rinsed media in their designated buckets: one for gravel, one for sand, one for charcoal.
- 10.** Snap the two lids with the holes on to the charcoal and sand buckets.
- 11.** Place the two cinder blocks (or whatever you're using) at a distance so the edges of the bucket can be stable on each side but leaving space in between.
- 12.** Place the charcoal bucket across the cinder blocks. Make sure it is stable.
- 13.** Center the sand bucket on top of the charcoal bucket and check for stability again.
- 14.** Put the gravel bucket on top of the sand bucket to top off the stack. Once again make sure it is stable. Place the lid with no hole loosely on top to keep out dust and dirt while you're not using your filter.
- 15.** You can pour up to three gallons of water at a time into the top bucket for filtration. Place a container on the ground under the hole, between the cinder blocks, to collect your filtered water. If the water is cloudy, it just means you didn't rinse quite well enough. Put water through until it runs clear and enjoy your drinkable clean water, master prepper!

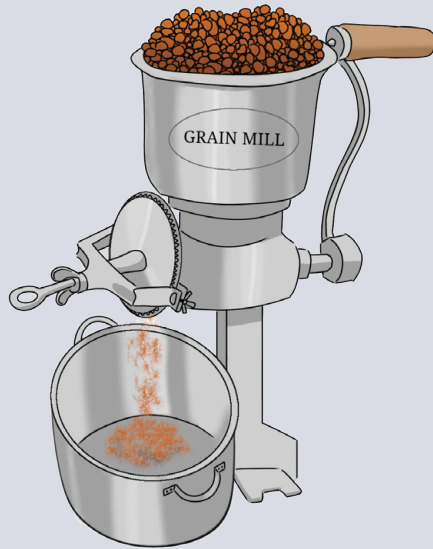


CHAPTER 2

FOOD

The *CHARD GM-150* manual grain mills are simple to use and don't require electricity. You'll be able to grind about a pound a minute and adjust the setting from coarse to fine. Just clamp it onto a table or other solid surface and you can use your preserved wheat berries whenever you like!

Illustration by Liliانا Faiella.



Super-Simple Salt Pork Recipe

INGREDIENTS:

- Pork belly
- Sea salt
- Brown sugar (optional but delicious)

DIRECTIONS:

Cut the pork belly into squares about 1-1.5" thick. This will speed up the curing time since you are creating more surface area on the pork, but you can use a whole pork belly if you like, which you may find easier to store for a long time.

Create your curing mixture which is one part brown sugar to five parts sea salt. You can leave out the brown sugar if you like, but it adds a nice flavor.

Spread a thick layer of curing mixture on an oven tray or flat-bottomed container. Lay the pork on top and cover it completely. Make sure all surfaces are covered. Use a nice thick layer for best results.

Let the pork rest for two to three days.

You'll see a lot of liquid come off the pork as the salt draws out the moisture. Remove the pork and then cover it again with fresh salt or the salt/sugar mix.

Let the pork rest for another two to three days.

After the curing process is done, rinse the pork well, and blot dry with paper towels.

If you have room in the refrigerator, store it there for maximum usefulness. If you have another cold place to store it, like an unheated basement or garage in the winter, you can hang it there to make sure rodents can't get at it.

When you are ready to use your salt pork for cooking, soak the amount you need in warm water for about an hour to get rid of the excess saltiness. You can cook up a little piece for a taste test and determine if you need to change the water and continue soaking.

Sugared Lemons Recipe

Sugared lemons are a delight! And this preservation method works for all citrus fruit. If you have extra citrus, don't let it spoil in the bowl. Grab it while it's still in good shape and try out this simple recipe that will keep for a month or more. And use organic citrus if you can, since you'll be able to eat the rind.

INGREDIENTS:

Granulated sugar

6 lemons (or the equivalent amount in oranges, limes, or other citrus fruit)

Tools

Mason jars with lids

DIRECTIONS:

Wash and dry the lemons.

Cut off the ends of each lemon and slice thinly, removing seeds.

Place a thin layer of granulated sugar on the bottom of the jar.

Add a layer of sliced lemons.

Sprinkle sugar on top and continue layering lemon slices and sugar until you fill the jar. Make sure all the lemons are sugar-covered as you go.

The lemons will start to release their juice and should be ready to enjoy in about 48 hours.

You can enjoy sugared lemons in all kinds of baking, on salads, with roasted vegetables, on salmon, chopped up on buttered toast (lemon marmalade anyone?), or as a cocktail garnish.

“Quickle” Recipe

This recipe is for quick pickles which should last in your refrigerator for a month. For longer preservation, can your pickles using the water bath canning method detailed in the canning section.

INGREDIENTS:

- Cucumbers
- Distilled white vinegar
- Granulated sugar
- Kosher salt
- Water

TOOLS:

- Jars with lids
- Wide funnel

DIRECTIONS:

Make sure you start with clean, dry jars.

Wash the cucumbers and cut into spears or slices.

Optional: flavor your pickles by adding sliced garlic cloves, peppercorns, rosemary, mustard seeds, or the classic dill. You can experiment with your favorite seasonings if you want to add a little zing and interest to your pickles.

Mix up your brine by combining:

- 1 cup water
- 1 1/3 cups distilled white vinegar
- 1/3 cup granulated sugar
- 2 tablespoons kosher salt

Bring your brine to a boil in a saucepan until the salt and sugar dissolve.

Remove from heat and allow your brine to cool for 10–15 minutes.

Place cucumbers in jar allowing enough room to completely cover with vinegar, leaving about 1/2 inch of space at the top.

Pour the brine over the cucumbers; stir, and tap the jar on the countertop to remove any air bubbles.

Seal the jars with the lids and refrigerate for two to three days. Voilà! Pickles!

DIY Sauerkraut

Sauerkraut is another great place to start if you are interested in trying your hand at fermenting! Not only is it easy and tang-a-licious, it provides your body with twenty-eight distinct strains of probiotics (good gut bacteria that aid in digestion, weight control, and all-around good health). That's better than you'll get from any expensive probiotic supplement you can buy in the store.

Stored in a dark, cool place, your homemade sauerkraut will keep for many months. The cooler the temperature, assuming it's above freezing, the longer it will last. It will continue to ferment over time, but more slowly at cooler temperatures. The refrigerator, a root cellar, or a cool basement are all ideal.

It's incredibly easy to make your own sauerkraut. All it takes is two ingredients and a lot of . . . smashing!

INGREDIENTS:

Cabbage

Salt (2 tsp. per pound of cabbage)

TOOLS:

Sharp knife

Large bowl

Tamper (or a small jar full of rocks)

Mason jar(s) with lid(s)

DIRECTIONS:

Peel off any old or discolored leaves from the cabbage.

With a large, sharp knife, cut the cabbage in half from top to bottom, through the core.

Remove the core from the cabbage.

Slice the cabbage into thin strips about 1/8" wide. Leave long strands or chop as you like.

Put the cabbage in the bowl and add the salt.

Mix it up with your hands and walk away.

Come back in 20–25 minutes, and you'll see that the cabbage has begun to give up the goods—the goods being cabbage juice!

Squeeze fistfuls of cabbage tightly in your hands or use a tamper to crush the cabbage until it is wilted. It will release even more juice. This will take 3–5 minutes.

Put cabbage and juice into the Mason jar(s), filling no more than two-thirds of the jar.

Push down on the cabbage until it is covered with brine and make sure there are no trapped pockets of air. You can put a small weighted jar of rocks on top to keep the cabbage under the liquid.

Over time your cabbage will *relax* and fermentation will begin.

Wait about two weeks, if your jar is at 65–70°F.

Put the lid loosely on the jar, and check it every day or so to release any built-up pressure.

Taste your sauerkraut. If you like the taste as it is, great! But you can wait, and your patience will be rewarded with more tang as time goes on. When your sauerkraut is pale yellow or beige, and reaches the desired tanginess, screw the cap on tight and put it in the refrigerator. It should keep for many months.

If you began the fermentation process in the fridge, sauerkraut will still happen but it will take more time. Remember, each batch will be different, so experiment with location and time, and enjoy!

Water Bath Canning 101

Water bath canning is a simple way to dip your toe in the water and decide if you want to explore the magical universe of canning your own food. This method works for acidic foods like fruits and berries, tomatoes and salsa, pickles and relishes, chutneys, pie fillings, and fruit sauces. For other foods with lower acidity, you'll need to use the pressure canning method.

TOOLS:

- Mason jars with lids and rings
- Tongs or a jar lifter
- Measuring cup
- Wide-mouth funnel
- Dish towels
- A large vessel like a deep stock pot
- A wire rack that fits inside the pot (or a dish cloth)

DIRECTIONS:

First, find a recipe you want to try, and gather your ingredients. Always choose fresh produce in good condition. You can prepare your recipe before or during the rest of the process.

Put the wire rack or a dish towel at the bottom of your stock pot to make sure water and heat completely surround the jars; place the empty Mason jars on the rack and fill the pot with water to submerge the jars.

Put a lid on the pot and bring the water to a boil. Add the lids and seals to the pot and boil for 3–5 minutes to sterilize them. Sterilization is what will allow you to keep your goodies edible for at least a year after canning.

Using the tongs, carefully lift the jars, lids, and rings from the stock pot; empty the jars and set them, along with the lids



Illustration by Liliانا Faiella.

and rings, on a clean kitchen towel on the countertop to dry. Be very careful you don't burn yourself.

Use the funnel to fill the jars with your delicious jam (or whatever you've chosen) and leave about $\frac{1}{2}$ inch of room at the top of the jar. Be sure your mixture is warm when you put it in the jar.

Using a damp cloth or paper towel, wipe the rims of the jars so they are clean. Don't touch the rims with your fingers.

Center the warm lid on the jar, and screw the ring securely, but not super tightly around the lid to hold it in place.

Using the tongs or jar lifter, return the sealed jars to the stock pot. Now your jars will be full so they will displace more water, and you may need to remove some of the water from the pot so it doesn't overflow. You can use a measuring cup for this. The jars should be submerged about an inch under the water.

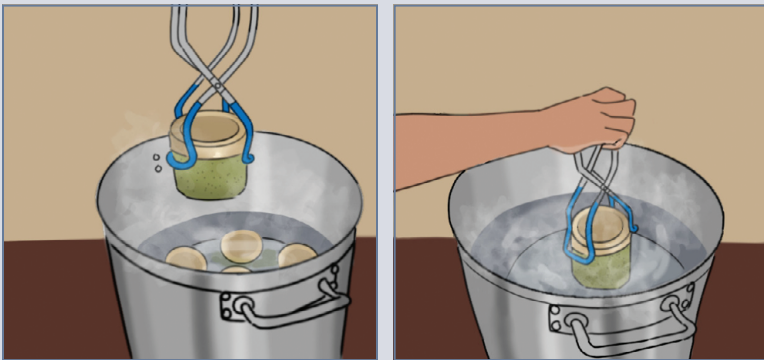


Illustration by Liliانا Faiella.

Allow to boil, following your recipe for the specified amount of time.

Remove pot from heat, and carefully remove your jars from the water and place them back on the towel. As the jars cool, you should hear a lovely popping noise which tells you that the jar has sealed properly.

Test your seals! After the jars have cooled, remove the ring and lift the jars from the edge of the lid a few inches off the counter. Do the lids feel firmly affixed to the jar? Congratulations! You did it!

Now, in January you can enjoy the scrumptiousness of a tomato sauce from your garden, or strawberry jam, or crunchy pickles.

ARE YOU READY?

- _____ Have you obtained the eight Armageddon foods?
- _____ Do you have a system in place to store your shelf-stable pantry staples (such as using desiccants, oxygen removers, and mylar bags inside five-gallon buckets)? Or maybe your plan is to just have extra staples on hand and rotate through them?
- _____ Have you gone down the list of supplemental foods and made sure you have an adequate supply for 2,000 calories per day for everyone in your family for at least two weeks? Or are you making a plan to obtain these foods over time?
- _____ Have you factored in the special dietary needs of pets, babies, elders, or anyone with food allergies or special dietary requirements?
- _____ Have you marked Prep Day on your calendar twice a year to check your food and water stores to rotate out what needs to be used, and replace it with new?
- _____ Have you taken your time to peruse the canned food section of the supermarket to see what kinds of shelf-stable foods are available canned?
- _____ Are you practicing best produce-extending tricks and food storage techniques to extend the life of your perishable food?
- _____ Do you have paper copies of favorite recipes that will be easy to make from your pantry staples?
- _____ Have you tried at least one type of food preservation technique like dehydrating, pickling, canning, or fermenting?
- _____ Do you have a few favorite books of easy recipes or printed copies of recipes to use in case you lose the internet or electricity?
- _____ After evaluating your food preparedness, have you thought of investing in:
 - a food dehydrator
 - a vacuum sealer and bags
 - a canning pot
 - a pressure canner
 - a grain mill



CHAPTER 3

FORAGE, FARM, AND MICROGARDEN



Shaggy mane mushrooms, pineapple weed, and cranberries from an evening walk in Interior Alaska.



This is my own chemical-free yard/dandelion harvesting ground!
It's easy to enjoy the young leaves, early blossoms, and roots!
And my family weren't the only ones who got to feast!



Plantain



Chickweed



Chicken of the Woods



A surprise trove of foraged bolete mushrooms and blueberries. This is why you should always carry a knife!



Porcini



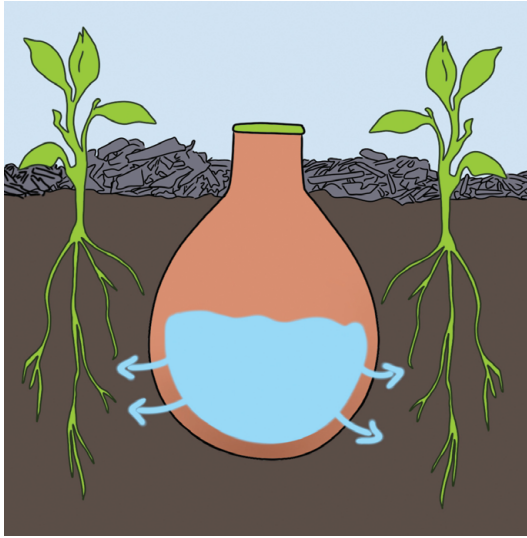
Chantrelles



Morels

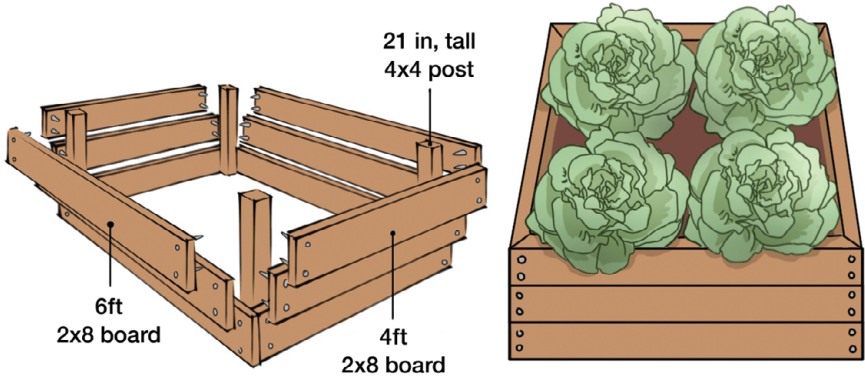


Sprouts



An Oya

Illustration by Liliانا Faiella.



Raised Beds

Illustration by Liliانا Faiella.

How to Grow Lettuce Microgreens

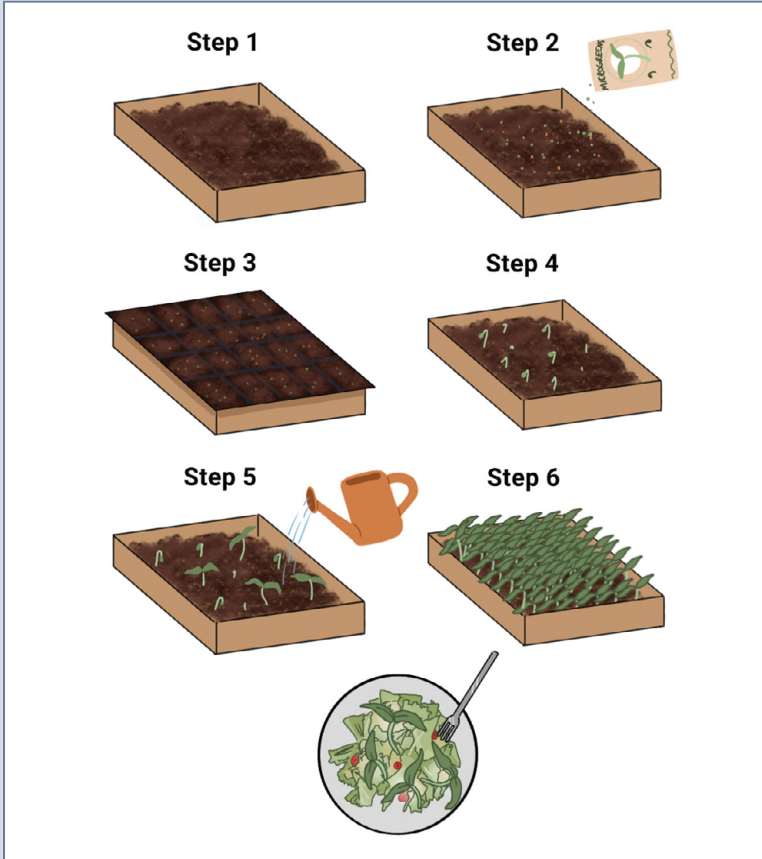


Illustration by Liliana Faiella.

Unlike sprouts, microgreens will need some sunlight or a grow light to develop the dark green chlorophyll in their leaves, so pick a sunny window or set up a small grow light. Then decide what size of tray or pot you can fit in that space. Let's say you can fit a standard-size seed-starting tray which is about 10" x 20" x 2.5".

- Pour 2 cups of water in the bottom of the tray.
- Fill the tray with fine seed-starting mix leaving about one-half to two-thirds of an inch of space at the top lip of the tray.

- Lightly compact the soil and make sure it's flat on the surface.
- Take about an ounce and a half of lettuce-mix seeds and sprinkle them evenly over the top of the soil. They will be very densely spread on the surface.
- Spray the top of the soil with enough water to make the surface wet but not soggy.
- Set another empty tray right on top of the seeds. They won't need light to sprout.
- Check back in a few days and you should see that sprouting has begun!
- A few days after sprouting, remove the tray, then water (without water-logging) and put the tray in the sun or about 8 inches under a grow light.
- Continue to water and check the progress of your microgreens.
- They should be ready to harvest about two to three weeks from planting, once true leaves have appeared.
- Harvest with scissors and enjoy!

Propagating Herbs from Scraps

- Start by cutting off the top three or four inches of the herb stem.
- Leave the first two sets of leaves on the top of the stem and remove everything below that.
- Then place the freshly cut stem in a glass of water. Use bottled spring water if your tap water is treated with chlorine or water softener.
- Make the water deep enough that it covers where you plucked off the lower set or two of leaves.
- Then place the herbs on a sunny windowsill.
- Change the water every few days.
- Be patient because it might take a few weeks to see new roots emerge.
- Once the roots are an inch long and begin to send off side roots, you can carefully plant in fine seedling soil mix in a pot with good drainage.



It's easy to propagate store-bought basil! This took about two weeks.

How to Compost

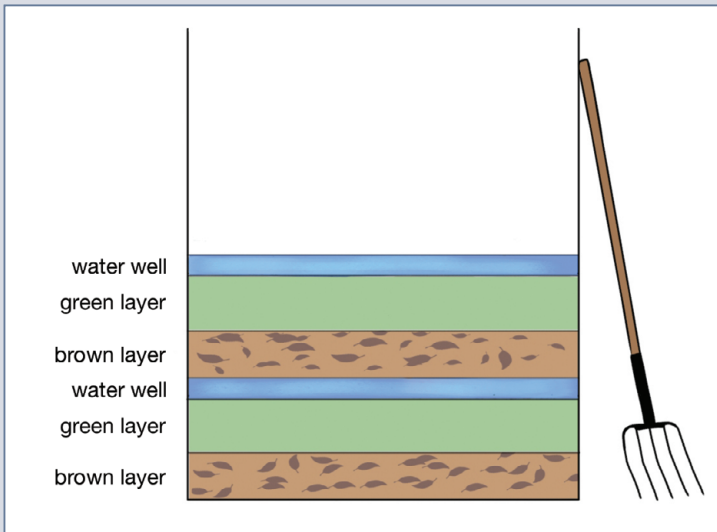


Illustration by Liliانا Faiella.

- Add your brown and green materials as you collect them from your yard or green space. If you have large twigs or branches they will need to be shredded or chipped to a small size.
- When you add something new, moisten the pile. You can also use a tarp to cover the pile to help retain moisture.
- Add roughly equal amounts of browns and greens, and once your pile is established you can start putting food scraps in it, about eight to ten inches under the top of the compost.
- Every few weeks you should “turn” your compost, which means using a pitchfork or shovel to move your compost around so what’s in the middle ends up on the edges, and what’s on the edges ends up in the middle. This is to aerate the compost and make sure your microbes are getting enough oxygen, and to adjust your brown/green ratio in case you had too much of one in the same place.
- If everything is going well, and your little microbe community is thriving, your compost will get warm! Do not be alarmed because this is a good sign. If you want to get fancy, you can buy a compost thermometer and take its temperature. If you want to speed up the process, turn the compost

when it gets below 120 degrees. That way your super-oxygenated critters will break down that material in record time.

Composting is an art and a science. As a survival skill, this is one to consider long-term. If a hurricane strikes, you won't be trying to make a compost pile. But if you've already got one going and are using it to help increase your supply of DIY food, then you are on the way to becoming a little more sustainable and less affected by supply chain interruptions.

ARE YOU READY?

- Foraging

What you need to bring will depend on where you are foraging, and what you are foraging for, but here's a good comprehensive list.

- ___ Rain poncho or lightweight raincoat
- ___ Comfortable waterproof shoes/boots
- ___ Tall socks with lightweight long pants tucked in to prevent ticks
- ___ Lightweight long-sleeved shirt
- ___ Field guide (or any printed resource with good illustrations or photos)
- ___ Snacks
- ___ Water
- ___ Hand sanitizer
- ___ Fully charged cell phone
- ___ Printed map of the area/GPS device/compass or whatever gets you back to where you started
- ___ Ziplock bags, small Tupperware containers, or cloth bags for your harvest
- ___ Sunscreen
- ___ Hat
- ___ Insect repellent
- ___ Scissors
- ___ Benadryl, in case of insect stings
- ___ Basic first aid items like bandages and first aid cream
- ___ Utility knife
- ___ Emergency foil blanket
- ___ Small noisemaker or air horn to deter uninvited wildlife
- ___ Bear bells

- Sprouts

- ___ Mason jar
- ___ Cheesecloth and rubber band, or sprouting lid with screen
- ___ Sprouting seeds
- ___ Water

- Microgreens
 - _____ Sprouting tray
 - _____ Sprouting soil
 - _____ Microgreen seeds in bulk
 - _____ Grow light, if necessary

- Container gardening
 - _____ Indoor light setup, if necessary
 - _____ Containers with holes the appropriate size for your crop
 - _____ Drip trays
 - _____ Soil for container gardening
 - _____ Fertilizer (for indoor or outdoor use as appropriate)
 - _____ Watering can or hose with rain shower attachment
 - _____ Mulch

- Raised beds
 - _____ Board lumber
 - _____ Bracing blocks
 - _____ Three-inch outdoor/decking screws
 - _____ Cordless drill
 - _____ Soil for raised beds
 - _____ Mulch

- Gardening supplies
 - _____ Shovels
 - _____ Shears/snips
 - _____ Hose or watering can with rain shower attachment
 - _____ Fertilizer
 - _____ Mulch
 - _____ Gardening gloves

- Composting
 - _____ Compost bin (outdoor or indoor, as appropriate)
 - _____ Green matter
 - _____ Brown matter
 - _____ Water
 - _____ Pitchfork
 - _____ Flat shovel
 - _____ Gardening gloves



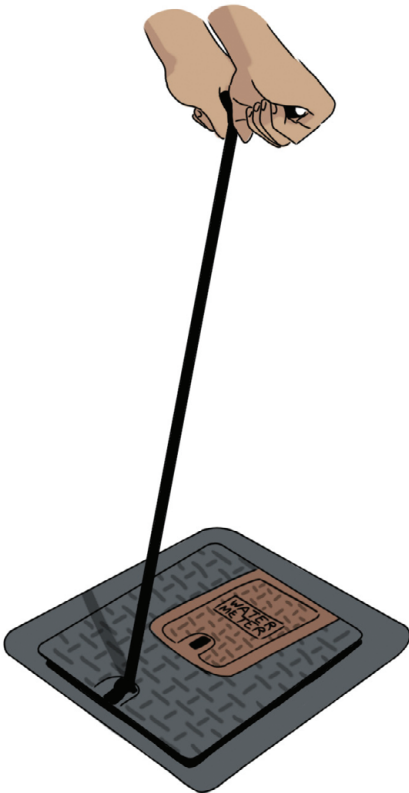
CHAPTER 4

ORGANIZATION

ARE YOU READY?

- Do you have a system of storage that works for you: labeled boxes, totes, ActionPackers?
- If you are on the ground floor or are storing things in the basement, do you have items off the floor?
- Have you maximized storage space in each of the zones in your home: bedroom, bathroom, kitchen, living spaces, basement/attic/storage?
- Have you digitized your important documents to the cloud and a portable hard drive/thumb drive, and are they in a safe place like a fireproof safe?
- Have you assembled your emergency binder?
- Do you have enough room to keep emergency supplies accessible and safe? You may need to go through the rest of the book to determine the answer to this question.

SHELTER

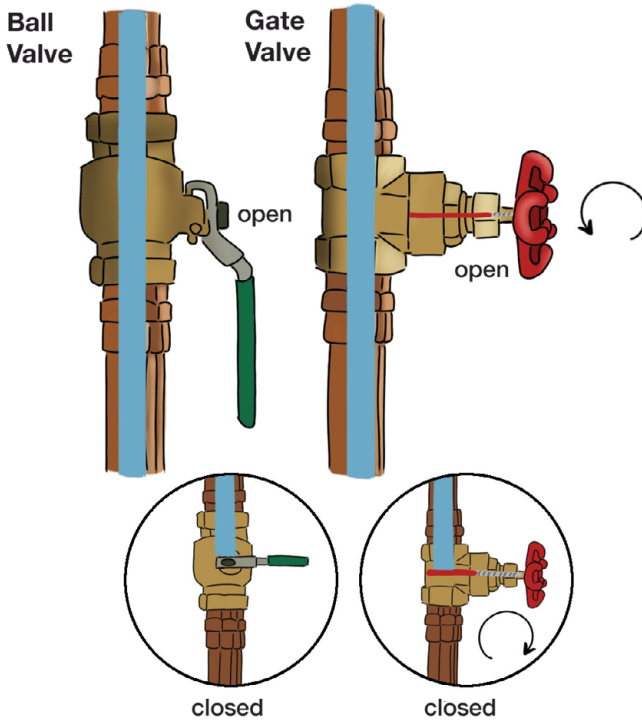


Main Water Valve Cover

Illustration by Liliana Faiella.



Meter key.

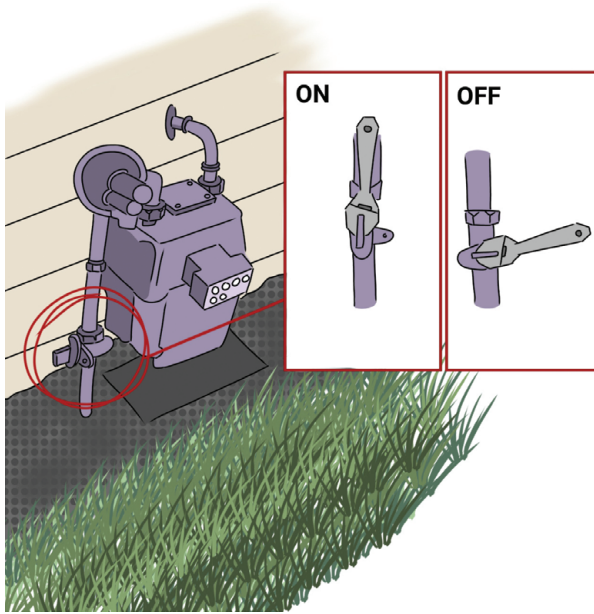


Shutting Off the Water at the Main Valve

Illustration by Liliانا Faiella.

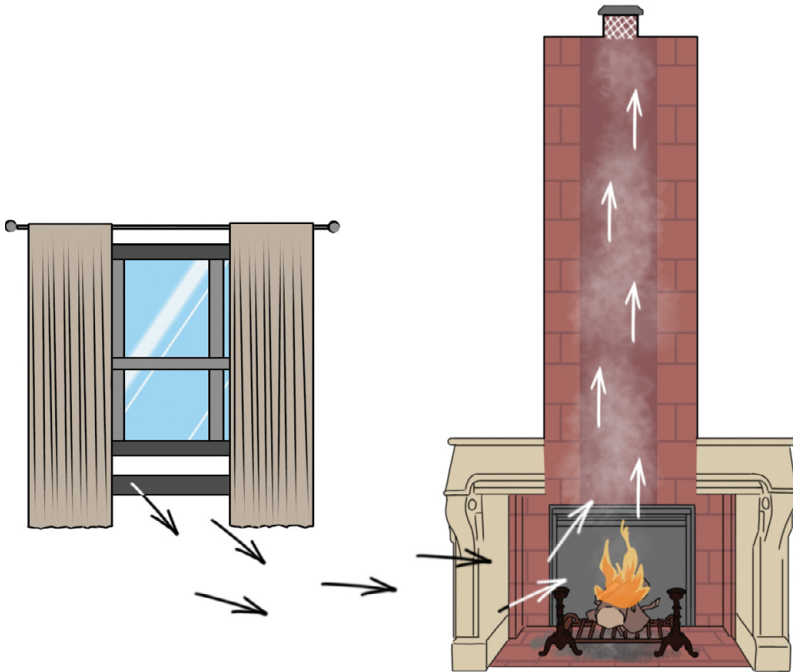
This is a GFCI breaker.
 All outlets in your kitchen and
 bathrooms should look like
 this. If they don't, put it on
 your list of things to fix ASAP!





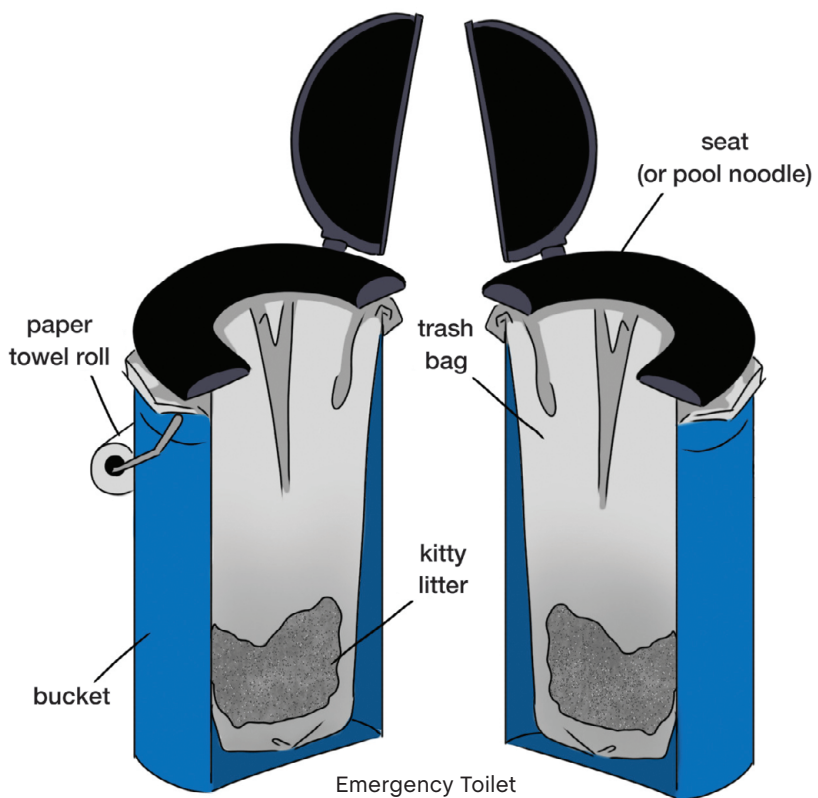
Turning Off the Gas at the Main Valve

Illustration by Liliانا Faiella.



Wood-Burning Fireplace

Illustration by Liliانا Faiella.



Emergency Toilet
Illustration by Liliانا Faiella.

ARE YOU READY?

Home shelter

- _____ Complete home assessment and make a targeted to-do list.
- _____ Get a good home repair manual.
- _____ Have a professional inspect and assess your home.

Your utilities

Water

- _____ Find and label your water main valve.
- _____ Tell all household members where it is.
- _____ Leave directions to shut off main water valve.
- _____ Check individual fixture water valves.

Gas

- _____ Find main gas valves.
- _____ Label main gas valve with diagram.
- _____ Find and check individual fixture gas valves.
- _____ Tell all household members where the main gas valve is.
- _____ Leave directions on how to shut off gas.

Electricity

- _____ Locate circuit breaker box.
- _____ Post directions on how to shut off electricity and label breakers.

Secondary utility requirements

- _____ Assess needs and obtain backup energy sources for light and heat.
- _____ Obtain gas cans, stabilizer, and gas to store if applicable.
- _____ Have the components on hand to make an emergency toilet.
- _____ Assemble your basic tool kit.

Office shelter

- _____ Know evacuation routes and emergency procedures.
- _____ Assemble emergency supplies.

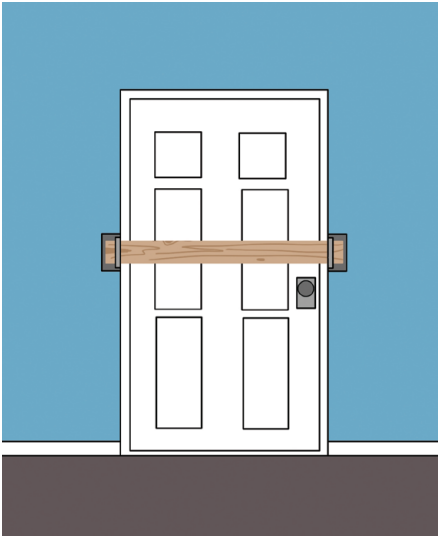
Assemble preparedness kits

- _____ Wallet
- _____ Handbag
- _____ Kids' backpacks
- _____ Special items and pets
- _____ Car mechanical
- _____ Car survival
- _____ Car cold-weather kit, if applicable



CHAPTER 6

SAFETY AND SECURITY



Interior entry door with bar installed.

Illustration by Liliana Faiella.



Padlock on garage door.



The Club.



Your camouflage color palette:
Autumn Ninja.

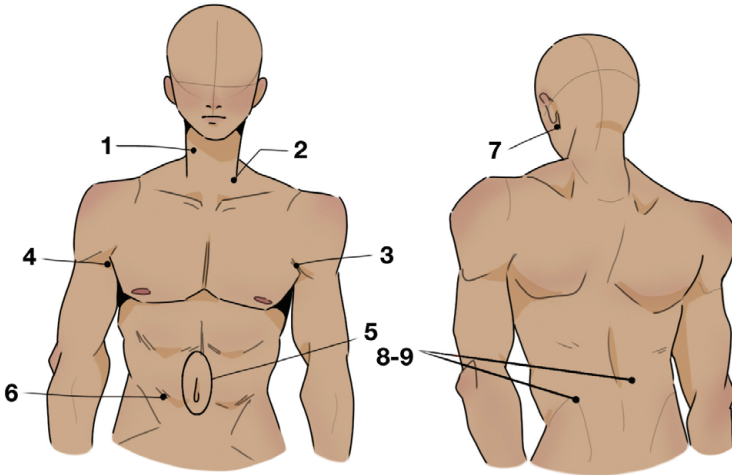


Tactical light gear.

Public domain photo courtesy of United States Navy.



Ballistic sunglasses.



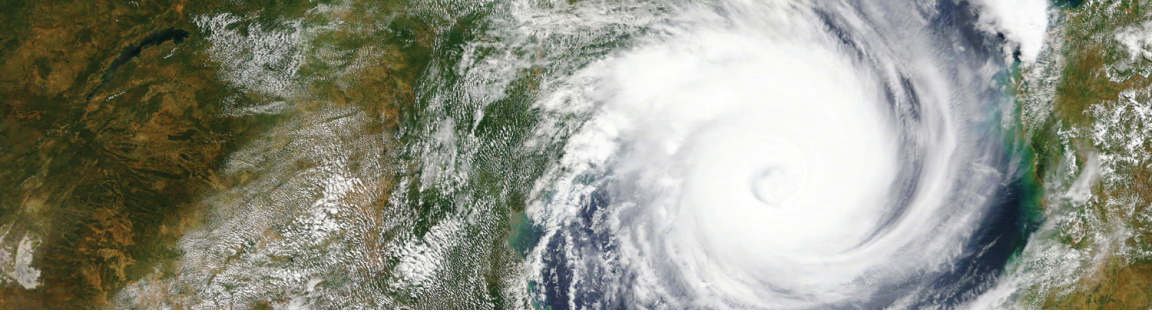
9 Fatal Stab Points
Illustration by Liliana Faiella.

ARE YOU READY?

- _____ Are all locks on your property and in your home functional and well-maintained? Do you have dead bolts (preferably single-sided ones at entry doors as well)?
- _____ Have you chosen and configured a safe room inside your home?
- _____ Do you have wood wedges for all external doors and your internal safe room?
- _____ Do all your windows have shatterproof glass, steel shutters, window film, or other reinforcements?
- _____ Do sliding windows and doors have dowel bars?
- _____ Do garage doors have slide locks or padlocks?
- _____ Do you have adequate external lighting so you can see what's outside and who is coming or going?
- _____ Do you have a security system with recording capability?
- _____ Do you have a siren or strobe light to deter unwanted guests?
- _____ Do you have a club safety device for your car?
- _____ Do you have a dark blanket or privacy shade in your car?
- _____ Have you practiced situational awareness exercises?
- _____ Do you have at least a couple of sets of clothing that are *grey* and unremarkable so you can blend into a crowd?
- _____ Is your car a neutral color and free from all bumper stickers or decoration?
- _____ Have you read about and considered protective methods such as smoke bombs or body armor?
- _____ Have you read about and considered carrying defensive sprays like mace or pepper spray?
- _____ Do you know the weak points on the human body in case you are assaulted and must fight back?

IF YOU ARE GOING TO HAVE ACTIVE DEFENSIVE MEASURES LIKE OWNING A FIREARM, HAVE YOU:

- _____ Considered thoughtfully what type of firearm and ammunition will serve your needs?
- _____ Purchased and installed a gun safe prior to purchasing the weapon?
- _____ Taken at least twelve hours of training in the weapon you will be using?
- _____ Committed yourself to gun safety, educating all members of your household, locking the weapon at all times when it is not in use, and leaving it unloaded?



CHAPTER 7

DISASTERS

FREQUENCY OF DAMAGING EARTHQUAKES SHAKING AROUND THE U.S.

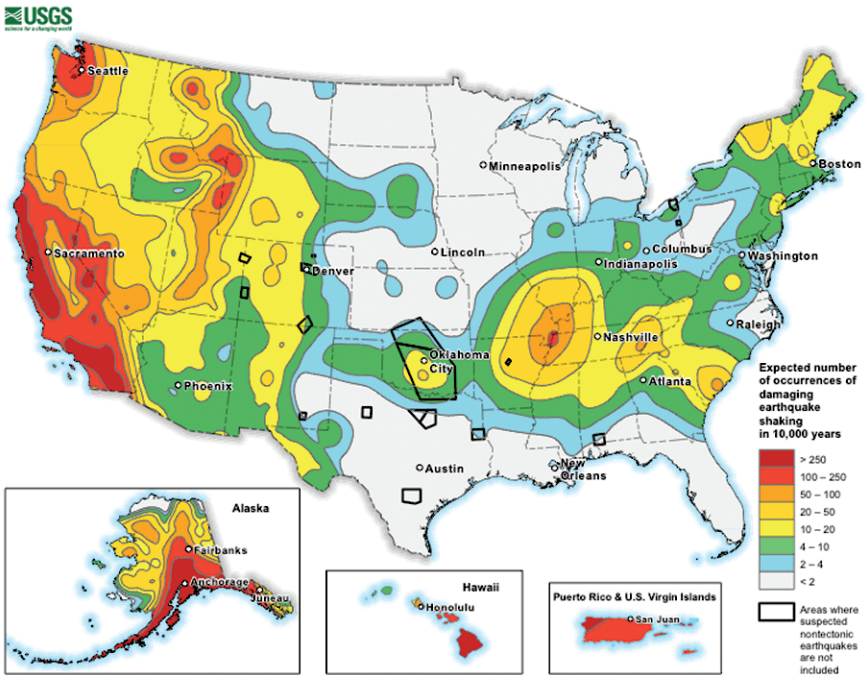


Image courtesy of United States Geological Survey.



Image courtesy of National Weather Service.

MAP OF FLOODING RISK

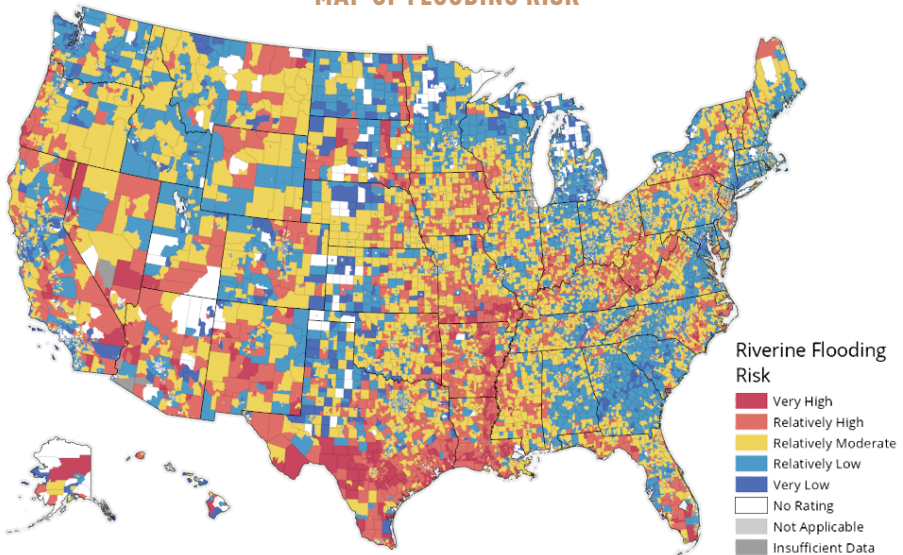
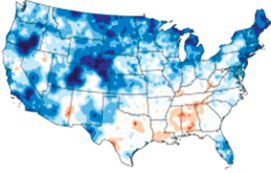


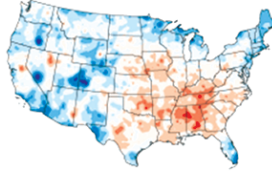
Image courtesy of FEMA.

U.S. ANNUAL TEMPERATURE COMPARED TO 20TH-CENTURY AVERAGE

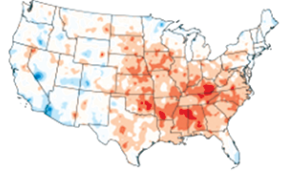
1901-1930



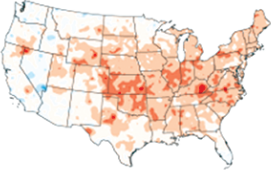
1911-1940



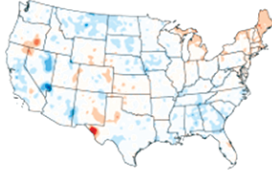
1921-1950



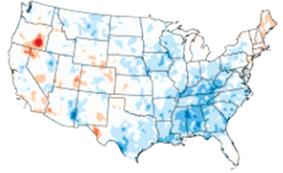
1931-1960



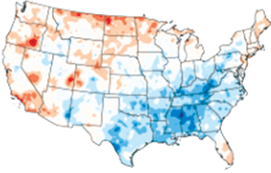
1941-1970



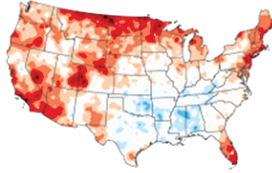
1951-1980



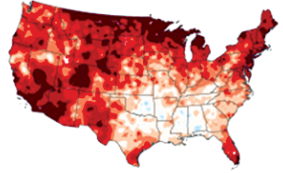
1961-1990



1971-2000



1981-2010



1991-2020

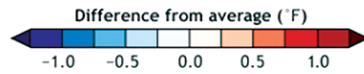


Image courtesy of NOAA.

RECOMMENDED DOSES OF KI FOR THRESHOLD THYROID RADIOACTIVE EXPOSURES

| | Predicted Thyroid gland exposure (cGy) | KI dose (mg) | Number or fraction of 130 mg tablets | Number or fraction of 65 mg tablets | Milliliters (mL) of oral solution, 65 mg/mL |
|------------------------------------|--|--------------|--------------------------------------|-------------------------------------|---|
| Adults over 40 | > 500 | 130 | 1 | 2 | 2 mL |
| Adults 18–40 | > 10 | 130 | 1 | 2 | 2 mL |
| Pregnant or lactating women | > 5 | 130 | 1 | 2 | 2 mL |
| Adolescents 12–18 | > 5 | 65 | 1/2 | 1 | 1 mL |
| Children 3–12 | > 5 | 65 | 1/2 | 1 | 1 mL |
| Children 1 month–3 years | > 5 | 32 | Use KI oral solution* | 1/2 | 0.5 mL |
| Infants, birth–1 month | > 5 | 16 | Use KI oral solution* | Use KI oral solution* | 0.25 mL |

* Each milliliter contains 65 mg of potassium iodide. You should take this dosage once every twenty-four hours until the danger has passed or as advised by a medical professional.

BLOOD DONATION INFORMATION

| Type | % of US Pop. | Best Donation | You Can Donate To | You Can Receive Donations From |
|------|--------------|---------------------------------|-------------------|--------------------------------|
| A+ | 34% | Platelets Plasma | A+, AB+ | A+, A-, O+, O- |
| A- | 6% | Double Red Cells Whole Blood | A-, A+, AB-, AB+ | A-, O- |
| B+ | 9% | Platelets Plasma | B+, AB+ | B+, B-, O+, O- |
| B- | 2% | Double Red Cells Whole Blood | B-, B+, AB-, AB+ | B-, O- |
| O+ | 38% | Double Red Cells Whole Blood | O+, A+, B+, AB+ | O+, O- |
| O- | 7% | Double Red Cells Whole Blood | All Types | O- |
| AB+ | 3% | Platelets Plasma | AB+ | All Types |
| AB- | 1% | Platelets Plasma | AB-, AB+ | AB-, A-, B-, O- |

ARE YOU READY?

Be prepared

- _____ Analyze and determine which disaster zones you live in and which disasters are most likely in your area
- _____ Prepare in advance by using the customized disaster lists for *all* your potential disasters
- _____ Know what to do during and after your likely emergencies
- _____ Download the Red Cross app
- _____ Download the FEMA app
- _____ Download the CDC app

Be a helper

- _____ Take a class from the Red Cross
- _____ Donate blood
- _____ Volunteer with the Red Cross, Meals on Wheels, or other community organization
- _____ Reach out and meet your neighbors
- _____ Create a neighborhood emergency group



CHAPTER 8

EVACUATION AND HOW TO PACK YOUR E-BAG

ARE YOU READY?

- _____ Have an official household emergency evacuation plan.
- _____ Everyone in your household knows the plan and has a physical copy of it in a wallet or backpack.
- _____ Know more than one route to your evacuation site.
- _____ Know your local community's emergency plan and shelter locations.
- _____ Establish a family member or friend to be a common contact for your household members in case they can't communicate with each other.
- _____ Establish a physical location where household members can meet up if they get separated or if they are not together when a disaster happens.
- _____ If you are using a car to evacuate, make sure your emergency supplies are in your car and your car is in good working order.
- _____ If you are relying on someone else, make sure your plans are clear and cast in stone, and also have a Plan B—follow up periodically to make sure the plan is up-to-date.

- If you are using public transport, know routes and availability, and contact your local authorities to find out how it will operate in an emergency.
- Download the Red Cross Shelter Finder app.
- Pack your own basic e-bag.
- Customize your e-bag as appropriate.
- Pack customized e-bags for household members.
- Create your list of last-minute items and place on top of contents in everyone's e-bag.
- Acquire necessary survival clothing and make a clothing plan that's included on your e-bag list.

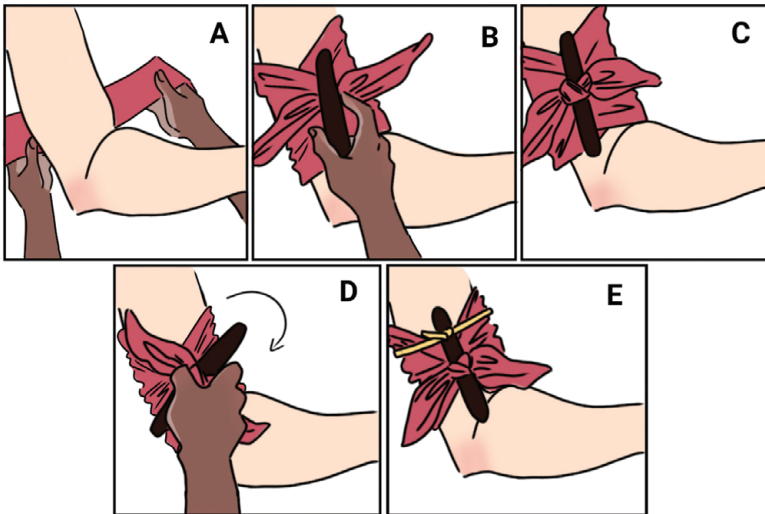


Illustration by Liliana Faiella.



CHAPTER 9

WELL-BEING



How to Tie a Tourniquet

Illustration by Liliana Faiella.



Forward Fold

Illustration by Liliانا Faiella.



Legs Up the Wall

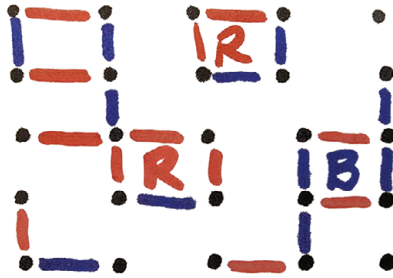
Illustration by Liliانا Faiella.



Child's Pose

Illustration by Liliانا Faiella.

DOTS AND BOXES



SALVO

| | A | B | C | D | E | F | G | H | I | J |
|----|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | | | | | | | | X |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | X |
| 5 | | | | | X | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | X | X | X | | | | | X | |
| 9 | | | X | | | | | | | |
| 10 | | | | | | | | | | |

YOUR FLEET

| | A | B | C | D | E | F | G | H | I | J |
|----|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | X |
| 2 | | X | | | | | | | | X |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | X | X | X | X | X | |
| 6 | | | | | | | | | | |
| 7 | | | | X | | | | | | |
| 8 | | | | | | | | | X | |
| 9 | X | | | | | | | | | |
| 10 | | | | | | | | | | |

ATTACK MAP

ARE YOU READY?

- _____ Review basic hygiene items and build a two- to three-month supply.
- _____ Take a basic first aid class that includes CPR, defibrillator training, and traumatic injury care.
- _____ See if your workplace is interested in taking a group first aid training.
- _____ Assemble home first aid kit.
- _____ Assemble car first aid kit.
- _____ Check on the first aid kit at work. Does it exist? Is it stocked?
- _____ Make sure everyone in your household is current on all vaccines in consultation with your doctor.
- _____ Talk to your doctor about having an extra supply of prescription medication for emergencies.
- _____ Keep track of your sleeping patterns and try to improve them.
- _____ Get into good exercise habits before a disaster so you are healthier and better able to cope.
- _____ Learn some new games and ways to keep everyone entertained without screens.
- _____ Ask neighbors and friends if they want to be included in your disaster network for check-ins and assistance.
- _____ Have an electronic copy *and* a hard copy of all names and contact numbers of your list of friends and neighbors in your home, on your phone, in your car, and in your evacuation bag.
- _____ Get at least one bicycle for your household for exercise and transportation in an emergency situation.
- _____ Think about a solar charger for devices, and always have spare batteries and an external battery storage device.
- _____ Have a landline.
- _____ Keep a copy of all emergency numbers in an obvious place: on the refrigerator, on the door, on a corkboard, next to a landline, etc. There's also a place to write them at the end of this book.
- _____ Always look out for yourself and be good to your body and mind.
- _____ Always look out for your people.

RECIPES AND NUTRITION

BADASS SURVIVAL FOOD RECIPES FROM HISTORY

Remember that the best recipes are the ones handed down through generations. In today's world that means all those links you've saved, and digital files don't count. Be sure to keep actual recipe books or some of your own favorite recipes on paper in a binder or an old-fashioned recipe box so you have them in case the internet goes down or your hard drive is compromised. Your recipe file will be no good to you if you can't get at it!

As with many survival-related tips and tricks, there's a lot we can learn from our ancestors. Those people were figuring out how to eat and what to eat when the whole world was like a giant TV survival show. The fact that any of us are even here means our forebears were, in fact, badassesses who learned, taught, and applied the lessons of food preservation successfully enough to create new generations without dying of food poisoning. So, give the old ones a pat on the back and learn how to make some fascinating food that can last sometimes for decades!

Hardtack

Hardtack is definitely not going to grace the cover of *Bon Apétit* any time soon, but if you ever really need it, you won't care. Relive some culinary history and whip up a batch of hardtack, used by our ancestors to carry on long journeys. Hardtack is as basic as it gets and about as yummy as it sounds. With only three ingredients—flour, water, and salt—it's got a long and storied history dating at least as far back as 6000 BC!

Hardtack has been known by many names (pilot bread, sea biscuit, molar breakers, sheet iron) and was used during long sea voyages, as a necessity of frontier life, and as standard ration for armies and navies from the seventeenth until the early twentieth century. Hardtack was often baked multiple times to remove as much moisture as possible so it would last longer.

Civil War soldiers (who started off using leftover hardtack from the Mexican-American War almost two decades earlier) soaked it in water or coffee to avoid that molar-breaking hazard, but it kept them alive and it stays edible for a *very* long time. If you could get your hands on some original Civil War hardtack, you could still eat it. At the very least, you could frame it and sell it at auction for five hundred dollars. Yep, that happened.

Sailor Boy brand pilot bread (a commercial brand which is softer than traditional hardtack) is still a staple in one US state. Alaskans consume more than 95 percent of all the pilot bread made, and for good reason. Outdoorspeople, campers, and the large numbers of Alaskans who live in the bush consume it regularly. A PB&J on pilot bread is as Alaskan as the midnight sun, and just as dependable.

Even if you're lucky enough to live in an area where you can find this arctic treat in the grocery store, hardtack is also a fun foolproof recipe to make with your kids, while explaining preparedness and giving a little history lesson at the same time.

Basic and Indestructible Hardtack Recipe

Don't use self-rising flour. White all-purpose flour will give you a product that lasts much longer than if you use other flours. Additionally, the salt is optional, but it will act as a preservative and your hardtack will stay good longer.

INGREDIENTS:

- 3 cups white all-purpose flour
- 1 cup water
- 2 tsp salt

DIRECTIONS (MAKES 12-16 CRACKERS):

Preheat oven to 375° F.

Combine the flour, salt, and water in a bowl and stir.

Your dough should be dry enough that it doesn't stick to your fingers. If your dough is too wet, sprinkle small amounts of flour into the dough until it reaches a drier consistency.

When your dough holds together, knead it into a ball. Work the dough with both hands until it has a uniform consistency that feels like Play-Doh.

Lightly flour a surface and roll out the dough to a uniform thickness of one-quarter to one-third inch. The thickness is important to make sure that your dough dries out thoroughly when you bake it.

Cut the dough into square pieces, roughly 2-3 inches each.

Poke 9-12 holes in rows in the hardtack with a chop stick, a nail, or a skewer. This will help keep the hardtack flat and dry. Make sure the hole goes all the way through the dough.

Place the pieces on a baking sheet and bake for thirty minutes.

Flip the pieces and bake for an additional thirty minutes.

When the hardtack has finished baking, remove the pieces with a spatula and let them cool on a rack. (Air circulation will keep the hardtack dry. Are you sensing a theme? Dry is what we want.)

After they have completely cooled, put the hardtack in an airtight container until you, or your children, or your children's children's children want to use it!

Remember to soak your hardtack before eating it so you don't destroy any dental work! This recipe is not meant to be a delightful crispy cracker or soft biscuit. These are hard-core last-forever calories. You can soak your creation in water, coffee, milk, or broths and soups (and some soldiers even smashed it up and soaked it in whiskey). Do what you need to do.

Pemmican

Pemmican traces its roots to Native Americans who used it as a staple. It's much better tasting than hardtack (which, granted, is not a high bar) *and* it actually contains enough nutrients that you could eat nothing but pemmican and survive for a very long time. Fur-trade journals and other records from the nineteenth century speak of pemmican as *the bread of the wilderness*.

It's easy to carry and store, doesn't require refrigeration, and there are only a few ingredients, although you can get creative and add nuts, honey, or experiment with different types of meats and berries. All these things make it a top-notch survival food that's also fun to make and eat.

Super basic pemmican requires only one ingredient: meat. But you can significantly add to the taste and nutritional value of pemmican by adding blueberries, currants or other berries; walnuts, pistachios, or almonds; and even honey.

Pemmican was originally made using wild game meat like buffalo, moose, caribou, or venison, which tend to be lean. You can also use a lean cut of beef which is what most people use now. Avoid pork which is too fatty. Also don't use bear and porcupine—you know . . . if you happen to have some lying around.

The idea is to completely dehydrate the meat and berries, crush them into a powder, and then bind them together with liquid fat. Then you can cut or shape the pemmican into little cakes and store it. Pemmican is basically like an Armageddon breakfast bar.

Ten pounds of pemmican is enough for one person to survive on for a month in a lockdown situation. To make ten pounds of pemmican you'll need to start with about fifty pounds of meat. Of course, if you don't want to go through all that, there are now companies that sell pemmican and you can go online and order it. But then you won't have bragging rights.

INGREDIENTS:

- 6 pounds beef
- 2 pounds tallow
- 1/2 cup berries

TOOLS:

- Food dehydrator (optional, but nice)
- Vacuum sealer (also optional, also nice)
- Sharp knife
- Food processor, blender, or mortar and pestle

DIRECTIONS:

Trim as much fat as possible off the meat and cut the meat into *very thin* strips.

Dry in a food dehydrator until the meat cracks and breaks. If it bends, there's still too much moisture. If you don't have a dehydrator, you can use your oven at the lowest setting possible (about 130 degrees) and put the meat strips directly on the rack. Be sure to put some foil at the bottom of the oven to catch drips.

Do the same thing with the berries. Put the berries on a sheet of aluminum foil with the sides turned up, and spread the berries out into a single layer. Then put the foil on the rack.

As you are dehydrating, leave the oven door open a crack so you don't trap moisture inside. This is especially crucial if you have a gas oven which tends to generate a moister heat than an electric oven.

Leave the meat and berries in the oven until the meat is completely crunchy and breakable. This will take about twelve to fifteen hours. Yes, *hours*. You're going to have to plan a Pemmican Day when you're barbecuing or getting takeout for dinner.

Render the tallow into a liquid form by cutting into small pieces, putting it in a pot on medium heat on the stovetop, stirring every few minutes, and waiting for it to liquefy. This takes patience, but you've already spent fifteen hours watching meat dry, so you're a champ. You'll end up with some *cracklins* that don't melt away and have turned a nice golden brown. You can spoon those out and eat them with salt or seasoning, or earn huge human points by saving them for your dog who has been patiently watching you this whole time and smelling meat all day.

Crush the fully dehydrated meat and berries (and nuts if you use them) into a fine powder using a food processor or a blender. If you don't have either, you can try rolling up your sleeves and do it the old-fashioned way with a mortar and pestle. You can even smash the meat with a hammer, a block of wood, a rock, or whatever you have. The objective is to get the meat as finely ground up

as you can. If there is smashing involved, remember that the original pemmican makers laid down a buffalo hide first to catch all the bits of flying meat particles. If you don't have a buffalo hide, a tarp is acceptable.

When you've blended the dry ingredients, pour in *just enough* fat and work it in so that everything is totally coated and sticks together in a cohesive way. Don't add so much fat that there's residue in the bottom of the bowl.

If you have a vacuum sealer, seal the pemmican in bags, or put it in ziplock bags and press it flat, squeezing out all the air you can before sealing. The less air, the longer your pemmican will last.

Store in a cool, dry place.

Fruitcake

The Cake that Never Dies

When you think of delicious baked goods, what springs to mind? Brownies? Fresh blueberry muffins? Rarely does anyone think about the baked good that is the king of them all, a storied treat from the annals of history that will outlive and outlast generations of mere mortals. One that actually improves with age. A sweet so decadent that it was outlawed in Continental Europe in the 1800s for being *sinfully rich*, and yet so nutritious that it passed the stringent standards of NASA as an astronaut survival food and even went to the moon! A dessert so very regal it is the traditional wedding cake of the British royal family to this day. We refer, of course, to the noble fruitcake.

Deep dark, rich, brandy-soaked fruitcakes are so long-lasting they truly rate as a survival food. They take time and patience to make, but when prepared and stored correctly they will stay delicious and safe to eat for many years.

In ancient Rome, soldiers brought a fruitcake called *satura* to the battlefield. It was a mixture of barley mash, pine nuts, pomegranate seeds, raisins, and honeyed wine. That sure beats the heck out of hardtack for a wartime snack! Gold star for the Romans!

The ingredients have morphed over the course of history and geography depending on which fruits and nuts were available. The fruitcake we know today can trace its culinary origins to the Middle Ages in Europe. As sugar became more affordable and people discovered it could preserve fruit, they began soaking fruit in sugar, and then all of that nummy sugar-soaked and preserved fruit was added to fruitcake. Throw in a few nuts, and you've pretty much got the fruitcake of today.

The long-lasting nature of fruitcake made it a traditional wedding cake, a slice of which could be enjoyed at an anniversary way down the road. As a matter of fact, my grandmother saved a slice of her wedding fruitcake from 1915 for so long that I got to taste a bite as a little kid in 1978. Take *that*, devil's food cake!

In Manitou Springs, Colorado, there's an annual fruitcake toss in which unwanted fruitcakes are catapulted across a field for prizes. *Your* fruitcake will definitely not be among them. When you are enjoying your decadent fruitcake some dark and stormy night when the power goes out, or when the next pandemic keeps you home, you will get the last laugh.

Use the fruits, nuts, and the preservative alcohol of your choice to make your own one-of-a-kind fruitcake that can last for years. This is easily customizable, so make it your own!

INGREDIENTS:

1/2 cup (1.5 oz, 45g) almonds, coarsely ground
1 cup walnuts or pecans, chopped
2 cups dark raisins
1 1/4 cups light raisins
1/3 cup candied orange peel
1/3 cup candied cherries
1 cup currants
Grated zest and juice from 1 lemon
2/3 cup brandy, rum, or whiskey for recipe (and more during the aging process)
1 1/2 cups all-purpose flour
1 1/2 tsp baking powder
1 tsp cinnamon
1/2 tsp nutmeg
1/2 tsp dried ginger or 2 tbs. fresh grated ginger
1/2 tsp kosher salt
3/4 cup room temperature, unsalted butter
3/4 cup brown sugar
4 large eggs, room temperature
Powdered sugar (for long-term storage)

TOOLS:

| | |
|-------------|-----------------------------|
| 9" cake pan | Cheesecloth or muslin cloth |
| Mixing bowl | Airtight container |

DIRECTIONS:

In a bowl, combine the dried fruits with the lemon zest and juice. Add the nuts, the ginger (if you're using fresh), 1/3 cup of the brandy (save the rest for later), and mix well. Cover the bowl and let it sit for 24–48 hours. Give it a toss now and then to make sure everything is well-soaked in the brandy.

Take the eggs and butter out of the refrigerator and let them get to room temperature.

Preheat the oven to 350°F. Line a 9-inch cake pan with a round piece of parchment paper.

Sift together the flour, baking powder, cinnamon, nutmeg, ginger (if you're using powdered), and salt.

In a large mixing bowl, cream the butter and sugar together until light and fluffy. Add the eggs one at a time. Mix until combined.

With the mixer running on low speed, add the dry ingredients a little at a time and mix until combined.

Fold in the soaked fruit and all the liquid by hand until mixed.

Pour the batter into the cake pan and spread it evenly.

Bake 50–55 minutes until it passes the toothpick test. (Insert a toothpick into the center of the cake. If it comes out clean it's done.)

Remove from the oven and drizzle the second $\frac{1}{3}$ cup of brandy, rum, or whiskey evenly over the top of the cake.

Cool the cake to room temperature and remove it from the pan.

Soak cheesecloth in whatever liquor you used and wrap it around the cake.

Then wrap the cake and cheesecloth in two layers of plastic wrap and set aside at room temperature.

Once a week for 4–6 weeks, unwrap the cake, brush it with liquor, and then re-soak the same cheesecloth in more liquor and re-wrap the cake.

After 4–6 weeks, continue the soaking process monthly for at least three months and up to a year. You can also brush the cake with liquor after unwrapping. The goal is to make sure that the alcohol has completely permeated the cake.

If you are going to be storing your fruitcake for a year, make sure your cake is well-soaked, and wrapped in a soaked flour sack or muslin towels. Then find an airtight container as close to the size of the cake as you can, put a layer of powdered sugar on the bottom, place the wrapped cake on top, and then cover with another thick layer of powdered sugar. Seal the container and leave it in a cool, dark place away from sunlight until you are ready to serve it.

The more you continue to brush the cake and wrap in soaked towels, and the more time that passes, the darker and boozier and more flavorful your masterpiece will become.

Despite your best efforts, it's possible that even a well-preserved fruitcake can go bad. If it wasn't soaked enough in alcohol, the cake may become hard and dry. If you notice mold, or if the cake tastes bad or sour, don't take any chances and discard it.

DIY Sourdough Starter Recipe

If you're like many people, the COVID-19 pandemic turned you into a home baker or amped up your existing skills. And you may have found that when you went to the store to get some baker's yeast for some bread baking, the shelves were bare. But the miracle of breadmaking does not rely on packets of yeast being in stock at Safeway. Humans have been making bread for thousands of years using sourdough starter, and newfangled baker's yeast has only been around for about 150 of those years. So how did they do it? Did they just make yeast out of thin air? The short answer is yes!

If you want to, you can go down a very deep yeast rabbit hole and learn about its chemistry, its history, and the 1,500 different strains that have been identified. We'll keep it simple. Yeast is a leavening agent (something that makes bread rise) that is made up of zillions of tiny living organisms perfectly adapted to the environment where they live. Yeast is everywhere around you: on crops, in the air, and even on your skin.

You can create a yeast colony of your very own with nothing more than flour and water, which is the preferred food and drink of your little yeasty beasties. Keep feeding them, and they will multiply. When you see bubbles, it means you're making them happy. And when the colony is super happy, it's time to bake! And forget that sourdough starter you've heard about that's been across the Oregon Trail and up the Yukon. Yeasts change over time and adapt to whomever is feeding them. Your yeast is all you, baby, and if you get it from someone else it will become yours and only yours over time.

You won't get instant gratification making yeast, but when the gratification comes in about a week, the triumph is sweet!

DAY 1: IT BEGINS!

In a quart Mason jar, combine $\frac{1}{2}$ cup (60g) of all-purpose flour and $\frac{1}{4}$ cup (60g) of filtered water. Chlorinated water can slow your process. Mix it up with a fork until the lumps are gone and the consistency is smooth, and thick.

Do yourself a favor and get a digital kitchen scale that measures in grams.

If you're doing any amount of baking (or cooking in general) it will always give you a superior product with proper ratios.

Place the jar in a small cereal bowl or saucer with the lid loosely on top and let it rest in a warm spot for twenty-four hours. You can put it on top of the refrigerator or turn on the oven light and give it a perfect warm fermentation cave. Just don't forget it's there and inadvertently incinerate your yeast!

DAY 2: BUBBLE WATCH

It's possible small bubbles may appear on the surface of your starter. This indicates that fermentation has begun! But if you don't see any, no worries. Just leave the yeast in its warm cozy home for another day.

DAY 3: FEEDING DAY!

Check again for bubbles. Don't freak out if you see a mysterious brown liquid on top of your starter. This liquid is called *hooch* and it indicates that your little colony is getting hungry. That means it's feeding day! Even if you don't see bubbles or brown liquid, it's time.

Discard about half of your starter from the jar and try not to feel like a mass murderer. This is just part of the process. Your colony will take over your refrigerator and your life if you don't discard the starter. When I first started



It's aliiiiive!

making sourdough, I had seven—literally seven—jars of bubbling yeast all over the place. I was the mad scientist of bread and was going through copious amounts of flour to feed the masses until I finally stopped the insanity and started discarding starter. So use a spoon and just dump it right in the trash. No one will judge you.

Then, add $\frac{1}{2}$ cup (60g) of flour and $\frac{1}{4}$ cup (60g) of filtered water. At this stage your starter should have the consistency of a very thick pancake batter. Put the lid on the jar and put it back in its safe place for another day.

DAY 4: REPEAT

Repeat the process of discarding half the starter and feeding it with flour. Try to feed your starter around the same time every day and always use the same all-purpose flour. You like variety in your diet; your yeast does not. You'll notice that your colony is becoming more robust and you may realize why we had you put the Mason jar in a bowl. Sometimes your yeast parties so hardy it runs over the top! You'll notice your starter rising and falling as it consumes its food and water and then as it relaxes. Normally it will double in size after a feeding.

DAYS 5+: KEEP IT UP!

If your yeast is taking longer to get going, don't worry. It will happen eventually. It may be that you have it at a cooler temperature than it likes, or there is chlorine in your water, which slows down the fermentation process.

You'll be ready to bake when you take about a half a teaspoon of yeast, drop it in a glass of water at room temperature, and it floats! Congratulations, you did it! You are a *yeastmaster* and you may now name your yeast. Yes, this is a thing among sourdough aficionados. (One of Jeanne's favorites is William Butler Yeast. She also knows a Yeasty Boys and a Gerald. But you do you.)

If you aren't going to be baking for a while, you can put your starter in the refrigerator and feed it about once a week. If you forget, don't sweat it—you can bring it back. You should also freeze some yeast in an airtight container as insurance in case you have a disaster and lose your yeast. Short of super-high temperatures, or smashing it on the floor, or someone throwing it away, your yeast should be able to withstand all kinds of abuse and neglect. To revitalize a sleepy yeast, even one you haven't fed in months, just pour off any hooch, and repeat the process of feeding above. You can feed once or twice a day. If you feed twice, wait for the yeast to relax between feedings.

Super Simple Three-Ingredient No Fuss Sourdough Bread

There are all kinds of sourdough recipes out there, and a lot of them are complicated, time-consuming, and have sometimes discouraged people from baking sourdough at all, which is a real shame. But no worries if you're not into making sourdough a way of life. Here's a fantastic super-simple recipe for basic beginner sourdough that will knock your socks off. You'll have to plan ahead a little, but it shouldn't take any longer than fifteen minutes on day one, and even less (if you don't include baking time) on day two. No Sourdough Master Class required.

INGREDIENTS:

- Sourdough starter
- All-purpose or white bread flour
- Non-iodized salt

TOOLS:

- Kitchen scale
- Dutch oven or loaf pan
- Flour sack cloth (if using Dutch oven)
- Scissors
- Thermometer

DAY 1

In a large bowl, mix 4 oz (113g) sourdough starter at 100 percent hydration, which just means you have fed for a couple days with equal *weights* of flour and water. You don't need to feed your starter first before baking.

Add 12 oz (340g) filtered room-temperature water.

Dissolve the starter in the water.

Add 1 lb 4 oz (567g) bread flour or unbleached all-purpose flour.

Add $\frac{3}{4}$ oz (20g) non-iodized salt.

Stir together until the dry flour is incorporated. You can sprinkle little bits of water on the dough if you can't incorporate all the dry flour. Then knead the dough for twenty seconds or so into a cohesive raggedy ball. Cover the bowl with a dish towel and let the dough rise for twelve to twenty-four hours on the countertop.

DAY 2

After the dough has roughly doubled in size, shape into a loaf. Depending on how recently you fed your starter it may double in anywhere from twelve (recently fed) to twenty-four hours or longer (not recently fed).

Turn the bowl upside down and let the dough release itself onto a slightly floured surface like your countertop. Shape it into a loaf by flouring your hands well and pulling the outside edge of one hand around the side and into the bottom of the dough ball, gently tucking the side of the ball underneath the main mass. Perform this action a few times, working around the perimeter of the ball until it is round and smooth.

If you are using a Dutch oven, let this dough ball rise in a bowl of about the same size as the Dutch oven. The bowl should be lined with a smooth cloth like a flour sack towel or linen napkin that has been heavily floured to prevent sticking. If you are using a loaf pan, let the dough rise right in the oiled loaf pan.

Let the dough rise again until it doubles in size. This should usually take about two to five hours.

BAKING

An hour before you're ready to put the loaf in the oven, make sure the oven rack is in the second-to-lowest position and preheat the oven to 500°F. If you are using a Dutch oven, preheat that in the oven as well and be very careful handling it!

After the Dutch oven is heated, put it on the stovetop with the lid off.

Score the dough. No need to be fancy here. Take a pair of scissors and snip the top of the dough with three parallel snips across the top of the loaf that go about half an inch deep. Drop or flip the loaf into the Dutch oven so it lands scored-side up and put the lid back on. If you are using a loaf pan, do the same thing with three diagonal snips across the top. Scoring allows your bread to expand and rise.

Turn the oven temperature down to 425 degrees.

In a Dutch oven, bake for thirty minutes covered, then remove the lid and

continue baking for another ten to fifteen minutes until the bread is dark golden brown and the internal temperature is 205 degrees.

In a loaf pan, the bread should be ready in about thirty-five minutes.

As tempted as you may be to have some hot sourdough right out of the oven, let it rest until fully cooled to avoid gumminess. If you have no willpower, try to at least wait thirty minutes!

Boom! You made delicious sourdough from scratch with minimal time invested! Now, feed your starter and get ready to make another loaf because this one is not going to last. And the more you bake sourdough, the better and faster you get at it.

Puffy Cloud Sourdough Pancakes

If you'd rather not dump all that hard-earned starter in the trash every day, here's a phenomenal way to use your unwanted sourdough discard that yields the most cloud-like, scrumptious pancakes you can imagine! The lives of your yeast shall not have been in vain!

INGREDIENTS:

- 2 cups all-purpose flour
- 2 tsp baking powder
- 1 tsp baking soda
- 2 tbsp sugar
- 1 tsp salt
- 1 cup of your amazing homemade sourdough starter!
- 1 1/2 cups milk
- 1 egg
- 2 tbsp vegetable oil

DIRECTIONS:

In a large bowl, whisk together the flour, and other dry ingredients to combine.

Then add the wet ingredients. Mix, just until nicely combined.

Heat a pan or griddle to medium heat and spray with cooking spray or use butter. Pour 1/4 cup pancake batter on the hot griddle. Cook until bubbles burst on the top of the pancake, then flip.

Cook for an additional minute or so until the pancake is cooked through and golden brown on the bottom.

Serve!

Bone Broth

Bone broth and stock are not the same. Stock is usually made from simmering vegetables and meat for long periods of time. Bone broth is made from the collagen-rich bones of beef, chicken, pork, or turkey (usually). The key to making a good bone broth is to allow all the rich, nutritious connective tissue and collagen-filled marrow lurking inside the bones, *out*. And to do that you may need to elicit the help of your local butcher, especially if you are making beef bone broth. If you are making chicken or turkey bone broth you can simply break the bones yourself. But beef bones will require cutting to access the marrow within.

For beef bone broth ask your butcher for knuckles, oxtail, neck, and cut leg bones that will fit in your pot. For chicken you can use the carcass of a whole roasted bird and break the bones yourself.

INGREDIENTS:

- Bones
- 2–3 carrots
- 1 large onion
- 2 stalks of celery
- 1 head of garlic cut in half crosswise
- 1 tsp peppercorns
- 2 bay leaves
- 1 tbs apple cider vinegar
- 12 cups of water
- Kosher salt to taste
- Water

TOOLS:

- Stock pot, crock pot, or Instapot
- Roasting pans

DIRECTIONS:

If you are using beef bones, blanch them first by dropping them into boiling water for ten to fifteen minutes to clean them. This will remove residual material and make your broth taste better.

If you are starting off with uncooked bones (including ones you blanched), place them on a roasting pan in a preheated 425°F oven for thirty to thirty-five minutes.

If you are starting with an already cooked chicken carcass, break the bones to expose marrow.

Bring the water to a boil.

Rough chop your vegetables and put them and the rest of the ingredients into the boiling water. There's no need to peel anything (including the garlic or onion) because you're going to be straining at the end.

Turn the heat down to the lowest setting, so the liquid is just barely simmering

Simmer for fourteen to eighteen hours, adding water when/if necessary to keep roughly the same amount you started with.

When you are finished, fill the sink with ice water and place the pot in the water to help cool it.

Then you can put your broth (which will be gelatinous when cold!) into Mason jars or other airtight containers in the refrigerator for a week, or you can freeze your broth in freezer bags or jars for later use.

Use bone broth for sipping, for soups and stews, for making rice or risotto, or any recipe that calls for chicken or beef stock.

I also like to save up vegetable scraps like the ends of onions or celery, or carrot peels, kale ribs, etc., and throw them in a freezer bag for use in making bone broth, or vegetable or meat stocks. It's a great way to squeeze all the nutrition and flavor you can from your produce, save money, and waste less food!

Simple Sautéed Dandelion Greens

This basic recipe works well on all sorts of forageable greens, and you can get creative with it. Add shallots or onion, experiment with different spices, use a dab of butter, a little bacon, whatever suits your taste. Use the very first young tender greens you see. If the leaves get too big, they can be bitter!

INGREDIENTS:

- 3–4 cups of freshly picked and washed dandelion greens
- 1–2 cloves of garlic, finely minced
- 1/4 tsp of red pepper flakes (optional or to taste)
- 1–2 tbsp olive oil
- Salt and pepper to taste

DIRECTIONS:

Heat olive oil in a skillet on low-medium heat, then add garlic and sauté for thirty seconds to a minute until it becomes fragrant.

Toss in greens and red pepper flakes and move them around the pan until the greens wilt and become tender.

Serve immediately.

NUTRITION

Sample 2,000-Calorie-A-Day Menus

FINISHING OFF WHAT'S ALREADY IN YOUR HOUSE:

BREAKFAST: two scrambled eggs (156 cal.), 1 tbs olive oil (119 cal.), 2 slices Canadian bacon (89 cal.), coffee with milk (12 cal.), 8 oz. orange juice (103 cal.) *479 calories*

SNACK: 1/4 cup nuts (160 cal.) *160 calories*

LUNCH: Two slices of whole wheat bread (138 cal.), with 3 oz. turkey (162 cal.), lettuce (10 cal.), tomato (10 cal.), swiss cheese (200 cal.), mustard (5 cal.), celery sticks (15 cal.) *540 calories*

SNACK: Six whole grain crackers (120 cal.) with 1 slice cheddar cheese or 2 oz. hummus (100 cal.) *220 calories*

DINNER: two baked chicken thighs (200 cal.), 1 cup cooked spinach (45 cal.), sweet potato (114 cal.), 2 pats butter (72 cal.), lettuce and tomato (40 cal.) with 1 tsp. olive oil (40 cal.) and apple cider vinegar (3 cal.) *514 calories*

DESSERT: one whole-grain granola bar or a container of strawberry yogurt (150 cal) *150 calories*

TOTAL: *2063 calories*

USING ONLY PANTRY STAPLES WHEN FRESH FOOD HAS RUN OUT:

BREAKFAST: 1.5 cups cooked oatmeal (237 cal.) with 1/4 cup reconstituted powdered milk (150 cal.), 1 tbs. honey (64 cal.), cranberry juice (92 cal.), black coffee *543 calories*

SNACK: 1/4 cup trail mix (175 cal.) *175 calories*

LUNCH: 2 cups of canned beef or lentil stew (400 cal.), 6 whole grain crackers (120 cal.) *520 calories*

SNACK: half a bag of microwave popcorn or a can of sardines (200 calories) *200 calories*

DINNER: 2 cups cooked whole wheat spaghetti (375 cal.), 3/4 cup jarred sauce (110 cal.), 1 c. canned green beans (35 cal.) *520 calories*

DESSERT: one can fruit cocktail in water (80 cal.) *80 calories*

TOTAL: *2038 calories*

VEGAN MENU:

BREAKFAST: two biscuits shredded wheat cereal (155 cal.) with $\frac{1}{2}$ cup almond milk (20 cal.), $\frac{1}{4}$ cup blueberries (20 cal.), drizzle of honey (20 cal.) black coffee. *195 calories*

SNACK: $\frac{1}{4}$ cup trail mix. *175 calories*

LUNCH: 3 tbs. peanut butter (240 cal.) 2 tbs. jelly (112 cal.), on homemade sourdough bread (250 cal.) *602 calories*

SNACK: six whole-grain crackers (120 cal.), 2 oz. hummus (94 cal.) *214 calories*

DINNER: 1 cup rice (206 cal.) with $\frac{1}{2}$ cup canned tomatoes (35 cal.), $\frac{1}{2}$ cup canned corn (70 cal.), $\frac{1}{2}$ cup black beans (115 cal.), garlic, cumin, onion powder, vegetarian protein of choice (150 cal.) *576 calories*

DESSERT: 1 cup vanilla chia pudding (232 cal.) with $\frac{1}{2}$ oz. dark chocolate chips (68 cal.) *300 calories*

TOTAL: *2062 calories*

PRODUCT RECOMMENDATIONS

WATER STORAGE

Water Bricks

Water bricks are made in the US and are the product of an effort (inspired by Jean-Michel Cousteau, son of legendary oceanographer Jacques Cousteau) to reduce plastic waste, provide ease of water delivery to remote and third-world areas, and provide a building material for transitional housing. So you can feel good about supporting this innovative and eco-aware company.

A ten-pack, which will store a total of thirty-five gallons of water, will cost about \$130–\$180.

Semi-Stackable Five-to-Seven-Gallon Jug

LCI makes all its products in the USA, and their sole mission is to create meaningful employment for the blind and visually impaired. They provide training and



advancement opportunities for their employees and engage in philanthropic efforts for research into blindness and treatment for the visually impaired.

waterBOB Water Bladder

The waterBOB bathtub bladder is a thick 100-gallon plastic bag that fits in your tub and lets you store and pump out water—like a giant doomsday Capri Sun.

It uses food-grade plastic, and only costs about \$35, so it's a pretty good bang for your water-storage buck. There are also smaller collapsible water containers if you don't have a tub.

Budget-Friendly Water Storage

AQUA-TAINER rigid storage containers from Reliance Products will do the job best when stored upright and used gently. And they're a budget prepper's best friend at only about \$15 for a seven-gallon jug. But don't let cost prevent you from having what you need when you need it! You can start with one container and add more over time. Something is always better than nothing.

RELIANCE PRODUCTS is a Canadian company which focuses on creating products that can be recycled to produce more packaging, minimizing plastic waste during the manufacturing process, and supporting responsible manufacturing. They've also been a national corporate partner with Habitat for Humanity since 2014, providing lots of volunteer hours and fundraising efforts supporting affordable housing for families in need.

UPCYCLE PRODUCTS sells fantastic eco-friendly fifty-five-gallon rain barrels that are actually repurposed Greek olive barrels! They measure 38"x 22" and are high-density food-grade plastic that can even be left outside during the winter months. Heavy-duty screening will keep mosquitoes and other unwanted visitors out. The spigot at the bottom of the barrel is designed to fit a garden hose. Think about adding a twelve-inch stand (about \$40) for the barrel to set on to keep the spigot higher off the ground so you can fill a watering can or other container right from the barrel.

The Gold Standard for Rainwater Collection

If you want to really nerd out on rainwater collection, RainHarvest Systems LLC offers complete above-ground rainwater collection systems that will store from 350 gallons (about \$500) to 500 gallons (about \$1,700),

cisterns that can run into the tens of thousands, up to a mammoth underground storage tank system that stores 50,000 gallons for a cool \$170,000, and everything in between.

LifeStraw

If budget and space don't allow, there's even a compact water filtration device called LifeStraw that can fit in your pocket, lets you drink right from any water source, and only costs about \$20.

LifeStraw sells a wide assortment of small-sized water filtration systems that are easy to carry with you, store in your house, or keep in your car or office. Their largest system runs almost \$500 and holds thirteen gallons at a time with a whopping lifetime delivery of 26,000 gallons! Use all that rainwater you collected, run it through, and you've got a hard-core emergency backup water supply!



Grayl

Another company, Grayl, has a fabulous product that acts like a French press coffee maker and can provide twenty-four ounces of drinkable water from virtually any fresh water source in just eight seconds! Fill, press, drink—from anywhere. This design is super convenient, and great not only for emergency use, but for travel to areas where drinking water might be a little sketchy. They cost around \$90, and are worth every penny.

Backpackers and hikers know what's up when it comes to portable water filtration, and outdoor stores and online retailers have a host of products to choose from that can render drinkable water from outdoor sources.

FOOD PRESERVATION

Prepackaged Freeze-Dried Foods

We love Mountain House, which offers good-tasting breakfasts, lunches, dinners, and desserts, either individually or in premade variety packs designed to last a couple of days up to a full year. They also have gluten-free and some vegetarian options.

In addition to their freeze-dried choices, they offer a large variety of foods in #10 cans that include oxygen absorbers. You'll find everything from granola to chicken packaged in these large cans that are great for families or multiple meals.

But for sheer freeze-dried foodie fodder (say that ten times fast) nobody beats Backpacker's Pantry. They offer treats like Kathmandu curry, hatch green chili mac and cheese, Cuban coconut red beans and rice, and how about a little dark chocolate cheesecake or crème brûlée to elevate your disaster dining? You can buy individual meals or case packs to create your own mix and match menu. They also have plenty of vegetarian and vegan options.

Pressure Canners

For the best of the best in pressure canners check out the All-American brand. Not only does it not have a gasket that needs replacing, it's built like a battle tank, and comes in a variety of sizes from 10.5 quarts (about \$350) to a whopping 41.5 quarts (about \$650).

For less-experienced canners with a smaller budget, the Presto is a great choice. It does require a rubber gasket, so be sure you always have an extra or two on hand, and that they are in good condition. The 16-quart Presto runs about \$150 and is also great for use in water bath canning.

CLEANING PRODUCTS

Blueland

Blueland is on a mission to help eliminate single-use plastic packaging from everyday cleaning products. Their products are designed as a reusable, refillable system. Forever bottles, shakers, and tins can be refilled with powdered soaps or teeny little tiny tablets so you're not paying shipping costs for heavy (mostly water) cleaners.

The company features seven products: three cleaners, foaming hand soap, powder dish soap, dishwasher tablets, and laundry tablets. All ingredients are cruelty-free and are found on the EPA Safer Chemical Ingredients List. You can find them at blueland.com

Brandless

For cleaning products that are super-affordable, no-frills, effective, and come in refillable concentrates, check out the line from the e-commerce company, Brandless. They feature laundry detergent as well as products for cleaning tub and tile, granite and stone, multi-surface, and glass. The entire line is also made in America and Green Seal certified nontoxic.

Their mission is: “By focusing on quality over packaging and people over promotion, we’re leading a movement that believes that making better choices should be simple and easy.” Check them out at brandless.com.

JAWS

JAWS stands for “Just Add Water System” and it’s just that simple. The company is a longtime player in the refillable cleaner business and has saved over forty million bottles from landfills by utilizing non-toxic refill pods of concentrate, reusable bottles, and water right out of your tap.

The full line of rainbow-colored cleaners has products for glass, kitchen, hardwood floor, granite and tile, a daily shower cleaner, foaming bathroom cleaner, multi-purpose cleaner, and a strong disinfectant cleaner. They also have an extra level of safety built into each pod which will only release the cleaner when the pod is in the bottle with the cap screwed on tight. You can find them at jawscleans.com.

Branch Basics

Branch Basics has one nontoxic soap concentrate product that, when combined with water in various quantities, replaces your glass cleaner, hand soap, all-purpose cleaner, and laundry detergent! Talk about a magical clutter buster! You can replace dozens of toxic cleaners with one concentrate that does it all. All you have to do is fill the bottle to the indicator lines with concentrate and water, and you’ll end up with product mixed just right for all the different jobs around the house. Learn more at branchbasics.com.

E-BAGS

Mystery Ranch

Mystery Ranch makes fitted bags for men and women that are designed for different body shapes and have proven themselves through years of hard use in both back country and combat applications. Hopefully

your needs won't be that great, but overkill is definitely your goal for an evacuation bag.

Tasmanian Tiger

Tasmanian Tiger makes ballistic nylon bags that will pretty much survive being thrown out of an airplane or getting run over by a tank.

KNIVES

Nope, this is not to cut a guy. This is a utility and survival knife. Good quality is the key, so stay away from anything with a stainless steel blade which is brittle, and never carry a Swiss Army knife for the knife part. Feel free to carry one for all the other super cool little tools, but a fixed-blade, full-shank knife is stronger than folding knives.

Folding knives are more convenient, and smaller when folded, so think about which type would serve you best and make the call. Why do you need a knife if it's not for self-defense, you ask? You can use it for a variety of things: scraping wood to make fire-starter material, flash a distress signal, cut a rope or paracord, dig in soft ground, use the butt of the handle to hammer or break glass, chop or cut food, cut through a seat belt, and a thousand other uses. Make sure your knife has a good sheath that can attach to a belt and, if it folds, that it's a locking blade.

Kershaw Blur Folding Knife

This is one of the few models they still make in the USA and is a great go-to pocketknife.

RAT-3 by Ontario Knife Company

This fixed-blade utility knife is worth every penny. I (Bill) own about five of these; one in every kit.

The ESSE 3

This knife has the same blade design as the RAT-3 but better materials and a more ergonomic handle.

Medford Knife and Tool

The Cadillac of knives, each blade is hand-hammered and forged. The quality and workmanship of their blades is top-notch and a Medford will last a lifetime or two.

CLOTHING

Base Layer

Tops and Bottoms

Softness, comfort, and wicking are your watchwords for base layers. And remember to change your base layer at least once a day if it becomes wet from sweating or the weather. If you are going to be walking long distances, wear a spandex-type layer so you don't end up with chafing on your arms, legs, or groin. Wool is a great material, but if you are allergic to wool, go with a wicking synthetic fiber. (Ibex, Patagonia, Smart Wool.)

Socks

Socks should be wool/wool blend if you are not allergic. Even if you have been in the past, it's worth trying out the new no-itch wool and blend ahead of time. Many people with previous wool sensitivity can wear these without problems. Or try wool socks with a synthetic liner so your skin doesn't touch the wool. Other synthetic wicking fibers can be worn by those who simply can't wear wool. Socks are one of the most important clothing items you have so don't go cheap. If you have space in your bag, pack two to three pairs a day minimum. Use foot powder and change them frequently and immediately if they become wet. Socks can be dried with your own body heat by putting them between your outer shell and inner insulating layer. (Darn Tough, Smart Wool.)

Mid-Layer(s)

Mid-Weight Jacket

Splurge on a nice fleece, or wool jacket if you can. This is the piece you will probably wear the most, so quality is everything. (Ibex, Patagonia, Arc'teryx.)

Sweaters/Hoodies

Essential and beloved, sweaters and hoodies should be in your closet and on your body during evacuation. Always go with wool or other natural materials like hemp when possible. (Ibex, Pendleton, Patagonia, Carhartt.)

Shirts

Cotton works for summer and hot temperatures. For colder temperatures choose wool and flannel. (Carhartt, Woolrich, Columbia.)

Pants

Wear sturdy, well-fitting, canvas-type work pants with six pockets. (Duluth Trading Company, Carhartt, Patagonia, Ibex, Columbia.)

T-Shirts

Plan on using two per day. Natural fibers are the way to go for this layer. Change them out when they become wet from perspiration or weather, and dry out the one you just took off as quickly as you can. (Patagonia, Carhartt, Ibex, Smart Wool.)

Outerwear

It's best to get good-quality outerwear if you can. This is the stuff that's really going to matter when you need it. It's hard to put a price on not being wet and cold and miserable while you're already stressed out, but it's high. (Patagonia, Arc'teryx.)

Rain Gear

Raincoats and pants are obvious choices, but rain ponchos are great because they can do double duty as tarps, a solar still, a small tent, or even sleeping bag covers, plus a poncho will cover your pack. Remember that rain gear is waterproof in both directions so it keeps moisture out and it keeps moisture in. Good-quality rain gear will have vents under armpits and in the groin area to allow moisture to escape. If you have unvented rain gear, wear a wool T-shirt and change it out frequently. (Patagonia, Arc'teryx.)

Cold and Wet Shell

Gore-Tex is great as a shell for cold and wet conditions like wet snow or cold rain, and as an outer layer that can be removed easily and dried. Look for Gore-Tex that is reinforced in areas like elbows and knees to extend its life. (Patagonia, Arc'teryx.)

Thin Shell/Wind Breaker

It's always a good idea to make sure this piece has the most water resistance possible, and if you layer it with a lightweight jacket, it will keep you comfortable even in the cold. (Patagonia, Arc'teryx.)

Soft Shells

This type of shell is water-resistant and flexible when layered with other outerwear. It can also be great in cold, dry or cold, damp conditions. (Carhartt, Arc'teryx, Patagonia.)

Parka

This is the outer layer for serious cold. If you're in the northern tier, you'll definitely want a down or polyester-filled parka and a waterproof outer shell so the insulation doesn't get soggy in cold wet environments. Look for ones with a ruff and a deep hood. (Carhartt, Arc'teryx, Patagonia.)

Mittens

In really cold environments mittens are way better than gloves for keeping your hands warm and frostbite-free. They allow your fingers to huddle together and share the warmth! If you have to be working with your hands, just wear a glove liner inside the mitten so you can pull your hand out with the liner on, and do whatever task you need to do. Always get mittens with shells and an extra pair of mitten liners so you can change the liner out if it becomes wet. (Outdoor Research.)

Cold-Weather Gloves

Gloves work pretty well, down to about 20°F. It's always a good idea to own a couple pairs of warm winter gloves, and multiple types of glove liners like wool and fleece. (Outdoor Research.)

Work Gloves

Mechanix brand or Hatch gloves can make all the difference in an emergency environment. You must protect your hands during preparation and cleanup efforts. Most of us don't use our hands for rough stuff, but hands are the most important tools you have and you can't risk putting them out of commission. Get a couple of good pairs that fit you comfortably and will protect you. Mechanix brand gloves have great dexterity and wear-resistance in a flood, earthquake, or other dangerous environments where the risk of cuts and scrapes is high. Hatch makes Kevlar pat-down and anti-knife gloves for law enforcement that are lifesavers and will protect you from just about anything.

Boots/Shoes

Always wear sturdy shoes in an evacuation situation. Sandals, flip-flops, slides, loafers, brogues, canvas sneakers, mules, heels, peep toes, boat shoes, and sling-backs are all a big fat no-go for adults and kids. Pick something that fits well, covers your whole foot with room to wiggle your toes, and can be adjusted for tightness with laces. Ankle support is great too. If you're walking a long distance, Vibram soles fit the bill because they are extremely durable. Boots should be leather or nylon, and if you are in a warm environment they should be vented at the sole to release moisture. If you are facing a wet or flooding environment, wear neoprene esior rubber rain boots and get the tallest ones you can find! Be sure to change your socks frequently. (Merrill, Rocky, Danner, Xtra Tuff, Muck.)

Belt

Get a nylon riggers type or a leather belt with a heavy-duty small buckle—no giant rodeo belt buckles! Leather belts should be oiled periodically. (Wilderness, Carhartt, Duluth Trading Co.)

WEAPONS

Stun Guns

Taser is the only company that makes a dependable, accurate cartridge-fed device that's worth spending the money on and can be trusted as a primary defensive weapon. Their X1 model works beautifully. Keep in

mind that with a cartridge-fed taser you need to have a few extra cartridges with you just in case you miss or they brought friends.

Ammunition

For both 12-gauge and .45 ACP a great go-to defense ammo is Hornady Critical Defense. Hornady makes some of the best, most dependable ammunition available and is the gold standard. Check with whomever you buy your ammunition from on specific needs you have and they can direct you to just the right round. Twelve-gauge shotguns have everything from standard bullets to smoke rounds, tear gas/pepper rounds, sponge rounds, bean bags, flares, parachute flares, rock salt, paint, chalk, and that's not even half of them. Like everything involving firearms, take your time with your ammunition choices and follow the manufacturer's safety recommendations.

EMERGENCY CONTACTS

WRITE IN YOUR LOCAL EMERGENCY NUMBERS HERE:

Police: _____

Fire: _____

Ambulance: _____

Disaster: _____

Emergency Services: _____

911:

This number will reach emergency services in the United States, Canada, Mexico, Argentina, Jordan, Palau, Panama, Philippines, and Uruguay. Prank calls or misuse of the number can be considered a crime in most places.

SUICIDE AND CRISIS LIFELINE: Call, text, or chat 988.

Gives access to trained crisis counselors who can help those experiencing suicidal, substance abuse, and/or mental health crises, or any other kind of emotional distress. Think of it as the 911 for mental health.

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION HELPLINE:

Call 1-800-662-HELP (4357)

SAMHSA's national helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service in English and Spanish for individuals and families facing mental and/or substance abuse disorders.

SAMHSA'S DISASTER DISTRESS HELPLINE: Call 1-800-985-5990

A 24/7, 365-day-a-year national hotline dedicated to providing immediate crisis counseling for people who are experiencing emotional distress, anxiety, or depression-like symptoms related to any natural or human-caused disaster. This toll-free, multilingual, and confidential crisis counseling and support service is available to all residents of the US and its territories.

VETERANS CRISIS LINE: Call 1-800-273-8255, text 838255

A free, confidential resource for veterans of all ages and circumstances.