

## Off Grid with Doug and Stacy



*Meet a fascinating couple, who live off their land and cook with the sun.*

Doug and Stacy were typical city folks who after years of the same old same old decided they wanted to enjoy life and take more control of the food they ate. They realized how hard they had to work to pay the tax man and for a lot of stuff they did not actually need. They sold their home in a large Midwestern city and hand built an 800-square foot log home on 11 acres. Their homestead is 100% self-sufficient and was built from the ground up.

With no carpentry and farming skills, they built a tiny log home and live with no grid, solar, or wind power and survive using natural resources: water, natural sunlight, and fire from candles and wood. Their food comes from their backyard, and their medicine comes from herbs. They use Sun Ovens year around for cooking, and a whole lot more.

Doug and Stacy enjoy helping people learn and share their experiences on their YouTube channel "Off Grid with Doug and Stacy." Their entertaining and enlightening videos take a common-sense approach to everyday life and nutrition while living off grid and have been viewed more than 15 million times by their 125,000 plus followers that they affectionately call Homestead Homies.

Stacy has an amazing knowledge of natural healing methods and approaches to prevent getting sick in the first place. She shares food recipes as well as natural remedies, often using a Sun Oven®.

You will find some of their videos about Sun Ovens at: <https://www.youtube.com/playlist?list=PLylxeR881sUZyJXE5UBvwy1bFHDe9nS8n>

While there, become a Homestead Homie by subscribing to their channel.



Order Your Sun Oven® Today

### Ask Billie



Q. Can I use a SunOven® to cook in winter?  
A. Yes a Sun Oven® can be used year around on days when there is enough sunlight to cast a shadow. (Just think of the ground hog if you can see your shadow you can cook.) The ambient temperature does not make any difference. The primary difference in winter and summer cooking is the number of hours a day you can cook. In June you can use your Sun Oven® 12 hours each day while in the winter cooking is limited to 4 to 5 hours per day.

We would like to thank all our Sun Oven® customers and supporters and wish you a very Merry Christmas and Happy New Year and look forward to many sunny cooking days in 2018.

What is your Most Burning Question about Food Storage or Emergency Preparedness?



Send your questions to  
[editor@sunoven.com](mailto:editor@sunoven.com)

Billie Nicholson

## Medical Genealogy

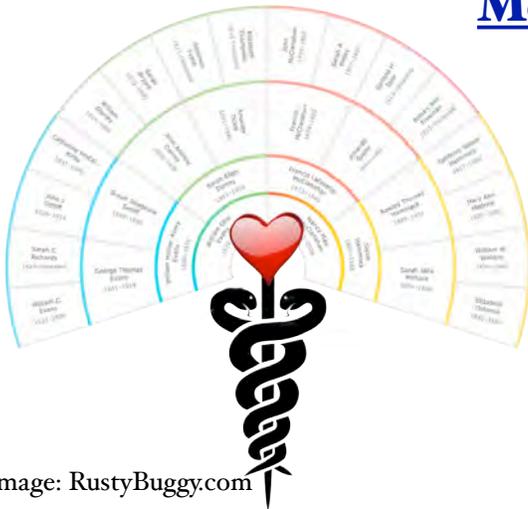


Image: RustyBuggy.com

Have you ever noticed that some branches of your family live longer than others? Do those who have succumbed have a common cause of death? Do certain diseases run in your family? What could this mean to you and your descendants?

Family health history also known as medical genealogy has become a special interest among family history researchers. Genetic research has shown that some illnesses today were inherited from ancestors. Creating a family health history can be a useful tool for you and your health care professional in interpreting health issues for you and perhaps your offspring. Some conditions might even give you cause to have second thoughts about ever having any

children. Others may give you a warning for changing some of your habits. This knowledge can make you more aware of early disease symptoms and consequently get medical attention earlier.

How do you predict what some of these diseases might be? In some cases there are genetic tests to determine if you or your spouse are carriers of those genes. In others, collecting family data from relatives and ancestors will contain clues. How do you go about getting this information? There are a variety of resources available. Begin with what you know. Record your medical facts and then go back a generation to your parents, and from there to your grand parents.

- Talk with your relatives and record their health conditions and what they remember about their parent's health. Be sure to record when the conditions occurred. Was your relative born with it or did it occur in later years? Assure your relatives that their medical history will remain private and is only for you, your descendant's and your health care professional's use.
- For deceased ancestors, check death certificates and obituaries, which often list a cause of death. Pension documents, Social Security applications, family Bibles, diaries, old letters and military records may offer some clues.
- Trace your ethnic background, some diseases like Tay Sachs or Sickle Cell Anemia occur in particular groups.
- Look for major illnesses like cancer, heart disease, diabetes, etc.
- Note general patterns of ill health, like chronic sore throats, continued aches and pains
- Birth defects
- Allergies, both environmental and drug related

When you learn that a relative or ancestor has/had a specific disease, begin to research the disease to learn all you can about it. Some diseases come from "bad genes" and others are a response to environmental triggers. If you know your familial predisposition to certain diseases, you can often do things to prevent them from occurring or to lessen its impact. Check with your doctor. She will know what types of medical screenings and tests you can do to get ahead of or prevent them. The more you know about your family's disease track record, the better you will be able to make an informed decision. A family medical history can't predict your future health, but it can provide information about risk. The information you gather may save a life!

There are several websites that will help you create your family health history. One is [My Family Health Portrait](#), a tool from the Surgeon General. The [Family Tree Maker](#) program has a place where you can record medical information and causes of death.

### References

## Materia Medica - Aloe Vera



**Botanical Name:** *Aloe vera* **Common Name:** Aloe

**Family:** Asphodelaceae (Liliaceae subdivision)

**Ayurvedic/TCM Name:** Kumari

**Parts Used:** Leaves

**Native Region:** Canary Islands

**Geographic Distribution:** Can be grown in any kitchen window around the world;

**Botanical Description:** *Aloe vera* is a stemless or very short-

stemmed plant growing to 60–100 cm (24–39 in) tall, spreading by [offsets](#). The leaves are thick and fleshy, green to grey-green, with some varieties showing white flecks on their upper and lower stem surfaces. The margin of the leaf is [serrated](#) and has small white teeth. The flowers are produced in summer on a spike up to 90 cm (35 in) tall, each flower being pendulous, with a yellow tubular [corolla](#) 2–3 cm (0.8–1.2 in) long. [1]

**Cultivation:** Aloe prefers a gravelly, well-drained, infertile soil. It likes full sun but is tolerant of shady windowsills. It requires very little water. Offsets at the plant base can be separated and repotted. Large scale commercial cultivation occurs in south Texas and Mexico and in Indonesia. They supply cosmetic and dietary supplement markets around the world.

**Harvesting Guidelines:** It is best to pick aloe from mature plants preferably grown in the ground. When the leaf tips obtain a rosy tinge, it is ready to harvest. Select upper, larger leaves, but not too many from a given plant. Choose a thick, smooth large leaf and use a clean, sharp knife to cut it as close to the trunk as possible. Unblemished leaves are the best tasting and contain the most aloe gel. [2]

**Constituents:** There are two parts to an aloe leaf: gel and a yellowish leaf sap latex (aloin), which can be very bitter and cause stomach upset in some people. After you harvest the leaf, hold the cut end down to allow the bitter latex to drain. Wash the leaf then lay it flat on the table and cut off the serrated edges. Start on one side and file off the skin, much like you take the skin off a fish. Continue removing the skin on all sides, including the yellowish layer, until a clear to white, translucent flesh is exposed. This is the good stuff and is ready to use after a quick rinse. [3] Aloe vera is full of good stuff - 75 active components, including 8 vitamins, 6 minerals, anthraquinones (aloin), polysaccharides (antiviral properties, ease gastrointestinal problems and stimulate the immune system), fatty acids (anti-inflammatory, antiseptic qualities and pain relieving components), and hormones that aid in wound healing and eight enzymes.

**Uses:** There are historical records about the benefits of aloe vera going back many years to a Mesopotamian tablet (2100 BC), Egyptian texts (1550 BC), Greeks and Romans (70 AD). Today aloe is one of the most commonly used herbs in the U.S. Applied externally, it provides immediate relief for burns, sunburn, skin irritations, scrapes and minor wounds. It has also been used in treating genital herpes and psoriasis. The gel contains active

**Continued**



## Land Navigation with Compass and Map

Kevin Estela

[Wilderness Learning Center](#)

Many emergency situations would not become survival situations, if you did not become lost. Many people carry compasses without knowing how to use them. The path of least resistance when traveling is usually the best. A map and compass can help you travel this way. Without direction, do you know where you are going in the woods, hills or mountains? Or how far you are from safety? Being lost in the short term causes fear, anxiety, rushing and making mistakes. Or in the long term, it can result in injury or death.



Let's start with a **map**. Historically, highly accurate, detailed topographic maps have been developed for military use. They show the shape of the land in addition to other features. It looks interesting, but what do all the lines and symbols mean? The first place to study on a map is the Legend. Here you will find a scale to give you an idea it's total area size measured in miles, kilometers and meters. It also includes contour intervals that give you a sense of elevation change, closer contour lines indicate steeper areas, farther apart means the area is flatter. There are common colors used on maps to designate land features: Blue shows water, black shows cultural, manmade features, brown represents earth topographic contours. Green shows vegetation and red shows land grids and important roads. Symbols for prominent features will vary per map. Map scales give you an idea of how large the area mapped is. A standard USGS map at 1:24,000 means 1 of anything on a map (1" or 1') translates to 24,000 of the same thing in real life. Therefore, if 1" on a map is 24,000 " in real life, 2.5" on the map will equal about a mile. A typical quadrangle map is 7.5 minutes latitude and 7.5 minute longitude. There is a variety of other marginal information on maps. For details see [MapReading.com](http://MapReading.com).

The earth is divided into 360 degrees of longitude (imaginary lines running North and South) They measure distance East to West. They are divided into 180 degrees East of the Prime Meridian and 180 degrees West of the Prime Meridian. There are 180 degrees of latitude with 90 north and 90 south of the equator running parallel and measuring distance North to South.

To prepare a map for use while traveling, first find the north arrows at the bottom of the map and use magnetic north for your navigation. Use a straight edge and draw magnetic north lines across the map parallel to each other. This will help you keep oriented even if the map's magnetic north arrow happens to be folded out of view. Coat it with a map sealant or Thompson's Water Seal. Fold carefully and store in a zip-lock bag for use. Carry it on your person, not in your pack, and have a spare map. If you are going into a specific area, you can photocopy it for easier use.

As you walk, you need to measure how far you have gone. Pacing is the traditional way. A true pace is a step with both your left and then right foot. Deriving from Roman times, 1000 paces was a Roman mile. The average pace of a Roman legion was 5.28 feet or 1/1000th of a mile. You will need to determine your individual pace factor by measuring how many paces it takes you to step out a given distance (1/10 of a mile). The formula to determine your factor is (Distance in feet divided by number of paces). Figure out how many paces it takes you to go 1/10th of a mile, if you add pace beads to your compass, have 4 (mile) beads separated from 9 (1/10th mile) additional ones. This way for every 1/10th mile you walk, pull down one of the 9 beads. When you have walked far enough to pull down a tenth bead, move one of the mile beads instead and return the nine to the other end of the string.

**Continued on Pg.6**

## Land, Compass and Map Navigation Continued from Pg. 5

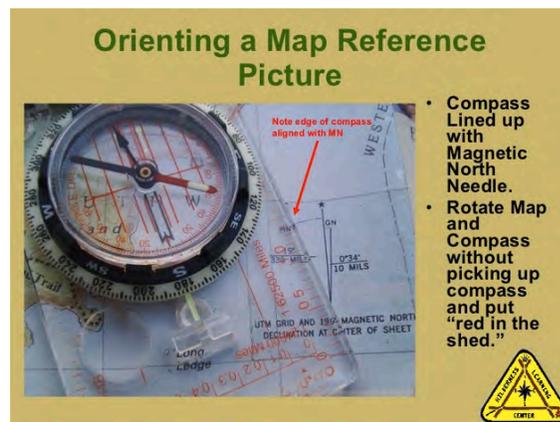
A **compass** is an instrument used for navigation and orientation that shows direction relative to the geographic cardinal directions (or points). Usually, a diagram called a **compass rose** shows the directions **north**, **south**, **east**, and **west** on the compass face as abbreviated initials. When the compass is used, the rose can be aligned with the corresponding geographic directions; for example, the "N" mark on the rose really points northward. Compasses often display markings for angles in degrees in addition to (or sometimes instead of) the rose. North corresponds to  $0^\circ$ , and the angles increase clockwise, so east is  $90^\circ$  degrees, south is  $180^\circ$ , and west is  $270^\circ$ . These numbers allow the compass to show azimuths or bearings, which are commonly stated in this notation. First invented in the Chinese Han Dynasty about 206 BC, and later adopted for navigation in the 11th century, the magnetic compass is the most familiar compass type. It functions as a pointer to "magnetic north", the local magnetic meridian, because the magnetized needle at its heart aligns itself with the horizontal component of the Earth's magnetic field. The magnetic field exerts a torque on the needle, pulling the North end or *pole* of the needle approximately toward the Earth's North magnetic pole, and pulling the other toward the Earth's South magnetic pole. The needle is mounted on a low-friction pivot point, in better compasses a jewel bearing, so it can turn easily. Modern needles are inside a capsule filled with a non-compressible under pressure liquid. Key points (N, S, E, W) and the needle point are often marked with luminous material to make them easier to read in low visibility situations. Magnetic north is about 1,000 miles from true north. A compass should be laid down on a level surface for the needle to work properly.[1]

In order to express accurate direction, it is expressed in units of angular measure. The most common is the degree ( $^\circ$ ) with its subdivisions of minutes ( $'$ ) and seconds ( $''$ ). 1 degree = 60 minutes; 1 minute = 60 seconds. To measure something, there always has to be a starting point, or zero (0) measurement and a point of reference. There are three baselines, one is true north (pointing to the North Pole), the second is magnetic north (direction indicated by the north seeking needle of a magnetic instrument), and the third is grid north (established using the vertical grid lines on the map and rarely used by the outdoorsman). Magnetic north is the one you should use for navigation with a compass. An azimuth is the horizontal angle measured clockwise from a north base line. and is used to express direction. The point from which the azimuth originates is the center of an imaginary circle, divided into 360 degrees. An azimuth can be measured from any of the three baselines.

Orienting a map means placing it on a surface and lining up magnetic north on the map with magnetic north on the compass. With bezel turned to 0 degrees north, place edge of compass on the magnetic north needle of the compass rose or one of the parallel lines you drew on the map. Without picking up the compass, turn the entire map with the compass on top until you put "red in the shed". Your map is now oriented to the land.

To take a bearing (azimuth), first make sure your bezel is turned to 0 degrees north. Point the directional arrow on the compass toward the target destination. Notice where the magnetic north needle is pointed. Rotate the bezel until the north needle is "red in the shed". When the needle is settled in the shed, read the bearing at the directional arrow. Walk to a prominent feature on the route and shoot your next bearing from there. If you have a map, you should measure the distance in paces from your starting point to ensure you don't end up short or long.

### References



## Gluten-Free Brownies



*Stacy made flour-less brownies in the Sun Oven®. These can be solar baked at any temperature (or time of year) by simply modifying the time.*

### Ingredients

6 TBS coconut oil  
1/2 bag semi-sweet chocolate chips  
  
2 eggs (chicken or duck)  
2 TBS vanilla extract  
2/3 cup coconut sugar  
1/4 cup unsweetened cocoa  
3 TBS arrowroot (or GMO free cornstarch)  
1/4 tsp salt

### Directions

Set Sun Oven out to preheat.

Melt coconut oil and semi-sweet chocolate chips in Sun Oven®. Beat two eggs, 2 Tbs vanilla extract and 2/3 cup of coconut sugar together for several minutes to mix well.

Prepare pan with parchment baking paper; grease the paper with coconut oil.

Add melted chips and coconut oil into egg and sugar mixture. Stir in remaining ingredients, mixing well.

Spread onto parchment in graniteware pan. The standard temperature for baking brownies is 30-35 minutes at 350° F. The beauty of Sun Oven cooking is that you can bake at a lower temperature and just add some extra time. Stacy had 250°F in her oven and she planned to bake the brownies about an hour. 1 3/4 hours later, they were tender and not too done.

Makes 6 - 12 servings depending on how good you are at sharing.



Photos: [Off Grid with Doug & Stacy](#)

## **Surviving a Nuclear Blast**

A nuclear blast is an explosion with intense light and heat, a damaging pressure wave, and widespread radioactive material that can contaminate the air, water, and ground surfaces for miles around. A nuclear device can range from a weapon carried by an intercontinental missile, to a small portable nuclear device transported by an individual. All nuclear devices cause deadly effects when exploded.[1]

If you see the bright, white flash and the blinding whiteness clears up and you can see again, you just survived an attack. After an explosion, radioactive material is propelled into the upper atmosphere. Shortly, you will see dust-like particles falling from the sky, this is fallout. Exposure to any form of fallout can be dangerous. This material can travel for hundreds of miles on prevailing air currents. If you can see the resulting mushroom cloud, compare its size to your thumb (literally). If it is larger than your thumb you are in a danger zone. You either need to evacuate or seek shelter immediately. You have 10 -15 minutes to get somewhere safe.[2]

The three things you need to protect yourself from radiation and fallout are distance, shielding and time. The more distance between you and the fallout particles, the better. An underground area offers more protection than the first floor of a building. The heavier and denser the materials that make up your protection shielding you from the fallout, the better. Any protection is better than none and the longer time you can take advantage of it, the less damage you may suffer. If you can get to a denser shield area within five minutes, get there, otherwise wait twenty-four hours to make your move. A good portion of the fallout will have settled by then (80%), reducing your exposure. [2] Fallout radiation loses its intensity fairly rapidly. It poses the greatest threat to people during the first two weeks. After that, the fallout has declined to about 1 % of its initial radiation level.[3]

While you are waiting in your thick walled shelter, EPA suggest that you wipe down parts of your body with a wet cloth and remove your contaminated clothing. Stick it in a plastic bag, seal it up and get it away from you and others. Shower with soap and shampoo, but do not scratch the surface of your skin. Do not use hair conditioner, as it will bind nuclear particles to your hair. Blow your nose and wipe eyelids, lashes and ears. If you don't have burns, then you were greater than ten miles from the explosion. Only drink bottled water and eat food from sealed containers. Listen to a communication device for further instructions. Do not expect significant Federal response at the scene for 24 hours. The full extent of Federal assets will not be available for several days. Emergency response is principally a local function.[4]

Now that you've found shelter and removed contamination, just settle in for a long stay. If you are down wind from the detonation, you may need to stay sheltered for two weeks to a month. When it is safe for you to leave, you will be instructed to do so. Meanwhile, you will need supplies. Start with water. Drink only bottled or water drawn from deep wells. You will not be able to remove radioactive material by boiling water.

Next you will need an emergency radio - probably a hand crank emergency one because the electro-magnetic pulse and the blast wind energy may have damaged or destroyed electronic cell towers. Always be listening for what to do, where to go and where not to go. If someone in your group begins to feel nauseous and display heavy fatigue, acute radiation sickness is setting in. Administer Potassium Iodide (KI) tablets. If they don't start vomiting until four hours or more after exposure, they will likely recover within a few days or weeks with rest. If they start vomiting within an hour of exposure, go unconscious, or are experiencing seizures, they are in need of serious medical attention and will require aid from a professional.

Soon you will need to locate any canned or packaged foods in your vicinity. Ration and share whatever you find. You can live 30 days without food, but only three days without water. Sanitary waste will be the next issue. Set up a trash can or large bucket as a toilet. If you have a trash bag, line the bucket with it. Kitty litter will help absorb liquid and keep some odor down.

Decisions following a nuclear blast will be determined by emergency personnel. If they tell you to go, go willingly. Hopefully you will be directed to a shelter, where you can be further decontaminated and start life over.

### References