

Gratitude

Billie Nicholson

This is the time we begin to reflect on all the events we've experienced during the past year - some good and some which could have been better.

Have you had an opportunity to be thankful for some of your preparedness activities? Recently traveling to see family and friends after a year, we had three I'd like to share.

We took some dried apples with us as a snack and shared them with our son's family. As we talked about how we had made these using our **Sun Oven**® on sunny days and a borrowed electric one on some rainy times, our daughter-in-law offered up a dehydrator she had not been using. We graciously accepted it, squeezing it into the last available space in our small car. Off we went to visit my sister, who had just completed harvesting apples from her two trees. With bushels of apples needing the next step in preservation, out came the dehydrator to make dried apples. It ran night and day for the duration of our visit. The *Stayman-Winesap* and *Arkansas Black* varieties are very flavorful dried.

When we returned home from a month long trip, we headed to our food storage pantry to decide what was for dinner. We selected canned salmon, cream of mushroom soup, peas and spiral noodles for a wonderful casserole. These are the same ingredients used for tuna casserole, but I substituted salmon instead. It made a nice variation.

On our property in NC, we have two camellia bushes that have never bloomed in the ten years we've been here. The last few years we



Camellia Blossoms

set up a compost bed between them into which we regularly toss kitchen scraps and tea bags. To our delight this year, they are both blooming! And now we know their variety (*Camellia sasanqua*). Did those extra nutrients make a difference in the quality of this rocky, mountain soil? There's no doubt in my mind.

From those of us at **Sun Oven**®, we wish you all a "prepared" Thanksgiving holiday. Will you be [baking your turkey in a Sun Oven](#)®?

Ask Billie



Dawn from IN Asks:

Is it possible to cook a whole turkey in the Sun Oven®?

A. Yes. You can use the **SUN OVEN**® to roast a juicy, golden brown turkey. A *sun-roasted* turkey does not dry out. The white meat is uniquely succulent, tender, moist, and flavorful. We have a special hanging Turkey Roasting rack that will accommodate up to an 18 pound bird. To order yours click [HERE](#).



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



Billie Nicholson



Order Your **Sun Oven**® Today

Preparing Your Home for Winter

Have you taken time to give your home a winter-prep review? If you get to these projects before the weather gets nasty, you will enjoy the work more and help extend the life of your home's components and make your property safer as well. Here are a few suggestions.

1. **Heating, air conditioning and ventilation systems** are first on the list. If you're using a fireplace or wood burning stove, inspect the firebox and flue system to ensure they're clean of soot, creosote and free of cracks or mortar voids that could be a fire hazard. If you have a gas or electric furnace, give it a run through before the temperature changes to catch any problems before you need to turn on the heat. Change the air filters to provide maximum efficiency and improve indoor air quality. Clean the whole house humidifier and replace the evaporator pad. Change batteries on smoke alarms and carbon monoxide detectors. Remove window air conditioners or cover them with insulated liners to prevent drafts. Make sure ceiling fans are moving in a clockwise direction to push warm air down. Check exposed ductwork in attic, basement and crawl spaces. Use a sealant to plug any leaks. Check all the weather stripping around windows and doors for drafts. Replace it as needed. Caulk any gaps. Do you have an alternative heating system should the electricity fail? Service and test generator.
2. **Gutter, roof and drains** should be examined next. Look for missing, damaged or warped shingles and replace before they begin to leak. Check the flashing around chimney, walls, vent pipes and skylights for deterioration. Seal joints where water could leak in with roofing cement and a caulking gun. Check the gutters and downspout fasteners and secure if they're loose. Gutter covers help keep out debris. Clean your gutters if you don't have them. Make sure downspouts extend away from your foundation to prevent flooding and water damage. Cover all vents and openings to prevent insects, birds, rodents or other vermin from getting inside to make a warm nest for the winter.
3. **Outdoor plumbing parts** are susceptible to freezing during cold weather. Burst pipes can cause some of the most expensive repairs in your home. Insulate any exposed water or drain piping in any uninsulated space (like crawl space, attic, or outside walls) with electrical heating tape or foam insulation. Turn off the water supply to any exterior faucets and drain them. Adding an insulated cover can help, too. Disconnect and drain all garden hoses. If you are shutting down a seasonal property, be sure to turn off the water supply and drain the plumbing system.
4. **Outdoor Furnishings** should be put away. Remove cushions and store all inside. Do the same for any outside toys, like boats, RV, jet skis, motorcycles and lawnmowers. Do not drain them. Fill the tank if it is metal and add a gas stabilizer. Run them to get stabilizer into carburetors.

Winterize Your Garden

We're always sad to see the plants in our gardens wither and die, but we know that most of what we planted are actually annuals that only live one season. So, as they wither away, be thankful for their produce, save any seeds, and pull the dead plants putting them into the compost pile (if they're disease free). All the clean up you do in the fall will save you time come spring.

First set up your *Sun Oven*®, combine fresh milk and coco in a small pot and cover.

Flower and vegetable gardens

- Pull out dead plants and any invasive weeds. Add compost to the soil and turn it with a spade (or rototiller if you have an open ground garden). Now is a good time to get a soil test to determine what deficiencies exist.
- Trim back perennials to about 6 inches tall, continue to water these until the ground freezes. Cut back herbs and freeze or dry the cuttings.
- Now is a good time to plant spring bulbs and garlic!
- Dig up any remaining basil or parsley, put them in pots and bring them inside to a window ledge for continued use. Don't be surprised if they become a little spindly at first. Cut and use them anyway.
- To protect cold susceptible plants, build a cage around them with wooden or metal stakes and burlap. Fill the cage with shredded leaves, straw or mulch to protect them from harsh winds and extreme cold.
- Plant cole crops if your area has a late killing frost. These include broccoli, cabbage, cauliflower, Brussels sprouts. Collards, turnips and some lettuce varieties are also cold resistant and make a welcome addition to cold weather meals.
- Leave root crops like turnips, carrots, leeks, garlic and parsnips in the ground for late fall harvest. Add extra mulch to slow the ground's freezing.
- You can never add too much mulch, the more the better. It acts as an insulating blanket as well as decomposing partially to add nutrients to your soil.

Lawn

- Continue mowing as long as the grass is growing.
- Remove heavy accumulations of leaves from your lawn and put it in your garden as mulch.
- Continue watering until the ground freezes.
- Review the lawn irrigation system, if you have one. Make sure all sprinkler heads are in working order or replace them. If the ground freezes where you live, make sure to turn off and drain the system before a hard freeze. This will keep sprinkler heads from freezing, rupturing and creating an icicle garden - pretty for a few minutes, but a real pain to repair in the cold.

Tools and Such

- Pull up all stakes and store them; take down fabric trellis and store inside
- Empty all container garden pots and store them upside down to prevent freezing and cracking.
- Take up all hoses and sprinkler heads, drain them and put them in storage.
- Clean and oil hand tools to prevent rust.
- Clean up lawn mower and store with a full gas tank including gas stabilizer to absorb water.
- **Now, go to your *Sun Oven*®, remove your hot chocolate, go inside to relax and celebrate a job well done.**

Tip for Perfect Sun Oven® Turkey from Our Solar Chef



Turkey is so much moister and tastier when it's roasted in the Sun Oven. I'll brine it first. A brined turkey not only tastes better, it will be juicier and will cook 20 to 30 minutes faster than one that is not. All you need are a few simple ingredients and a large, food-safe container. I use a camping cooler.

Ingredients

Turkey Brine

- 1 gallon vegetable broth
- 1 cup sea salt
- 1 tablespoon dried rosemary
- 1 tablespoon dried sage
- 1 tablespoon dried savory
- 1 gallon ice water
- 1 turkey, (thawed if frozen)

Preparation

Combine the first six ingredients (broth through savory) in a large stock pot. Bring the contents to a boil, stirring often, until the salt has completely dissolved. Remove from heat and let cool to room temperature.

When cool pour it into a container large enough to hold the turkey and the brine. Add the ice water. Remove all giblets from the cavity of your turkey. Wash and pat dry. Place the turkey in the brine breast down, making sure that the cavity is filled.

Refrigerate overnight.

Remove the turkey from the brine, drain, pat dry, and prepare according to your favorite recipe. Discard brining liquid.

Cooking

Set *Sun Oven*® out to preheat.

By removing the leveling tray, the *Sun Oven's* cooking chamber can accommodate a bird up to 15 pounds, even without the hanging rack. Simply set a trivet on the floor of the chamber, put the turkey in an oven bag, and set it on the trivet.

On a clear, sunny day the cooking time will be comparable to a conventional oven. On a recent sunny day I was able to roast a 14 pound bird that was ready in about 4 hours.

The hardest part, without the hanging rack, is getting the cooked turkey, with all its cooking juices, out of the oven and on to the counter for carving. So I was delighted to discover that with the hanging rack, lifting the heavy bird out of the *Sun Oven*® is a piece of cake. It works so much better than any other turkey lifter I've ever used that, should Thanksgiving day happen to be too cloudy for solar cooking, I'll still use it in my conventional oven.

Practical Action - Recycling Organic Waste Around the World

Dia Rees [Practical Action](#)

Organic waste is produced wherever there is human habitation. The main forms of organic waste are household food waste, agricultural waste, human and animal waste. In industrialised countries the amount of organic waste produced is increasing dramatically each year. Although many gardening enthusiasts 'compost' some of their kitchen and garden waste, much of the household waste goes into landfill sites and is often the most hazardous waste. The organic waste component of landfill is broken down by micro-organisms to form a liquid 'leachate' which contains bacteria, rotting matter and maybe chemical contaminants from the landfill. This leachate can present a serious hazard if it reaches a watercourse or enters the water table. Digesting organic matter in landfills also generates methane, which is a harmful greenhouse gas, in large quantities. Human organic waste is usually pumped to a treatment plant where it is treated, and then the effluent enters a watercourse, or it is deposited directly into the sea.



[Wikipedia](#)

In developing countries, there is a different approach to dealing with organic waste. In fact, the word 'waste' is often an inappropriate term for organic matter, which is often put to good use. The economies of most developing countries dictates that materials and resources must be used to their full potential, and this has propagated a culture of reuse, repair and recycling. In many developing countries there exists a whole sector of recyclers, scavengers and collectors, whose business is to salvage 'waste' material and reclaim it for further use. Organic waste can be used for soil improvement, animal raising and to provide a source of energy. There are a variety of ways to deal with organic waste recycling. This report will share some recycling examples from around the world where organic waste is being put to good use.

Pig-feeding in Metro Manila, Philippines - In the outlying urban areas of Manila, backyard pig-rearing has long been a traditional source of income. Commercially produced feed for this activity is expensive and pig raisers often turn to organic scraps to supplement or replace the commercial product. A network of collectors has developed that collects organic waste from restaurants in the city centre, and then distribute it amongst the backyard farmers. The farmers can purchase the scrap at about half the price of the commercial feed. A cost comparison shows that profit is more than doubled by feeding the pigs on organic scraps, even after all other costs, such as veterinary costs, transport, fuel, etc., are taken into consideration.

Organized Refuse Collection in Cairo, Egypt - One of the most institutionalized scavenging systems in the world exists in Cairo, Egypt. There, a group of former oasis dwellers, called Wahis, have controlled garbage collection for the last 100 years. Another group, the Zabaleen, pay a fee to the Wahi for the right to collect garbage. The Zabaleen, with less than one third of the staff of the municipal sanitation department, collect 10% more than the sanitation department. Even so, 15% of the cities rubbish piles up in the streets. The Zabaleen haul home the day's receipts in donkey carts. Later, in residential courtyards, the women and children of the household sort the trash. Organic materials feed the pigs – their primary income earners – while glass, paper, plastics, metal and cloth are sold. Systematic garbage collection by the city would cost more than the entire municipal budget. Without the Zabaleen, much of the city's waste would simply not be collected.

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Practical Action - Recycling Organic Waste Around the World

Dia Rees [Practical Action](#) continued from Page 5



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Integrated System for Organic Waste Recycling in Mérida, Mexico - In early 1978 a new drainage and recycling system was commissioned as part of a new low-cost housing project in Mérida, a city in south-eastern Mexico. Each house is connected to a drainage system that distinguishes between grey (washing) and black (toilet) water. The grey water is filtered and used for irrigation, and the solids in the black water are settled out and used in a co-composting process (with household waste) to produce a nutrient rich, dry-powder fertilizer. The dual chamber system yields compost every 6 months. The treated black water is also used for irrigation. The system was designed to be managed by the community. In the early days there was considerable opposition to the system, not only from the community but also from the local council and private companies, but this soon dissipated as it became clear that the system improved the communities sanitation and yielded a good quality saleable compost. The system is maintained by community members on a voluntary basis and revenue from the sale of compost (usually to middle class residents for garden use) is reinvested in micro-enterprises or used to pay for larger maintenance jobs.

Waste collection and disposal is often seen as being the responsibility of the government or municipality. In many cases the municipality is unable to fulfill this role either due to financial constraints, lack of will or lack of organizational skills. In many cities, collection and separation of waste by the private or informal sector is seen as being too time consuming because of the content of the waste, often a mixture of organic and non-organic substances, such as plastic film. For there to emerge a successful organic waste reclamation process, it has been noted that it is of great help if the organic and non-organic waste is separated at source. It is here that the responsibility is thrown back onto the generator of the waste, the public. Many successful schemes are only successful because of community participation in the activities on a day-to-day basis. Where waste is separated at source, this lessens the risk of contamination from such items as batteries, means that the organic waste is cleaner (and will therefore fetch a higher price), it is easier to sort and the incidence of injury and disease related to sorting is decreased.

Learn more about the work of [Practical Action.org](http://PracticalAction.org) and to [read this entire report](#).

Vitamin D - The Sunshine, Happy Vitamin



Cathy S. [Everything Mushroom](#)

If you suffer from the winter blues, increasing the vitamin D in your diet may be the answer to your blahs.

Your skin makes vitamin D when it is exposed to sunshine. In the winter, when the days are short and most of us are stuck inside (and covered in heavy clothing when we do venture outdoors), it's hard to get enough sun exposure to make adequate amounts of vitamin D. So it stands to reason that low vitamin D levels might play a role in Seasonal Affective Disorder (SAD).

Recent studies have found lower vitamin D levels in depressed [1] and obese individuals [2], suggesting a direct relationship with SAD. Low vitamin D has

also been linked to immune system dysfunction and inflammation [3]. There is hope, vitamin D supplements have been shown to play a therapeutic role in obesity-associated inflammation and weight loss. [4] Scientists are just beginning to understand the interrelationship between the immune system, inflammation and depression [5-8]. For instance, illness can lead to inflammation, which can lead to depression—and what's worse, the cycle can work in any direction, causing a rapid downward spiral.

For example, a little case of the winter blahs, left untreated, can turn into a physical illness that keeps you inside. Being stuck inside means you get less exercise, less vitamin D and less human interaction, further compounding depression, weight gain and inflammation. So it's best to take measures to curb depression early on, before you get caught in a whirlpool.

With vitamin D, as with almost all vitamins, natural food sources are the best. In fact, this is especially true of vitamin D. Supplements made from plant- or yeast-based vitamin D2 differ from the vitamin D3 made naturally in your skin. Studies have shown that D2 converts to the active form in your body much more slowly than does vitamin D3. Natural sources of vitamin D3 include eggs, fish, beef liver and mushrooms. In the United States, most fortified consumer products, such as tofu, orange juice and cereals, contain vitamin D2.

Mushrooms, both sun-dried and fresh UV irradiated, are a healthy source of vitamin D2 and D3. Interestingly, mushrooms make vitamin D3 when they're exposed to the UV rays of the sun, just as humans and other animals do but in addition they make D2 and D4. So placing mushrooms outdoors to grow or to dry for a several hours will actually boost their vitamin D levels [9, 10]. A recent study has shown sun dried mushrooms can be an important part of a vegan diet in maintaining healthy levels of vitamin D [11].

Here at Everything Mushrooms, we supply [mushroom logs](#) and [plugs](#) for growing mushrooms outdoors, along with [kits](#) for the very freshest mushrooms. Drying these mushrooms outdoors will increase their umami flavor and their vitamin D3 levels. Vitamin D is fat soluble, so don't be afraid to cook mushrooms (which don't have any natural fat or cholesterol) in olive oil or a little butter.

We still need more research to fully understand vitamin D and its uses [12]. Right now, there isn't even a reliable test to find out if your vitamin D levels are low [13]. But what we do know about vitamin D indicates that simply eating more mushrooms could make you happier and healthier.

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Vitamin D - The Sunshiny, Happy Vitamin

Cathy S. [Everything Mushroom](#) *Continued from Page 7*

True, this simple fix hasn't received much attention from researchers, since it won't yield a new, expensive product for a pharmaceutical company to peddle. But even without the hard data, it's worth a try. After all, when is the last time you were given an option to treat depression with something that has no side effects and could benefit your health?

Sun-drying Mushrooms for increased vitamin D:

1. Check the weather. Ideally, you want a warm to hot forecast of sunny, mostly sunny or partly cloudy with no chance of rain for a couple days.
2. Gather and dust off mushrooms for drying. Pictured here are log grown shiitake and wild lobster mushrooms. Any fleshy mushroom will work well. Mushrooms that are high in water content like oysters will work but you won't be left with much after the drying process.
3. Slice mushrooms about 1/4 inch thick.
4. Lay mushrooms on baking sheets or racks with or without parchment paper, don't overlap.
5. Place in sun during daylight hours. Cover mushrooms or bring them inside overnight. Two days in the sun is enough to boost vitamin D but not usually enough to completely dry mushrooms. Mushrooms should snap when bent, if mushrooms are even slightly rubbery finish in oven or dehydrator.
6. Finish drying mushrooms in a dehydrator or an oven on low. A **Sun Oven®** works great for dehydrating, leave the door slightly ajar so the moisture can escape. Set a conventional oven at 200°F for one hour, leave the mushrooms in the warm oven overnight to continue drying.
7. Store in an airtight container. Dried mushrooms will retain vitamin D and flavor for about a year.
8. Re-hydrate by soaking in water and enjoy in your favorite mushroom recipes.



References