

The Homesteading Heritage of Fermentation Crocks

Do you remember the taste of your grandma's pickles? That tangy, complex flavor so typical in traditional pickles is almost impossible to find in the grocery store today. Your memories haven't gotten rosier with age; those pickles of your childhood truly were tastier than what you're used to now- and they were healthier, too.

The secret? Those pickles might not have been pickled at all, but made in a fermentation crock instead.

Fermentation crocks are a traditional way to preserve vegetables, and gourmet cooks and homesteaders alike are rediscovering their benefits today. These crocks were used in decades past to put beneficial bacteria to work creating wholesome side dishes from the garden's overabundance, and you can share the taste of traditional pickles with the next generation by using a fermentation crock yourself.

But consider yourself warned- making just one batch of mouthwatering sauerkraut might be all it takes to get you addicted to homemade ferments for life.

How Do Fermentation Crocks Work?

Fermentation crocks are ceramic vessels designed to control the decomposition of vegetables to stop them from spoiling and to enhance their nutritional content. Many crocks come with a gutter in the rim that is filled with water to keep air out, which prevents surface molds or yeasts from developing. Often, ceramic weights are used to keep the ingredients submerged throughout the fermentation process, which usually takes about three weeks.

Don't get intimidated- using a fermentation crock is simpler than it sounds. In fact, this preservation technique is an efficient, low-tech way to extend the lifespan of fresh food and cut out the need for refrigeration. For this reason, fermentation crocks let you preserve food without being connected to a power source, making them a smart way to stock up on food for potential emergencies.

What are the Benefits of Using a Fermentation Crock?

Trying your hand at using a fermentation crock does more than give you a new tool to experiment with in the kitchen, it also has profound advantages for your health and lifestyle.

Gain More Nutrition from Every Vegetable

Cabbage is considered one of the healthiest foods on the planet, but far too few people are taking advantage of it. The sky-high antioxidant levels in cabbage help your body fight off the cell mutations that lead to cancer, regulate your digestive system and even lower overall cholesterol levels. In fact, research is showing that the fermentation process creates a natural antidepressant in sauerkraut and kimchi, so fermenting cabbage is a smart way to keep it in your regular diet.

In the same way, the breakdown of plant cells during fermentation makes their nutrients more bioavailable. Research has found that fermented foods have more vitamin K2 (a known cancer fighter) than non-fermented foods. Fruits and vegetables also contain naturally occurring toxins

that can create health problems, but the microbes in the fermentation process help break them down into harmless components before you digest them.

Connect with a Rich History of Traditional Fermentation

Fermentation might be in fashion now, but it's hardly a passing trend. When you use a fermentation crock, you are taking part in a method of food preservation that was essential for almost every human society before the modern age. From Eskimo sour fish soup to Korean kimchi, Mongolian ghee, and even beer and wine, fermenting perishable foods has long been a smart way to improve their shelf life while enhancing flavor and texture in the process.

Traditionally, vegetables were fermented in barrel-sized vessels to ensure entire families could be fed on the results for months at a time. Personal refrigeration caused fermentation to fall out of favor in industrialized countries, but today, using a fermentation crock is a modern way to connect to this sustainable heritage of processing bounty for times of scarcity.

Rebalance Your Gut Biome for Better Health

A well-functioning digestive system is the foundation of good health, and eating more fermented foods is the key to keeping it in optimal condition. Fermented foods are easier to digest than raw foods, and they work to repopulate your gut with cultures of beneficial bacteria. Studies have shown that eating fermented foods can help with the symptoms of irritable bowel syndrome, improve immune system functioning, reduce the risk of colds and infections, and decrease the possibility of developing diarrhea.

Pickling vs. Fermenting: What's the Difference?

The results might seem similar, but fermentation and pickling are distinct preservation processes with different health benefits. Pickling relies on vinegar or salt to halt the decomposition process, while fermentation instead puts naturally-occurring yeasts, bacteria, and enzymes to work converting the plant's carbohydrates into carbon dioxide, alcohol, and acids for preservation. Salt is often added to add flavor and control the process, but you don't need much liquid besides what the vegetables provide for themselves.

Most pickles and sauerkraut in grocery stores are pickled and pasteurized, meaning that the high heat and acidity strips them of their probiotic potential (and their flavor). In most instances, the only way to get the full bacterial benefits of fermented foods is to make them yourself with a fermentation crock at home.

But, isn't home-fermentation dangerous? Hardly! Humans have been surviving off foods preserved in less-than-sterile conditions throughout recorded history, and to date, the U.S. Center for Disease Control hasn't had a single case of botulism from home-fermented vegetables. In fact, statistics show that your health is at greater risk from eating supermarket spinach than home-fermented foods.

How Do You Choose the Best Fermentation Crock?

Are you ready to get started putting up your own produce through fermentation? There are two kinds of crocks you can choose from: open crocks and water-sealed crocks.

Open crocks are the traditional approach for fermenting pickles, and they are likely what your grandma used. Today, these crocks are a common sight in antique shops (though the risk of toxic glaze ingredients is high, so use them as décor only!). To put them to use, you can pack the crock with produce, weigh it down with ceramic plates, and secure a cloth over the opening to allow air to move in and out. While this technique is lower maintenance than water-sealed crocks, the risk of contamination from insects and outside bacteria is higher, and the produce can even develop harmless, yet unappetizing surface molds.

Water-sealed crocks are the preferred crocks for most fermentation enthusiasts today. These crocks are packed and weighted just like the open ones, but a lid is placed into an open moat and the brim is filled with water. This lid prevents any outside air from entering and allows the forming carbon dioxide gasses to bubble out. The likelihood of growing mold is almost nonexistent, and all funky odors from the fermentation process stay contained within the crock.

Deciding what size fermentation crock is best depends on your needs. Typical sizes range from 2 liters, 5 liters, 10 liters, 15 liters, 2 gallons, 3 gallons and even 4 gallons. In most cases, the size refers to the internal capacity of each crock, as their overall size will be significantly bigger.

If you're just starting to experiment with fermented foods, a 5 liter or 10 liter crock is likely best. Small enough to fit in the sink for washing, it still produces an impressive amount of food. If you have a larger family or don't want to be creatively limited, it's better to go bigger and choose a capacity that allows you to put up copious amounts of food in every batch. Larger crocks can even handle whole onions and ears of corn to create the kinds of fermented concoctions you won't find anywhere else.

How Do You Use a Fermentation Crock?

By design, modern fermentation crocks are simple to use and provide consistent results. It takes about three weeks to turn raw produce into a probiotic-filled fermented product, but for most of this time, all you need to do is watch it happen.

Before using your fermentation crock, make sure to wash it well in hot soapy water to kill any unwanted bacteria lingering inside. There are many recipes available in fermentation books with specific instructions, but in general, you will need to fill the crock with cabbage, cucumbers, or other produce and add the listed amount of brine or salt. Many recipes require that you submerge the vegetables under an inch or more of liquid, and the included ceramic weights can keep them submerged.

If you are using a water-sealed fermentation crock, place the lid on top and fill the brim with water. Over time, the gasses from the fermentation process will cause the lip to "burp" as it releases them and instantly reseals, ensuring that oxygen and outside bacteria are barred from entry.

Other essential tools in the home fermentation process include a cabbage cutter and wooden stomper (don't use metal for metabolic reasons) to pack the produce into the crock.

Taste your food over the next few weeks to gauge how the fermentation process is going. Once the mixture reaches the flavor you like most, you can stop the fermentation process by storing

the results in your fridge for up to several months or even canning them in a waterbath to extend the lifespan even longer.

Remember: fermentation is a science AND an art. The process relies on the mysterious workings of microbes, meaning that planning for specific flavors can be difficult. Be open to experimentation and appreciating the unique flavors that each batch creates for you, and you'll find your fermentation crock to be an invaluable kitchen tool for decades to come.

