

**Fermentation, Preserving food, and Sauerkraut**  
**By Nancy Varley, August 29, 2022**  
**Culinary Club – Clarinda Lied Library**

**How to Make Sauerkraut**

The Vessel

Begin with a vessel of your choice. A jar filled with raw food and submerged under salty liquid will ferment. I like to use a large mouth quart-sized mason jar as it is easy to fit your hand into the opening to push the cabbage into the jar. The jar should be clean but does not have to be sanitized. I also have a crock that I use when I have larger amounts of cabbage or cucumbers to ferment. A lid or tea towel will be important to cover the cabbage while it is fermenting.

The Salt

My preference is to use canning/pickling salt or sea salt. Ordinary table salt is very refined and they have stripped the natural minerals away which is why they have to add back Iodine. Iodine has antimicrobial properties and the salt usually has anti-caking agents that can make the sauerkraut cloudy or cause difficulties in the fermentation. Kosher salt is a different weight and texture which could give you inconsistent results from using just canning salt or sea salt.

The Cabbage

The fresher your cabbage is the easier time you will have drawing out the liquid that your cabbage will be submerged in to make the sauerkraut. So garden or farmers' market is wonderful but I have had good results from ordinary grocery store cabbage. And one of my favorite times to make sauerkraut is in March when cabbage goes on sale for St Patrick's Day.

The Method

I shred the cabbage using a variety of methods. I have used a box grater, a good sharp knife, and my food processor. The food processor is convenient but you have to guard that you don't turn the cabbage to mush by over processing. I probably use the grater the most and then if some large chunks pass through I chop more finely with my knife. I like my sauerkraut to be a fine texture but other people may prefer a bigger bite or longer strand of cabbage.

Once the cabbage is shredded and placed in a large bowl I add my salt. As fermentation is not an exact science, the rule of thumb is 1 ½ to 2 teaspoons of salt per pound of cabbage. It is helpful to use a kitchen scale but this is an imprecise process so you can just taste as you go. The

cabbage should taste salty but not unbearably salty. For a large head of cabbage I usually use 2 Tablespoons of salt.

Work the salt through all the cabbage and massage it or press it down with a potato masher or other device so the water will start to draw out of the cabbage. The cabbage should start to release a lot of liquid. I usually wait about a half hour and then begin to fill my clean jar with the cabbage and salt mixture.

Place the salted cabbage in the jar and press the cabbage down. Fill the jar to within an inch of the top. One of the main goals when fermenting is to keep the food completely submerged for the duration of the time you are waiting for it to become sauerkraut. I like to keep a large cabbage leaf to act as a topper, then place a weight on top of that leaf to ensure the cabbage is completely submerged. If your cabbage has not released much liquid, it is ok to add some filtered water (chlorinated water can kill the fermentation process so if you use tap water, boil it to release the chlorine before adding it to the jar). Fermentation is primarily an anaerobic process, which means it occurs in an airless environment so you want to ensure the food is under the water. The desirable bacteria thrive in this oxygen-free environment digesting sugars, starches, and carbohydrates and releasing alcohols, carbon dioxide, and organic acids (which are what preserve the food).

Cover the jar with a lid. An ordinary lid is ok but I have purchased lids with holes in the top to place an airlock device which lets carbon dioxide escape as the food ferments, without letting oxygen into the jar. If you have an ordinary lid just be sure to open it every day or so to release any build up gas. I normally place a tray below the jar to catch any liquid that may ooze out of the jar and contain the mess. You could also place a jelly jar on top to press the cabbage below the liquid but cover this with a tea towel so gnats and other air born items don't fall into your jar. Rule of thumb is to place the fermenting jar away from direct sunlight but otherwise it is pretty happy almost anywhere. I like to place it out of the way but also in a place where I will still see it and not forget that it is bubbling away somewhere.

The warmer the temperature, the quicker your food will ferment. In the warm summer, you will want to check the cabbage sooner and more frequently for doneness. I start checking within a few days. The smaller the jar the quicker it will ferment. You may remember grandma leaving the sauerkraut to ferment for a long time but those may have been much larger crocks.

You will notice that the cabbage changes as fermentation begins. It will go from a bright green color to more of a grayish-green. In the first day or so you should start to see lots of bubbles a lot like watching soda pop fizz. The liquid may ooze out of the jar or that may not happen. Watch it and taste and when it looks and tastes ready to you, remove the weights and place in the refrigerator to halt the fermentation process. As you eat the food and more air fills the jar it is a good idea to transfer it to a smaller jar to reduce the chance that all that air in the jar can spoil your sauerkraut.