Sauerkraut and Other Brined Pickles

“Cabbage is hot and dries out the body and makes people sing well.” – Das Kochbuch des Meisters Eberhard, Germany, 15th c.[[1]](#footnote-1)

Preserving food was just as important in the Middle Ages as it is today, both for nutritional purposes, and to enhance the diet with a wider variety of flavors and available foods. Some methods of preservation are focused on sealing food so that oxygen and contaminants cannot get in, such as potting (using fat/butter to fully submerge foods) and jellying (using gelatin for the same purpose). Honey is also used this way, and has the double benefit of being anti-microbial. Some methods of preservation removed moisture, limiting mold and bacteria growth, such as air-drying, smoking, or dry-salting. Candying was also used in period, and works by both reducing moisture content and providing an inhospitable high-sugar environment that repels bacteria and molds.

Brining, which was used not just for sauerkraut, but for a wide variety of pickled food items, works to prevent spoiling in several ways. The high-salt brine used to cover the food is lethal to harmful bacteria and molds, and the fact that the food is kept submerged protects it from excess oxygen. The brine also encourages the growth of lactic acid bacteria, such as lactobacillus, found naturally in the environment, which produces lactic acid. This acid creates the salty/tangy flavor that makes sauerkraut what it is, but also kills bacteria. Lactobacillus, also present in other preserved/fermented foods such as yogurt, kefir, and kombucha, has a reputation for aiding digestion and helping with stomach upsets in addition to its role in food preservation.

Period sources for sauerkraut are sparse. My belief is that this was likely a well-known technique that did not require recipes, merely a knife, a storage container, and salt. The 1616 Danish *Koge Bog* offers this recipe: “To pickle cabbage. Chop it finely, sprinkle it well each layer by itself in a container or barrel. Between each layer sprinkle salt, cumin and juniper berries and put a good weight on him, iiii or v days. Thereafter pour vinegar over it.”[[2]](#footnote-2) To me it sounds as though this vinegar is more for flavor than for preservation, but that’s mere speculation on my part.

This pickling method can be used for just about any vegetable, and is a great way to make a delicious tangy pickle that retains its nutrient content and crunch while adding flavor to any meal. In the middle ages, a stoneware crock or wooden barrel with a weighted lid would be used for making and storing kraut. The image below is typical of the “traditional” fermenting crocks available for purchase, which would not look terribly out of place in a medieval kitchen.

[[3]](#footnote-3)

**Sauerkraut recipe:**

* Cabbage (1 head makes about 2 quarts of sauerkraut)
* Non-iodized salt (use pickling salt or sea salt)
* Spices/flavors of choice (examples: garlic, onions, dill, jalapenos, peppercorns, etc.)
* Water
* Jar or crock (I like small mouth mason jars best)
* Canning funnel (not necessary, but makes things easier).
* Plastic from an old container, or a small plastic bag

**Preparation**

1. Shred or chop cabbage into bits. Place in a large non-metal bowl. Sprinkle with about 4 Tablespoons of salt.
2. Mix and knead the cabbage well. Allow to rest for at least 30 minutes. You will notice the water seeping out of your cabbage. Do not drain this liquid off.
3. Rinse your container well (no bleach).
4. Spoon cabbage into your jar, juice and all. Pack down tightly to avoid air pockets. Leave about an inch of head space below the neck of the jar.
5. If there is not enough liquid to completely cover your cabbage, add water to thoroughly cover.
6. Cut out a piece of plastic that is just larger than the neck of your jar. Fold and slip inside the jar, pressing the cabbage down under the liquid and wedging below the neck of the jar. OR, fill a small plastic bag with a bit of water (1/2 cup or less), tie/seal, and place in the neck of the jar to keep the cabbage under the liquid. The goal is to keep the cabbage submerged but allow air to contact the brine and let bubbles out.
7. Place the jar on top of a plate or dish in a dark place (a cupboard is great for this). The brine may bubble over as air pockets are released and the lactobacillus digests the sugars in the cabbage. This is normal.
8. Check your sauerkraut after about a week. You may see some cloudiness or even a bit of mold on top of your brine, or floating white or pink kahm yeast. THIS IS OKAY. Just scoop it out with a clean spoon. The salt and lactic acid will prevent anything from getting down into your sauerkraut.
9. Remove your plastic seal/plastic bag and taste your sauerkraut. If it’s sour enough, put a lid on your jar and refrigerate. Sauerkraut will keep for at least six months in the fridge. Kraut is also okay if left un-refrigerated, but will continue to ferment and become sourer until the acidity level is high enough to halt the bacteria’s digestive processes.
10. I like sauerkraut that is at least two weeks old, but experiment and see what is right for you! Fermentation is faster in hot weather, so check frequently. You may also find that in our dry climate, especially with a bit of bubbling, your sauerkraut might need more liquid added. I add a pinch of salt to a cup, fill with tepid water, and pour in.

This method works with lots of other veggies too! Try it with carrots, onions, tomatoes, radishes, turnips, zucchini, cucumbers, beans, peppers, beets, parsnips, squash, etc. Fermented salsas and bean dips are also popular. Grate the veggies, or cut into bite-sized pieces or sticks, then make brine with 2 tablespoons salt per quart of water. Fill the container as tightly as you can with veggies and seasonings of your choice, then pour brine over the vegetables and follow steps 6-10 as above.

**Sources and more Info:**

<http://www.culturesforhealth.com/cultured-vegetable-fruit-condiment-recipes> lots of good recipes here, with info on lots of other fermented foods

<http://vikingfoodguy.com/wordpress/papers/preserved-foods-of-the-viking-age/> Amazing list of foods, and great refrence section.

*Wild Fermentation* by Sandor Katz (Chelsea Green Publishing)

*Food and Drink in Medieval Poland* by Maria Dembinska and William Woys Weaver (University of Pennsylvania Press)

1. Source: http://www.florilegium.org/?http%3A//www.florilegium.org/files/FOOD-MANUSCRIPTS/Eberhard-art.html [↑](#footnote-ref-1)
2. Source: http://www.medievalcookery.com/search/display.html?kogeb:40:KBJ [↑](#footnote-ref-2)
3. Image of a Harsch Fermenting Crock, source: http://www.canningpantry.com/harsch-fermenting-crocks.html [↑](#footnote-ref-3)