



Lewis County

Master Food Preserver

WASHINGTON STATE UNIVERSITY
EXTENSION

Food Safety and Preservation



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Sauerkraut Making

Cabbage Selection:

For the best sauerkraut, use firm heads of fresh cabbage, preferably harvested between mid-August and mid-September. Shred cabbage and start kraut between 24 and 48 hours after harvest. If old, tough cabbage is used, the sauerkraut will be poor quality.

Equipment:

Utensils for shredding or cutting cabbage for making sauerkraut should be selected carefully to avoid bruising the cabbage or cutting it too fine. Wash and remove outer leaves. Cut in halves or quarters and remove the core. **Shred or slice cabbage to the thickness of a quarter.** Use a kraut shredder, vegetable grater, electric meat slicer or cut with a sharp knife. Don't grind the cabbage. If the cabbage is cut like coleslaw, it will bruise and pack too tight. When it packs too tight, it will not allow the salt and liquid to penetrate the cabbage. This will cause the cabbage to spoil and not ferment evenly.



Suitable Containers:

Sauerkraut has traditionally been made in a large stoneware crock. If the crock has chips or cracks, use another type of container. Other containers include large glass bowls, gallon glass jars or food-grade plastic pails (available from restaurants or delis).

Do not use garbage cans or plastic "scrub" buckets. These containers are not food grade and will produce unsafe or off-flavored sauerkraut.

Suitable covers and weights: Shredded cabbage must be kept submerged in brine while fermenting. Sufficient weights must be used to keep brine 1-2 inches above shredded cabbage. There are two ways to do this:

- Put one food-grade plastic bag inside another. Make brine by adding 1½ tablespoons of salt per quart of water. **Boil and cool before using.** Pour brine into double bag. You need enough brine to help the bag form a seal around the edges of the jar or container.

OR

- Use a dinner plate that just fits inside the container's opening. Weigh the plate down with two quart jars filled with brine.

If you weigh the cabbage down with a brine-filled bag, do not disturb the crock until normal fermentation is completed in about 3-4 weeks. If you use a plate and jar as weight, you will have to check the kraut 2-3 times each week and remove scum if it forms. Cover the cabbage filled container with a clean towel to reduce mold growth.

Ingredients:

Sauerkraut is made by the "dry salt" method. A concentrated brine is formed by salt drawing out the juice from the cabbage. **Use pickling salt.** The salt encourages the sugar in the cabbage to be changed to lactic acid, producing sauerkraut. **The proper ratio of salt to cabbage is very important.**

A higher or lower concentration of salt results in an inferior product and spoilage may occur. The correct amount of salt and the right temperature will complete the fermentation in 3-4 weeks. Taste the kraut to determine if the kraut has fermented enough for your taste. If you like it tarter - let it ferment longer.

Procedure:

If you have not made sauerkraut before, there is less chance of failure when smaller amounts are made. A good proportion to work with is **5 pounds shredded cabbage combined with 3 tablespoons pickling salt.**

Work with about 5 pounds of cabbage at a time. Discard outer leaves. Rinse heads under cold running water and drain. Cut heads in quarters and remove cores. Shred or slice to a thickness of a quarter. Alternate layers of cabbage with salt until all 5 pounds are in the container. Mix thoroughly, using clean hands. Mix several times during the next 20-30 minutes.

Pack the cabbage firmly into the container, small amounts at a time. As you pack the cabbage, liquid will continue to rise to the top. The salt draws juices from cabbage. Continue packing until all cabbage is in the container. If juice does not cover cabbage, add more brine (**1½ tablespoons of pickling salt per quart of water**). Add plate or plastic bag weight. Store at 70° to 75° F to ferment. At temperatures between 70° and 75° F, kraut will be fully fermented in about 3-4 weeks; at 60° to 65° F, fermentation may take 5-6 weeks. At temperatures below 60° F sauerkraut will not ferment.

Special Notes:

During the first week of fermentation the kraut usually produces a "rotten" odor. Don't throw it out. The odor will disappear in a few days as fermenting continues. In the meantime, place the container where the smell will not disturb your family. Large gallon jars are nice when this problem occurs because the lid can be put on the jar. This will eliminate most of the odor problem.

Keep the cabbage covered with brine. If necessary, add more weak brine made by dissolving 1½ tablespoons salt in 1 quart water. Add the brine during the fermenting process if it evaporates during fermentation. You may need to remove the bag filled with brine to add brine on top of the cabbage. Or when you remove the plate to clean it, you may need to add more brine before you put the plate back as a weight.

Processing and Storage:

After it has fermented, heat kraut to boiling or pack raw kraut firmly in canning jars leaving ½" headspace. If there is not enough juice to cover the kraut, cover with a brine of 1½ tablespoons salt dissolved in 1 quart water. Adjust lids and process.

The water bath procedure is done to stop fermentation and prevent mold growth. Fully fermented, unprocessed kraut will keep in the refrigerator several months or it can also be frozen.

**Recommended process time for Sauerkraut
in a boiling-water canner**

		Process Time at Altitudes of:			
Style of Pack	Jar Size	0-	1,001-	3,001-	Above
		1,000 feet	3,000 feet	6,000 feet	6,000 feet
Hot	Pints	10 min	15	15	20
	Quarts	15	20	20	25
Raw	Pints	20	25	30	35
	Quarts	25	30	35	40

SAUERKRAUT PROBLEMS:

PROBLEM

CAUSE

- | | |
|---------------------------|---|
| White scum on top | <ul style="list-style-type: none"> • Weight on top of cabbage and liquid not sufficient to exclude air during fermentation. Does occur often - skim off. |
| Slimy kraut
(Discard) | <ul style="list-style-type: none"> • Too high temperature during fermentation • Too low salt content |
| Dark kraut | <ul style="list-style-type: none"> • Iodized salt was used • Uneven salting • Temperature too warm for fermentation |
| Soft kraut
(Discard) | <ul style="list-style-type: none"> • Insufficient salt (inaccurate measuring or uneven salt distribution.) • Temperature too warm for fermentation • Uneven distribution of salt. • Air pockets caused by improper packing prior to fermentation. |
| Pink kraut
(Discard) | <ul style="list-style-type: none"> • Yeast growth on surface caused by too much salt, uneven distribution of salt or if kraut is improperly covered or weighted during fermentation. Yeast thrives on high salt concentrations. |
| Rotten kraut
(Discard) | <ul style="list-style-type: none"> • Usually on the surface where cabbage has not been covered sufficiently to exclude air during fermentation. |
| Moldy kraut
(Discard) | <ul style="list-style-type: none"> • Usually on the surface when fermented has conditions too warm and not covered tightly. |