



Lacto-Fermentation Basics using Brine or Salt

Fermenting foods is a means to preserve food, enhance its nutrient content and provides your body with probiotics. Fermenting is a natural process that allows the good bacteria Lactobacillus (found on the surface of fruits and vegetables) to turn sugars in the foods into lactic acid. Fermented foods taste slightly tangy and adds good bacteria to the gut. These good bacteria help strengthen the immune system, regulate appetite and provides probiotics for gut health.

Equipment:

- Jar with lid, very clean, no need to sterilize,
- A plate to catch leaking from the fermentation process.
- A cover to keep the food below the surface of the liquid. (fermentation weights, 1 small cabbage leaf or a recycled plastic lid cut to fit inside the jar to cover fermenting food.

Ingredients:

- choice of vegetables and seasonings,
- sea salt, pickling or kosher salt,
- filtered water, spring water (or tap water boiled and cooled or let to sit for 24 hours in an open container).

Instructions: 2 methods of fermenting

1. **Brine method:** make a brine (usually 2 to 3 percent, salt and water, to submerge the veggies in. It is safe to use a brine ratio **up to 5%**. Anything higher than 5% may stop the fermentation.
 - Place veggies and seasonings in jars, leaving at least 1 inch head space.
- Mix salt with room-temperature water, stir to dissolve. Make enough to fully cover vegetables.
 - 3% brine: 3 g salt to 100g water (roughly 1 tsp salt to 1 cup of water)
 - 5% brine: 5 g salt to 100g water
 - <https://myfermentedfoods.com/tools/brine-calculator/>
- Pour the brine on top of the veggies, until they are completely covered. Leave at least 1/2 inch of space above the top of the brine. If needed, weigh the veggies down with a weight so the vegetables are not exposed to air.
- Place lid on the jar, screw on loosely to allow gases produced to escape. Open the jar daily to release any built-up gas, keep jar on a plate to collect any overflow.
- Sit at room temperature for 3-6 days. After 3 days taste the veggies. Check daily until they are the desired 'tang' then place in the fridge.
- Its normal for the brine to get a little cloudy, it's just veggies releasing juices while soaking up the brine.

2. **Dry-salting method:** salt is mixed with the veggies which pulls out the juices from the vegetable to make the brine (cabbage, shredded carrots or radish, or cucumber, etc.)
- Prepare vegetables, weigh, place in bowl with the correct amount of salt as in the chart below. Gently massage the salt into the vegetables, as the salt dissolves and the vegetables wilt, water will collect in the bowl, pack into jars including all liquids. Make sure solution covers the vegetables, top up with brine if necessary.

Weight of vegetables	2% of salt	3% of salt	5% salt
1/2 lb	1 tsp. (5g)	1 1/2 tsp. (7.5g)	3/4 Tbsp (12.5 g)
1 lb	2 tsp. (10g)	2 1/2 tsp. (15g)	1 1/2 Tbsp (25g)
1.5 lb	3 tsp. (15g)	4 tsp. (22.5g)	2 1/4 Tbsp (37.5g)
2 lbs	4 tsp. (20g)	5 tsp. (30g)	3 Tbsp (50g)

Tips

Use fresh, organic vegetables from your garden or local markets.

Make sure your containers (preferably glass jars) are very clean to avoid contamination.

Taste-test throughout the fermenting process to find your preferred level of sourness.

If you're fermenting in winter, keep your jars in a slightly warmer part of your home, as lower temperatures slow fermentation.

Flavor Combinations –

- Carrot sticks + 1 clove garlic + pinch of black peppercorns + 1 sprig fresh dill –
- Cauliflower + 2 cloves garlic + pinch red pepper flakes + pinch black peppercorns –
- Green beans + 2 sprigs fresh dill + 2 cloves garlic + pinch of black peppercorns –
- Sliced radish, jalapeno, onion, and carrots + pinch of cumin seeds + pinch of red pepper flakes + 1 clove garlic –
- sliced peeled beets + 1 clove garlic + pinch of black peppercorns