Your Guide to Fermenting Vegetables

The Lost Art of Preserving Food

I belong to a CSA and I sometimes find myself overwhelmed when large amounts of vegetables come in all at once. Although there are a variety of ways this produce can be preserved, I have found that fermentation is the best one for me. Using this method preserves the vibrant colors, flavors, vitamins, minerals, and food enzymes since fermentation does not involve heat like with conventional canning methods.

In my explorations with food I have fermented beets, Sauerkraut, Kimchi, varieties of salsa, chopped jalapeno peppers, cucumbers, chopped garlic, and herbal blends including cilantro and chives.

History of Fermentation

Fermentation, drying, freezing, smoking, salting and sugaring foods were the methods used by our ancestors to keep food through seasonal shortages. Fermentation has been in practice for thousands of years and is still commonly used in other cultures throughout the world.

The art of fermenting vegetables is also becoming more common in the U.S. as more people are realizing the many health benefits of including fermented foods in the diet.

When you improve digestion, you improve absorption too

Do you suffer from food intolerance, constipation, irritable bowel syndrome, yeast infections, allergies or asthma? All of

these conditions have been linked to gut health. Fermented foods will help to restore the proper balance of gut flora, and since 80 percent of your immune system is located in your intestines, making gut health a priority can be a proactive defense against disease. Furthermore, since fermented foods retain their enzymes, your body will utilize them in the digestion and assimilation of nutrients.

By fermenting in-season vegetables you can save money.

I'm sure we have all experienced produce spoiling before it was eaten. By preserving your surplus you can avoid this common problem. As an added bonus, you can save money by purchasing and preserving your produce while in-season, thus ensuring that you are getting the highest quality at the lowest price.

Aside from the initial cost of your fermentation vessels, there are minimal expenses to this process. I have a crock for sauerkraut, and I use quart and pint size canning jars for fermenting and storing.

The basics – How to Ferment Vegetables

Typically, coarse sea salt and/or whey are used for the fermenting process. If you use whey, it can be obtained by draining plain cultured yogurt over cheesecloth or by pouring the accumulated liquid from the top of the yogurt container.

After deciding what to ferment, the typical process is to chop or finely grate the vegetables to increase the surface area which will be exposed to the brine.

Place the grated/chopped vegetables into a bowl and sprinkle with a coarse sea salt. The ratio is 2 T per 1 qt mason jar of vegetables, or 1- 1 ½ tsp of salt per 2 lbs of vegetables. Use clean hands or a utensil to work the salt in. It may take

a few minutes to pull the liquid from the vegetables, but soon you will have enough to cover the vegetables thoroughly when placed into your mason jars.

Fill the jar with the vegetables and juice and continue to press firmly to release more liquid and to remove any air pockets.

Usually no additional water is needed; however it can simply be added to completely submerge the vegetables. If there is a need for water, you should use filtered or spring water only. If at any point in the fermentation process you notice that the vegetables have lost moisture, you can always add more and incorporate it in.

Cover the jar with a cloth or paper towel and secure with a rubber band to keep insects out. Sealing your jar tightly at this point would cause pressure to build up which could cause breakage.

Leave the jar at room temperature for 4 to 7 days. The warmer the area, the faster the fermentation will occur. When you are satisfied with the taste, you can secure a cover and store in a refrigerator or a cool basement.

Being submerged in the salted brine will prevent the vegetables from growing mold. However, if you find mold growing on the top it can simply be removed and you will find that the vegetables underneath are still fine. I have not found mold to be an issue, but I am in the habit of smelling the product before using.

Use non-metal utensils when mixing or when removing vegetables from the container.

Fermented Vegetables Recipes

Kimchi

(fills 2 qt jars)

This recipe includes whey. Read the above instructions on obtaining whey. If you don’t have whey, you will add more salt using the 2 T per 1 quart mason jar.

- 1 head Napa cabbage that has been cored and shredded
- 1 bunch of green onions, chopped
- 1 cup grated carrots
- 1/2 cup grated daikon radish
- 1 T fresh grated ginger
- 3 cloves garlic, peeled and minced
- 1/2 tsp dried chili flakes
- 2 T sea salt
- ½ C whey

Place vegetables, ginger, red chili flakes, and salt and/or whey into a bowl and incorporate until you have released the juices. Fill 2 quart size glass jars with the mixture, while pressing down firmly until all the juices have risen to the top and cover the vegetables leaving 1 inch of space at the top of the jar. You can use a cabbage leaf over the top of the mixture to keep the vegetables submerged below the brine. Cover the jar lightly and keep at room temperature for about 4-7 days, then secure a cover and transfer to the refrigerator.

Salsa Verde

- 1 lb tomatillos that have been lightly blanched and husked
- 4 jalapeno peppers seeded and chopped
- 3 cloves garlic peeled and crushed
- Juice of 1 lime
- 2 T unrefined coarse sea salt
- 3T chopped cilantro

Toss tomatillos, peppers, garlic, lime juice, and salt in a food processor or blender and process until smooth, adjusting seasoning to taste. Transfer to a mason jar leaving 1 inch at the top of the jar, lightly cover and ferment at room temperature for three to five days, then secure a cover and store in the refrigerator.

Basic Salsa

See above for obtaining whey. If you don’t have whey, just add more salt using the 2 T per 1 quart size mason jar.

- 2 large onions
- 6 large tomatoes
- 2 green peppers
- 3 cloves of garlic
- 6 jalapenos or to taste (seeded)
- ½ cup fresh chopped cilantro
- juice of three lemons or limes
- 1/2 cup whey
- 2 Tablespoons of sea salt
- water if necessary

Run individual veggies through a food processor or chop by hand and combine in a large bowl. Add the salt and/or whey and stir well. Let sit for a few minutes and then put into jars leaving an inch at the top. Lightly cover and let sit at room temperature for 4 days, then cover and store in the refrigerator.

Fermented Garlic

- 7 garlic bulbs
- 1 T sea salt

This recipe is to fill a mason jar about ½ of the way full of chopped garlic cloves. Separate the heads of garlic into individual cloves and peel the skin off of each clove. Combine

1 T sea salt with 1 cup of water and pour into a 1-qt. mason jar, stirring well to dissolve. Lightly chop the garlic in a food processor and add to the salted water, add additional water if needed and stir. Cover lightly and set it aside at room temperature for at least three days or up to a week or until the garlic achieves the desired flavor, then cover and store in the refrigerator.

Preserving Herbs with Fermentation

I used to dry herbs but found they were lacking in flavor. Using the process of fermentation they remain vibrant in color and flavor and can be used to season your dishes.

Depending on the amount of herbs you are fermenting it may take a quart or a pint size jar. Start by placing the washed herbs in a food processor until they have reached a finely chopped consistency. Add some water to make your brine (this should have the consistency of thick salsa).

In this state, you can get a better idea of the amount of salt that you will need to add by following the 2 T per qt size jar. Incorporate the salt into the mixture thoroughly before transferring it to mason jar(s), then cover lightly. Allow to ferment for 3- 4 days, then secure a cover and store in the refrigerator.

Recommended Reading:

- *Candida, Gut Flora, Allergies, and Disease*
- *How to Kill Fungal Infections*
- *Health Benefits of Apple Cider Vinegar & How to Make Your Own*
- *Your Guide to Root Vegetables – Health Benefits, Recipes, and More*