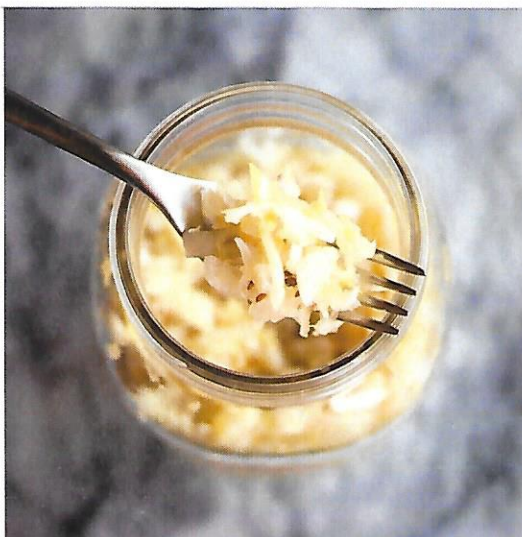


The Essentials of Fermented Vegetables

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Prairie Whispers

+ What is fermented (live-cultured) food?

Cultured foods are part of every traditional diet around the globe. These foods are naturally fermented, like kefir or sauerkraut. The fermentation process causes the production of lactic acid bacteria, which are good for us. Fermenting foods maintains freshness while adding flavor, texture, and aroma.



Fun Facts

- The ancient art of culturing, fermenting, and pickling vegetables date back thousands of years.
- The word "sauerkraut" is German for "sour plant."
- It is believed to have been brought to Europe from China.
- Chinese workers building the Great Wall of China consumed this food in great quantities.
- The Korean version of sauerkraut is called kimchi.
- In 1776, Captain James Cook was awarded a medal for demonstrating that "kraut" could be used to prevent scurvy.
- British crews on long voyages did not get scurvy because of the high vitamin C content of



+ Why eat fermented (live-cultured) vegetables?

- These friendly cultures produce a complex of B vitamins and vitamin K, which are components in blood clotting.
- They make foods more digestible because microbial action breaks down the fiber, protein, fats, and carbohydrates.
- Through their production of lactic acid, raw vegetables are preserved "garden fresh" for use beyond the growing season.
- Certain friendly bacteria act as anti-cancer factors by detoxifying or preventing the formation of chemicals which are carcinogenic.
- They enhance immune function.
- They enhance bowel function by producing improved peristaltic action and reducing transit time of food through the bowels.
- They play a role in protecting against the negative effects of radiation and toxic pollutants.
- Evidence is strong that an overgrowth of E. coli in the bowel may provoke a diabetic condition. Resident microflora keep E. coli in check.
- They are able to control proliferation of hostile yeasts such as candida albicans and vaginitis.

Sauerkraut (makes 1 quart)

- 1 medium cabbage, cored and shredded
- 1 tablespoon caraway seeds
- 1 ½ tablespoon sea salt

1. In a bowl, mix cabbage with caraway seeds and sea salt.
2. Pound mixture with a wooden pounder or meat hammer for about 10 minutes to release juices.
3. Place mixture in a quart-sized, wide-mouthed mason jar and press down firmly with a pounder or meat hammer until juices come to the top of the cabbage. The top of the cabbage should be at least 1 inch below the top of the jar.
4. Cover tightly and keep at room temperature for about 3 days before transferring to cold storage.
5. The sauerkraut may be eaten immediately, but improves with age.

Kimchi

- 7 lb. shredded cabbage
- 1 lb. shredded carrots
- 1 lb. diced onion
- ½ lb. shredded daikon radish
- 3 cloves garlic (or more)
- 1 Tbs. grated fresh ginger
- 3 oz. sea salt
- 2 cayenne peppers (whole)

Get creative! Add your other vegetables or spices to make it your own!

1. Combine all ingredients, except cayenne peppers, in a crock and beat down to release liquids; continue until watery.
 2. Add the cayenne peppers and push them into the middle of the vegetable mixture.
 3. Place cabbage leaves on top of the mixture to cover it.
 4. Place two bags full of water, one on top of the other, on top of the cabbage leaves.
 5. Cover the entire crock with a towel and let it sit at room temperature for at least a week. If you prefer a sourer flavor, ferment longer.
 6. Once the kimchi has reached your desired level of sourness, transfer it to the refrigerator, where it will keep for at least 6 months.
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Beet Kvass (makes 2 quarts)

3 medium or 2 large beets, peeled and coarsely chopped

1 tablespoon sea salt

Filtered water

1. Place chopped beets and sea salt in a 2-quart glass container.
2. Add filtered water to fill the container.
3. Stir well and cover securely.
4. Keep at room temperature for at least 2 days** before transferring to the refrigerator.

**Check the kvass daily and taste it for desired flavor, then place in the refrigerator.

- To speed up the fermentation process, add $\frac{1}{4}$ cup of whey, sauerkraut juice, kimchi juice, or beet kvass before you fill the container with water.
- When most of the liquid has been drunk, you may fill up the container with water and keep at room temperature another 2 days. The resulting brew will be slightly less strong than the first. After the second brew, discard the beets and start again. You may, however, reserve some of the liquid and use it to start another batch.
- DO NOT USE grated beets in preparation of this beet tonic. When grated, the beets exude too much juice, resulting in a too-rapid fermentation that fosters the production of alcohol rather than lactic acid.
- This drink is valuable for its medicinal qualities and as a digestive aid. Beets are loaded with nutrients. One 4-ounce glass, morning and night, is an excellent blood tonic, promotes regularity, aids digestions, alkalizes the blood, cleanses the liver, and is a good treatment for kidney stones and other ailments.
- Beet kvass may also be used in place of vinegar in salad dressings and as an addition to soups.

If you don't want to make homemade fermented vegetables, contact this company: "Rejuvenative Foods." They are from California and will send out different sizes and flavors of jarred sauerkraut, kimchi, and more.

Call 1-800-805-7957 or 831-462-6715 or visit their website: <http://www.rejuvenative.com/>

Fruit and Vegetable Fermentation Tips

- After the basic technique is mastered, get creative!
- Experiment with different vegetable combinations; include dark, green, leafy vegetables like kale, mustard greens, collards, or broccoli leaves.
- For even more variety, use kelp! Simply soak, drain, and chop sea vegetables like Dulse, Wakame, Hijiki, and Arame. Then, add just a little to your mix.
- Experiment with new herbs. Use either dry or fresh. Consider juniper berries with cabbage; tarragon goes with carrots; cloves, cinnamon, and cumin work nicely with fruits.
- Some people use lemon juice as part of the brine.
- Try making cultured turnips, daikon radishes, kohlrabi, celery, garlic, ginger, or apples. You can really ferment whatever fruit or vegetable you have available!
- Roll up cabbage leaves and place them on top of the jar to fill the air space before lightly closing the jar lid.
- Consider fermented vegetables as a kind of “probiotic” salad.
- Diversity/variety in foods will be both interesting and good for you!

Vegetables to Ferment

Beans	Celery	Onions	Fiddlehead Ferns	Broccoli	Leeks
Beets	Cucumbers	Peppers	Zucchini	Turnips	Kale
Cabbage	Garlic	Rutabagas	Summer Squash	Cauliflower	Okra
Carrots	Kohlrabi	Tomatoes	Asparagus	Egg Plant	Anything!

Herbs and Spices Commonly Used in Fermenting

Garlic	Bay Leaves	Coriander	Tarragon
Dill	Caraway Seeds	Cloves	Summer Savory
Onions	Juniper Berries	Mustard Seeds	Red Pepper Seeds
Horseradish	Pimentos	Pickling Spice Mix	Cumin

Leaves Used (to provide tannis [crispiness] and lactic acid bacteria)

Grape Leaves	Horseradish Leaves	Oak Leaves
Fresh Red Raspberry Leaves	Black Currant	Apple Leaves

These additions also help preserve crispiness:

Garlic, Hot Peppers, Juniper Berries, Caraway Seeds, Horseradish Root and Leaves.

Lacto-Fermentation Processing Problems and Warning Signs

(Knowledge comes with experience!)

- The “smell test” is very reliable—your nose will detect if it is safe to eat.
- Successful fermentations have a distinguishing, pleasant smell. The taste is slightly sour.
- If using litmus paper to indicate pH, it should be below 4.1.
- Sometimes mold or harmless, white kahm yeast appears on the top; just skim this off and don't worry because it is simply a result from contact with air.

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