Vegetable Fermentation at Home; Give it a Try!

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Fermenting food at home is becoming an increasingly popular food trend, although home food fermentation has been practiced for centuries around the world as a key way to preserve food. However, as with any food preservation or preparation method, it is essential that it is done safely. Many different types of food are often fermented at home, including, but not limited to, sourdough bread, yogurt, vegetables (such as sauerkraut and kimchi), kombucha and others. We will focus on vegetables for this article.

What happens to the vegetables when they ferment?

The natural bacteria present in the vegetables break down the components (natural sugars, etc.) of the vegetable into forms that are easier to digest. Lactic acid normally forms during fermentation, which helps to control any harmful bacteria that might be present.

Basic safe home food fermentation tips

In addition to the same good practices that should be used for any home food preservation projects, these tips should be particularly considered when fermenting vegetables:

1) Start with vegetables that have been grown using good food safety practices.
2) Wash all surfaces and containers that will be used with hot sudsy water and rinse well with very hot water before use.
3) Be certain that fermenting foods contact only food-grade materials. The fermenting container should not be metal or have scratches or cracks, which could harbor harmful bacteria. Some metal containers (other than stainless steel) may react with the acid in the food and give it a strange flavor or color and could leach into the food.
4) Start fermentation process within 24 hours of harvesting the vegetables. (recommended)
5) Use the amount of salt called for in the recipe as it is essential to its safety (and texture and flavor). Be sure to use canning and pickling salt to ensure the proper proportion of salt to vegetable. Do NOT reduce or eliminate the amount of salt, as it is essential to the safety of the fermentation process.
6) Store fermenting vegetables in a sealed container at 70 to 75°F, which is the optimum temperature for the fermenting microorganisms. Try not to disturb the vegetables during fermentation to reduce the amount of oxygen reaching the vegetables so mold doesn't develop.
7) Remove any scum that forms during fermentation by skimming the scum with a clean, non-metal spoon or cup.
8) After fermenting, be sure to handle fermented foods with clean hands and do not let them come into contact with contaminated meat or fish or surfaces that have not been adequately cleaned.
9) After fermenting, products must either be stored in the refrigerator or canned properly.

Kimchi has always been a family favorite of ours and its uses are endless. We put it on summer-fun picnic foods like hot dogs, hamburgers and even to spice up a good salad. How spicy you like it is up to you. My husband loves spicy and I am a “medium” kinda gal. So we make two separate batches. Make sure you mark them, but you will know right away if it isn’t “your” batch. :) Below is a link to a reputable, home safe recipe from our website: https://ucanr.edu/sites/camasterfoodpreservers/files/336327.pdf.

The UC Master Food Preservers of El Dorado County are a great resource for answers to your preserving question. Leave a message at (530) 621-5506 or email us at edmfp@ucanr.edu. For more information about our program, events and recipes, visit our website at http://ucanr.edu/edmfp. Sign up to receive our eNewsletter at http://ucanr.org/mfpcsenews/ . Find us on Facebook, too (UCCE Master Food Preservers of El Dorado County)!