The Pickle Project

From "Cukes" to "Pickles": Making Magic with Vinegar and Salt

What is "Pickling"?

Aaah, the crunch of a cucumber "pickle". Be it a fermented dill or a garlicy half sour, or sweet and vinegary "cornichon", cucumbers can easily be transformed into a variety of delicious "pickles". "Pickles" have been around for thousands of years, dating as far back as 2030 BC when cucumbers, native to India were produced in the Tigris Valley. The word "pickle" comes from the Dutch pekel or northern German pókel, meaning "salt" or "brine". Using salt to create pickles uses "lacto-fermentation" to transform a cucumber into a pickle, but not all pickles are fermented! Cucumbers can also be transformed into "pickles" simply by pouring a vinegar solution over vegetables.

So what's the difference?

In 'lacto-fermentation" (or simply "fermentation") lactic microbial organisms develop which turn the naturally occurring sugars in foods into lactic acid. The environment becomes acidic quickly, making it impossible for any spoiling bacteria to multiply. Cucumbers made this way include "half-sours" and "dill pickles". Cabbage made this way becomes sauerkraut. The other process uses a vinegar solution to transform cucumbers into French "cornichons" or English "sweet pickles". Pickling can be made with carrots, cauliflower, radishes, onions, green beans, asparagus and a seemingly endless variety of other vegetables and fruits. Using different pickling methods is part of understanding diverse cultural food traditions.

Homemade Pickle Recipes

Recipe #1: Fermented Pickles (Salt Brine Solution)

Basic salt brine solution ratio: 1 cup water to 1 ½ teaspoon salt (taste to get a sense of the salinity)

For a 1-quart jar:

- 4 cups water and 2 tablespoons of salt
- Cucumbers to fill jar depending on shape (ends cut off; about 1 ½ pounds for a 1-quart jar)
- Whole garlic cloves (about 8 for a quart, or to taste)
- Coriander seeds (1 teaspoon for a quart, or to taste)
- Dried mustard seeds (black, brown or your choice; one teaspoon for a quart)
- Dried hot pepper (your choice of heat)
- Sliced onion (your choice; one small for a quart)
- Dill sprigs (your choice; about 3 for a quart)
- Bay leaf (needed to add tannin to keep the pickles crispy)
- Black, green, red peppercorns (your choice); ½ teaspoon of each if using all three, or one teaspoon if using just one.



Heat water and dissolve salt. Put all other ingredients in glass jar leaving about 2 inches of "head space" Let solution cool then pour solution over other ingredients. Weigh down the cucumbers so they are completely submerged under the liquid, using a small glass or a small zip lock bag filled with a little water, or something as simple as a clean river stone.

Cover loosely with a lid, place in a bowl or pan to catch any overflow and place them in a cool dark place for 3-7 days. A slow, cool fermentation works best.

Check after 3 days. Look for signs of life: bubbles, or cloudy water. All are good signs (will depend on temperature). When ready, remove the weight, tighten lid, shake the jar to distribute the spices and place the jar in the fridge to further slow the fermentation.

Letting it sit for a week (or longer for more "sour" and pungent taste; depends on preference). Taste the brine to see if you like it. "New pickles" are left out to ferment for a shorter time. Note that warmer temperatures lead to faster fermentations. To slow and stop the fermentation process refrigerate. Longer fermentation creates more "sour" pickles.

Recipe #2: Vinegar Pickles ("Quick Refrigerator Pickles")

Basic vinegar solution ratio: 1:1 (1 cup vinegar to 1 cup water to ¼ cup sugar to 1 tablespoon salt)

For a 1-quart jar:

- 2 cups white vinegar with 5% acidity
- 2 cups water
- 1/2 cup sugar
- 2 tablespoons kosher (sea) salt (less if desired, but at least 2 teaspoons for flavor enhancement)
- Cucumbers to fill jar (about 1 ½ pounds for a quart jar, cleaned with ends cut off)
- Whole garlic cloves (about 8 for a quart; or to taste)
- Coriander seeds (1 teaspoon for a quart, or to taste)
- Dried mustard seeds (black, brown or your choice; one teaspoon for a quart)
- Dried hot pepper (your choice of heat)
- Sliced onion (your choice; one small for a quart)
- Dill sprigs (your choice; about 3 for a quart)
- Bay leaf
- Black, green, red peppercorns (your choice); ½ teaspoon of each if using all three, or one teaspoon if using just one.

Heat water, vinegar, sugar, and salt together until sugar and salt dissolve.

Let solution cool and pour over other ingredients. Tighten lid on jar, shake jar to distribute spices. Refrigerate. Ready to eat after a couple hours; longer time is more pungent and flavorful.



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Jerri Husch holds a PhD in Sociology and is a specialist in social change, food policy, innovative land regeneration, and urban food systems. An adjunct professorial lecturer in the Sociology Department she teaches across a variety of areas including, "Political Sociology", "City and Place", and "Public Sociology". In addition to her teaching she is part of AU Facilities Management and a Faculty Fellow, coordinating the "AU Edible Campus" project and promoting the "Learning by Leading" ("LxL") Initiative.



Dr. Husch works with national and local governments, NGO's and WHO, UNDP, UNICEF and the UN Secretariat on projects related to food safety, climate change, human rights and livelihoods with a focus on the cultural context of policy and project delivery.

As an international management consultant and trained chef, she has lived and worked around the world, explored markets, collected seeds, cultivated gardens, and invented new recipes for adventurous food loving friends.

For more fun with food contact Jerri at: <u>husch@american.edu</u>.