



HYG-5345-09

# Quick Process Pickles

Quick process pickles differ from fermented pickles because the pickling process uses acetic acid from vinegar rather than lactic acid from fermentation. Quick process pickles are ideal for those who want to make pickles, start to finish, in a few days. However, the flavor of fresh pack or quick process pickles is better if they are left to stand in sealed jars for several weeks.

## Safety

The correct acid concentration, in the form of vinegar, is important because acid prevents the growth of *Clostridium botulinum*, a deadly microorganism, in quick process pickles.

If acid concentration is not sufficient, there is a danger of botulism poisoning. Therefore, use only tested recipes, and do not change the proportion of food, water, and vinegar.

## Selection

Select firm cucumbers. Always use a variety recommended for pickling. Refer to seed catalogs for information. Catalogs often distinguish varieties best for pickling by labeling them as such. Cucumbers labeled as “table use” or for “slicing” will NOT result in a quality product. If you buy cucumbers, select only unwaxed ones, as the brine used in the pickling process cannot penetrate through the wax.

For highest quality, plan to pickle the cucumbers within 24 hours after they are picked. If the produce cannot be used immediately, refrigerate it, or temporarily store it in a cool, well-ventilated place. This is particularly important for cucumbers because they deteriorate rapidly, especially at room temperature.

## Preparation

Sort the vegetables and select the size best suited for your recipe: 1½ inch in length cucumbers for gherkins, and 4-inch cucumbers for dills. Do not use vegetables showing evidence of mold. Proper processing kills microorganisms that cause spoilage but does not destroy the off flavor from the mold. Wash vegetables well, especially around the stems. Soil trapped around the stem breeds bacteria that softens pickles. Because the blossom end of the vegetables contains enzymes that can cause softening, it should also be removed with a 1/16-inch slice.

## Ingredients

**Salt**—When making quick process pickles, use canning salt or pickling salt (found in the salt section of the grocery store). Although iodized and non-iodized table salt may be used safely, the non-caking materials added to table salts may make the brine cloudy and the iodine

may darken the pickles. Do not use flake salt as it varies in density. *Reduced-sodium salt may be used in quick pickle recipes, but not in fermented pickle recipes.* It is best to use a recipe designed for low sodium content. Follow the recipe exactly. Try small batches to see if the taste is acceptable. Do NOT use reduced sodium ingredients for sauerkraut or fermented pickles, as the higher sodium is present in those two foods to prevent bacterial growth.

**Vinegar**—Use white distilled or cider vinegar of 5 percent to 6 percent acidity (50 to 60 grain). This will provide the acid concentration needed for safety. DO NOT use homemade vinegars. Use white vinegar for a lighter color (especially when pickling onions and cauliflower). If the product is too sour for personal taste, increase the amount of sugar, rather than diluting the vinegar, which will decrease the acid concentration, and thus the preservative effect.

**Sweeteners**—White granulated and brown sugars are the sweeteners most often used in pickling. White sugar will not add any color to the product; however, brown sugar may add a distinctive flavor and color. Do not use a sugar substitute unless the recipe has been developed for that product, as sweeteners may produce a bitter taste, and do not provide the “plumping” action of sugar.

**Firming ingredients**—Lime and alum are NOT needed to produce crisp pickles. Alum does not improve the firmness of quick process pickles. An excess of alum can cause digestive upsets. Removal of a 1/16-inch slice from the blossom end of fresh cucumbers eliminates a softening enzyme located in the blossom. Soaking cucumbers in ice water for 4 to 5 hours will maintain crispness.

*If you must use lime, use the following instructions.*

Lime may lower the pH of a pickled product, thus allowing harmful microorganisms to grow.

**CAUTION:** DO NOT use aluminum containers with lime, as it can pit the surface and cause an increased level of aluminum in the pickles.

For safe limed pickles, soak cucumbers in a mixture of 1-cup pickling lime (food grade), 1/2-cup salt, and 1 gallon of water. Do not inhale the lime/water solution while mixing. Soak cucumbers in lime water for 12 to 24 hours, then remove the excess lime by the following steps.

- Remove cucumbers from the lime solution, rinse and soak for 1 hour in fresh water.
- Repeat rinsing and soaking process twice more, for a total of 3 times.
- Handle carefully, as slices of cucumber will be brittle. Drain well.

### Alternate Processing Method

Use of a lower temperature water bath may also keep pickles crisp. Pack the room temperature cucumbers in the jar and pour 165° F to 180° F liquid over the product, leaving an appropriate headspace. Remove air bubbles, wipe jar rims, add lids and rings, and process at 180° F for 30 minutes. *Use a candy or jelly thermometer to make sure the temperature of the water does not fall below 180° F during the entire 30 minutes.* This method CANNOT be used with low sodium pickles.

**Spices**—Use fresh whole spices for best quality and flavor in pickles. Powdered spices may darken and cloud the product. Pickles will darken less if you tie whole spices loosely in a clean white cloth or cheesecloth bag, then remove the bag from the pickling solution before packing the jars.

### Equipment

Choice of pans is important in the pickling process. The liquids used in pickling can react with the metal in copper, brass, galvanized or iron utensils, and therefore, these materials should NOT be used. Choose stainless steel, aluminum, glass, or unchipped enamelware saucepans.

Short-term brining or soaking can be done in crocks, saucepans, or bowls made from stoneware, glass, stainless steel, or unchipped enamelware.

## Recipes

Use only recipes with tested proportions of ingredients. Sources of tested recipes include the United States Department of Agriculture (USDA), land-grant universities, and companies that manufacture pickling ingredients and canning equipment. Precise measurements and tested recipes guarantee the quality and the safety of the product. Do not alter vinegar, salt, or water proportions in a recipe or use vinegar with an unknown acidity.

### ***Sweet Gherkin Pickles***

7 pounds cucumbers (1½ inch or less)  
 1/2 cup canning or pickling salt  
 8 cups sugar  
 6 cups vinegar (5 percent)  
 3/4 teaspoon turmeric  
 2 teaspoons celery seeds  
 2 teaspoons whole mixed pickling spice  
 2 cinnamon sticks  
 1/2 teaspoon fennel seed (optional)  
 2 teaspoons vanilla (optional)

*Yields 6 to 7 pints*

Wash cucumbers. Cut 1/16-inch slice off blossom end and discard, but leave 1/4-inch of stem attached. Place cucumbers in large container and cover with boiling water.

Six to 8 hours later, and on the second day, drain and cover with 6 quarts of fresh boiling water containing 1/4 cup salt.

On the third day, drain and prick cucumbers with a table fork. Combine and bring to boil 3 cups vinegar, 3 cups sugar, turmeric, and spices. Pour over cucumbers.

Six to 8 hours later, drain and save the pickling syrup. Add another 2 cups each of sugar and vinegar and reheat to boil. Pour over pickles.

On the fourth day, drain and save syrup. Add another 2 cups sugar and 1 cup vinegar. Heat to boiling and pour over pickles. Six to 8 hours later, drain and save pickling syrup. Add 1 cup sugar and 2 teaspoons vanilla and heat to boiling. Fill sterile pint jars with pickles and cover with hot syrup, leaving 1/2 inch headspace. Adjust lids and process as indicated below, or use the Alternate Processing Method (180°F) described above.

<b>Recommended process time for Sweet Gherkin Pickles in a boiling-water canner</b>			
		<i>Process time at altitudes of</i>	
<b>Style pack</b>	<b>Jar size</b>	<b>0–1,000 ft.</b>	<b>1,001–6,000 ft.</b>
Raw	Pints	5 min.	10 min.

### ***Quick Fresh Pack Dill Pickles***

8 pounds of 3- to 5-inch pickling cucumbers  
 2 gallons water  
 1¼ cups canning or pickling salt (divided)  
 1½ quarts vinegar (5 percent)  
 1/4 cup sugar  
 2 quarts water  
 2 Tablespoons whole mixed pickling spice  
 3 Tablespoons whole mustard seed (1 teaspoon to 2 teaspoons per pint jar)  
 14 heads of fresh dill (1½ heads to 3 heads per pint jar)  
 4½ Tablespoons dill seed (1 tablespoon to 1½ teaspoons per pint jar)

*Yields 7 to 9 pints*

Wash cucumbers. Cut 1/16 slice off blossom end and discard, but leave 1/4-inch of stem attached. Dissolve 3/4 cup salt in 2 gallons water. Pour over cucumbers and let stand 12 hours. Drain. Combine vinegar, 1/2 cup salt, sugar, and 2 quarts water. Add mixed pickling spices

tied in a clean white cloth. Heat to boiling. Fill jars with cucumbers. Add 1 teaspoon mustard seed and 1½ heads fresh dill per pint. Cover with boiling pickling solution, leaving 1/2-inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids and process as indicated below, or use the Alternate Processing Method (180°F) described above.

<b>Recommended process time for Quick Fresh Pack Dill Pickles in a boiling-water canner</b>			
		<i>Process time at altitudes of</i>	
<i>Style pack</i>	<i>Jar size</i>	<i>0–1,000 ft.</i>	<i>1,001–6,000 ft.</i>
Raw	Pints	10 min.	15 min.
	Quarts	15	20

## References

- Complete Guide to Home Canning*. United States Department of Agriculture, Agriculture Information Bulletin No. 539. [http://www.uga.edu/nchfp/publications/publications\\_usda.html](http://www.uga.edu/nchfp/publications/publications_usda.html)
- So Easy to Preserve*. Fifth Edition. (2006). Address, Elizabeth L. and Harrison, Judy A. Cooperative Extension. The University of Georgia, Athens.
- Practically Edible. The Web's Biggest Food Encyclopedia, <http://www.practicallyedible.com/edible.nsf/encyclopaedia!openframeset&frame=Right&Src=/edible.nsf/pages/ed.1254!open document&BaseTarget=Right>

Information Compiled by Lydia Medeiros, Professor, Department of Human Nutrition.

Updated 2008 by Lois Clark, Extension Educator, Family and Consumer Sciences, Auglaize County, and Jean DeBrosse, Program Assistant, Family and Consumer Sciences, Greene County.

Reviewed by Julie Shertzer, Ph.D., R.D., Program Specialist, Ohio State University Extension.

## EMPOWERMENT THROUGH EDUCATION

Visit Ohio State University Extension's web site "Ohioline" at: <http://ohioline.osu.edu>

Ohio State University Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

Keith L. Smith, Ph.D., Associate Vice President for Agricultural Administration and Director, Ohio State University Extension

TDD No. 800-589-8292 (Ohio only) or 614-292-1868