



The Garden is Ready Time to Make Pickles!

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When your garden yields a surplus of fresh produce, or when the farm stand has prices too low to resist, then it's time to make pickles. Pickling is one of the oldest known methods of preserving foods, and a long-time favorite of home canners. While cucumbers are the most popular pickled product, many other vegetables and fruits can be successfully pickled at home.

Pickling often seems to be a rather mysterious process, with complex steps and unusual ingredients, but if you remember to **use high quality ingredients** and **follow a tested recipe**, you can make high quality pickles every time.

Types of pickles

There are two basic types of pickles, fermented (or crock) pickles and fresh pack or quick process pickles.

- **Fermented pickles**, also called **crock pickles**, are produced by fermenting cucumbers, or other vegetables, in salt brine for several weeks. During the fermentation, bacteria convert sugars in the vegetables into lactic acid. Lactic acid preserves the pickles and gives them their characteristic tangy flavor. Genuine dill pickles and sauerkraut are both fermented products.
- **Fresh pack** or **quick process pickles** are not fermented. Instead, the acid necessary to preserve this product is added in the form of a 'pickling solution' of vinegar and spices. Sugar may also be added. Popular pickles such as bread-and-butter, and fresh pack dill are examples of this type of pickle. Also in this category are fruit pickles and relishes.

Start with high quality ingredients

Select fresh, firm, high quality vegetables and fruits for pickling. The highest quality cucumber pickles will be prepared from:

- **Pickling cucumbers.** Pickling cucumbers of 1 to 2 inches make good gherkins, while pickles are more commonly made from cucumbers that are 3 to 5 inches long. You can leave them whole, or slice them lengthwise into spears or crosswise into slices or chunks. Cucumbers longer than 5 inches are best chopped and made into relish. Wax coated cucumbers brought from the grocery store are not suitable for pickling.
- **Softened water.** Hard water contains minerals that may cloud the pickle brine, or cause off-flavors or discoloration. You can soften hard water by boiling for 15 minutes in a large kettle. Allow the boiled water to stand for 24 hours, and pour off the water, leaving the sediment behind.
- **Vinegar.** White vinegar is most often recommended in pickles. Use only standard commercial vinegar of 5% acetic acid. Do not use homemade vinegar. Cider vinegar may be a good choice for some pickles, but it does darken most fruits and

vegetables. Never dilute vinegar, or alter the amount of vinegar in recipes, an unsafe product may result.

- **Salt.** Use pure canning and pickling salt for the highest quality pickles. Table salt contains anti-caking agents that will cloud pickle brine, and is not recommended. Ice cream salt, rock salt and solar salt should not be used for pickles. These salts may contain impurities that may make pickles unsafe.
- **Sugar and spices.** Either **white or brown sugar** can be used in pickle recipes, depending on your preference. Sugar substitutes are not recommended and will not produce a high quality product. Most pickle recipes call for **whole spices** for fresher and more concentrated flavor. Powdered spices will also cloud pickle brine and produce a less desirable product.

Safe pickles everyone can enjoy

Many of us can remember our mother or grandmother adding lime or alum to create firm, crisp pickles. But firming agents such as **lime** or **alum** are no longer recommended in pickle processing. **Pickling lime**, if not used properly, can make pickles unsafe to consume. Pickling lime can **only** be used as an initial soak for fresh cucumbers, and excess lime must be thoroughly removed by rinsing. **Alum** is no longer recommended because the aluminum in this product may be unsafe to consume.

Here are a few tips for making firm pickles without these potentially unsafe ingredients:

- Process cucumbers within 24 hours of harvest. Cucumbers deteriorate rapidly, and if stored too long will not make a quality product.
- Gently wash cucumbers before processing. Soil, especially that trapped near the stem, can harbor bacteria that may cause softening in pickles.
- Remove a thin slice, 1/16th inch, from the blossom end of each cucumber. The enzymes that cause softening are concentrated in the blossom end, and discarding a thin slice will help to keep pickles firm.
- Soak fresh cucumbers in ice water for 4 to 5 hours before pickling.
- Follow a tested recipe, and heat process pickles for the correct length of time.

Follow a tested recipe

There are so many sources of pickle recipes, from magazines to cookbooks old and new. However, many of these sources do not contain recipes that are tested to ensure safety and quality. For best results, follow a tested recipe. Sources of tested recipes include your local county extension office, or the *Complete Guide to Home Canning* published by the United States Department of Agriculture. Here is one of my favorites, illustrating how lime may be safely used in the manufacture of a quick process pickle:

Bread and Butter Pickle Slices

6 pounds pickling cucumbers, 4 to 5 inches long, *or* slender (1 to 1-1/2 inches in diameter) zucchini or yellow squash

8 cups onions (about 3 pounds), peeled and thinly sliced

1/2 cup canning and pickling salt

ice, crushed or cubed

4 cups vinegar (5% acetic acid)

4-1/2 cups sugar

2 tbsp mustard seed

1-1/2 tbsp celery seed

1 tbsp ground mustard

1 cup pickling lime (optional, see directions for firmer pickles)

1. Wash cucumbers carefully, cut 1/16-inch off blossom end and discard **or** wash squash well. Cut into 3/16-inch slices. Combine cucumbers or squash and sliced onions in a large bowl. Add salt. Cover with 2 inches crushed or cubed ice. Refrigerate 3 to 4 hours, adding more ice as needed. Drain.

Or:

- For firmer pickles:** Wash cucumbers carefully, cut 1/16-inch off blossom end and discard **or** wash squash well. Cut into 3/16-inch slices. Mix 1 cup pickling lime, ½ cup salt and 1-gallon water in a 2-to 3-gallon crock, glass or enamelware container. **Caution: Avoid inhaling lime dust while mixing the lime-water solution.** Cover and soak cucumbers in lime water for 12 to 24 hours, stirring occasionally. Remove from lime solution, rinse well and re-soak 1 hour in fresh cold water. Repeat the rinsing and soaking step **two more times**. Rinse and drain. Handle carefully, as slices will be brittle.
2. Add sugar and remaining ingredients to vinegar in a large kettle. Bring to a boil, and boil 10 minutes. Add well-drained cucumbers or squash and onions and slowly reheat to boiling.
 3. Fill pint or quart jars with slices, leaving 1/2-inch headspace. Fill to 1/2 inch from top with hot pickling solution. Remove bubbles with a rubber spatula. Wipe jar rims clean, adjust lids and process.

Boiling Water Canner:

Hot pack: 15 minutes for pints or quarts.

Yield- 7 to 8 pints

Note: after processing and cooling, store jars for 4 to 5 weeks to develop ideal flavor.

Resources:

Homemade Pickles and Relishes by Barbara H. Ingham. B2267, University of Wisconsin-Extension. 2002.

Complete Guide to Home Canning. 1994. USDA Agriculture Bulletin no. 539. Available on the web at: http://www.uga.edu/nchfp/publications/publications_usda.html.

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