

Food Preservation: Quick-Process Pickles

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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 for several weeks after proper processing.

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 cucumbers, water, and vinegar.

Selection

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

For the 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. Cucumbers deteriorate rapidly, especially at room temperature.

Preparation

Do not use cucumbers showing evidence of mold. Proper processing kills microorganisms that cause spoilage but does not destroy the off-flavor from mold. Wash cucumbers well, especially around the stems. Soil trapped around the stem breeds bacteria that softens pickles. Because the blossom end of cucumbers contains enzymes that can cause softening, it should also be removed with a 1/16-inch slice.



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For the best results, plan to pickle cucumbers within 24 hours after they are picked after they are picked.

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 fermented pickles, as the higher sodium prevents bacterial growth.

Vinegar

Use white distilled or cider vinegar of 5%–6% acidity (50–60 grain). This will provide the acid concentration needed for safety. Do not use homemade vinegars. Use white vinegar for a lighter pickle color. If the product is too sour for personal taste, increase the amount of sugar rather than diluting the vinegar, as diluting the vinegar 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. Brown sugar may add a distinctive flavor and color. Do not use a sugar substitute unless the recipe has been developed for that product. Sweeteners may produce a bitter taste, and they 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 ability of quick-process syrup to firm quick-process pickles. An excess of alum can cause digestive upset. 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 4–5 hours will maintain crispness.

If you add lime, use the following instructions.

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

Caution: Do not use lime in aluminum containers. Lime can pit the surface of aluminum 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), ½-cup salt, and 1 gallon of water. Do not inhale the lime/water solution’s fumes while mixing. Soak cucumbers in lime water for 12–24 hours, then follow these steps to remove the excess lime:

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

Another item available to help keep pickles crisp is a commercial calcium chloride product. This can be added to pickles once in the jars. Use according to the manufacturer’s directions.

Alternative Processing Method

Use of a lower-temperature water bath may also keep pickles crisp. Pack the room-temperature cucumbers in the jar and pour 165–180 degrees Fahrenheit liquid over the product, leaving ½-inch 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

Fresh whole spices will produce pickles with the best quality and flavor. Powdered spices may darken and cloud the product. To reduce darkening, 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

The 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—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. Do not use crocks and stoneware with cracks and/or glazing damage.

When the processing time is less than 10 minutes, jars must be sterilized before use. Sterilize the jars by boiling them for 10 minutes. Keep the jars in the hot water until they are used to prevent the jars from breaking when filled with the hot product. If you are at an elevation of 1,000 feet or more, add 1 minute to the sterilizing time.

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 safety of the product.

Do not alter the proportions of vinegar, salt, or water in a recipe. Do not use vinegar with an unknown acidity.

For additional pickle, pickled vegetable, and pickled fruit recipes, please visit: National Center for Home Food Preservation (nchfp.uga.edu/).

Quick Sweet Pickles

(May be canned as either strips or slices.)

- 8 pounds of 3–4-inch pickling cucumbers
- ⅓ cup canning or pickling salt
- 4 ½ cups sugar
- 3 ½ cups of 5% vinegar
- 2 teaspoons celery seed
- 1 tablespoon whole allspice
- 2 tablespoons mustard seed
- 1 cup pickling lime (only for use in recipe variation provided below for making firmer pickles)

Yield: About 7–9 pints

Instructions:

1. Wash cucumbers. Cut ¼ inch off the blossom end and discard but leave ¼ inch of stem attached. Slice or cut in strips, if desired.
2. Place in a bowl and sprinkle with ⅓ cup salt. Cover with 2 inches of crushed or cubed ice. Refrigerate 3–4 hours. Add more ice as needed. Drain well.
3. Combine sugar, vinegar, celery seed, allspice and mustard seed in 6-quart kettle. Heat to boiling.
4. **Raw pack:** Fill jars with cucumber slices, leaving ½-inch headspace. Add hot pickling syrup, leaving ½-inch headspace.

Table 1. Recommended Processing Times for Quick Sweet Pickles in a Boiling-Water Canner.

Style of Pack	Jar Size	Process Time (in minutes) at Elevations of: 0–1,000 ft	Process Time (in minutes) at Elevations of: 1,001–6,000 ft	Process Time (in minutes) at Elevations of: Above 6,000 ft
Hot	Pints or Quarts	5	10	15
Raw	Pints	10	15	20
Raw	Quarts	15	20	25

Table 2. Recommended Processing Times for Quick Fresh-Pack Dill Pickles in a Boiling-Water Canner

Style of Pack	Jar Size	Process Time (in minutes) at Elevations of: 0–1,000 ft	Process Time (in minutes) at Elevations of: 1,001–6,000 ft	Process Time (in minutes) at Elevations of: Above 6,000 ft
Raw	Pints	10	15	20
Raw	Quarts	15	20	25

OR

- Hot pack:** Add cucumbers and heat slowly until vinegar solution returns to boil. Stir occasionally to make sure the mixture heats evenly. Fill sterile jars, leaving ½-inch headspace.

Adjust lids and process according to the recommendations in Table 1 or use the low-temperature pasteurization treatment.

For more information, see the National Center for Home Food Preservation, “Low-Temperature Pasteurization Treatment,” (nchfp.uga.edu/how/pickle/general-information-pickling/low-temperature-pasteurization-treatment/)

Storage: After processing and cooling, jars should be stored for 4–5 weeks to develop the ideal flavor.

Variation: Add 2 slices of raw whole onion to each jar before filling with cucumbers.

Quick Fresh-Pack Dill Pickles

- 8 pounds of 3–5-inch pickling cucumbers
- 2 gallons water
- 1 ¼ cups canning or pickling salt (used in proportions stated in instructions 2 and 3 below)
- 1 ½ quarts of 5% vinegar
- ¼ cup sugar

- 2 quarts water
- 2 tablespoons whole mixed pickling spice
- 3 tablespoons whole mustard seed (1–2 teaspoons per pint jar)
- 14 heads of fresh dill (1 ½–3 heads per pint jar)
- 4 ¼ tablespoons dill seed (1–1 ½ teaspoons per pint jar)

Yield: 7–9 pints

Instructions:

1. Wash cucumbers. Cut ¼ slice off the blossom end and discard but leave ¼ inch of stem attached.
2. Dissolve ¾ cup salt in 2 gallons of water. Pour over cucumbers and let stand for 12 hours. Drain.
3. Combine vinegar, ½ cup salt, sugar, and 2 quarts water. Add mixed pickling spices tied in a clean white cloth. Heat to boiling.
4. Fill jars with cucumbers. Add 1 teaspoon mustard seed and 1 ½ heads fresh dill per pint.
5. Cover with boiling pickling solution, leaving ½-inch headspace. Remove air bubbles. Wipe jar rims.
6. Adjust lids and process as indicated in Table 2 or use the Alternate Processing Method (180 F) described earlier.

Additional Resources

Note: This fact sheet uses language, recipes, procedures, and data from reliable sources such as the ones listed below. For the most part the original text has been preserved because safety around food preservation is especially important. For safe and healthy preserved foods, be sure to carefully follow directions.

- So Easy To Preserve, University of Georgia Extension (extension.uga.edu/publications/detail.html?number=B989&title=so-easy-to-preserve)
- USDA Complete Guide to Home Canning (nchfp.uga.edu/resources/category/usda-guide)

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