

Quick Process Pickles

Quick process pickles are made by adding acid in the form of vinegar, whereas acid in fermented pickles is produced by bacteria over a span of weeks.

Recommended Varieties of Cucumbers

Use a pickling variety of cucumber. Seed catalogs are a good source of information about cucumber varieties suitable for pickling.

Quality

Select firm cucumbers of the appropriate size—about 2 inches for gherkins and 5 inches for dills. When buying cucumbers, select unwaxed ones for pickling whole. Use odd-shaped and more mature cucumbers for relishes and bread-and-butter-style pickles.

Containers

A 1-gallon container holds 5 pounds of fresh cucumbers; a 5-gallon container holds 25 pounds. Do not use copper, iron, galvanized metal containers, or lead-glazed crocks. If you are unsure about the safety of a container, use an alternative. Glass and stainless steel containers are excellent substitutes for stone crocks. Other 1- to 3-gallon food-grade containers may be used if they are lined inside with a clean food-grade plastic bag. *Do not use garbage bags or trash can liners.*

Preparation

Start with clean countertops and utensils. Wash hands with soap and warm water. All produce should be properly washed before it is consumed or preserved. Gently rub produce under cold running water. Do not soak produce in water. Cut $\frac{1}{16}$ inch (2mm) off the blossom end.

If good-quality ingredients are used in pickling and up-to-date methods are followed, lime and alum are not needed for crisp pickles. Soaking cucumbers in ice water for 4 to 5 hours prior to pickling is a safer method for making crisp pickles. Commercially available calcium chloride products such as Ball Pickle Crisp® and Mrs. Wages Xtra Crunch® may be used to improve the texture of quick process pickles, if desired. Follow manufacturers' instructions for use.

CAUTION: The level of acidity in a pickled product is as important to its safety as it is to taste and texture. Do not alter vinegar, food, or water proportions in a recipe or use vinegar with unknown acidity. Use only recipes with tested proportions of ingredients. There must be a minimum, uniform level of acid throughout the mixed product to prevent the growth of botulinum bacteria.



Photo credit: Jarden Home Brands.

Canning Procedure

Wash jars. Prepare lids according to the manufacturer's instructions. Fill jars with product. Wipe sealing edge of jars with a clean, damp paper towel. Add lids and tighten screw bands. Process jars in a boiling water or atmospheric steam canner or use the low-temperature pasteurization treatment.

To Process in a Boiling Water Canner

Fill canner halfway with water and preheat to 180°F (82°C) for hot packs or 140°F (60°C) for raw packs. Load sealed jars into the canner rack and lower with handles, or load one jar at a time with a jar lifter onto rack in canner. Add water, if needed, to 1 inch above jars and cover. When water boils vigorously, lower heat to maintain a gentle boil and process jars for the time given in Table 1.

To Process in an Atmospheric Steam Canner

Preheat the base of a steam canner that has been filled with the amount of water designated in the instruction manual that comes with the canner (usually about 2 quarts). Set the rack in the base of the canner. Heat water in the base of the canner to 180°F (82°C). As each jar is filled, place it on canner rack, keeping the cover or lid on the atmospheric steam canner as you work. When all jars are in the canner, bring the canner to a boil over medium to medium-high heat until a steady column of steam at least 6 inches long escapes from the vent hole(s). Processing time begins when there is a steady column of steam 6 to 8 inches long. Slowly adjust the heat to maintain a steady column of steam throughout the processing time.

To Process Using Low-Temperature Pasteurization Treatment

Place jars in a canner filled halfway with warm (120°F to 140°F) (48°C to 60°C) water. Add hot water to 1 inch above jars. Heat the water and maintain a 180°F (82°C) water temperature for 30 minutes. Use a calibrated thermometer clipped to the side of the pot to be certain that the water temperature is at least 180°F (82°C) during the entire 30 minutes. Temperatures higher than 185°F (85°C) may cause unnecessary softening of pickles. This treatment results in a better product texture but must be carefully managed to avoid possible spoilage. *Caution:* Use only when recipe indicates.



After Processing

When processing is complete, turn off heat. Allow the jars to sit in the covered atmospheric steam canner or uncovered boiling water bath canner for 5 minutes before removing them from the canner with a jar lifter, being careful not to tilt the jars, to a wooden cutting board or towel-lined surface. Do not retighten screw bands. Cool jars for 12 to 24 hours and remove screw bands.

Check lid seals. If the center of the lid is indented, the jar is sealed. Wash, dry, label, and store sealed jars in a clean, cool, dark place. If lid is unsealed, examine and replace jar if defective, use new lid, and reprocess as before or store in the refrigerator.

Wash screw bands and store separately. Canned goods are best if consumed within a year and are safe as long as lids remain vacuum sealed.

Quick Fresh Pack Dill Pickles

- 8 lbs. of 3- to 5-inch pickling cucumbers
- 2 gals. water
- 1¼ cups canning or pickling salt (divided)
- 1½ qts. vinegar (5%)
- ¼ cup sugar
- 2 qts. water
- 2 Tablespoons whole mixed pickling spice
- 3 Tablespoons whole mustard seed
- About 14 heads of fresh dill (3 heads to 1½ heads per pint jar) or 4½ Tablespoons dill seed (1 Tablespoon to 1½ teaspoons per pint jar)

Yields 7 to 9 pints

PROCEDURE. Wash cucumbers. Cut ¼ inch from the blossom ends and discard. Leave ¼ inch of cucumber stem ends attached. Dissolve ¾ cup of salt in 2 gallons of water. Pour brine water over cucumbers and let stand for 12 hours. Drain. Combine vinegar, ½ cup of salt, sugar, and 2 quarts of water. Add mixed pickling spices tied in a clean white cloth. Heat to boiling. Fill jars with cucumbers. Add 1 teaspoon of mustard seed and 1½ heads of fresh dill per pint (or 1½ teaspoons dill seed). Cover with boiling liquid, leaving ½ inch of headspace. Adjust lids and process jars as described in Table 1 or use the low-temperature pasteurization treatment described earlier.

Quick Sweet Pickles

- 8 lbs. of 3- to 4-inch pickling cucumbers
- ½ cup canning or pickling salt
- 4½ cups sugar
- 3½ cups vinegar (5%)
- 2 teaspoons celery seed
- 1 Tablespoon whole allspice
- 2 Tablespoons mustard seed

Yields 7 pints

PROCEDURE. Wash cucumbers. Cut ¼ inch from the blossom ends and discard. Leave ¼ inch of stem ends of cucumbers attached. Slice or cut in strips, if desired. Place in bowl and sprinkle with ½ cup of salt. Cover with 2 inches of crushed or cubed

ice. Refrigerate for 3 to 4 hours. Add more ice as needed. Drain well. Combine sugar, vinegar, celery seed, allspice, and mustard seed in a 6-quart pot to make pickling syrup. Heat to boiling.

For a Hot Pack

Add cucumbers and heat slowly until vinegar mixture returns to boil. Stir occasionally to make sure vinegar mixture heats evenly. Fill sterile jars with cucumbers and add hot pickling syrup, leaving ½ inch of headspace. Process as described in Table 1.

For a Raw Pack

Fill jars with cucumbers and add hot pickling syrup, leaving ½ inch of headspace. Adjust lids and process jars as described in Table 1 or use the low-temperature pasteurization treatment described earlier.

VARIATION. Add two slices of raw onion to each jar before filling with cucumbers.

Sweet Gherkins

- 5 qts. (about 7 lb) 1½-inch cucumbers
- ½ cup canning or pickling salt
- 8 cups sugar
- 1½ qts. vinegar (5%)
- ¾ teaspoon turmeric
- 2 teaspoons celery seed
- 2 teaspoons whole mixed pickling spice
- 2 cinnamon sticks
- ½ teaspoon fennel (optional)
- 2 teaspoons vanilla (optional)

Yields 6 to 7 pints

First Day

MORNING. Wash cucumbers thoroughly; scrub with vegetable brush. Cut ¼-inch slice off blossom ends and discard. Leave ¼ inch of stem. Drain cucumbers; place in large suitable container and cover with boiling water.

AFTERNOON (6-8 HOURS LATER). Drain, add ¼ cup of salt, and cover with fresh, boiling water.

Second Day

AFTERNOON. Drain, add ¼ cup of salt, cover with fresh, boiling water.

Third Day

MORNING. Drain and then prick cucumbers in several places with table fork. Make syrup from 3 cups of the sugar and 3 cups of the vinegar; add turmeric and spices. Heat to boiling and pour over the cucumbers. (Cucumbers will be partially covered at this point.)

AFTERNOON (6-8 HOURS LATER). Drain syrup into pan. Add 2 cups of the sugar and 2 cups of the vinegar to the syrup. Heat to boiling and pour over pickles.

Fourth Day

MORNING. Drain syrup into pan. Add 2 cups of the sugar and 1 cup of the vinegar to syrup. Heat to boiling and pour over pickles.

AFTERNOON (6-8 HOURS LATER). Drain syrup into pan. Add remaining 1 cup of sugar and the vanilla to the syrup; heat to boiling. Pack pickles into hot pint jars and cover with the boiling

syrup to ½ inch from the top of the jar. Remove air bubbles. Wipe jar rims. Adjust lids. Process as described in Table 1.

Source: Andress, Elizabeth L., and Judy A. Harrison, *So Easy to Preserve*, 6th ed. (Athens: University of Georgia Cooperative Extension Service, 2014).

Bread-and-Butter Pickles

- 6 lbs. of 4- to 5-inch pickling cucumbers
- 2 qts. thinly sliced onions (about 3 lb)
- ½ cup canning or pickling salt
- 1 qt. vinegar (5%)
- 4½ cups sugar
- 2 Tablespoons mustard seed
- 1½ Tablespoons celery seed
- 1 Tablespoon ground turmeric

Yields approx. 8 pints

PROCEDURE. Cut cucumbers into ¾-inch slices. Combine cucumbers and onion slices in a large bowl. Add salt. Cover with 2 inches of crushed or cubed ice. Refrigerate for 3 to 4 hours, adding more ice as needed. Drain cucumbers and onions. Discard remaining ice.

Add sugar and remaining ingredients to vinegar in a large pot. Boil for 10 minutes. Add drained cucumbers and onions. Slowly reheat to boiling. Fill pint jars with slices and cooking syrup, leaving ½ inch of headspace. Adjust lids and process jars as described in Table 1 or use the low-temperature pasteurization treatment described earlier.

VARIATION. For squash bread-and-butter pickles, substitute slender (1½ to 2 inches in diameter) zucchini or yellow summer squash for cucumbers.

Store for 4 to 5 weeks to develop flavor before eating.

Pickle Relish

- 3 qts. fresh chopped cucumbers
- 3 cups chopped sweet green peppers
- 3 cups chopped sweet red peppers
- 1 cup chopped onion
- ¾ cup canning or pickling salt
- 2 qts. water
- 1 qt. ice
- 2 cups sugar
- 4 teaspoons each of mustard seed, turmeric, whole allspice, and whole cloves
- 1½ qts. white vinegar (5%)

Yields 8 to 9 pints

PROCEDURE. Add salt, ice, cucumbers, peppers, and onions to water and let stand for 4 hours. Drain and cover vegetables with fresh ice water for another hour. Drain again. Combine spices in a spice bag or cheesecloth bag. Add spices to sugar and vinegar. Heat to boiling and pour mixture over vegetables. Cover and refrigerate for 24 hours. Heat mixture to boiling, remove spice bag, and fill clean jars while hot, leaving ½ inch of headspace. Adjust lids and process jars as described in Table 1.

Pickled Beets

- 7 lbs. of 2- to 2½-inch-diameter beets
- 4 cups vinegar (5%)
- 1½ teaspoons canning or pickling salt
- 2 cups sugar
- 2 cups water
- 2 cinnamon sticks
- 12 whole cloves
- 4 to 6 onions (if desired)

Yields approx. 8 pints

PROCEDURE. Trim off beet tops, leaving 1 inch of stem and roots to prevent bleeding of color. Wash thoroughly. Sort for size. Cover similar sizes together with boiling water and cook until tender (about 25 to 30 minutes). Caution: Drain and discard liquid. Cool beets. Trim off roots and stems and slip off skins. Slice into ¼-inch slices. Peel and thinly slice onions. Combine vinegar, salt, sugar, and fresh water. Put spices in cheesecloth bag and add to vinegar mixture. Bring to a boil. Add beets and onions. Simmer for 5 minutes. Remove spice bag. Fill jars with beets and onions, leaving ½ inch of headspace. Add hot vinegar solution, allowing ½ inch of headspace. Adjust lids and process according to the recommendations in Table 1.

VARIATION. Pickled whole baby beets. Follow above directions but use beets that are 1 to 1½ inches in diameter. Pack whole; do not slice. Onions may be omitted.

Source: *Complete Guide to Home Canning* (USDA Extension Service, 2015).

Pickled Cauliflower or Brussels Sprouts

- 12 cups of 1- to 2-inch cauliflower flowerets or small Brussels sprouts
- 4 cups white vinegar (5%)
- 2 cups sugar
- 2 cups thinly sliced onions
- 1 cup diced sweet red peppers
- 2 Tablespoons mustard seed
- 1 Tablespoon celery seed
- 1 teaspoon turmeric
- 1 teaspoon red pepper flakes

Yields approx. 4 pints

PROCEDURE. Wash cauliflower flowerets or Brussels sprouts (remove stems and blemished outer leaves) and boil in salt water (4 teaspoon of canning salt per gallon of water) for 3 minutes for cauliflower and 4 minutes for Brussels sprouts. Drain and cool just enough to stop the cooking. Combine vinegar, sugar, onion, diced pepper, and spices in large saucepan. Bring to a boil and simmer for 5 minutes. Distribute onion and diced pepper among jars. Fill jars with drained cauliflower flowerets or Brussels sprouts and pickling solution, leaving ½ inch of headspace. Adjust lids and process in a boiling water canner or atmospheric steam canner according to the directions in Table 1.

Source: *Complete Guide to Home Canning* (USDA Extension Service, 2015).

Reduced-Sodium Sweet Pickles

4 lbs. (3- to 4-inch) pickling cucumbers

Brining solution:

1 qt. distilled white vinegar (5 percent)

1 Tablespoon canning or pickling salt

1 Tablespoon mustard seed

½ cup sugar

Canning syrup:

1⅓ cups distilled white vinegar (5 percent)

3 cups sugar

1 Tablespoon whole allspice

2¼ teaspoons celery seed

Yields approx. 4 to 5 pints

PROCEDURE. Wash cucumbers and cut ¼ inch off blossom end and discard. Cut cucumbers into ¼-inch slices. In a large saucepot, mix the ingredients for the brining solution. Add the cut cucumbers, cover, and simmer until the cucumbers change color from bright to dull green (about 5 to 7 minutes). At the same time, mix canning syrup ingredients in a saucepan. Bring syrup to a boil. Drain the cucumber slices. Pack cucumbers in jars, leaving ½ inch of headspace. Fill jars to ½ inch from top with hot canning syrup. Remove air bubbles. Wipe jar rims. Adjust lids. Process in a boiling water canner or atmospheric steam canner according to the directions in Table 1.

Source: Complete Guide to Home Canning (USDA Extension Service, 2015).

Table 1. Recommended processing times in a boiling water or atmospheric steam canner.

Pickle Type	Style of pack	Jar size	Process time (in minutes) at an altitude of		
			0–1,000 ft.	1,001–6,000 ft.	Above 6,000 ft.
Quick fresh pack dill	Raw	Pints	10	15	20
		Quarts	15	20	25
Quick sweet	Hot	Pints or quarts	5*	10	15
	Raw	Pints	10	15	20
		Quarts	15	20	25
Sweet gherkin	Raw	Pints	5*	10	15
		Quarts	10	15	20
Bread-and-butter	Hot	Pints or quarts	10	15	20
Pickle relish	Hot	Half-pints or pints	10	15	20
Pickled beets	Hot	Pints or quarts	30	40	45
Pickled cauliflower or Brussels sprouts	Hot	Half-pints or pints	10	15	20
Reduced-sodium sweet pickles	Hot	Pints	10	15	20

*Use sterile jars. Place clean, empty jars in a boiling water canner, cover jars with water, and boil for 10 minutes.

For additional information about food preservation, visit the Penn State Extension Home Food Preservation website at extension.psu.edu/food/preservation or contact Penn State Extension in your county.

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