

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.

Quick Process Pickles

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

Wash cucumbers and cut ½6 inch 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.

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 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 for hot packs or 140°F 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 USING LOW-TEMPERATURE PASTEURIZATION TREATMENT

Place jars in a canner filled halfway with warm (120°F to 140°F) water. Add hot water to 1 inch above jars. Heat the water and maintain a 180°F water temperature for 30 minutes. Use a candy or jelly thermometer to be certain that the water temperature is at least 180°F during the entire 30 minutes. Temperatures higher than 185°F 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

After processing is complete, set canner off heat and remove canner lid. Wait 5 minutes. Remove jars from canner with a

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Table 1. Recommended processing times in a boiling water canner.

PRODUCT	STYLE OF PACK	JAR SIZE	PROCESS TIME AT ALTITUDES OF		
			0-1,000 FT (MIN)	1,001–6,000 FT (MIN)	ABOVE 6,000 FT (MIN)
Pickle Quick fresh pack dill	Raw	Pints Quarts	10 15	15 20	20 25
Quick sweet	Hot Raw	Pints or quarts Pints Quarts	5* 10 15	10 15 20	15 20 25
Sweet gherkin	Raw	Pints Quarts	5* 10	10 15	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

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

jar lifter and place on a towel or rack. 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. Wash screw bands and store separately. Pickles are best if used within a year and are safe as long as the lids remain vacuum sealed.

Quick Fresh Pack Dill Pickles

8 lbs of 3- to 5-inch pickling cucumbers

2 gal water

1¹/₄ cups canning or pickling salt (divided)

1½ qt vinegar (5%)

½ cup sugar

2 qts water

2 tbsp whole mixed pickling spice

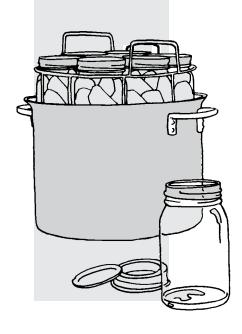
3 tbsp whole mustard seed

(2 tsp per quart jar)

21 heads to about 14 heads fresh dill (3 heads to 1½ heads per pint), or 7 tbsp to 4½ tbsp dill seed (1 tbsp to 1½ tsp per pint)

Yields 7 to 9 pints

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. Cover with boiling liquid, leaving ½-inch 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 tsp celery seed

1 tbsp whole allspice

2 tbsp mustard seed

Yields 7 pints

PROCEDURE. Leave ½ 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 headspace. Process as described in Table 1.

FOR A RAW PACK

Fill jars with cucumbers and add hot pickling syrup, leaving ½-inch 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 whole onion to each jar before filling with cucumbers.

Sweet Gherkins

5 qts (about 7 lbs) 1½-inch cucumbers

½ cup pure granulated salt

8 cups sugar

1½ qts vinegar (5%)

3/4 tsp turmeric

2 tsp celery seed

2 tsp whole mixed pickling spice

2 cinnamon sticks

½ tsp fennel (optional)

2 tsp vanilla (optional)

Yields 6 to 7 pints

FIRST DAY

MORNING. Wash cucumbers thoroughly; scrub with vegetable brush. Cut ½6-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 ½ cup of salt, and cover with fresh, boiling water.

SECOND DAY

AFTERNOON. Drain, add ½ 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. 2006. *So Easy to Preserve*. 5th ed. Bulletin 989. Athens: University of Georgia Cooperative Extension Service.

Bread-and-Butter Pickles

6 lbs of 4- to 5-inch pickling cucumbers

2 qt thinly sliced onions (about 3 lbs)

½ cup canning or pickling salt

1 qt vinegar (5%)

4½ cups sugar

2 tbsp mustard seed

1½ tbsp celery seed

1 tbsp ground turmeric

Yields approx. 8 pints

PROCEDURE. Cut cucumbers into $\frac{3}{16}$ -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.

Add sugar and remaining ingredients to vinegar in a large pot. Boil for 10 minutes. Drain and add cucumbers and onions. Slowly reheat to boiling. Fill pint jars with slices and cooking syrup, leaving ½-inch 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 ($1\frac{1}{2}$ 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

3/4 cup canning or pickling salt

2 qts water

1 qt ice

2 cups sugar

4 tsp each of mustard seed, turmeric, whole allspice, and whole cloves

 $1\frac{1}{2}$ 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 and fill clean jars while hot, leaving ½-inch headspace. Adjust lids and process jars as described in Table 1.





Pickled Beets

7 lbs of 2- to $2\frac{1}{2}$ -inch diameter beets

4 cups vinegar (5%)

1½ tsp 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 1/4-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 headspace. Add hot vinegar solution, allowing ½-inch 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: USDA. 1994. *Complete Guide to Home Canning*. Agriculture Information Bulletin No. 539. USDA Extension Service.

Pickled Cauliflower or Brussels Sprouts

12 cups of 1- to 2-inch cauliflower or small Brussels sprouts

4 cups white vinegar (5%)

2 cups sugar

2 cups thinly sliced onions

1 cup diced sweet red peppers

2 tbsp mustard seed

1 tbsp celery seed

1 tsp turmeric

1 tsp 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 tsp of canning salt per gallon of water) for 3 minutes for cauliflower and 4 minutes for Brussels sprouts. Drain and cool. 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 headspace. Adjust lids and process in a boiling water canner according to the directions in Table 1.

SOURCE: Complete Guide to Home Canning. 1994. Agriculture Information Bulletin No. 539. USDA Extension Service.





For additional information about food preservation, visit the Penn State Food Safety Web site at foodsafety.cas.psu.edu and select the Home Food Preservation Web site, or contact Penn State Cooperative Extension in your county.

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