

Pickles and Relishes

Pickles are one of the favorites of home canners, and pickling is among the oldest known methods of preserving food, dating back to biblical times. Today, pickles are great for snacks and are the perfect companion for sandwiches.

When we speak of pickles, many of us think only of cucumbers. But in canning terms, pickles include any fruit, protein food or vegetable prepared by a pickling process, as well as a wide variety of relishes. Pickle products are either fermented in brine (salt) or packed in vinegar to aid preservation.

Many older pickle recipes exist, from family heirlooms, on the internet, or canning books. Unfortunately, the amount of vinegar may be incorrect in fresh-pack pickle recipes because vinegar's level of acidity in older recipes may not match with current vinegar acidity. Also, older recipes may not have the correct processing method. There is always a danger of harmful microorganisms entering the food when it is transferred from the pickling container to the jar without being processed. It is best to follow tested recipes from *USDA Complete Guide to Home Canning 2015* or recent Cooperative Extension publications.

Processing destroys organisms that can cause spoilage and inactivates enzymes that may affect flavor, color and texture.

Pickle products are generally grouped as:

Fermented pickles: The vegetables are submerged in a brine solution to ferment or cure for several weeks. Dilled cucumbers, sauerkraut, various vegetables and fruits belong to this group. Herbs and spices are often added to the solution for flavoring.

Fresh-pack pickles: Quick-process pickles canned in a spicy vinegar solution; may be soaked for several hours or overnight.

Fruit pickles: Prepared from whole fruits and simmered in a spicy, sweet-sour syrup.



Top-Quality Ingredients are Key to Successful Pickling

Pickling is one area of canning where it is essential to have top-quality ingredients and to follow proper procedures carefully to achieve satisfactory results. The ingredients and procedures may be right, but if the correct proportions of sugar, salt, vinegar and spices are not maintained, the quality will likely suffer.

Fruits and vegetables should be fresh from the garden. If possible they should be picked no more than 24 hours before pickling. Cucumbers, especially, deteriorate rapidly at room temperatures.

Salt: Pure salt or pickling salt should be used. Non-caking agents added to salt may make brine cloudy. Iodized table salt should not be used as it may darken pickles. Flake salt varies in density and is not recommended for use in pickles. Salt acts as a preservative and adds flavor and crispness; therefore, it is not advisable to use less salt or reduced-sodium salts. If a low-salt pickle is desired, check with your Cooperative Extension agent for recipes. Brine solutions in recipes should be carefully prepared. Brine draws juices and sugars from foods and forms lactic acid, a preservative.

Vinegar gives a tart taste and acts as a preservative. Use a high-grade cider or white distilled vinegar no less than 5% acidity. If a less sour product is preferred, add sugar rather than decrease the amount of vinegar.

Sugar: Use white granulated sugar, unless the recipe calls for another sweetener. Brown sugar darkens the product.

Spices and herbs flavor pickles. Use fresh spices and herbs. Whole fresh spices are preferred. The dry powdered and salt forms may cloud the pickling mixture. Spices lose pungency in heat and humidity. Store spices in airtight containers in a cool place.

Water: Soft water should be used in making brine. The minerals in hard water will have a negative effect on the quality of pickles.

If soft water is not available, soften by boiling for 15 minutes. Let it stand for 24 hours. A scum will likely appear on top of the water. Carefully skim it off. Ladle water from container; do not disturb sediment on bottom. Add 1 tablespoon of vinegar per gallon of boiled water before using.

Some older recipes call for the use of alum and/or lime to add crispness or firmness to pickles. If the proper ingredients are used, these items are unnecessary. Pickle making begins with the brine, and a brine that is made carelessly or maintained carelessly is the reason for most soft and unfit pickles.

Be sure to follow basic canning steps and recipes.

Equipment

To heat pickling liquids, use unchipped enamelware, stainless steel or nonstick coated material. Do not use copper, brass, galvanized or iron utensils.

For fermenting or brining, use a crock, plastic food-safe container, stone jar, unchipped enamel-lined pan, large glass jar or bowl. Use a plate with a weight or a plastic bag filled with water to hold the vegetables below the surface of the brine.

Small utensils: Measuring cups and spoons, sharp knives, tongs, vegetable peeler, ladle with a lip for pouring, slotted spoon, trays, footed colander or

wire basket, wide-mouth funnel, food chopper or grinder, cutting board. Utensils needed will vary based on the product being made.

Scales: Household scales will be needed if the recipes specify ingredients by weight. They are necessary in making sauerkraut to ensure correct proportions of salt and shredded cabbage.

Jars and lids: Free of cracks, chips, dents or any defects. Wash in hot soapy water and rinse thoroughly before filling. Follow manufacturer's directions on lids.

Boiling water canner with lid and rack should be deep enough to allow at least 1 inch of water above tops of the jars, with space so water does not splash over. Remember these key points:

- Use clean jars, kept hot until ready to use.
- Use only a recommended pickling variety of cucumbers. Don't use burpless cucumbers because enzymes make pickles slimy and soft.
- Use pure granulated salt.
- Do not use hard water.
- After processing, remove jars from canner to rack. Let cool, undisturbed, 12 to 24 hours; check for seals.

Fresh-Pack Dill Pickles

Yield: about 8 pint jars

8 lbs cucumbers (3–5 inches long)

2 ½ gallons water, divided

1 ½ cup canning or pickling salt, divided

1 ½ quarts vinegar (5%)

½ cup canning or pickling salt

¼ cup sugar

2 tablespoons whole mixed pickling spice

3 tablespoons whole mustard seed

1 bunch garlic, if desired

14 heads dill plant, fresh or dried, or 4 ½ tablespoons dill seed per pint jar

Wash cucumbers thoroughly, scrub with vegetable brush; drain. Slice 1/16-inch off blossom end but leave ¼ inch of stem attached. Dissolve ¾ cups salt in 2 gallons water. Cover cucumbers with the 5% brine. Let stand 12 hours; drain.

Combine vinegar, salt, sugar, 2 quarts water and mixed pickling spices tied in a clean, thin, white

cloth; heat to boiling. Pack cucumbers into clean, hot jars. Add 1 teaspoon mustard seed and 1 ½ dill head or 1 ½ teaspoon seed per pint. If desired, add 1 clove garlic per pint. Adjust lids.

Process quart jars in boiling water canner 15 minutes for altitudes under 1,000 feet, 20 minutes at 1,001 to 6,000 feet, and 25 minutes above 6,000 feet. If using pint jars, 10 minutes 0 to 1,000 feet, 15 minutes at 1,001 to 6,000 feet, and 20 minutes above 6,000 feet.

Pickled Beets

Yield: About 8 pints

7 lbs beets (2- to 2 ½-inch diameter)
4 cups vinegar (5%)
1 ½ teaspoons canning or pickling salt
2 cups sugar
2 cups water
2 cinnamon sticks
12 whole cloves
4 to 6 onions (2- to 2 ½-inch diameter) if desired

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). **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 5 minutes. Remove spice bag. Fill hot pint or quart jars with beets and onions, leaving ½-inch headspace. Add hot vinegar solution, allowing ½-inch headspace.

Adjust lids and process pint or quart jars in a boiling water canner for 30 minutes for altitudes under 1,000 feet, 35 minutes for 1,001 to 3,000 feet, 40 minutes for 3,001 to 6,000 feet, and 45 minutes for 6,001 to 8,000 feet.

Variation: Pickled whole baby beets. Follow above directions but use beets that are 1- to 1 ½ inches in diameter. Pack whole; do not slice. Onions may be omitted.

Pickled Carrots

Yield: About 4 pint jars

2 ¾ pounds peeled carrots
5 ½ cups white distilled vinegar (5%)
1 cup water
2 cups sugar
2 teaspoons canning salt
8 teaspoons mustard seed
4 teaspoons celery seed

Wash, peel carrots well. Wash again after peeling and cut into rounds approximately ½-inch thick.

Combine vinegar, water, sugar and canning salt in an 8-quart Dutch oven or stockpot. Bring to a boil and boil gently 3 minutes. Add carrots and bring back to a boil. Then reduce heat to a simmer and heat until the carrots are half cooked (about 3 to 5 minutes).

Meanwhile, place 2 teaspoons mustard seed and 1 teaspoon celery seed in the bottom of each clean, hot pint jar. Fill hot jars with the hot carrots, leaving 1-inch headspace. Cover with hot pickling liquid, leaving ½-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened, clean paper towel; adjust two-piece metal canning lids.

Process in a boiling water canner for 15 minutes for altitudes under 1,000 feet, 20 minutes for 1,001 to 6,000 feet, and 25 minutes for 6,001 to 8,000 feet.

Allow carrots to sit in processed jars for 3 to 5 days before consuming for best flavor development.

Bread-and-Butter Pickles

Yield: About 8 pints

6 lbs slender zucchini or yellow summer squash (1 to 1 ½ inches in diameter)
8 cups thinly sliced onions (about 3 pounds)
½ cup canning or pickling salt
4 cups vinegar (5%)
4 ½ cups sugar
2 tablespoons mustard seed
1 ½ tablespoons celery seed
1 tablespoon ground turmeric

Wash zucchini or summer squash. Cut $\frac{1}{16}$ -inch off blossom end and discard. Cut into $\frac{3}{16}$ -inch slices. Combine zucchini or squash and 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.

Combine remaining ingredients in a large pot. Boil 10 minutes. Drain and add zucchini or squash and onions and slowly reheat to boiling. Fill pint or quart jars with slices and cooking syrup, leaving $\frac{1}{2}$ -inch headspace. Adjust lids and process in a boiling water canner 10 minutes for altitudes under 1,000 feet, 15 minutes for 1,001 to 6,000 feet, and 20 minutes for above 6,000 feet.

After processing and cooling, jars should be

stored 4 to 5 weeks to develop ideal flavor.

Variation: May use 4- to 5-inch pickling cucumbers.

References

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