



Food Preservation

Pickles and Relishes Lesson 6

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Pickles are one of the favorites of home canners and is among the oldest known methods of preserving food, dating back to Biblical times. In today's meals, 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 mean any fruit, meat or vegetable prepared by a pickling process and includes a wide variety of relishes. Pickle products are either fermented in brine (salt) or packed in vinegar to aid preservation.

Many older recipes called for pickles to be packed into jars and sealed without processing. This method is no longer recommended. There is always a danger of harmful micro-organisms entering the food when it is transferred from pickling container to jar.



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

Pickle products are generally grouped into four classes:

Brined pickles—Also called fermented pickles. The vegetables are submerged in a brine solution to ferment or cure for about three weeks. Dilled cucumbers and sauerkraut belong to this group. Herbs and spices are often added to solution for flavoring.

Fresh-pack pickles—Quick-process pickles canned in a spicy vinegar solution without brining, but usually soaked for several hours or overnight.

Relishes—Prepared from fruits and/or vegetables which are chopped and cooked to desired consistency in a spicy vinegar solution. If a sweet relish is desired, sugar can be added. Hot peppers or other spices make a hot relish.

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

Top Quality Ingredients — The 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 pro-

cedures may be right, but if the correct proportions of sugar, salt, vinegar and spices are not maintained, the quality will likely suffer.

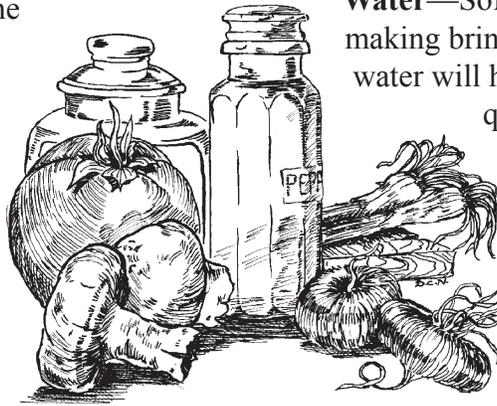
Fruits and vegetables—should be fresh from the garden. If possible they should be picked no more than 24 hours before pickling. Cucumbers, especially, deteriorate rapidly at room temperatures.

Salt—Brine solutions should be carefully prepared. Pure salt or pickling salt should be used. Un-iodized salt may make brine cloudy. Iodized table salt should not be used as it may darken pickles. Salt acts as a preservative to add flavor and crispness; therefore it is not advisable to use less salt or reduced sodium salts. 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 percent acidity. If a less sour product is preferred, add sugar rather than decrease vinegar. Changing these proportions will change the preservative balance.

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

Spices and herbs—flavor pickles. Only fresh spices and herbs should be used. Whole fresh spices are preferred. The dry powdered and salt forms may cloud the pickling mixture. Spices lose pungency readily in heat and humidity. Spices should be stored in airtight containers and kept 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 water. Carefully skim it off. Ladle water from con-

tainer, do not disturb sediment on bottom. Add one 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 to make carelessly or to maintain carelessly a brine is the reason for most of the soft and unfit pickles.

Be sure to follow basic canning steps and recipes.

Utensils

To heat pickling liquids, use unchipped enamelware, stainless steel, or non-stick 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. You can get by with less, but these add ease and convenience.

Scales—Household scales will be needed if the recipes specify ingredients by weight. They are necessary in making sauerkraut to insure 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. Metal lids may need boiling or holding in boiling water for a few minutes before they are used to soften sealing compound. Follow manufacturers directions on lids.

Water-bath canner should be deep enough to allow one inch of water above tops of the jars.

Remember these key points:

- Use clean jars.
- 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.

Fresh-Pack Dill Pickles

Yield: 7 quarts

7–10 cucumbers per quart, 3–5 inches long
About 2 gallons 5-percent brine ($\frac{3}{4}$ cup pure granulated salt per gallon of water)

1½ quarts vinegar

$\frac{3}{4}$ salt, pure granulated

$\frac{1}{4}$ cup sugar

2¼ quarts water

2 tablespoons whole mixed pickling spice

2 teaspoons per quart jar whole mustard seed

1 or 2 cloves per quart jar garlic, if desired

3 heads per quart jar dill plant, fresh or dried
or 1 tablespoon per quart jar dill seed

Wash cucumbers thoroughly; scrub with vegetable brush; drain. Cover with the 5-percent brine. Let sit overnight; drain.

Combine vinegar, salt, sugar, water, and mixed pickling spices that are tied in a clean, thin, white cloth; heat to boiling. Pack cucumbers into clean, hot quart jars. Add mustard seed, dill plant or seed. Process for 5 minutes in a boiling water canner for altitudes under 1000 feet, ten minutes for 1001 to 6000 feet and 15 minutes for 6001 to 8000 feet.

Piccalilli

Yield: 3 pints

1 quart green tomatoes, chopped

1 cup sweet red pepper, chopped

1 cup green pepper, chopped

1½ cups chopped onion

5 cups (about 2 pounds) cabbage, chopped

$\frac{1}{3}$ cup salt

3 cups vinegar

2 cups brown sugar, packed

2 tablespoons whole mixed pickling spice

Combine vegetables, mix with salt, let stand overnight. Drain and press in a clean, thin, white cloth to remove all liquid possible. Do not change proportions of vegetables as these are matched to amount of acid.

Combine vinegar and sugar. Place spices loosely in a clean cloth; tie with a string. Add to vinegar mixture. Bring to a boil.

Add vegetables, bring to a boil, and boil gently about 30 minutes, or until mixture is reduced one-half in volume. Remove spice bag. Pack hot relish into clean, hot pint jars. Fill jars to $\frac{1}{2}$ inch from top. Adjust lids.

Process in boiling water for 5 minutes (start to count processing time as soon as water in canner returns to boiling) for altitudes under 1000

feet, ten minutes for 1001 to 6000 feet and 15 minutes for 6001 to 8000 feet.

Remove jars and complete seals if necessary. Set jars upright on a wire rack or folded towel to cool. Place them several inches apart.

Crosscut Pickle Slices

Yield: 7 pints

4 quarts (about 6 pounds) medium size cucumbers, sliced
1½ cup (about 1 pound) small white onions, sliced
2 large garlic cloves
⅓ cup salt
2 quarts (2 trays) ice, crushed or cubes
4½ sugar
1½ teaspoons turmeric
1½ teaspoons celery seed
2 tablespoons mustard seed
3 cups white vinegar

Wash cucumbers thoroughly, using a vegetable brush; drain on rack. Slice unpeeled cucumbers into ⅛ inch to ½ inch slices; discard ends. Add onions and garlic.

Add salt and mix thoroughly; cover with crushed ice or ice cubes; let stand 3 hours. Drain thoroughly; remove garlic cloves.

Combine sugar, spices, and vinegar; heat just to boiling. Add drained cucumber and onion slices and heat five minutes.

Pack hot pickles loosely into clean, hot pint jars and cover with hot liquid to ½ inch from top. Adjust jar lids.

Process in boiling water for five minutes (start to count processing time as soon as water in canner returns to boiling). Increase processing to ten minutes at altitudes from 1001 to 6000 feet. Remove jars and complete seals if necessary. Set jars upright on wire rack or folded towel to cool. Place them several inches apart.

References

USDA Complete Guide to Home Canning.

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