Pack a Pickled Product

The amount of acid in pickles is as important to their safety as it is to their taste and texture. For this reason, do not change the amounts of vinegar, vegetables or water in any recipe. Don’t use vinegar of unknown acidity. It is not safe to use homemade vinegar in pickling. Use only recipes with tested amounts of ingredients because there must be a minimum, uniform level of acid throughout all products to prevent the growth of botulinum bacteria. If botulinum bacteria are not destroyed, they can grow inside jars and produce the deadly toxin that causes botulism, a type of food poisoning that can be fatal.

Please refer to MU Extension publication GH1457, Food Preservation — In a Pickle, for more information on pickling ingredients, proper containers, and processing pickles in a boiling-water canner.

Instructions for specific products

Sauerkraut

25 pounds cabbage
¼ cup canning or pickling salt

Yield: About 9 quarts

Quality: Firm heads of fresh cabbage make the best sauerkraut. Shred cabbage and start kraut between 24 and 48 hours after harvest.

Procedure: Work with about 5 pounds of cabbage at a time. Discard outer leaves. Rinse heads under cold running water, and drain. Cut heads in quarters, and remove cores. Shred or slice to the thickness of a quarter.

Put cabbage in a suitable fermentation container (see MU Extension publication GH1457, Food Preservation — In a Pickle), and add 3 tablespoons of salt. Mix thoroughly with clean hands. Pack cabbage down firmly until salt draws out juices. Repeat shredding, salting and packing until all cabbage is in the container.

Be sure the container is deep enough so the packed, shredded cabbage is at least 4 or 5 inches below the rim. If juice does not cover cabbage, add boiled and cooled brine (1½ tablespoons of salt per quart of water).

Quality for Keeps

Add plate and weight (see MU Extension publication GH1457, Food Preservation — In a Pickle, for ideas for acceptable weights); cover container with a clean bath towel.

Store sauerkraut at 70 to 75 degrees F while it is fermenting. Kraut will be fully fermented in 3 to 4 weeks at temperatures between 70 and 75 degrees F.

At 60 to 65 degrees F, fermentation may take 5 to 6 weeks. Kraut may not ferment at temperatures lower than 60 degrees F. Above 75 degrees F, kraut may become soft.

If you weight the cabbage down with a brine-filled bag, don’t disturb the crock until normal fermentation is completed (when bubbling stops). If you use a jar as a weight, check the kraut two to three times each week and skim off scum if it forms.

Fully fermented kraut will keep tightly covered in the refrigerator for several months. Additionally, you can preserve kraut for longer using either of these methods:

Hot pack: Bring kraut and liquid slowly to a boil in a large kettle; stir frequently. Remove from heat and fill jars rather firmly with kraut and juices. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

Raw pack: Fill jars firmly with kraut and cover with juices. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

Pickled dilled beans

4 pounds fresh tender green or yellow beans (5 to 6 inches long)
8–16 heads fresh dill or 8 teaspoons dill seed
8 cloves garlic (optional)
½ cup canning or pickling salt
4 cups white vinegar (5 percent)
4 cups water
1 teaspoon hot red pepper flakes or cayenne pepper (optional)

Yield: About 8 pints

Procedure: Wash and trim ends from beans, and cut beans into 4-inch lengths. Put 1 to 2 dill heads (or 1 teaspoon dill seed) and 1 clove of garlic in each sterilized jar. Stand beans upright in jars. Leave ½ inch of headspace. Trim beans to fit the jar if necessary.

Add plate and weight (see MU Extension publication GH1457, Food Preservation — In a Pickle, for ideas for acceptable weights); cover container with a clean bath towel.

Store dilled beans at 70 to 75 degrees F while it is fermenting. Coleslaw is fully fermented in 3 to 4 weeks at temperatures between 70 and 75 degrees F.

At 60 to 65 degrees F, fermentation may require 5 to 6 weeks. Coleslaw may not ferment at temperatures lower than 60 degrees F. Above 75 degrees F, coleslaw may become soft.

If you weight the cabbage down with a brine-filled bag, don’t disturb the crock until normal fermentation is completed (when bubbling stops). If you use a jar as a weight, check the coleslaw two to three times each week and skim off scum if it forms.

Fully fermented coleslaw will keep tightly covered in the refrigerator for several months. Additionally, you can preserve coleslaw for longer using either of these methods:

Hot pack: Bring coleslaw and liquid slowly to a boil in a large kettle; stir frequently. Remove from heat and fill jars rather firmly with coleslaw and juices. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

Raw pack: Fill jars firmly with coleslaw and cover with juices. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

Reviewed by
Susan Mills-Gray, State Nutrition Specialist
**Pickled beets**  
7 pounds beets, 2 to 2½ inches around  
4 cups vinegar (5 percent)  
1½ teaspoons canning or pickling salt  
2 cups sugar  
2 cups water  
2 cinnamon sticks  
12 whole cloves  
4–6 onions, 2 to 2½ inches around (optional)  
**Yield:** About 8 pints  
**Caution:** Drain and discard liquid. Cool beets. Trim off roots and stems, and slip off skins. Slice in ¼-inch slices. Peel and thinly slice onions.  
**Procedure:** Trim off beet tops. Leave 1 inch of stem and roots to prevent color from bleeding. Wash beets thoroughly and sort them for size. Cook similar sizes together by covering them with boiling water and cooking until tender, about 25 to 30 minutes.  
   Mix vinegar, salt, sugar and fresh water. Put spices in cheesecloth bag and add to vinegar mixture. Bring to a boil and add beets and onions. Simmer 5 minutes. Remove spice bag. Fill jars with beets and onions. Leave ½ inch of headspace. Add hot vinegar mixture, leaving ½ inch of headspace. Adjust lids, and process as directed in Table 1.  

**Pickled cauliflower or Brussels sprouts**  
12 cups of 1- to 2-inch cauliflower florets or small Brussels sprouts  
4 cups white vinegar (5 percent)  
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 hot red pepper flakes  
**Yield:** About 9 half-pints  
**Procedure:** Wash cauliflower and cut into flowerets. Wash Brussels sprouts and remove stems and damaged outer leaves. Boil in salt water (4 teaspoons canning salt per gallon of water). Boil cauliflower 3 minutes, and boil Brussels sprouts 4 minutes. Drain and cool.  
   Mix vinegar, sugar, onion, diced red pepper and spices in large saucepan. Bring to a boil, and simmer 5 minutes.  
   Divide onion and diced pepper among jars. Fill jars with drained cauliflower or brussels sprouts and hot pickling mixture. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

**Pickled corn relish**  
10 cups fresh whole kernel corn (16 to 20 medium-size ears), or six 10-ounce packages of frozen corn  
2½ cups diced sweet red peppers  
2 cups diced sweet green peppers  
2½ cups chopped celery  
1¼ cups diced onions  
1¼ cups sugar  
5 cups vinegar (5 percent)  
2½ tablespoons canning or pickling salt  
2½ teaspoons celery seed  
2½ tablespoons dry mustard  
1½ teaspoons turmeric  
**Yield:** About 9 pints  
**Procedure:** Wash and hull corn.  
   Drain and cool.  
   Place corn in a 10-quart saucepan and add the following:  
   - 2½ cups sliced celery  
   - 2½ cups diced onions  
   - 1½ cups sugar  
   - 5 cups vinegar (5 percent)  
   - 2½ tablespoons canning or pickling salt  
   - 2½ teaspoons celery seed  
   - 2½ tablespoons dry mustard  
   - 1½ teaspoons turmeric  
   Bring to a boil, and simmer 5 minutes.  
   Add hot vinegar mixture, leaving ½ inch of headspace. Adjust lids, and process as directed in Table 1.
**Procedure:** Boil ears of corn 5 minutes. Dip in cold water and cut whole kernels from cob (do not scrape the cob) or use six 10-ounce packages of frozen corn (defrost in the refrigerator or in the microwave). Mix peppers, celery, onions, sugar, vinegar, salt and celery seed in a saucepan. Bring to a boil and simmer 5 minutes. Stir occasionally.

Mix mustard and turmeric with a small amount of the simmered mixture, and add back to the hot mixture along with the corn. Simmer another 5 minutes. If desired, thicken mixture with flour paste (¼ cup flour blended in ¼ cup water) and stir frequently. Fill jars with hot mixture. Leave ½-inch of headspace. Adjust lids, and process as directed in Table 1.

**Pickled dilled okra**
- 7 pounds small okra pods
- 6 small hot peppers
- 4 teaspoons dill seed
- 8–9 garlic cloves
- ½ cup canning or pickling salt
- 6 cups water
- 6 cups vinegar (5 percent)

**Yield:** About 8 to 9 pints

**Procedure:** Wash and trim okra. Pack jars firmly with whole okra. Leave ½ inch of headspace. Put 1 garlic clove in each jar.

Mix salt, hot peppers, dill seed, water and vinegar in large saucepan and bring to a boil. Pour hot pickling mixture over okra. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

**Pickled bell peppers**
- 7 pounds firm bell peppers, free of blemishes
- 3½ cups sugar
- 3 cups vinegar (5 percent)
- 3 cups water
- 9 cloves garlic
- 4½ teaspoons canning or pickling salt

**Yield:** About 9 pints

**Procedure:** Wash peppers, cut into quarters, and remove cores and seeds. Slice peppers in strips. Boil sugar, vinegar and water for 1 minute. Add peppers and bring to a boil. Put ½ clove of garlic and ¼ teaspoon salt in each sterilized half-pint jar. Double the amounts for pint jars. Add pepper strips and cover with hot pickling mixture. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

**Pickled hot peppers (Hungarian, banana, chile, jalapeño)**
- 4 pounds hot, long peppers (red, green or yellow)
- 3 pounds sweet peppers (red and green mixed)
- 5 cups vinegar (5 percent)
- 1 cup water
- 4 teaspoons canning or pickling salt
- 2 tablespoons sugar
- 2 cloves garlic

**Yield:** About 9 pints

**Caution:** To avoid severe burns, wear rubber gloves when handling hot peppers. After handling peppers, wash hands thoroughly with soap and water before touching your face.

**Procedure:** Wash peppers. If small peppers are left whole, slash 2 to 4 slits in each. Quarter large peppers. To peel peppers, blanch in boiling water or blister as follows:
- **Oven or broiler method:** Put peppers in a hot oven (400 degrees F), or place under the broiler for 6 to 8 minutes or until skins blister.
- **Range-top method:** Cover hot burner, either gas or electric, with heavy wire mesh. Put peppers on burner for several minutes until skins blister.

Cool peppers in a pan covered with a damp cloth. This step makes it easier to peel the peppers. Peel skin off cooled peppers. Flatten small peppers.

Fill jars with cucumber slices. Leave ½ inch of headspace. Mix and heat other ingredients to boiling, and simmer 10 minutes. Remove garlic, and pour hot pickling mixture over peppers. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1.

**Reduced-sodium, sliced dill pickles**
- 4 pounds pickling cucumbers (3 to 5 inches long)
- 6 cups vinegar (5 percent)
- 6 cups sugar
- 2 tablespoons canning or pickling salt
- 1½ teaspoons celery seed
- 1½ teaspoons mustard seed
- 2 large onions, thinly sliced
- 8 heads fresh dill

**Yield:** About 8 pints

**Procedure:** Wash cucumbers. Cut ¼-inch slice off blossom end and discard. Cut cucumbers into ¼-inch slices. Mix vinegar, sugar, salt, celery and mustard seeds in large saucepan and bring to a boil.

Put 2 slices of onion and ½ dill head on bottom of each pint jar.

Fill jars with cucumber slices. Leave ½ inch of headspace. Add 1 slice of onion and ½ dill head on top. Pour hot pickling mixture over cucumbers. Leave ¼ inch of headspace. Adjust lids, and process as directed in Table 1.

**Pickled green tomato relish**
- 10 pounds small, hard green tomatoes
- 1½ pounds red bell peppers
- 1¼ pounds green bell peppers
- 2 pounds onions
- ½ cup canning or pickling salt
- 1 quart water
- 4 cups sugar
- 1 quart vinegar (5 percent)
- ½ cup prepared yellow mustard
- 2 tablespoons cornstarch

**Yield:** 7 to 9 pints

**Procedure:** Wash and coarsely grate or finely chop tomatoes, peppers and onions. Dissolve salt in water, and
pour water over vegetables in large kettle. Heat to boiling and simmer 5 minutes. Drain vegetables in a colander.

Return vegetables to kettle and add sugar, vinegar, mustard and cornstarch. Stir to mix. Heat to a boil and simmer 5 minutes. Fill sterilized pint jars with hot relish. Leave ½ inch of headspace.

Adjust lids, and process as directed in Table 1.

**Pickled horseradish sauce**

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<thead>
<tr>
<th>Ingredients</th>
<th>Yield</th>
<th>Note:</th>
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<tbody>
<tr>
<td>2 cups (¾ pound) freshly grated horseradish</td>
<td>About 2 half-pints</td>
<td>Make only small quantities of horseradish at a time — its biting taste fades within 1 to 2 months, even when refrigerated. Combine ingredients, and fill sterilized jars. Seal jars tightly. Store in a refrigerator.</td>
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<tr>
<td>1 cup white vinegar (5 percent)</td>
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<td>½ teaspoon canning or pickling salt</td>
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<td>¼ teaspoon powdered ascorbic acid</td>
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**Pickled bread-and-butter zucchini**

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<tr>
<td>16 cups fresh zucchini, sliced</td>
<td>About 8 to 9 pints</td>
<td>Cover zucchini and onion slices with 1 inch water and salt. Let stand 2 hours and drain thoroughly. Combine vinegar, sugar and spices. Bring to a boil and add zucchini and onions. Simmer 5 minutes. Fill jars with zucchini mixture and pickling mixture. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1. Or use the low-temperature pasteurization treatment described in MU Extension publication GH1457, Food Preservation — In a Pickle.</td>
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<tr>
<td>4 cups onions, thinly sliced</td>
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<td>Cover zucchini and onion slices with 1 inch water and salt. Let stand 2 hours and drain thoroughly. Combine vinegar, sugar and spices. Bring to a boil and add zucchini and onions. Simmer 5 minutes. Fill jars with zucchini mixture and pickling mixture. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1. Or use the low-temperature pasteurization treatment described in MU Extension publication GH1457, Food Preservation — In a Pickle.</td>
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<tr>
<td>½ cup canning or pickling salt</td>
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<td>4 cups white vinegar (5 percent)</td>
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<td>2 cups sugar</td>
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<td>4 tablespoons mustard seed</td>
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<td>2 tablespoons celery seed</td>
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<td>2 teaspoons ground turmeric</td>
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**Piccalilli**

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<tr>
<td>6 cups chopped green tomatoes</td>
<td>9 half-pints</td>
<td>Wash, chop, and combine vegetables with the ½ cup salt. Cover with hot water and let stand 12 hours. Drain and place in a clean white cloth. Squeeze gently to remove all liquid. Mix vinegar and brown sugar in a saucepan. Tie spices loosely in a spice bag; add to vinegar and brown sugar mixture. Heat to boil. Add vegetables and continue boiling gently 30 minutes, or until the volume of the mixture is reduced by one-half. Remove spice bag. Fill hot, sterilized jars with hot mixture. Leave ½ inch of headspace. Adjust lids, and process as directed in Table 1. Or use the low-temperature pasteurization treatment described in MU Extension publication GH1457, Food Preservation — In a Pickle.</td>
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<tr>
<td>1½ cups chopped sweet red peppers</td>
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<tr>
<td>1½ cups chopped green peppers</td>
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<td>2½ cups chopped onions</td>
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<td>7½ cups chopped cabbage</td>
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<td>½ cup canning or pickling salt</td>
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<td>3 tablespoons whole mixed pickling spice</td>
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<td>4½ cups vinegar (5 percent)</td>
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<td>3 cups brown sugar</td>
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Also from MU Extension publications

GH1451, Quality for Keeps: Before You Start to Can, Learn the Basics
GH1452, Quality for Keeps: Steps to Success in Home Canning
GH1454, Quality for Keeps: Preserve Your Garden Delights — How to Can Fresh Vegetables
GH1457, Quality for Keeps: Pickling Basics — In a Pickle