

Fill Your Pantry: Pickles

PICKLE BASICS

Select firm, unwaxed, pickling cucumbers

- 1/16 inch cut off blossom end

In recipes:

- Canning or pickling salt is recommended
- White granulated sugar or brown sugar are recommended
- Use vinegar with 5% acidity



Photo credit: National Center for Home Food Preservation

PICKLE SAFETY AND STEPS

Follow directions and steps of tested recipes

Process pickles in a boiling-water bath canner as directed by recipe

Pickles processed in a boiling-water bath canner **less than 10 minutes** must be put in sterilized jars first

Brined pickles	Fresh pack / quick process pickles	Fruit pickles	Pickle relish
Cured in a brine (salt and water)	Covered in vinegar, spices, and seasonings	Made with fruits and a sweet-sour syrup	Made with fruits and vegetables and cooked to desired consistency
Preserved with vinegar	Better flavor is achieved when pickles stand for several weeks after being sealed in jars	including vinegar or lemon juice	in a vinegar solution

Fill Your Pantry: Pickles

- For fermenting use stone crockery, glass or food grade plastic
- For quick pickles heat solution in: aluminum, steel or unchipped enamel
- For best results use soft water

Problem	Cause	Prevention
Soft or slippery pickles (If spoilage is evident, do not eat)	Pickles not processed properly (to destroy microorganisms)	Process pickles in canner after filling jars
	Blossom ends not removed from cucumbers	Slice at least 1/16th inch off blossom end of cucumbers and discard
Strong, bitter taste	Using salt substitutes	Potassium chloride, the ingredient in most of these, causes bitterness
Shriveled Pickles	Overcooking or overprocessing	Follow a reliable recipe exactly
Dark or discolored pickles (If brass, copper or zinc utensils and brining equipment were used, do not use pickles)	Minerals in hard water	Use soft water
	Spices left in jars of pickles	Place spices loosely in cheesecloth bag so they can be removed before canning
	Brass, iron, copper or zinc utensils used	Use food-grade unchipped enamelware, glass, stainless steel, or stoneware utensils

For other causes and possible solutions for problems with pickles, see the National Center for Home Food Preservation website:
nchfp.uga.edu

Fill Your Pantry: Pickles**Pickling Recipes****Pickled Bread-And-Butter Zucchini**

Source: Colorado State University Extension

Yield: 8-9 pints

Ingredients

16 cups fresh zucchini, sliced (3/16-inch thick)
4 cups onion, thinly sliced
1/2 cup canning or pickling salt
4 cups white vinegar (5% acidity)
2 cups sugar
4 tablespoons mustard seed
2 tablespoons celery seed
2 teaspoons ground turmeric

Procedure: Cover zucchini and onion with 1 inch ice water and salt. Let stand 2 hours; drain thoroughly.

Combine vinegar, sugar, mustard seed, celery seed and turmeric. Bring to a boil; add zucchini and onions. Simmer 5 minutes.

Fill jars with mixture and pickling solution, leaving 1/2-inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids.

Recommended process time for pickling in a boiling water canner.				
		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft.	1,001 - 6,000 ft.	Above 6,000 ft.
Hot	Pints & Quarts	15 mins	15 mins	20 mins

Note: Please read Using Boiling Water Canners before beginning. If this is your first time canning, it is recommended that you read Principles of Home Canning.

Fill Your Pantry: Pickles

Pickled Sweet Green Tomatoes

Source: Colorado State University Extension

Yield: about 9 pints or 4 1/2 quarts

Ingredients

10 to 11 pounds of green tomatoes (16 cups sliced 1/4-inch thick)

2 cups thinly sliced onions

1/4 cup canning or pickling salt

3 cups brown sugar

4 cups vinegar (5% acidity)

1 tablespoon each mustard seed, allspice, celery seed and whole cloves

Procedure: Wash and slice tomatoes and onions. Place in bowl, sprinkle with 1/4 cup salt, and let stand 4 to 6 hours. Drain.

Heat and stir sugar in vinegar until dissolved. Tie mustard seed, allspice, celery seed and cloves in a spice bag. Add to vinegar with tomatoes and onions. If needed, add minimum water to cover pieces.

Bring to boil and simmer 30 minutes, stirring as needed to prevent burning. Tomatoes should be tender and transparent when properly cooked. Remove spice bag.

Fill jars and cover with hot pickling solution, leaving 1/2-inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids.

Recommended process time for pickled recipe in a boiling water bath			
		Process Time at Altitudes of	
Style of Pack	Jar Size	0 - 6,000 ft.	Above 6,000 ft.
Hot	Pints	15 mins	20 mins
	Quarts	20 mins	25 mins

Note: Please read Using Boiling Water Canners before beginning. If this is your first time canning, it is recommended that you read Principles of Home Canning.

Fill Your Pantry: Pickles

Kosher Dills

Source: National Center for Home Food Preservation (University of Georgia Extension)

Yield: 6-7 pints

Ingredients

30-36 cucumbers (3-4 inches long)

3 cups vinegar (5 percent)

3 cups water

6 Tbsp canning salt

Fresh or dried dill

Garlic

Mustard Seed

Procedure

1. Wash the cucumbers. Slice 1/16-inch from blossom end and discard. Leave 1/4-inch of stem attached.
2. Make a brine of the vinegar, water, and salt. Bring to a boil.
3. Place a generous layer of dill, 1/2 to 1 clove of garlic (sliced), and 1/2 teaspoon of mustard seed in bottom of each pint jar. Pack the cucumbers into the hot jars. When the jars are half-filled with cucumbers, add more dill and complete the packing of the jars.
4. Fill the jars 1/2 inch from the top with boiling brine. Remove air bubbles. Wipe jar rims. Adjust lids. Process 10 minutes in a Boiling Water Bath. Pickles will shrivel after processing. They will later plump in sealed jar.

Recommended process time for Kosher Dills in a boiling-water canner.

		Process Time at Altitudes of
Style of Pack	Jar Size	0 - 1,000 ft
Hot	Pints	10 min

Source: National Center for Home Food Preservation (University of Georgia Extension)
Yield: 8 pints

Ingredients

4 lbs fresh tender green or yellow beans (5 to 6 inches long)
8 to 16 heads fresh dill
8 cloves garlic (optional)
1/2 cup canning or pickling salt
4 cups white vinegar (5 percent)
4 cups water
1 tsp hot red pepper flakes (optional)

Procedure

1. Wash and trim ends from beans and cut to 4-inch lengths.
2. In each sterile pint jar, place 1 to 2 dill heads and, if desired, 1 clove of garlic. Place whole beans upright in jars, leaving 1/2-inch headspace. Trim beans to ensure proper fit, if necessary.
3. Combine salt, vinegar water, and pepper flakes (if desired). Bring to a boil. Add hot solution to beans, leaving 1/2-inch headspace.
4. Adjust lids and process according to the recommendations/

Recommended process time for Pickled Dilled Beans in a boiling-water canner.

		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Raw	Pints	5 min	10	15

Storage

Use home canned foods within 1 year.

Sterilizing Jars

Wash jars in a dishwasher or by hand, using detergent and rinsing well. Submerge jars (covered by) in boiling water for 10 minutes.

To pre-sterilize jars, place the cleaned jars right-side-up on a rack in a canner and fill the jars and canner with water to 1-inch above the tops of the jars. Bring the water to a boil and then boil for 10 minutes. When you are ready to fill the jars, remove the jars one at a time, emptying the water from them back into the canner.

Yield: 9 half-pints

Ingredients

6 cups finely chopped onions
3 cups finely chopped sweet red peppers
3 cups finely chopped green peppers
1-1/2 cups sugar
6 cups vinegar (5 percent), preferably white distilled
2 tbsp canning or pickling salt

Procedure

1. Wash and chop vegetables. Combine all ingredients and boil gently until mixture thickens and volume is reduced by one-half (about 30 minutes).
2. Fill sterile jars, with hot relish, leaving 1/2-inch headspace, and seal tightly. Store in refrigerator and use within one month. For extended storage, process according to the recommendations.

Table 1. Recommended process time for Pickled Pepper-Onion Relish in a boiling-water canner.

		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Half-pints or Pints	5 min	10	15

Storage

Use home canned foods within 1 year.

Sterilizing Jars

Wash jars in a dishwasher or by hand, using detergent and rinsing well. Submerge jars (covered by) in boiling water for 10 minutes.

To pre-sterilize jars, place the cleaned jars right-side-up on a rack in a canner and fill the jars and canner with water to 1-inch above the tops of the jars. Bring the water to a boil and then boil for 10 minutes. When you are ready to fill the jars, remove the jars one at a time, emptying the water from them back into the canner.

I ILLINOIS EXTENSION

Fill Your Pantry: Pickles

Bread and Butter Pickles

Source: Purdue Extension

Yield: 12-13 pints

Ingredients

1 peck small cucumbers (1/4 bushel)
12 medium sized onions
6 green peppers

- 6 cloves of garlic
- 2/3 cup Canning Salt
- 3 pounds bag of crushed ice, for crisping
- For Marinade and Canning
- 10 cups sugar (1.5 lb bag)
- 6 cups cider vinegar (5% acidity)
- 3 teaspoons ground tumeric
- 3 teaspoons celery seed
- 4 tablespoons mustard seeds
- 12-14 pint jars with lids and rims

Procedure

1. Thinly slice cucumbers, onions, green peppers and garlic. Place them all in a large pot and mix in salt. Cover the ingredients with 1-inch thick layer of crushed ice. Let the mixture stand for 3 hours, remove remaining ice, and drain (and squeeze) the cucumber mixture thoroughly to get rid of excess moisture.
2. In a large stockpot over medium heat dissolve sugar, vinegar, tumeric, celery seed and mustard seeds. Once it is all dissolved add the cucumber mixture and stir to make sure everything is fully combined.
3. Heat the cucumber mixture just to a boil and let simmer for one minute. Then, ladle cucumber mixture into hot pint jars, filling the jar until there is 3/4 inches remaining at the top. Then, ladle liquid over the cucumbers until there is 1/4 inch of headspace. Place lid and secure rims.
4. Process jars in a boiling water bath for 10 minutes. Store pickles in a cool dry place and enjoy within a year for best quality.

Table 1. Recommended process time for Pickled Pepper-Onion Relish in a boiling-water canner.

		Process Time at Altitudes of
Style of Pack	Jar Size	0 - 1,000 ft
Hot	Half-pints or Pints	10

Storage

Use home canned foods within 1 year.

Questions throughout the Webinar

1. **What is the role of grape leaves found in some dill pickle recipes? How to process the grape leaves? Where do you get grape leaves?**
 Grape leaves contain tannins that inhibit the pectinase enzyme that can make pickles soft. However, removing the blossom ends (the source of undesirable enzymes) will make the addition of grape leaves unnecessary. I could not find a modern recipe using grape leaves, in fact, grape leaves can sometimes impart a bitter flavor to the pickles.

2. When I make radish quick pickles, the red skin bleeds and then the pickles are just pink all over. Is there any way to preserve the color of the skin?

Sprinkle with salt and let stand for 30 minutes, then drain and pat dry before pouring pickling solution over. Leave a small amount of "top" on the radish and process whole. If that doesn't work, then enjoy "pink pickles"!

3. what can you use to make pickles crisp?

Alum may be safely used to firm fermented pickles. However, it is unnecessary. Alum does not improve the firmness of quick-process pickles. The calcium in lime definitely improves quick pickle firmness. Food-grade lime may be used as a lime-water solution for soaking fresh cucumbers 12 to 24 hours before pickling them. Excess lime absorbed by the cucumbers must be removed to make safe pickles. To remove excess lime, drain the lime-water solution, rinse, and then re-soak the cucumbers in fresh water for 1 hour. Repeat the rinsing and soaking steps two more times. To further improve pickle firmness, you may process cucumber pickles for 30 minutes in water at 180°F. This process also prevents spoilage, **but the water temperature should not fall below 180°F. Use a candy or jelly thermometer to check the water temperature.** *From So Easy to Preserve, NCHFP*

4. how can you get crispy pickled peppers, such as banana or jalapeno?

Use a recipe from an approved source, NCHFP, USDA or Extension that uses pickling lime. Make sure to follow the directions on soaking and rinsing.

5. I have a question on refrigerator pickles. I have seen recipes where after the pickles cool, they are left on the counter for a couple days before placing in the refrigerator. I have also seen recipes where after the pickles cool they are put immediately in the refrigerator. Is placing it on the counter first safe?

Always refrigerate pickles that are not processed in a boiling water bath. Leaving them on the counter can lead to spoilage as the room temperature is an ideal environment for spoilage bacteria to grow. Fermented pickles are left out during the fermentation process but not refrigerated pickles.

6. Pickling salt often comes in large containers. How long can you safely store pickling salt?—5 years

7. Are you opposed to a good sea salt, to include a lot of minerals? My question is for fermented pickles, which is what I do.

Use of canning or pickling salt is recommended. Fermented and non-fermented pickles may be safely made using either iodized or non-iodized table salt. However, non-caking materials added to table salts may make the brine cloudy. Flake salt varies in density and is not recommended for use. Kosher salt may be used but must not include anti-caking agents in the ingredient list. The "extra" minerals in sea salt can lead to off colors or flavors in the pickles and is therefore not recommended.

8. I like using tea bags to hold the spices and prevent clouding

Excellent idea!

9. do you recommend any canning process for lactofermentation? if so would that kill the beneficial bacteria?

Fermented pickles use lactofermentation just like sauerkraut and other fermented foods. This process reduces the bad bacteria and encourages the beneficial.

10. Is it safe to reduce a recipe? For example, I found a recipe on nchfp that calls for 8lbs of pickling cucumbers but I only have 4lbs.

Recipes are scientific formulas with exact ratios of acid/salt/water therefore I would not recommend altering recipes (unless all ingredients in the recipe can be divided exactly in half).

11. How long can I keep pickled green tomatoes in the fridge after opening the jar?

Keep them in the refrigerator, when serving put a small amount in a bowl and leave the jar in the refrigerator. If exposure to room temperature is limited then the pickles

should last 1-2 months after opening. If you observe signs of spoilage (bubbles, change in color, odors), then discard.

12. I would like to make bread and butter pickles (sweet & sour pickles). You did not mention these. Is it the same process?

Find a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company). There are many delicious bread and butter recipes, we have included one in this handout.

13. Can you use kosher salt for pickling?

Yes, make sure there are no anti-caking agents in the ingredients and if it is in flake form then the measurements need to be converted. (use 50% more flaked salt than granulated)

14. Why do you recommend taking the temperature to 240-F, when 210°F will kill all pathogens?

Botulinum spores are very hard to destroy at boiling-water temperatures; the higher the canner temperature, the more easily they are destroyed. Therefore, all low-acid foods should be sterilized at temperatures of 240° to 250°F, attainable with pressure canners operated at 10 to 15 PSIG.

15. What of sea salt vs pickling salt?

See questions #7 & 13

16. How long can you keep quick pickle jars. I have one from last summer.

Foods made from a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company), kept in a cool, dry space are best used within a year. However, as long as the seal is not broken, the lid rusted or otherwise compromised the food will be safe for several years—the quality, texture, taste can be effected.

17. So many recipes for pickled beets -- what is critical?

Using a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company). Find one that has spices that you like!

18. Your slide mentioned aluminum, steel and unchipped enamel for quick pickling, Is glass ok?

Glass can be used but is more fragile and can break.

19. Do most people just do a canning bath for dill pickles, or a pressure canner?

Pickles are acidified and thus best processed in a boiling water bath. Pressure canning pickles can cause texture issues—soft rather than crisp.

20. Any thoughts on fermentation locks? are they necessary and if so do you recommend a particular type for mason jars?

They all essentially do the same thing- let carbon dioxide escape and keep oxygen out. Extension recommends an air lock to ensure an anaerobic environment but you can ferment without one. Just make sure your vegetables are submerged under the brine level (with or without the air lock).

21. I would like to try pickling carrots, should I cook/dice them first like I would with beets?

NCHFP recommends cooking carrots until they are “half-cooked” just tender before processing. Always use a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company).

22. Can you reuse the brine from a commercially bought pickle to reuse for quick pickles?

Yes, but only if you are using it to flavor vegetables and not as a preservative. The acid/water ratio will not be the same as fresh brine but will impart flavor into whatever vegetables you add to the jar. Let stand for 2-3 days in the refrigerator before using and use within 7-10 days— If you observe signs of spoilage (bubbles, change in color, odors), then discard.

23. Can fermented pickles be shelf stable?

Fully fermented pickles may be stored in the original container for about 4 to 6 months, provided they are refrigerated and surface scum and molds are removed regularly. Canning fully fermented pickles is a better way to store them. To can them, pour the

brine into a pan, heat slowly to a boil, and simmer 5 minutes. Filter brine through paper coffee filters to reduce cloudiness, if desired. Fill hot jar with pickles and hot brine, leaving 1/2-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened clean paper towel. Adjust lids and process as below, or use the low temperature pasteurization treatment.

(The following treatment results in a better product texture but must be carefully managed to avoid possible spoilage. Place jars in a canner filled half way with warm (120° to 140°F) water. Then, add hot water to a level 1 inch above jars. Heat the water enough to maintain 180° to 185°F water temperature for 30 minutes. Check with 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. Caution: Use only when recipe indicates.)

Source: USDA

24. How long can refrigerator pickles last?

Keep in the refrigerator, when serving put a small amount in a bowl and leave the jar in the refrigerator. If exposure to room temperature is limited then the pickles should last 1-2 months after opening. If you observe signs of spoilage (bubbles, change in color, odors), then discard.

25. Growing up my mom used just regular cucumbers for pickles...why does it matter now that we make sure we are buying pickle cucumbers?

Cucumber varieties specific for pickling have smaller seeds and less bitter skins.

26. On 14 day pickles, can you safely reduce number of days if you proportion each step according to recipe.

No, follow an approved recipe EXACTLY

27. How long are quick pickles able to be stored on a shelf after canning?

Foods made from a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company), and processed in a boiling water bath according to the recipe and kept in a cool, dry space are best used within a year, However, as long as the seal is not broken, the lid rusted or otherwise compromised the food will be safe for several years—the quality, texture, taste can be effected.

28. Do you suggest soaking fresh picked cucumbers overnight before pickling?

Soaking overnight is a method that is used when cucumbers are not fresh. Harvesting cucumbers early in the morning and pickling the same day will ensure a better product. Many recipes for quick pickles call for soaking in ice water for a few hours prior to processing.

29. what can I do with any leftover brine? can it be stored and used later or. ... and can brine be reused once a jar is empty of pickles?

Many recipes make a bit more brine than needed to cover the vegetables in the jars. Any remaining brine can be used to make “refrigerator vegetables”—just pour over any type of vegetable, let flavors develop for a few days and enjoy—do not process (can) as a pickle, simply enjoy as a fresh condiment.

30. Are Cinnamon Pickles the same process?

Do you mean pickles made with red hot candy? Some people refer to them as Christmas pickles? Just make sure you use a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company).

31. Where can I get recipes for pickled food that are not processed?

You can make refrigerator pickles, since they are not processed you can find recipes nearly everywhere. Make sure your recipe calls for vinegar with 5% acidity.

32. How can I find my local extension office to have the dial gauge on my pressure canner tested?

here is a map of testing locations:

https://extension.illinois.edu/sites/default/files/pressure_canning_testing_locations_-_june_2020.pdf

You can also google Illinois Extension then click where we serve, locate your county and call the office nearest you—they will help.

33. Last week for jams/jellies you said not to use recipes developed before 1985. Is there any caution on pickle recipes?

Yes, the same holds true for all processed foods. The methods/times/recipes have advanced with the advent of more modern food safety measures.

34. I am interested in doing some Farmer Markets...since my kitchen is not certified ... and am I okay to sell my apple butter, jellies, pickles etc.

The short answer is yes, but please go to the Illinois Extension Cottage Food website for all the info you should need: <https://web.extension.illinois.edu/cottage/index.cfm>

35. Are there certain brands of pressure canner lids that can not be tested with the Presto device?

Those pressure canners with weights, rather than a gauge, do not need testing. Most brands can be tested with the Presto device.

36. Do you have any knowledge about lead-free jars? I'm relying on Ball brand. I know some of the older jars of various brands were a problem ---someone online was testing various brands. Not sure if I trust any others than Ball, unless you know they have been tested for lead (Kerr, etc).

The sources I was able to locate indicate that there are negligible amounts of lead in canning jars. Some of the older colored jars may contain lead and are best used for display only.

37. I've never seen jars with a variety of veggies like the 'restaurant' style -- how would that work? How can I do that at home... only with quick pickles or water bath and process an option

Mixed vegetable pickle recipes can be found at these reliable sources: (USDA, NCHFP, Extension, commercial canning supply company). Here is one from NCHFP ; https://nchfp.uga.edu/how/can_06/pickled_mixed_veg.html

38. Can you share the glass company where the jars are breaking so that we can be aware to avoid that brand? American Harvest? Ball? etc.?

I believe I was referring to using jars that once held other commercial foods, e.g mayonnaise, peanut butter, etc. These jars are designed to go through processing one time and you can risk them breaking if you try to can in them. Use them as storage jars if you like but do not can (process) food in them.

39. what can i use overly soft/ mushy pickles for?

Tartar sauce, sandwich spread, potato, egg, chicken or other salads?

40. I was looking through the Ball recipe books this weekend and noticed that a number of the pickled/chutney recipes only make a small number of jars (I.e. 3 pints in a boiling water bath, etc.) Is there any reason that the recipe couldn't be doubled for one processing session?

Pickling recipes are scientific formulas. That being said, if the ingredients and vinegar/water/sugar/salt ratios can all be doubled evenly (there being no rounding up or fractional amounts) then you should be able to double it. The easiest thing to do is to find a similar recipe at (USDA, NCHFP, Extension, commercial canning supply company).

41. Is there any benefit for soaking pickling cucumbers in an ice bath before making refrigerator pickles?

The ice bath firms up the cell wall of the cucumbers, it might help crisp the refrigerator pickles, although it is not necessary. Keeping the pickles in the fridge will also result in a crisp pickle.

42. If we are harvesting our own pickling cucumbers slowly but want to pickle them all together, would a brine solution store them longer until we had a larger batch?

I have heard about commercial pickling companies that store cucumbers in brine much in the same way we store grain here in Illinois, however, I do not know the formula or how it would work on a small scale. You can store the cucumbers in the fridge and then when you have enough for a batch, soak them in brine overnight to plump them. Or simply make several small batches as your cucumbers mature. You can find smaller yielding recipes from Ball, Kehr or Mrs. Wages.

43. How do I determine how hard/soft my water is?

There are some DIY instructions on youtube, however, you can purchase an in-home test kit at your local hardware store.

44. I am finding that the new lids are flimsier compared to lids of many years back. What brand lids do you recommend using?

We recommend using name brand (Ball, Kehr) rather than store brand.

45. Where can I purchase large quantities of pickling cucumbers to process?

Go to your farmers market and ask a farmer if you can purchase a large amount, making an arrangement to pick them up the morning they are harvested.

46. How old is too old for using canning jars? If I got them within the last five years? Is that safe?

Yes, canning jars (from reputable source-Ball, Kehr) are made to be used for many years. Make sure you check for nicks and cracks before using.

47. Are weck jars safe to use?

There are currently no USDA approved procedures for using these jars because there has never been a study funded and performed by the USDA or extension service on these jars.

48. Do you have any recipe books you'd recommend for good dill pickles?

I do not have a tried and true dill recipe, you will have to try several before you find one your family prefers. Make sure you are using a recipe from an approved source (USDA, NCHFP, Extension, commercial canning supply company).

49. Where can I get the recipe for giardiniera?

https://nchfp.uga.edu/how/can_06/pickled_mixed_veg.html

<https://extension.colostate.edu/topic-areas/nutrition-food-safety-health/making-pickled-peppers-at-home-9-314/>