



K-STATE
Research and Extension

PRESERVE IT FRESH, PRESERVE IT SAFE PEPPERS



When preserving fresh foods at home, follow proper procedures to prevent foodborne illness. These safety tested methods can be used for freezing, canning, and pickling peppers. For salsa and other recipes containing peppers, see *Preserve it Fresh, Preserve it Safe Tomatoes*, MF1185.

Always wash your hands before preparing any recipe.

Freezing

Freezer manuals offer guidelines for the maximum amount that can be frozen at one time to maintain quality — usually 2 to 3 pounds of food for each cubic foot of freezer space.

Quantity

Three peppers or about $\frac{2}{3}$ pound yields 1 pint frozen.

Quality

Select firm, yellow, green, or red peppers free of disease and insect damage.

Bell or sweet: Sweet or bell peppers can be frozen without blanching. Select crisp, tender, green, or bright red pods. Rinse and cut peppers in half, removing stems, seeds, and white membrane. Cut into $\frac{1}{2}$ -inch strips or rings, or dice depending on use.

Blanched — These are best used in cooking. Water blanch halves 3 minutes, strips, or rings 2 minutes. Cool promptly, drain, package, seal, and freeze.

Unblanched — These can be used in uncooked or cooked foods. Package raw, seal, and freeze.

Hot peppers: Rinse and stem. Package raw. Seal and freeze. *Caution:* To prevent burning your hands when handling hot peppers, wear plastic or rubber gloves. Do not touch your eyes.

Pimientos: Select firm, crisp pimientos of deep red color. Peel by roasting in the oven 400° to 450°F for 6 to 8 minutes or until skins can be rubbed off. Rinse off the charred skins, cut out stems, and remove seeds. Package, leaving $\frac{1}{2}$ -inch headspace. Seal and freeze.

Nutrition: Frozen Peppers, no salt added
Serving size: $\frac{3}{4}$ cup — 25 calories, 0 g fat, 5 g carbohydrate, 1 g protein, 1 g fiber, 4 mg sodium, 3 g sugar

Dehydrating

For information on dehydrating peppers, see <https://www.rrc.k-state.edu/preservation/drying.html> for resources.

Canning

To learn about canning methods, see *How-to Guide to Water Bath Canning and Steam Canning* (MF3241) and *How-to Guide to Pressure Canning* (MF3242).

Preparing Jars and Lids

For all canning recipes processed less than 10 minutes, wash and sterilize jars by placing them inside a boiling water canner and cover with water. Boil jars for at least 10 minutes and keep them hot. All jars must be warm prior to filling with food.

Preheating is not required for standard metal lids. Always wash lids in hot, soapy water before use. If using reusable plastic lid systems with rubber rings, follow the manufacturer's directions.

Peppers

Quality

Select firm yellow, green, or red peppers including chilis, jalapenos, and pimientos. Do not use soft or diseased peppers.

Quantity

An average of 9 pounds is needed for a 9-pint canner load. A bushel weighs 25 pounds and yields 20 to 30 pints — an average of 1 pound per pint.

Peeling methods

Rinse peppers. Peel peppers by placing them in a 400° to 450°F oven for 6 to 8 minutes. Remove from oven

and allow them to stand in a wet towel to steam for 15 minutes. Remove skin, stem and seeds. Another way to peel is to blister the skin of the peppers thoroughly on a hot range or with a flame, turning frequently to prevent scorching. Steam the peppers as directed above. Slash skin and insert a knife at the tapered end, pulling skin off toward stem. Remove stem and seeds. Flatten whole peppers to remove air.

Procedure

Select your favorite type of pepper. *Caution:* Wear plastic or rubber gloves when handling hot peppers or wash hands thoroughly with soap and water. Avoid touching your face.

Small peppers may be left whole. Large peppers may be quartered. Remove cores and seeds. Slash two or four slits in each pepper and either blanch in boiling water or peel using one of the peeling methods described above.

Add ½ teaspoon of salt to each pint jar or ¼ teaspoon salt per half-pint jar, if desired. Fill jars loosely with peppers and add fresh boiling water, leaving 1-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe jar rims with a clean, damp paper towel. Apply lids and rings fingertip-tight. Process in a pressure canner as directed in Table 1.

Turn off heat, let canner depressurize naturally, and remove canner lid. Let jars cool 5 minutes, and then remove from canner; do not retighten bands. Cool completely, check seals, label, date, and store.

Nutrition: Canned Peppers, with salt added
Serving size: ½ cup — 23 calories, 0 g fat, 5 g carbohydrate, 1 g protein, 1 g fiber, 31 mg sodium, 4 g sugar

Pickled Bell Peppers

Yield: About 9 pints or 18 half-pints

- 7 pounds firm bell peppers
- 3½ cups sugar
- 3 cups vinegar (5% acidity)
- 3 cups water
- 9 cloves garlic
- 4½ teaspoons canning or pickling salt

Rinse peppers, cut in quarters, remove cores, seeds, and blemishes. Slice into strips. Boil sugar, vinegar, and water for 1 minute. Add peppers and bring to a boil. Place ½ clove garlic and ¼ teaspoon salt in each sterile half-pint jar; ½ teaspoon salt for pint jars. Add pepper

strips and cover with the hot vinegar mixture, leaving ½-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe jar rims with a clean, damp paper towel. Apply lids and rings fingertip-tight. Process in a water bath canner or steam canner according to instructions in Table 2. Turn off heat and remove canner lid. Cool jars for 5 minutes. Remove jars from canner; do not retighten bands. Cool completely, check seals, label, date, and store.

Nutrition: Pickled Bell Peppers
Serving size: 1½ tablespoons — 20 calories, 0 g fat, 5 g carbohydrate, 0 g protein, 0 g fiber, 60 mg sodium, 5 g sugar

Pickled Hot Peppers

Hungarian, banana, chili, jalapeño

Yield: About 9 pints or 18 half-pints

- 4 pounds hot long red, green, or yellow peppers
- 3 pounds sweet red and green peppers, mixed
- 5 cups vinegar (5% acidity)
- 1 cup water
- 4 teaspoons canning or pickling salt
- 2 tablespoons sugar
- 2 cloves garlic

Caution: Wear plastic or rubber gloves when handling hot peppers or wash your hands thoroughly with soap and water before touching your face.

Rinse peppers. If small peppers are left whole, slash two to four slits in each. Quarter the large peppers. Blanch in boiling water or peel using one of the peeling methods described on page 1. Cool and remove skin. Flatten small peppers. Fill hot jars, leaving ½-inch headspace.

Combine and heat remaining ingredients. Bring to a boil and simmer 10 minutes. Remove garlic. Pour the hot pickling solution over peppers, leaving ½-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe jar rims with a damp, clean paper towel. Apply lids and rings fingertip-tight. Process in a water-bath or steam canner according to the instructions in Table 2.

Turn off heat and remove canner lid. Let jars cool 5 minutes. Remove jars from canner; do not retighten bands. Cool completely, check seals, label, date, and store.

Nutrition: Pickled Hot Peppers
Serving size: About 5 pieces — 20 calories, 0 g fat, 5 g carbohydrate, 0 g protein, 0 g fiber, 55 mg sodium, 5 g sugar

Pickled Pepper-Onion Relish

Yield: about 4 pints or 9 half-pints

- 6 cups finely chopped onions
- 3 cups finely chopped sweet red peppers
- 3 cups finely chopped green peppers
- 1½ cups sugar
- 6 cups vinegar (5% acidity), preferably white distilled
- 2 tablespoons canning or pickling salt

Rinse and chop vegetables. Combine all ingredients and boil gently until mixture thickens and the volume is reduced by one-half (about 30 minutes). Fill sterile jars with hot relish, leaving ½-inch headspace. Remove air bubbles and adjust headspace if necessary. Wipe rims of jars with a damp clean paper towel. Apply lids and rings fingertip-tight. Store in the refrigerator and use within one month. *Caution:* For extended storage, process in a boiling water bath or steam canner according to directions in Table 2. Turn off heat and remove canner lid. Let jars cool 5 minutes. Remove jars from canner; do not retighten bands. Cool completely, check seals, label, date, and store.

Nutrition: Pickled Pepper-Onion Relish

Serving size: 1 tablespoon — 5 calories, 0 g fat, 2 g carbohydrate, 0 g protein, 0 g fiber, 60 mg sodium, 2 g sugar

Piccalilli

Yield: about 4 pints or 9 half-pints

- 6 cups chopped green tomatoes
- 1½ cups chopped sweet red peppers
- 1½ cups chopped green peppers
- 2¼ cups chopped onions
- 7½ cups chopped cabbage
- ½ cup canning or pickling salt
- 3 tablespoons whole mixed pickling spice
- 4½ cups vinegar (5% acidity)
- 3 cups brown sugar

Procedure

Wash, chop, and combine vegetables with ½ cup salt. Cover with hot water and let stand 12 hours. Drain and press in a clean white cloth to remove all possible liquid. Tie spices loosely in a spice bag, add to the combined vinegar and brown sugar, and heat to a boil in a saucepan. Add vegetables and boil gently for 30 minutes or until volume is reduced by one-half. Remove spice bag.

Fill hot, sterile jars with the hot mixture, leaving ½-inch headspace. Remove air bubbles and adjust headspace if necessary. Wipe rims of jars with a damp clean paper towel. Apply lids and rings fingertip-tight. Process in a boiling water bath canner or steam canner according to Table 2. Turn off heat and remove canner lid. Let jars cool 5 minutes. Remove jars from canner; do not retighten bands. Cool completely, check seals, label, date, and store.

Nutrition: Piccalilli

Serving size: 1 tablespoon — 10 calories, 0 g fat, 3 g carbohydrate, 0 g protein, 0 g fiber, 200 mg sodium, 3 g sugar

Hot Pepper Relish

Yield: About 6 pint or 12 half-pints

- 5 cups ground green or red bell peppers (About 7 to 8 peppers, or 3 to 4 pounds before grinding) *
- 5 cups ground jalapeño peppers (About 3 to 4 pounds before grinding) *
- 1½ cups ground onion (3 medium yellow onions, 2.5 to 3 inches diameter, before grinding)
- 2½ cups distilled white or cider vinegar (5% acidity)
- 2 cups sugar
- 4 teaspoons pickling salt
- 4 teaspoons mustard seed

Caution: Wear plastic or rubber gloves and do not touch your face while handling or cutting hot peppers. If you do not wear gloves, wash hands thoroughly with soap and water before touching your face or eyes.

Procedure

Rinse bell peppers well; trim to remove stems and seeds. Slice stem end from jalapeño peppers; grind remaining jalapeño peppers with seeds. Peel, core, and wash onions. Cut peppers and onions into large pieces. Coarsely grind peppers and onions.

Measure 5 cups of the ground bell peppers with their juice, 5 cups of the ground jalapeño peppers with their juice, and 1½ cups of the ground onion, including juice. Combine the measured peppers and onions with the remaining ingredients into a large stockpot. Bring the mixture to a boil over high heat. Reduce heat and cook at a low boil for 30 minutes, stirring often to prevent scorching.

Fill the hot relish into prepared hot pint jars, leaving ½-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe jar rims with a clean,

Table 1. Recommended processing times in a pressure canner for plain peppers ONLY

Style of pack	Jar size	Process time (min.)	Canner gauge pressure for different elevations (in feet)			
			Dial gauge (lbs.)		Weighted gauge (lbs.)	
			0-2,000	2,001-4,000	0-1,000	Above 1,000
Hot	Pints	35	11	12	10	15

Table 2. Recommended processing times for pickled peppers in a boiling-water canner or steam canner

Product	Style of pack	Jar size	Processing times in minutes at different elevations (in feet)	
			0-1,000	1,001-6,000
Pickled bell peppers	Hot	Half-pints or pints	5	10
Pickled hot peppers	Raw	Half-pints or pints	10	15
Pickled pepper-onion relish	Hot	Half-pints or pints	5	10
Piccalilli	Hot	Half-pints or pints	5	10
Hot Pepper Relish	Hot	Pints or Half-pints	10	15

damp paper towel. Apply lids and rings fingertip-tight. Process in a water bath canner or steam canner according to instructions in Table 2. Turn off heat and remove canner lid. Cool jars for 5 minutes. Remove jars from canner; do not retighten bands. Cool completely, check seals, label, date, and store.

*Note: To adjust the hot pepper intensity of the finished product, the proportion of sweet to hot peppers may be adjusted according to taste and the variety of hot pepper used. The total amount of measured ground peppers should be no more than 10 cups of ground peppers.

Nutrition: Hot Pepper Relish

Serving size: 1 tablespoon – 15 calories, 0 g fat, 3 g carbohydrate, 0 g protein, 1 g fiber, 60 mg sodium, 3 g sugar

Problems and Solutions

1. Can pickled peppers be pressure canned?

It is not recommended to pressure can pickled peppers. This high-heat treatment causes peppers to become too soft and mushy. Water bath canning or steam canning is the best processing method for pickled peppers.

2. Why are non-pickled peppers pressure canned?

Peppers are a low acid food. Without added acid, such as vinegar, they must be pressure canned to make them safe.

3. In mixed vegetable pickled products with peppers, such as salsa, can any kind of pepper be used?

Yes. Any variety of pepper can be used because of similar acid content. Do not, however, change the amount of peppers called for in the recipe. Any changes will alter the acidity of the recipe and make it unsafe.

4. When handling hot peppers, what causes the burning sensation on the skin?

Hot peppers contain a compound called capsaicin, which can burn the skin. Capsaicin is primarily in the white membranes and less in the seeds. Wear rubber gloves when handling hot peppers and wash hands thoroughly with soap and water before touching your face.

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Complete Guide to Home Canning, USDA AIB No. 539, 2009; and *So Easy to Preserve*, 6th ed., The University of Georgia Cooperative Extension Service; and the National Center for Home Food Preservation, <https://nchfp.uga.edu>.

Nutrition data provided by USDA FoodData Central, <https://fdc.nal.usda.gov/index.html> and ESHA Genesis R&D Food Formulation & Labeling Software, version 11.13
Publications from Kansas State University are available at bookstore.ksre.ksu.edu

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Karen Blakeslee, *Preserve it Fresh, Preserve it Safe: Peppers*, Kansas State University, February 2024.