# **LET'S PRESERVE**

# **Peppers**

# **Types of Peppers and Products**

- Regular: made with bell, pimiento, chili, and jalapeño peppers
- Sweet pickled: made with banana, bell, Hungarian, and pimiento peppers
- Hot pickled: made with chili and jalapeño peppers
- Marinated: normally made with sweet red, yellow, and green peppers
- Pickled pepper relish: normally made with sweet red, yellow, and green peppers

# Quality

Select firm peppers free of disease and insect damage. Peppers of any color may be used.

# Quantity

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

# **Preparation**

Start with clean countertops and utensils. Wash hands with soap and warm water. All produce should be properly washed before it is consumed or preserved. Gently rub peppers under cold running water. Do not soak produce in water.

# **Freezing Procedures**

#### **Bell or Sweet Peppers**

**PREPARATION.** Select crisp, tender, green or bright-red pods. Wash, cut out stems, cut in half, and remove seeds. If desired, cut into ½-inch (13 mm) strips or rings, or chop.

#### For Longest Shelf-Life

Water-blanch halves for 3 minutes and strips or rings for 2 minutes. Cool promptly, drain, and package, leaving ½ inch (13 mm) of headspace. Seal and freeze. For crisper texture, package raw, leaving no headspace. Seal and freeze.

#### **Hot Peppers**

Wash and stem peppers. Package leaving no headspace. Seal and freeze.

**CAUTION:** If you choose hot peppers, wear plastic gloves while handling them, or wash your hands thoroughly with soap and water before touching your face.





# **Canning Procedures**

# Handling and Preparation

Select your favorite pepper(s). *Caution*: If you choose hot peppers, wear plastic gloves while handling them, or wash your hands thoroughly with soap and water before touching your face. Small peppers may be left whole. Wash and quarter large peppers. Remove cores and seeds. Slash two or four slits in each pepper, and place in a hot oven (400°F) (204°C) or broiler for 6 to 8 minutes until skins blister. Cool peppers in water and slip off skins. Flatten small whole peppers.

Wash jars. Prepare lids according to the manufacturer's instructions. Place products into jars. Add liquids according to recipe. Remove air bubbles. Wipe sealing edge of jars with a clean, damp paper towel. Add lids and tighten screw bands. Process jars of non-pickled peppers in a pressure canner or jars of pickled peppers in a boiling water or atmospheric steam canner.

# **Procedures**

To process in a pressure canner, place jar rack, 2 to 3 inches (5 to 7.5 cm) of water, and sealed jars in the canner. Fasten lid and heat canner on high setting. After steam exhausts for 10 minutes, add weighted gauge or close petcock to pressurize the canner. Start timing the process when the desired pressure is reached. Regulate heat to maintain a uniform pressure and process jars for the time given in Table 1.

#### Non-pickled Peppers

Process non-pickled peppers in a pressure canner. Fill jars loosely with peeled, cored, or flattened sweet or hot peppers. Add ½ teaspoon of salt to each pint, if desired. Add hot water, leaving 1 inch (2.5 cm) of headspace. Adjust lids and process the product for the time given in Table 1. When processing is complete, remove canner from heat. Air-cool canner until it is fully depressurized. Slowly remove weighted gauge or open petcock. Wait 10 minutes, unfasten, and carefully remove canner lid. Remove jars from the canner with a jar lifter, being careful not to tilt the jars, to a wooden cutting board or towel-lined surface.

#### **Processing Pickled Peppers**

#### To Process Pickled Peppers in a Boiling Water Canner

Preheat canner filled halfway with water to 180°F (82°C) for hot packs or 140°F (60°C) for raw packs. Load sealed jars onto the canner rack and lower rack with handles, or load one jar at a time with a jar lifter onto rack in canner. Add water, if needed, to 1 inch (2.5 cm) above jars and add canner cover. When water boils vigorously, lower heat to maintain a gentle boil and process sealed jars as prescribed in Table 2.

When jars have been processed in boiling water for the recommended time, set canner off heat and remove the canner lid. Wait 5 minutes before removing jars from the canner with a jar lifter, being careful not to tilt the jars, to a wooden cutting board or towel-lined surface.

# To Process Pickled Peppers in an Atmospheric Steam Canner

Preheat the base of a steam canner that has been filled with the amount of water designated in the instruction manual that comes with the canner (usually about 2 quarts). Set the rack in the base of the canner. Heat water in the base of the canner to 180°F (82°C). As each jar is filled, place it on canner rack, keeping the cover or lid on the atmospheric steam canner as you work. When all jars are in the canner, bring the canner to a boil over medium to medium-high heat until a steady column of steam at least 6 inches (15 cm) long escapes from the vent hole(s). Processing time begins when there is a steady column of steam 6 to 8 inches (15 cm to 20 cm) long. Slowly adjust the heat to maintain a steady column of steam throughout the processing time. When processing is complete, turn off heat. Allow the jars to sit in the covered canner for 5 minutes before removing them from the canner with a jar lifter, being careful not to tilt the jars, to a wooden cutting board or towel-lined surface.

# After Processing

Do not retighten screw bands. Cool jars for 12 to 24 hours and remove screw bands. Check lid seals. If the center of the lid is indented, the jar is sealed. Wash, dry, label, and store sealed jars in a clean, cool, dark place. If the lid is unsealed, examine and replace jar if defective, use new lid, and reprocess as before or store in the refrigerator. Wash screw bands and store separately. Canned goods are best if consumed within a year and are safe as long as lids remain vacuum sealed.

#### **Pickled Sweet Peppers**

7 pounds firm bell peppers

3½ cups sugar

3 cups vinegar (5%)

3 cups water

9 cloves garlic

41/2 teaspoons canning or pickling salt

Yields approx. 9 pints

**PROCEDURE.** Select and wash your favorite sweet peppers, cut into quarters, remove cores and seeds, and cut away any blemishes. Slice peppers into strips. Boil vinegar, water, and sugar for 1 minute. Add peppers and bring to a boil. Place ½ clove of gar-

lic and ¼ teaspoon of salt in each sterile half-pint jar, or double the amounts for pint jars. Add pepper strips and cover with hot vinegar mixture, leaving ½ inch (13 mm) of headspace. Adjust lids and process jars in a boiling water or atmospheric steam canner as prescribed in Table 2.

# **Pickled Hot Peppers**

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

Yields approx. 9 pints

PROCEDURE. Wash peppers. Peel as described on page 1. If small peppers are left whole, slash two or four slits in each. Quarter large peppers. Flatten small peppers. Fill jars, leaving ½ inch (13 mm) of headspace. Combine and heat other ingredients to boiling and simmer for 10 minutes. Remove garlic. Add pickling solution over peppers, leaving ½ inch (13 mm) of headspace. Adjust lids and process jars in a boiling water or atmospheric steam canner as prescribed in Table 2.

# **Marinated Peppers**

- 4 pounds firm peppers
- 1 cup bottled lemon juice
- 2 cups white vinegar (5%)
- 1 tablespoon oregano leaves
- 1 cup olive or salad oil
- ½ cup onions, chopped
- 2 cloves garlic, quartered (optional)
- 2 tablespoons prepared horseradish (optional)

Yields approx. 9 half-pints

**PROCEDURE.** Select your favorite sweet or hot peppers. Peel peppers as described on page 1. Quarter large peppers. Mix all re-



maining ingredients in a saucepan and heat to boiling. Place ¼ garlic clove (optional) and ¼ teaspoon of salt in each half-pint or ½ teaspoon per pint. Fill jars with peppers; add hot, well-mixed oil/pickling solution over peppers, leaving ½ inch (13 mm) of headspace. Adjust lids and process jars in a boiling water or atmospheric steam canner as prescribed in Table 2.

# Pickled Pepper-Onion Relish

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

Yields approx. 9 half-pints

**PROCEDURE.** Wash and chop vegetables. Combine all ingredients and boil gently until mixture thickens and volume is reduced by one-half (about 30 minutes). Fill sterile jars with hot relish, leaving 1/2 inch (13 mm) of headspace, and seal tightly. Store in refrigerator and use within one month. *Caution*: If extended storage is desired, jars must be processed immediately after filling in a boiling water or atmospheric steam canner, as prescribed in Table 2.

# Sweet Pepper Relish

- 5 cups ground green bell peppers (about 7 to 8 peppers, or 3 to 4 pounds before grinding)
- 5 cups ground red bell peppers (about 7 to 8 peppers, or 3 to 4 pounds before grinding)
- $1\frac{1}{2}$  cups ground onion (3 medium yellow onions,  $2\frac{1}{2}$  to 3 inches diameter, before grinding)
- 2½ cups cider or white distilled vinegar (5%)
- 2 cups sugar
- 4 teaspoons pickling salt
- 4 teaspoons mustard seed

Yields approx. 6 pint jars

**PROCEDURE.** Wash and rinse pint or half-pint canning jars; keep hot until ready to fill. Prepare lids and ring bands according to manufacturer's directions.

Wash peppers well; trim to remove stems and seeds. Peel, core and wash onions. Cut peppers and onions into large pieces. Coarsely grind peppers and onions.\*

Measure 5 cups of each type of ground bell 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 (13 mm) of headspace. If needed, remove air bubbles and readjust headspace to ½ inch (13 mm). Wipe rims of jars with a dampened clean paper towel. Adjust lids and bands.

Process in a boiling water or atmospheric steam canner according to the recommendations in Table 1. Let cool, undisturbed, for 12 to 24 hours and check for seals.

\*For recipe development, peppers and onions were ground using a stand mixer grinder attachment with the coarse blade. Bell peppers may be all one color or mixed in different proportions as long as 10 cups total are not exceeded. If you prefer a hotter relish, you may include up to 5 cups of jalapeño peppers, as long as 10 cups total of peppers are not exceeded.

# Pickled Corn-Pepper Relish

- 10 cups fresh whole-kernel corn (16 to 20 medium-size ears) or five 12-ounce packages of frozen corn, defrosted
- 21/2 cups sweet red peppers, diced
- 2½ cups sweet green peppers, diced
- 21/2 cups celery, chopped
- 1¼ cups onions, chopped
- 1¾ cups sugar
- 5 cups vinegar (5%)
- 21/2 tablespoons canning or pickling salt
- 21/2 teaspoons celery seed
- 21/2 tablespoons dry mustard
- 11/4 teaspoons turmeric



PROCEDURE. Boil ears of corn for 5 minutes. Dip in cold water. Cut whole kernels from cob or use five 12-ounce packages of frozen corn. If using frozen corn, defrost in the refrigerator overnight or in a microwave. Combine peppers, celery, onions, sugar, vinegar, salt, and celery seed in a saucepan. Bring to boil and simmer for 5 minutes, stirring occasionally. Mix mustard and turmeric in ½ cup of the simmered mixture. Add this mixture and corn to the hot mixture. Simmer for another 5

minutes. If desired, thicken mixture with flour paste (¼ cup of flour blended in ¼ cup of water) and stir frequently. Fill jars with hot mixture, leaving ½ inch (13 mm) of headspace. Adjust lids and process jars in a boiling water or atmospheric steam canner as prescribed in Table 2.

Table 1. Recommended processing time in a pressure canner for non-pickled peppers.

			Canner gauge pressure (in pounds) at altitudes of							
				Dial ga	Weighted gauge canner					
Product	Jar size	Time (min.)	0–2,000 ft.	2,001–4,000 ft.	4,001–6,000 ft.	6,001–8,000 ft.	0–1,000 ft.	Above 1,000 ft.		
Peppers	Half-pints or pints	35	11	12	13	14	10	15		

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

			Processing time (in minutes) at altitudes of			
Product	Style of pack	Jar size	0–1,000 ft.	1,001–6,000 ft.	Above 6,000 ft.	
Pickled, sweet	Hot	Half-pints or pints	5	10	15	
Pickled, hot	Hot	Half-pints or pints	10	15	20	
Sweet pepper relish	Hot	Half-pints or pints	10	15	20	
Marinated	Hot	Half-pints or pints	15	20	25	
Pickled pepper-onion relish	Hot	Half-pints or pints	5	10	15	
Pickled corn-pepper relish	Hot	Half-pints or pints	15	20	25	

For additional information about food preservation, visit the Penn State Extension Home Food Preservation website at **extension.psu.edu/food/preservation** or contact Penn State Extension in your county.

Prepared by Martha Zepp, extension project assistant; Andy Hirneisen, senior food safety educator; and Luke LaBorde, professor of food science.

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