Sacramento County Master Food Preservers
Monthly Wednesday Night Demonstration

August 18, 2021
Tomatoes and Peppers

Resources:
- Please visit the National Center for Home Food Preservation at http://nchfp.uga.edu for detailed information about research-based methods of home food preservation.
- UC ANR Catalog (http://anrcatalog.ucanr.edu)

Should you need assistance or require special accommodations for any of our educational programs, please contact us at 916-875-6913.
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MARINATED PEPPERS (Bell, Hungarian, Banana, or Jalapeno)
Source: https://nchfp.uga.edu/how/can_06/marinated_peppers.html

Yield: about 9 half-pints.

4 lbs firm peppers*
1 cup bottled lemon juice
2 cups white vinegar (5 percent)
1 Tablespoon oregano leaves
1 cup olive or salad oil
1/2 cup chopped onions
2 cloves garlic, quartered (optional)
2 Tablespoons prepared horseradish (optional)

* Note: It is possible to adjust the intensity of pickled jalapeno peppers by using all hot jalapeno peppers or blending with sweet and mild peppers.
For hot style: Use 4 lbs jalapeno peppers.
For medium style: Use 2 lbs jalapeno peppers and 2 lbs sweet and mild peppers.
For mild style: Use 1 lb jalapeno peppers and 3 lbs sweet and mild peppers.

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.
Select your favorite pepper. Peppers may be left whole. Large peppers may be quartered.
Wash, slash two to four slits in each pepper, and blanch in boiling water or blister in order to peel tough-skinned hot peppers.
Peppers may be blistered using one of the following methods: Oven or broiler method: Place peppers in a hot oven (400ºF) or broiler for 6-8 minutes or until skins blister. Range-top method: Cover hot burner, either gas or electric, with heavy wire mesh. Place peppers on burner for several minutes until skins blister.
Allow peppers to cool. Place in pan and cover with a damp cloth. This will make peeling the peppers easier. After several minutes of cooling, peel each pepper.

Flatten whole peppers. Mix all remaining ingredients in a saucepan and heat to boiling. Place 1/4 garlic clove (optional) and 1/4 teaspoon salt in each half pint or 1/2 teaspoon per pint.
Fill jars with peppers, add hot, well-mixed oil/pickling solution over peppers, leaving 1/2-inch headspace. Adjust lids and process as below:

<table>
<thead>
<tr>
<th>Pack</th>
<th>Jar Size</th>
<th>Process Time at Altitudes of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw</td>
<td>Half-pints and</td>
<td>0 - 1,000 ft</td>
</tr>
<tr>
<td></td>
<td>pints</td>
<td>15 min</td>
</tr>
</tbody>
</table>
HOME-STYLE PICKLED JALAPEÑOS
Source: https://www.freshpreserving.com/blog?cid=home-style-pickled-jalapenos

Yield: Makes about 6 (1-PT./500-mL) Jars

These long, pickled pepper strips are the perfect fit for tacos, nachos, or any favorite sandwich that needs spicing up.

- 3-1/2 lb. jalapeño peppers, seeded and quartered
- 1 cup thinly sliced white onion
- 2 large carrots, thinly sliced
- 2-1/2 cups white vinegar (5% acidity)
- 2-1/2 cups water
- 2 Tbsp Ball® Salt for Pickling & Preserving
- 1 Tbsp sugar
- 6 garlic cloves, crushed
- Ball® Pickle Crisp (optional)

Directions

2. Put on gloves, and cut peppers in half lengthwise; remove seeds. Cut halves in half lengthwise to create long strips. Place jalapeño strips in a large bowl. Add onion and carrot; toss well.

3. Combine vinegar and next 3 ingredients in a large stainless steel or enameled saucepan. Bring to a boil.

4. Place 1 crushed garlic clove in a hot jar, and pack jar tightly with vegetable mixture, leaving 1/2-inch headspace. Add 1/8 tsp. Ball® Pickle Crisp to jar, if desired. Ladle hot pickling liquid over vegetables, leaving 1/2-inch headspace. Remove air bubbles. Wipe jar rim. Center lid on jar. Apply band, and adjust to fingertip-tight. Place jar in boiling- water canner. Repeat until all jars are filled.

5. Process jars 10 minutes, adjusting for altitude. Turn off heat; remove lid, and let jars stand 5 minutes. Remove jars and cool 12-24 hours. Check lids for seal, they should not flex when center is pressed.
CHOICE SALSA
Source: https://nchfp.uga.edu/how/can_salsa/choice_salsa.html

Yield: About 6 pints

6 cups peeled, cored, seeded, chopped ripe tomatoes
9 cups diced onions and/or peppers of any variety
1-1/2 cups bottled lemon or lime juice
1 Tablespoon canning or pickling salt

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.

To prepare tomatoes: Dip washed tomatoes in boiling water for 30 to 60 seconds or until the skins split. Submerge immediately in cold water. Peel off loosened skins and remove cores. Remove seeds and chop into 1/4 to 1/2-inch pieces.
To prepare onions: Peel, wash, core and dice onions into 1/4-inch pieces.
To prepare bell peppers: Wash and core bell peppers. Remove the seeds and membranes before dicing into 1/4-inch pieces.
To prepare hot peppers: Wash and remove stems of hot peppers. Keep or remove as much of the seeds and membranes as you wish, depending on the ‘pepper heat’ of the salsa that you desire. Dice peppers into 1/4-inch pieces.

Combine tomatoes, onions, and peppers in a large saucepan; add lemon or lime juice and salt. Bring to a boil over medium heat while stirring. Reduce heat and simmer for 3 minutes, stirring to prevent scorching.

Ladle hot salsa into hot pint jars, leaving 1/2-inch headspace. Remove air bubbles and adjust head space if needed. Wipe rims and adjust lids.

Process in a boiling water canner 15 minutes at 0 – 1,000 feet altitude (20 minutes at 1,001 to 6,000 feet, 25 minutes above 6,000 feet).

Turn off heat; remove the lid, and let the jars stand 5 minutes. Remove the jars and cool.

Notes: This is a fairly acidic salsa, but was tested with a wide variety of tomatoes, peppers and onions to ensure the necessary acidification for boiling water canning and still allow for some consumer choice in the ingredients.
The peppers used may be sweet bell peppers (of any color) and/or hot peppers.

The purpose of the commercially bottled lemon or lime juice is to standardize a minimum level of acidity in the recipe. For the purposes NCHFP testing, they used lemon juice as it was deemed the most acceptable flavor for the proportions in this particular recipe. For safety reasons, do not substitute vinegar for the lemon or lime juice. Do not use bottled key lime juice.

*Do not alter the proportions of tomatoes, vegetables and acid because that might make the salsa unsafe when this canning process is used. The chopped tomatoes and diced peppers and/or onions are to be measured level in dry measuring cups; the lemon or lime juice is measured in a liquid measuring cup. We did not test other vegetables for flavor or acidity.*

**Additional Note:** *Refrigerate any leftover salsa after filling jars, and enjoy freshly made!* Refrigerate the canned salsa once jars are opened for use.
HERBED SEASONED TOMATOES
Source: Ball Complete Book of Home Preserving
Yield: about 6 pints

12 cups halved, cored, peeled tomatoes*
Spice blend(s)
Bottled lemon juice or citric acid
Salt (optional)

Prepare canner, jars, and lids.

Prepare the quantity of spice blend(s) that suits your needs and set aside.

Place tomatoes in a large stainless steel saucepan. For best results, do not layer tomatoes in pan. Add water to cover. Bring to a boil over medium-high heat, stirring gently. Reduce heat and boil gently for 5 minutes.

Before packing each jar of tomatoes, add 1 tablespoon lemon juice or 1/4 teaspoon citric acid and 1/4 teaspoon salt to the hot jar. Add the specified quantity of your chosen spice blend. Pack hot tomatoes** into prepared jars to within a generous 1/2 inch of top of jar. Ladle hot liquid into jar to cover tomatoes, leaving 1/2 inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot liquid. Wipe rim. Center lid on jar. Screw band down until resistance is met, then increase to fingertip-tight.

Place jars in canner, ensuring they are completely covered with water. Bring to a boil and process for 40 minutes. (To adjust for altitude: at 1,001 to 3,000 feet process 45 minutes; at 3,001 to 6,000 feet process 50 minutes; at 6,001 to 8,000 feet process 55 minutes; 8,001 to 10,000 feet process 60 minutes.) IMPORTANT: Process in a water bath canner only. A steam canner can only be used if processing time is less than 45 minutes.

Remove canner lid. Wait 5 minutes, then remove jars, cool and store.

*To peel tomatoes, place them in a pot of boiling water for 30 to 60 seconds, or until the skins start to crack. Immediately dip in cold water. The skins will slip off.

**For best-quality product and vacuum seal, pack tomatoes one jar at a time. For each jar add the lemon juice or citric acid, then the salt, then the spice blend. Then pack the tomatoes and place jar in the canner. Repeat until all jars are filled.
SPICE BLENDS

For each pint jar, use 2 tsp of spice blend.

**Italian Spice Blend**

<table>
<thead>
<tr>
<th>Dried herbs and spices</th>
<th>2 jars</th>
<th>6 jars</th>
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</thead>
<tbody>
<tr>
<td>Basil</td>
<td>1 tsp</td>
<td>4 tsp</td>
</tr>
<tr>
<td>Thyme</td>
<td>1 tsp</td>
<td>2 tsp</td>
</tr>
<tr>
<td>Oregano</td>
<td>1 tsp</td>
<td>2 ½ tsp</td>
</tr>
<tr>
<td>Rosemary</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
</tr>
<tr>
<td>Sage</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
</tr>
<tr>
<td>Garlic Powder</td>
<td>½ tsp</td>
<td>1 tsp</td>
</tr>
<tr>
<td>Hot pepper flakes (optional)</td>
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<td>1 tsp</td>
</tr>
</tbody>
</table>

**Mexican Spice Blend**

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Chili powder</td>
<td>2 tsp</td>
<td>6 tsp</td>
</tr>
<tr>
<td>Ground cumin</td>
<td>1 tsp</td>
<td>2 tsp</td>
</tr>
<tr>
<td>Oregano</td>
<td>1 tsp</td>
<td>2 tsp</td>
</tr>
<tr>
<td>Garlic powder</td>
<td>1 tsp</td>
<td>2 tsp</td>
</tr>
<tr>
<td>Ground coriander</td>
<td>1 tsp</td>
<td>2 tsp</td>
</tr>
<tr>
<td>Seasoned salt (optional)</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
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</tbody>
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**Cajun Spice Blend**

<table>
<thead>
<tr>
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<th>2 jars</th>
<th>6 jars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chili powder</td>
<td>1 tsp</td>
<td>3 tsp</td>
</tr>
<tr>
<td>Paprika</td>
<td>1 tsp</td>
<td>2 tsp</td>
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<tr>
<td>Onion flakes</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
</tr>
<tr>
<td>Garlic powder</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
</tr>
<tr>
<td>Ground allspice</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
</tr>
<tr>
<td>Thyme</td>
<td>½ tsp</td>
<td>1 ½ tsp</td>
</tr>
<tr>
<td>Cayenne pepper</td>
<td>¼ tsp</td>
<td>1 tsp</td>
</tr>
</tbody>
</table>
FREEZING TOMATOES
Source: So Easy to Preserve

Preparation – Select firm, ripe tomatoes with deep red color.

Raw – Wash and dip in boiling water for 30 seconds to loosen skins. Core and peel. Freeze whole or in pieces. Pack into containers, leaving 1-inch headspace. Seal and freeze. Use only for cooking or seasoning as tomatoes will not be solid when thawed.

Juice – Wash, sort, and trim firm, vine-ripened tomatoes. Cut in quarters or eighths. Simmer 5 to 10 minutes. Press through a sieve. If desired, season with 1 teaspoon salt to each quart of juice. Pour into containers, leaving headspace. Seal and freeze.
• Headspace for Wide top opening: Pint - 1/2 inch, Quart - 1 inch
• Headspace for Narrow top opening: Pint - 1 1/2 inches, Quart - 1 1/2 inches

Stewed – Remove stem ends, peel and quarter ripe tomatoes. Cover and cook until tender (10 to 20 minutes). Place pan containing tomatoes in cold water to cool. Pack into containers, leaving headspace. Seal and freeze.
• Headspace for Wide top opening: Pint - 1/2 inch, Quart - 1 inch
• Headspace for Narrow top opening: Pint – 3/4 inch, Quart - 1 1/2 inches

FREEZING GREEN TOMATOES
Source: So Easy to Preserve, 2006 edition - pg 278 or, 2014 edition - pg 290

Preparation – Select firm, sound green tomatoes. Wash, core and slice 1/4 inch thick.

For Frying – Pack the slices into containers with freezer wrap between the slices. Leave 1/2 inch headspace. Seal and freeze.
DRYING TOMATOES

For Stewing
Source: So Easy to Preserve, 2006 edition - pg 339 or, 2014 edition - pg 351

**Preparation** – Steam (for 3 minutes) or dip in boiling water (for 1 minute) to loosen skins. Chill in cold water, peel. Cut into sections about 3/4 inch wide, or slice. Cut small pear or plum tomatoes in half.

**Drying** – Estimated drying time in a dehydrator is 10 - 18 hours. Drying times vary depending on the initial moisture content of the product and the particular dehydrator being used. Drying times in a conventional oven could be up to twice as long, depending on air circulation.

Sliced
Source: So Easy to Preserve, 2014 edition - pg 351

**Preparation** – Wash, trim out core, and cut cross-wise into 1/4 to 3/8 inch slices. No peeling or blanching is necessary. Slices may be lightly sprinkled with crumbled dry oregano or other dry herb of your choice prior to drying.

**Drying** – Estimated drying time in a dehydrator is 6 - 12 hours. Drying times vary depending on the initial moisture content of the product and the particular dehydrator being used. Drying times in a conventional oven could be up to twice as long, depending on air circulation.

Reference:
http://nchfp.uga.edu/how/dry/csu_dry_vegetables.pdf

**IMPORTANT CAUTION:** Preserving tomatoes in oil is currently not recommended. Oil may protect botulism organisms trapped in a water droplet.
http://nchfp.uga.edu/tips/summer/home_preserv_tomatoes.html
TOMATO POWDER
Source: food52.com

Use tomato skins, fresh tomato slices (1/4-inch thick), or pureed tomatoes.
1. Place on dehydrator tray and dry until crisp.
2. Place dried tomato slices or leather or skins in blender, herb, or coffee grinder and blend until a fine powder.
3. Use powder in a variety of dishes from soups to meat loaf. The flavor of dried tomatoes is more concentrated so use sparingly in your cooking.

Reconstitution ratios:

Tomato Paste
   1 cup dried tomato powder
   1-3/4 cups water
   1/2 teaspoon sugar

Tomato Sauce
   1 cup dried tomato powder
   3 cups water
   1/2 teaspoon sugar

Tomato Soup
   1 cup dried tomato powder
   3/4 cup water
   1/2 cup dry milk
   Season to taste.

TOMATO SKIN CHIPS
Source: The Ultimate Dehydrator Cookbook, 2014

1. Arrange tomato skins on dehydrator tray; sprinkle with seasonings (salt, garlic, etc.).

2. Dry at 135°F for 4-6 hours or until crispy.
TOMATO FLAVORED SALT
Source: food52.com

Tomato skins (weighed)
Coarse salt (in equal amount to tomato skins by weight)

1. Heat oven to 200°F.

2. After blanching and peeling tomatoes for some other use, save those skins and weigh them.

3. Spread out the tomato skins on a parchment lined baking sheet and sprinkle with the coarse salt (that you've measured out to be equal in weight to the tomato skins).

4. Place the baking sheet in the oven and bake until the tomato skins are completely dry, like (salt-encrusted) autumn leaves. For the skins of 4 medium tomatoes, this takes around 2 to 3 hours; larger batches will likely take longer.

5. Remove from the oven and let cool. Then, pulverize the salty skins into tomato skin salt either in a spice mill or mortar and pestle. A small food processor works too, but you might not be able to get the skins to break down as finely.
PICKLED JALAPENO PEPPERS
Source: So Easy To Preserve

Yield: 1 pint jar

Jalapeno peppers (about 1 pound)
1 cup vinegar (5%)
1/4 cup water
1 teaspoon canning salt
1 teaspoon mixed pickling spices

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.

1. Wash peppers and pack tightly into hot jar, leaving 1/2 inch headspace.
2. Combine vinegar, water, salt, and pickling spice; heat to boiling. Pour boiling hot liquid over peppers to 1/2 inch from jar top.
   To adjust for altitude:
   - at 1,001 to 3,000 feet process 15 minutes
   - at 3,001 to 6,000 feet process 20 minutes
   - at 6,001 to 8,000 feet process 25 minutes
   - at 8,001 to 10,000 feet process 30 minutes
BRUSCHETTA IN A JAR, ITALY
Source: Ball Complete Book of Home Preserving, 2012

Yield: about seven half-pints

5 cloves garlic, finely chopped
1 cup dry white wine
1 cup white wine vinegar
1/2 cup water
2 Tablespoons granulated sugar
2 Tablespoons dried basil
2 Tablespoons dried oregano
2 Tablespoons balsamic vinegar
9 cups chopped cored plum tomatoes (1 inch pieces)

1. Prepare canner, jars and lids.

2. In a large, deep stainless steel saucepan, combine garlic, wine, wine vinegar, water, sugar, basil, oregano and balsamic vinegar. Bring to a full rolling boil over high heat, stirring occasionally. Reduce heat, cover and boil gently, for 5 minutes, until garlic is heated through. Remove from heat.

3. Pack tomatoes into hot jars to within a little more than 1/2 inch to the top of the jar. Ladle hot vinegar mixture into jar to cover tomatoes, leaving 1/2 inch headspace. Remove air bubbles and adjust headspace, if necessary, by adding hot liquid. Wipe rim. Apply lids and rings.

4. Process in a boiling water or steam canner for 20 minutes. (To adjust for altitude: at 1,001 to 3,000 feet process 25 minutes; at 3,001 to 6,000 feet process 30 minutes; at 6,001 to 8,000 feet process 35 minutes; 8,001 to 10,000 feet process 40 minutes.)

TIP: Plum tomatoes work better than globe tomatoes, as their flesh is firmer and holds its shape during processing, which is preferable for bruschetta. You can seed them if you prefer, but this is not essential. Plum tomatoes do not need to be drained because they yield little liquid.

However, if you are unable to find plum tomatoes, you can use globe tomatoes. Chop tomatoes and drain in a colander placed over a sink for 30 minutes to remove excess liquid.
SPAGHETTI SAUCE WITHOUT MEAT
http://nchfp.uga.edu/how/can_03/spaghetti_sauce.html

30 lbs tomatoes
1 cup chopped onions
5 cloves garlic, minced
1 cup chopped celery or green pepper
1 lb fresh mushrooms, sliced (optional)
4-1/2 tsp salt
2 tbsp oregano
4 tbsp minced parsley
2 tsp black pepper
1/4 cup brown sugar
1/4 cup vegetable oil
Yield: About 9 pints

Caution: Do not increase the proportion of onions, peppers, or mushrooms.

1. Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Dip in cold water and slip off skins. Remove cores and quarter tomatoes.

2. Boil 20 minutes, uncovered, in large saucepan. Put through food mill or sieve.

3. Sauté onions, garlic, celery or peppers, and mushrooms (if desired) in vegetable oil until tender.

4. Combine sautéed vegetables and tomatoes and add remainder of spices, salt, and sugar. Bring to a boil. Simmer uncovered, until thick enough for serving. At this time the initial volume will have been reduced by nearly one-half. Stir frequently to avoid burning.

5. Fill jars, leaving 1-inch headspace. Adjust lids and process according to the recommendations in Table 1 or Table 2, depending on the whether you are using a dial-gauge or a weighted-gauge pressure canner.
Table 1. Recommended process time *Spaghetti Sauce Without Meat* **dial-gauge** pressure canner.

<table>
<thead>
<tr>
<th>Canner Gauge Pressure (PSI) at Altitudes of</th>
<th>Style of Pack</th>
<th>Jar Size</th>
<th>Process Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2,000 ft</td>
<td>Hot Pints</td>
<td>20 min</td>
<td>11 lb</td>
</tr>
<tr>
<td>2,001 - 4,000 ft</td>
<td></td>
<td></td>
<td>12 lb</td>
</tr>
<tr>
<td>4,001 - 6,000 ft</td>
<td></td>
<td></td>
<td>13 lb</td>
</tr>
<tr>
<td>6,001 - 8,000 ft</td>
<td></td>
<td></td>
<td>14 lb</td>
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</tbody>
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Table 2. Recommended process time *Spaghetti Sauce Without Meat* **weighted-gauge** pressure canner.

<table>
<thead>
<tr>
<th>Canner Gauge Pressure (PSI) at Altitudes of</th>
<th>Style of Pack</th>
<th>Jar Size</th>
<th>Process Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1,000 ft</td>
<td>Hot Pints</td>
<td>20 min</td>
<td>10 lb</td>
</tr>
<tr>
<td>Above 1,000 ft</td>
<td></td>
<td></td>
<td>15 lb</td>
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<td></td>
<td>Hot Quarts</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
BOILING WATER CANNING PROCESS

1. Before you start preparing your food, fill the canner halfway with clean water. This is approximately the level needed for a canner load of pint jars. For other sizes and numbers of jars, adjust the amount of water in the canner so it will be 1 to 2 inches over the top of the filled jars.

2. Preheat water to 140°F for raw-packed foods and to 180°F for hot-packed foods. Food preparation can begin while this water is preheating. Do not have the water boiling when you add the jars.

3. Fill, fit with lids, load onto the canner rack and use the handles to lower the rack into the water; or fill the canner with the rack in the bottom, one jar at a time, using a jar lifter. When using a jar lifter, make sure it is securely positioned below the neck of the jar (below the screw band of the lid). Keep the jar upright at all times. Tilting the jar could cause food to spill into the sealing area of the lid.

4. Add boiling water, if needed, so the water level is at least 1 inch above jar tops. Pour the water around the jars, not on them. For process times over 30 minutes, the water level should be at least 2 inches above the tops of the jars.

5. Turn heat to its highest position, cover the canner with its lid, and heat until the water in the canner boils vigorously.

6. Set the timer for the total minutes required for processing the food, adjusting for altitude.

7. Keep the canner covered and maintain a boil throughout the process schedule. The heat setting may be lowered a little as long as a complete boil is maintained for the entire process time. If the water stops boiling at any time during the process, bring the water back to a vigorous boil and begin the timing of the process over, from the beginning.

8. Add more boiling water, if needed, to keep the water level above the jars.

9. When the jars have boiled for the recommended time, turn off the heat and remove the canner lid. Wait no more than 5 minutes before removing jars.

10. Using a jar lifter, remove the jars without tipping and place them on a towel, leaving at least 1-inch spaces between the jars during cooling. Let jars sit undisturbed to cool at room temperature for 12 to 24 hours.
ATMOSPHERIC STEAM CANNING PROCESS

1. Use a research tested recipe and processing time developed for a boiling water canner when using an atmospheric steam canner. An atmospheric steam canner may be used with recipes approved for half-pint, pint, or quart jars.

2. Add enough water to the base of the canner to cover the rack. (Follow manufacturer recommendations.)

3. Preheat water to 140°F for raw-packed foods and to 180°F for hot-packed foods. Food preparation can begin while this water is preheating. Do not have the water boiling when you add the jars.

4. Heat jars prior to filling with hot liquid (raw or hot pack). Do not allow the jars to cool before filling.

5. Load filled jars, fitted with lids, onto the canner rack and place the lid on the canner base.

6. Turn heat to its highest position to boil the water until a steady column of steam (6-8 inches) appears from the vent hole(s) in the canner lid. Jars must be processed in pure steam environment.

7. If using a canner with a temperature sensor, begin processing time when the temperature marker is in the green zone for your altitude. If using a canner without a temperature sensor, begin processing time when a steady stream of steam is visible from the vent hole(s).

8. Set the timer for the total minutes required for processing the food, adjusting for altitude. Processing time must be limited to 45 minutes or less, including any modification for elevation. The processing time is limited by the amount of water in the canner base. When processing food, do not open the canner to add water.

9. Monitor the temperature sensor and/or steady stream of steam throughout the entire timed process. Regulate heat so that the canner maintains a temperature of 212°F. A canner that is boiling too vigorously can boil dry within 20 minutes. If a canner boils dry, the food is considered under-processed and therefore potentially unsafe.

10. At the end of the processing time, turn off the heat and wait 2 to 3 minutes. Carefully remove the lid, lifting the lid away from you.

11. Using a jar lifter, remove the jars without tipping and place them on a towel, leaving at least 1-inch spaces between the jars during cooling. Let jars sit undisturbed to cool at room temperature for 12 to 24 hours.
PRESSURE CANNING PROCESS — QUICK STEPS

1. Use reputable, research-based recipe.
2. Prep work area, food and jars.
3. Heat 2-3” canner water (not boiling).
   Hot Pack: 180°F, Raw Pack: 140°F
4. Jars in canner; lid on; weight off; high heat.
5. Vent 10 minutes.
6. Weight on.
7. Pressurize; lower heat to maintain pressure.
8. Start time; process, adjust heat as needed.
9. Ding! Timer off; heat off.
10. Wait until pressure drops to 0.
11. Weight off.
12. Cool 10 minutes more.
13. Lid off; jars out.
   Check seals; remove rings, clean jars.
15. Label and store sealed jars.
   Cool, dry, dark location.
   Use within 1 year for best quality.