Canning Fruits and Tomatoes

In a Boiling Water Bath Canner

Boiling Water Processing
Heat is transferred to the food by boiling water that surrounds the jar in a boiling water bath canner. Maintaining a temperature of 212°F for the time specified in a tested recipe is adequate to destroy molds, yeasts, enzymes and some bacteria. Processing times are usually given for altitudes under 1,000 feet above sea level. Higher altitudes need longer processing times.* It is important to know your altitude before you start the canning process.

General Directions
Follow directions for hot or raw pack and pack fruit or acidified tomatoes into hot jars. Leave ½ inch head space except where indicated. Remove air bubbles. Wipe jar rims. Adjust lids. Process in a boiling water bath canner. Use a jar lifter to place and remove jars from the canner, being careful to not tilt the jars in the process.

Boiling Water Bath Procedure

- Fill the canner about half full with water.
- Preheat the water to 140°F for raw-packed foods and to 180°F for hot-packed foods.
- While keeping the pre-filled jars upright, place them on a rack in the canner.
- Add more hot water if necessary to cover the jars with at least 1 inch of water.
- Place the lid on the canner and keep covered during the entire process.
- Turn heat to its highest position until water boils vigorously; then lower the heat setting to maintain a gentle boil while processing for the recommended time.
- After processing for the correct amount of time based on altitude, turn off the heat and remove the canner from the burner, remove the canner lid, and let the jars rest in the canner for 5 minutes before removing from the canner.

*Processing times are usually given for altitudes under 1,000 feet above sea level. Higher levels need longer processing times. It is important to know your altitude before you start the canning process.
Table 1: Steps for Preparing Fruits and Tomatoes for Canning

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Preparation</th>
<th>Jar Size</th>
<th>Processing Time in Boiling Water Canner (0 - 1000 ft*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples, sliced</td>
<td>Wash, peel, core and slice into ½ inch wedges. Place into anti-darkening solution.</td>
<td>Pint or Quarts</td>
<td>20 Minutes</td>
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<td></td>
<td>Hot pack: Put 5 lbs. of slices in a pot with 2 cups of water, very light, light or medium syrup. Boil 5 minutes. Fill jars with hot slices and hot syrup or hot water.</td>
<td></td>
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<tr>
<td>Applesauce</td>
<td>Wash, peel, core. Slice and place into anti-darkening solution.</td>
<td>Pints or Quarts</td>
<td>15 Minutes</td>
</tr>
<tr>
<td></td>
<td>Hot pack: Place sliced apples in large pot, add ½ cup water. Heat until tender. Press through sieve for smooth sauce. Add sugar if desired – 1/8 cup per quart or to taste. Reheat to boiling, fill hot jars with hot apple sauce.</td>
<td></td>
<td>20 Minutes</td>
</tr>
<tr>
<td>Berries (whole blackberries, blueberries, raspberries)</td>
<td>Wash. Drain, cap, stem.</td>
<td>Pints or Quarts</td>
<td>15 Minutes</td>
</tr>
<tr>
<td></td>
<td>Hot pack: Blanch 1 pound of berries in 1 gallon boiling water for 30 seconds, drain. Add ½ cup hot syrup, juice or water to hot jars. Pack hot berries into hot jars. Fill with more hot liquid.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit Purees of any fruit except bananas, Asian pears, figs, tomatoes, melons, papaya, ripe mango or coconut</td>
<td>Stem, wash, drain, peel and remove pits.</td>
<td>Pints or Quarts</td>
<td>15 Minutes</td>
</tr>
<tr>
<td></td>
<td>Hot pack: Measure fruit into large pot, crushing slightly if desired. Add 1 cup hot water for each quart of fruit. Cook slowly until soft. Stir frequently. Press through sieve or food mill. If desired, add sugar to taste. Reheat until sugar dissolves. Fill hot puree into hot jars. Leave ¼ inch headspace.</td>
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<td></td>
</tr>
</tbody>
</table>

Notes:
1 Anti-darkening Solution: Light colored fruits such as apples and pears will turn dark once cut or peeled. To prevent darkening, hold small batches of fruit in an ascorbic acid (Vitamin C) solution until ready to use. Mix one teaspoon or 3000 mg of ascorbic acid in one gallon of water. Commercially prepared mixes of ascorbic acid are also available where canning supplies are sold. Follow the manufacturer’s directions. Drain thoroughly before canning.

*Altitude Adjustment: For altitudes of 1,001-3,000 ft. add 5 minutes to processing time.

Adding syrup to canned fruit helps retain flavor, color and shape.
### General Instructions for Canning with sugar

#### Preparing and Using Syrups

Table 2. Measure of Water and Sugar for 9-pint load or 4-quart load.

<table>
<thead>
<tr>
<th>Type of Syrup</th>
<th>Sugar</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% (very light)</td>
<td>½ cup</td>
<td>4 cups</td>
</tr>
<tr>
<td>20% (light)</td>
<td>1 cup</td>
<td>4 cups</td>
</tr>
<tr>
<td>30% (medium)</td>
<td>1 ½ cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>40% (heavy)</td>
<td>2 ½ cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>50% (very heavy)</td>
<td>4 cups</td>
<td>4 cups</td>
</tr>
</tbody>
</table>

#### Procedure

Heat water and sugar together. Bring to a boil and keep hot until ready to use. Adding syrup to canned fruit helps retain flavor, color and shape. It doesn't prevent spoilage of these foods.

#### Canning Fruits without Sugar

Select fully ripe but firm fruits of the best quality. Prepare fruit for hot pack as described in the fruit preparation directions above but use water or commercial unsweetened fruit juices instead of sugar syrup. Unsweetened apple, pineapple, or white grape juice used as is or diluted with water are good packing liquids for fruit. Adjust head space and lid and use processing recommendations given for regular fruit.
<table>
<thead>
<tr>
<th>Fruit</th>
<th>Preparation</th>
<th>Jar Size</th>
<th>Processing Time in Boiling Water Canner (0 - 1000 ft*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomatoes, crushed (with no added liquid)</td>
<td>Wash tomatoes. Dip in boiling water 30-60 seconds or until skins split. Dip in cold water. Remove skins, core. Quarter. Hot pack: Heat about 1 pound of the quarters quickly in large pot, crushing them with a spoon as they're added to pot. Continue heating. Stir. Once boiling, gradually add remaining tomatoes, stir constantly. Remaining tomatoes don't need to be crushed. Boil gently 5 minutes. Add 2 tablespoons of bottled lemon juice OR ½ teaspoon citric acid to each quart jar (1 tablespoon bottled lemon juice or ¼ teaspoon citric acid to each pint). Fill hot jars with hot tomatoes. Add ½ teaspoon salt to each pint jar (1 teaspoon/quart) if desired.</td>
<td>Pint or Quarts</td>
<td>35 Minutes 45 Minutes</td>
</tr>
<tr>
<td>Tomatoes, whole or halved (packed in water)</td>
<td>Prepare tomatoes as above. Leave whole or halve. Hot pack: Place in pot, cover with water, boil gently for 5 minutes. Add bottled lemon juice or citric acid to jars (see above). Fill hot jars with hot tomatoes. Fill jars with hot cooking liquid. Add ½ teaspoon salt to each pint jar (1 teaspoon/quart) if desired. Raw pack: Add bottled lemon juice or citric acid to jars (see above). Add ½ teaspoon salt to each pint jar (1 teaspoon/quart) if desired. Pack prepared tomatoes into hot jars. Fill jars with boiling water.</td>
<td>Pints Quarts</td>
<td>40 Minutes 45 Minutes</td>
</tr>
</tbody>
</table>

Did You Know?

Tomatoes have a pH value that falls close to 4.6. To ensure safe acidity levels in whole, crushed, or juiced tomatoes; add lemon juice or citric acid according to directions, whether they will be processed in a boiling water or pressure canner.
For more detailed, research-based information on food preservation, go to the National Center for Home Food Preservation website – [http://www.uga.edu/nchfp/](http://www.uga.edu/nchfp/)

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