



Canning Tomatoes & Tomato Juice



Although tomatoes are considered an acid food and traditionally have been canned in a boiling water bath, some are now known to be less acidic (pH values slightly above 4.6). If tomatoes are canned as low acid foods in a boiling water bath, they must be acidified to a pH of 4.6 or lower. To ensure safe acidity in whole, crushed, or juiced tomatoes, add two tablespoons of bottled lemon juice or 1/2 teaspoon of citric acid per quart of tomatoes. For pints, use one tablespoon bottled lemon juice or 1/4 teaspoon citric acid. Acid can be added directly to the jars before filling with product.

Recent research shows that for some tomato products, pressure canning gives a higher quality, more nutritious product.

Before You Begin

Gather Supplies

1. Water bath canner. The canner may be purchased, or it can be any large metal container with a tightly fitting cover and a rack. It must be deep enough so that the water can cover the tops of the jars at least 1 to 2 inches and boil freely. A wire or wooden rack will keep jars from touching the bottom of the canner.
2. Canning jars and lids. Use only standard canning jars. (Packer's jars from commercially canned foods such as mayonnaise, peanut butter and jelly may break in canning process or may not seal.) Use new lids. Metal screw bands may be reused if they are not rusty or bent.
3. Other necessary equipment. Needed tools include sharp paring knife; large spoon; two large pans or Dutch ovens for heating jars, scalding tomatoes and heating tomatoes for hot packing; small saucepan for lids; a jar lifter; a table knife, teaspoon, cup, clean towels and potholders.
4. Useful but not essential equipment. Optional tools include wire basket for scalding tomatoes, wide-mouthed funnel, a ladle and tongs.

Step-by-Step Canning

1. Check tops of jars for nicks, cracks, sharp edges. Wash thoroughly in hot, soapy water and rinse. Leave in hot water until ready to use; then invert on a clean towel.
2. Check lids to be sure sealing compound is good and rings are not bent or rusty. Follow manufacturer's directions for using because they vary. The general procedure, however, is to cover lids with water, bring just to a boil and remove from heat. Leave in hot water until used or for at least 3 minutes.

3. Fill water bath canner half full of water and put on to heat. Have a pan of boiling water to scald tomatoes for easy peeling.
4. Select fresh, firm, ripe tomatoes. Discard those with decayed spots and cracks. Tomatoes that are too ripe may not be acid enough to can safely. Wash thoroughly and drain enough for one canner load.
5. To peel, dip a few tomatoes at a time in boiling water for about half a minute. (Use a wire basket or cheesecloth bag for easy handling.) After scalding, put immediately in cold water.
6. Cut out core, remove skins and trim off any green or discolored portions. If skins don't slip off easily, either the tomatoes are not ripe enough, or they were not left in the boiling water long enough.
7. Fill jars.
 - Hot Pack (Crushed tomatoes with no added liquid)
Cut tomatoes in quarters; put in cooking pan. Bring to a boil, stirring to prevent scorching. Boil 5 minutes.
Fill hot jars with boiling tomatoes to within 1/2 inch of top.
Hot-packing generally gives a fuller pack.
Fill to within 1/2 inch from top of jar. Use a cup or ladle to fill jar.
A funnel makes it easier.
 - Raw Pack (Whole or halved tomatoes packed raw without added liquid)
Cut large tomatoes into halves or quarters; leave small ones whole.
Pack into hot jar as tightly as possible. The spaces will fill with juice.
Push tomatoes down so that juice completely covers them.
Fill to within 1/2 inch from top of jar.
8. Add 2 tablespoons lemon juice or 1/2 teaspoon citric acid to each quart, 1 tablespoon lemon juice or 1/4 teaspoon citric acid per pint. Citric acid is available on most supermarket shelves or at the drugstore.
9. Add 1 teaspoon salt to each quart; 1/2 teaspoon to a pint (if desired). Salt is not essential; it only adds flavor.
10. Run a flat plastic spatula or table knife down between tomatoes and side of jar to remove air bubbles.
11. Wipe sealing edge and threads with a clean, damp cloth to remove all seeds or particles of food.
12. Place prepared lid on jar with sealing compound next to jar. Screw band down firmly.
13. Immediately place the filled jar on a rack in the water bath canner of hot water. A jar lifter is helpful.
14. Fill other jars for a canner full. Do not let jars touch

each other; they might break.

15. Add boiling water so that it is 1 to 2 inches above the tops of the jars.
16. Cover, and when the water begins to boil, start counting processing time.
Processing Time - Water Bath Canner
 - Hot Pack (crushed tomatoes - no added liquid)
 - Pint jars - 35 minutes
 - Quart jars - 45 minutes
 - Raw Pack (whole or halved tomatoes - no added liquid)
 - Pint and quart jars - 85 minutes
17. When processing time is finished, remove jars immediately. Do not tighten rings; it might break the seal. Set on folded towels away from draft to cool.
18. When cooled for 12 to 24 hours, test for a good seal. Press center of lid. If dome is down and will not move, the jar is sealed.
19. Remove rings, rinse, dry and put away to use again. Store jars in a cool, dry, dark place.

Alternative Method – Pressure Canner

An alternative method is to process by pressure canner. Exhaust canner 10 minutes before bringing pressure up.

- Raw Pack: whole or halved tomatoes (packed raw without added liquid).
Process in a dial-gauge pressure canner at 11 pounds pressure or in a weighted gauge pressure canner at 10 pounds pressure.
Pints or quarts - 25 minutes
- Hot Pack: crushed tomatoes (packed hot without added liquid)
Process in a dial-gauge pressure canner at 11 pounds pressure or in a weighted gauge pressure canner at 10 pounds pressure.
Pints or quarts – 15 minutes
- Tomato Juice
Process in a dial gauge pressure canner at 11 pounds pressure or in a weighted gauge pressure canner at 10 pounds pressure
Pints or quarts – 15 minutes
- Tomato Sauce
Process in a dial gauge pressure canner at 11 pounds pressure or in a weighted gauge pressure canner at 10 pounds pressure
Pints – 15 minutes

Tomato Juice That Doesn't Separate

Tomato juice canned at home often separates, with the solids on the bottom of the jar topped by a watery layer. To make tomato juice with little or no separation, follow this simple procedure:

- Select fresh, fully ripe tomatoes. Avoid overripe ones, because they contribute to the separation problem. Overripe tomatoes and those from dead vines may also have less acidity, making them unsafe to can in the boiling water bath canner.
- Wash tomatoes, remove stems, core and trim away sunscald and green or bruised portions.
- Quickly cut about a quart of tomatoes into quarters, and place directly into pot.
- Heat immediately to boiling while crushing the slices. Heating inactivates the pectinase enzymes, keeping them from breaking down the natural pectin, which gives viscosity to the juice. The juice may separate unless the tomatoes are heated quickly to destroy the enzymes. The enzymes are also responsible for loss of vitamin C.
- Continue to add cut tomatoes to the boiling mixture slowly, crushing quarters as you add them. Keep mixture boiling constantly and vigorously while the remaining tomato pieces are added.
- Simmer 5 minutes after all tomatoes have been added.
- Press the hot, cooked tomatoes through a sieve or food mill to remove skins and seeds. Do not use a blender because the high speed incorporates air, destroying much of the vitamin C.
- Heat juice at once to boiling.
- Fill jars immediately, leaving 1/2-inch headspace. Acidify the same as for tomatoes. For each quart, add 1 tablespoon bottled lemon juice or 1/2 teaspoon citric acid. Add 1 teaspoon salt if desired.
- Process pints 35 minutes and quarts 40 minutes in a boiling water bath canner OR process in a dial gauge pressure canner at 11 pounds pressure or in a weighted gauge pressure canner at 10 pounds pressure. Pints or quarts – 15 minutes

Home-canned tomato juice doesn't have the flavor of commercially canned juice. The distinct flavor of the commercial juice is a "tinny" flavor caused from the can.

Reference:

USDA National Center for Home Food Preservation

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