Food Preservation **Preserving Tomatoes**





Preserving tomatoes allows you to enjoy them all year long. Canning, freezing, or dehydrating are the three safe methods for preserving, and each has a specific set of instructions yielding a unique product.

Selecting Tomatoes

Choose only firm, disease-free, ripe, or under-ripe tomatoes. Overripe tomatoes are too low in acid to safely can.

Green, under-ripe tomatoes or heirloom tomatoes may be used following the same directions as ripe, red tomatoes.

Do not can tomatoes from dead or frost-killed vines, as they may be too low in acid. Freeze or dehydrate instead.

Removing Tomato Skins

Most canned, frozen, or dried recipes will call for peeled tomatoes. When canning, if the recipe says to peel the tomato, then you must peel it, as the processing time is based on a peeled tomato.

- 1. Wash tomatoes under cool running water.
- 2. Dip them in boiling water for 30 to 60 seconds. A little trick: before dipping in boiling water, you may take a paring knife and slit an "X" on the bottom of the tomato. It may help it start to peel off. Do not leave the tomatoes in boiling water for too long; they will become mushy.
- 3. Dip in a bowl of ice water.
- 4. Slip off the skin and remove the core. Leave whole, halve, chop, or whatever your recipe calls for.

Canning Tomatoes

There are only two safe methods of canning: Boilingwater bath canning and pressure canning.

Tomatoes can be safely canned using either method, but if the recipe provides directions only for the pressure canning method, use only that method.

Boiling-Water Bath Canning

- Uses a pot of boiling water at 212 F
- Used for acidic foods: fruits, jams, jellies, tomatoes, and figs with added acid, pickled products, and fermented products

Pressure Canning

- Uses pressure canner, at least 240 F
- May be a dial or weighted gauge
- Must be used for low-acid foods, such as meats, vegetables, broth, dried beans, and mixed products

Use a tested recipe

It is crucial only to use up-to-date, lab-tested recipes. Tomatoes are on the borderline between acidic and non-acidic foods and are thus susceptible to the deadly bacterium Clostridium botulinum if not processed correctly. Use <u>Cooperative Extension</u> recipes or recipes from one of these resources:

- <u>So Easy to Preserve</u>, University of Georgia Extension
- <u>Complete Guide to Home Canning</u>, USDA Guide to Home Canning
- National Center for Home Food Preservation, <u>nchfp.uga.edu</u>

Adding Acid

Due to the variety of tomatoes and the uncertainty of their acidity levels, acid must be added to tomatoes, even when pressure canning.

Choose one acidifier option to add to each canning jar before adding the tomatoes and liquid.

| Acidifier | Per 1 pint | Per 1 quart |
|--------------------------|---------------|---------------|
| Lemon juice, bottled | 1 tablespoon | 2 tablespoons |
| Citric acid | ¼ teaspoon | ½ teaspoon |
| *Vinegar (5% acidity) | 2 tablespoons | 4 tablespoons |
| **Salt (optional) | ½ teaspoon | 1 teaspoon |

*Vinegar may have an undesirable flavor.

**Salt is used only for flavor, not to prevent spoilage.





Packing Tomatoes

No Added Liquid

- Wash tomatoes and take off the skin and core. Add acid to jars.
- Press tomatoes into jars until the remaining space between fills up with the juice released from the pressed tomatoes.
- Remove air bubbles, leave ½-inch headspace, wipe rims, and add lids.

| Process in boiling water bath | | | |
|--|------------|--|--|
| Pint | 85 minutes | | |
| Quart | 85 minutes | | |
| Process in a pressure canner Dial gauge = 11 lbs. Weighted gauge = 10 lbs. | | | |
| Pint | 25 minutes | | |
| Quart | 25 minutes | | |

Packed in Water

Wash tomatoes and take off the skin and core. Add acid to jars. Choose either raw pack or hot pack:

- **Raw pack:** Pack tomatoes tightly in jars and fill them with boiling water.
- Hot pack: Cover tomatoes with water in a saucepan and gently boil for 5 minutes. Pack tomatoes and liquid in jars.

Remove air bubbles, leave $\frac{1}{2}$ -inch headspace, wipe rims, and add lids.

| Process in boiling water bath | | |
|--|------------|--|
| Pint | 40 minutes | |
| Quart | 45 minutes | |
| Process in a pressure canner Dial gauge = 11 lbs. Weighted gauge = 10 lbs. | | |
| Pint | 10 minutes | |
| Quart | 10 minutes | |

Packed in Tomato Juice

Wash tomatoes and take off the skin and core. Add acid to jars. Choose either raw pack or hot pack:

- **Raw pack:** Pack tomatoes tightly in jars and fill them with boiling water.
- Hot pack: Cover tomatoes with water in a saucepan and gently boil for 5 minutes. Pack tomatoes and liquid in jars.

Remove air bubbles, leave ½-inch headspace, wipe rims, and add lids.

| Process in boiling water bath | | |
|--|------------|--|
| Pint | 85 minutes | |
| Quart | 85 minutes | |
| Process in a pressure canner Dial gauge = 11 lbs. Weighted gauge = 10 lbs. | | |
| Pint | 25 minutes | |
| Quart | 25 minutes | |

Processing times listed are at altitudes of 0 to 1,000 feet. Higher altitudes require longer processing times. Find altitude by location at <u>whatismyelevation.com</u> and adjust processing times according to the <u>National Center for Home</u> <u>Food Preservation</u>.

Troubleshooting

If tomatoes float:

Tomatoes in raw packs can leave too much air in tissues. Pack tomatoes as closely as possible before adding liquid or try a hot pack instead.

If tomato juice separates:

Enzymatic changes after cutting can lead to juice separation. Avoid putting raw tomatoes in a blender and prevent separation by quickly simmering no more than 2 cups of tomatoes at a time at 180 F to 185 F, and strain.

Tomato Juice

Use pints or quarts; do not use half-gallon or larger jars. Just like when canning tomatoes, you will need to add acid using the exact instructions.

Canning Salsa

While there are many delicious homemade salsa recipes and other tomato-based products, it is recommended to use canned salsa recipes that have been tested for safety in a commercial laboratory.

Other recipes may be safely frozen but not canned.

Salsa CANs:

- Change the type of onion or pepper.
- Omit or change the type and/or amount of herbs and spices, including salt.
- Add sugar to overcome tartness.
- Substitute bottled lemon juice with 5% acidity vinegar.
- Thicken salsas with flour, cornstarch, or other starches after opening for eating.

Salsa CANNOTs:

- Do not change the amount of onion or pepper.
- Do not alter the amounts of acid.
- Do not use fresh lemon, lime juice, or vinegar that is NOT 5% acidity level.
- Do not substitute vinegar for bottled lemon juice.
- Before canning, do not thicken salsas with flour, cornstarch, or other starches.

Freezing Tomatoes

Unlike most vegetables, tomatoes do not have to be blanched, and while you don't have to take the skins off to freeze them, many people prefer them without the skins. Tomatoes and tomato products, which will be frozen, do not require acidification.

Containers for Freezing

Use freezer-safe containers made with plastic or glass, such as plastic freezer containers with tightfitting lids or wide-mouth canning jars. Do not use regular glass jars; they break easily at freezer temperatures.

Plastic freezer bags are another suitable option. Press to remove as much air as possible before closing. Before freezing, label the wrapping or airtight container with the product name, current date, and recommended storage time. For best quality, use frozen tomatoes within 10 to 12 months. However, they will remain safe after that.

Freezing Raw Tomatoes

- Wash and remove skins and core; leave whole or in pieces.
- Pack into freezer containers or freezer-safe plastic bags, leaving 1 inch of headspace.
- Seal and freeze.

Freezing Juice and Mixtures

- Prepare the product according to the recipe; may use a canning recipe.
- Cool and pour into freezer containers, leaving appropriate headspace:
 - Narrow-mouth canning jars: 1-1/2 inch of headspace.
 - Wide-mouth canning jars: 1/2 to 1 inch of headspace.
- Seal and freeze.

Freezing Other Variations

- Stewed tomatoes: simmer in water for 10 to 20 minutes.
- Green tomato slices for fried green tomatoes, leaving skins on.
- Cherry or grape tomatoes: roast with a bit of olive oil in a 450 F oven for 20 to 25 minutes until they blister and split.

Drying Tomatoes

Dehydrated tomatoes are packed with tomato flavor. The best tomatoes for drying are Roma, another type of paste or meaty tomato, or grape and cherry tomatoes.

Drying Methods

Two methods are recommended for drying tomatoes. Outdoor home drying is not recommended for meats or vegetables, including tomatoes.

Using an electric dehydrator

Dehydrators are designed to dry foods fast, maintain a temperature of 140 F, and circulate air with a builtin fan.

- Wash tomatoes and take off skins and core. Do not need to take off the skins of cherry or grape tomatoes.
- Slice tomatoes into 1/4 to 1/2-inch thick slices or halve or quarter.
- Place on drying trays, leaving ½-inch of space between tomatoes.
- Dry in a dehydrator at 140 F for 10 to 18 hours, turning tomatoes and rotating racks as needed.

Using an oven

Make sure the oven can hold a temperature of 140 F.

- Wash tomatoes and take off skins and core. It is not necessary to remove skins of cherry or grape tomatoes.
- Slice tomatoes into 1/4 to 1/2-inch thick slices or halve or quarter.
- Place on drying trays, leaving ½-inch of space between tomatoes.
- Prop open the oven door 2 to 6 inches to allow air circulation. Take caution: this can be dangerous for small children or pets.
- Oven drying takes two to three times longer than drying in an electric dehydrator.

Test for doneness

Dry tomatoes until they are slightly pliable. They need more time to dry if they feel sticky to the touch. May need to turn tomatoes and rotate racks.





Storing Tomatoes

Store dry tomatoes in airtight containers, such as canning jars with tight-fitting lids. Freezer bags can also be used for storage, but it's important to note that they are not insect and rodent-proof.

Store in a cool, dark place at 60 F, or refrigerate or freeze to extend their storage time. For best quality, use within six to nine months when stored at 60 F. If stored at higher temperatures, storage time will be shortened.

Check dried tomatoes frequently during storage. Dried tomatoes will re-absorb moisture easily and cause undesirable color and flavor changes.

Using Dehydrated Tomatoes

Rehydrating in water is optional. Add dried tomatoes directly to soups, stews, or sauces. Use dried tomatoes in a savory trail mix or add them to pasta dishes and other favorite recipes.

For more, visit <u>go.illinois.edu/FoodPreservation</u>.

Call Your Local Office

Contact your local Illinois Extension office with your food safety questions: go.illinois.edu/FindILExtension.

References and Resources

- <u>Canning and Freezing Tomatoes and Making Salsa</u>, North Dakota State University Extension.
- How to Dry Tomatoes at Home, University of Minnesota Extension.
- National Center for Home Food Preservation, University of Georgia Extension.

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