Fill Your Pantry: Processing Tomatoes

Preserving Tomatoes

Do you have a garden full of tomatoes? Consider preserving your tomatoes so you can 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 for Preserving

- Choose only firm, ripe, or under-ripe, disease-free 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.

Taking off the Skins

Most recipes, whether canned, frozen, or dried, 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 30-60 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: boiling water bath canning and pressure canning. Tomatoes can be safely canned using either method, but if the recipe only lists the pressure canning method, that is the method you must use.

BOILING WATER BATH CANNING

Uses pot of boiling water (212°F)

Used for acid foods (fruits, jams, jellies, tomatoes & figs with acid added, pickled products & 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 (meats, vegetables, broth, dried beans & mixed products)

Find a Tested Recipe

It's crucial to only use up-to-date, lab-tested recipes. Tomatoes are on the borderline of an acid food and low acid food, and thus are susceptible to the deadly bacterium, *clostridium botulinum*, if not processed correctly. Use Cooperative Extension recipes or recipes from the:

- National Center for Home Food Preservation website: https://nchfp.uga.edu/
- "So Easy to Preserve" book, University of Georgia Cooperative Extension
- USDA Complete Guide to Home Canning book

Canning Tomatoes

Due to the many varieties of tomatoes and the uncertainty of their acidity level, acid must be added to tomatoes even when pressure canning. Choose <u>one</u> option, and add to each canning jar before adding the tomatoes and liquid:

<u>Per pint</u>: 1 Tablespoon bottled lemon juice OR ¼ teaspoon citric acid OR 2 Tablespoons vinegar (may have undesirable flavor)

<u>Per quart</u>: 2 Tablespoons bottled lemon juice OR ½ teaspoon citric acid OR 4 Tablespoons vinegar (may have undesirable flavor)

Salt: Salt is used only for flavor, not to prevent spoilage. If desired, add ½ teaspoon salt per pint jar or 1 teaspoon salt per quart jar.

teaspoon salt per quart jar.			
PACKED IN WATER	NO ADDED LIQUID	PACKED IN TOMATO JUICE	
Wash tomatoes and take off skins and core.	Wash tomatoes and take off skins and core.	 Wash tomatoes and take off skins and core. 	
Add acid to jars.	Add acid to jars.		
		Add acid to jars.	
Choose either raw pack	Press tomatoes in jars		
or hot pack.	until spaces between fill	3. Choose either raw	
	with juice.	pack or hot pack.	
Raw pack: Pack tomatoes			
tightly in jars and fill with	4. Remove air bubbles,	Raw pack: Pack tomatoes	
boiling water.	leave ½-inch headspace,	tightly in jars and fill with	
	wipe rims and add lids.	heated tomato juice.	
Hot pack: Cover tomatoes with			
water in a saucepan, and gently	Process in a Boiling	Hot pack: Cover	
boil for 5 minutes. Pack	Water Bath (pints or	tomatoes with tomato juice	
tomatoes and liquid in jars.	quarts= 85 min) or	in a saucepan, and gently boil	
	Pressure Canner (Dial	for 5 minutes. Pack tomatoes	
4. Remove air bubbles,	gauge: 11 lbs. Weighted	and juice in jars.	
leave ½-inch	gauge: 10 lbs., pints or		
	quarts= 25 minutes)		

- headspace, wipe rims and add lids.
- 5. Process in a Boiling
 Water Bath (pints= 40
 min, quarts= 45
 minutes) or Pressure
 Canner (Dial gauge: 11
 lbs. Weighted gauge:
 10 lbs., pints or quarts=
 10 minutes)

- 4. Remove air bubbles, leave ½-inch headspace, wipe rims and add lids.
- 5. Process in a Boiling
 Water Bath (pints or
 quarts= 85 min) or
 Pressure Canner (Dial
 gauge: 11 lbs.
 Weighted gauge: 10
 lbs., pints or quarts=
 25 minutes)

Canning Salsa

While there are delicious homemade canned salsa recipes (or other tomato-based product), you cannot can it unless it has been tested for safety in a commercial laboratory. However, it may be safely frozen. Always use a tested recipe and understand the Salsa Cans and Salsa Cannots.

Salsa Cans

- Change the type of onion or pepper
- Change the type and/or amount of herbs and spices (can omit, including salt)
- ✓ Add sugar to overcome tartness
- Substitute bottled lemon juice for vinegar
- Thicken salsas with flour, cornstarch or other starches after opening for eating

Salsa Cannots

- Change the amount of onions or peppers
- Alter amounts of acid
- ✓ Use fresh lemon or lime, vinegar that is NOT 5% acidity level
- Substitute vinegar for lemon juice
- ⊘Thicken with flour, cornstarch
 or other starches

Canning Tomato Juice

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

Troubleshooting

Problem	Cause	Prevention
Tomatoes float	Raw pack– too much air in tomato tissues	Heat tomatoes before packing (hot pack)
	Too much liquid added for the amount of tomatoes	Pack tomatoes as closely as possible before adding liquid
Separation of tomato juice	Enzymatic change after cutting tomatoes	Quickly simmer no more than 2 cups of tomatoes at a time at 180-185°F; strain
		Do not put raw tomatoes in a blender

Freezing Tomatoes

Unlike most vegetables, tomatoes don't have to be blanched, and while you don't *have* to take the skins off for freezing them, many people tend to prefer them without the skins. Frozen tomatoes and tomato products do not need to be acidified.

Proper Containers

Use freezer-safe containers made with plastic or glass, such as plastic freezer containers with tight-fitting lids or wide-mouth canning jars. Do not use regular glass jars; they break easily at freezer temperatures. Another option is to use plastic freezer bags. Press to remove as much air as possible before closing.

Before placing in the freezer, label the wrapping or the airtight container with the product name, the current date and the recommended storage time.

Storage Time

For best quality, use frozen tomatoes within 10-12 months. However, they will remain safe after that.

Freeze Raw Tomatoes

- 1. Wash, take off skins and core
- 2. Leave whole or in pieces
- 3. Pack into freezer containers or freezer-safe plastic bags
- 4. Leave 1-inch headspace
- 5. Seal and freeze

Freeze Juice and Mixtures

- 1. Prepare product according to the recipe (may use recipes for canning)
- 2. Cool
- 3. Pour into freezer containers
- 4. Leave 1 ½-inch headspace
- 5. Seal and freeze

Freeze Other Variations

Freeze stewed tomatoes (simmer in water for 10-20 minutes), green tomato slices for fried green tomatoes (leaving skins on), roasted cherry or grape tomatoes (with a bit of olive oil in a 450° F oven for 20-25 minutes until they've blistered and split).

Drying Tomatoes

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

Equipment for Drying Tomatoes

There are two recommended methods to drying tomatoes. Note: Outdoor home drying is not recommended for vegetables and meats, and this includes tomatoes.

ELECTRIC DEHYDRATOR

- Heats to 140°F
- Circulates air with a built-in fan
- Designed to dry foods fast

OVEN

- Check if oven will reach 140°F
- For air circulation, prop oven door open 2-6 inches (maybe dangerous with small children or pets)
- Takes 2 to 3 times longer than a dehydrator

Drying Tomatoes in a Dehydrator

- Wash tomatoes, take off skins and core. You do not need to take off skins of cherry/grape tomatoes
- 2. Slice into ¼ to ½ thick slices or halve or quarter
- 3. Place on drying trays, leaving ½ inch space between tomatoes
- 4. Dry in a dehydrator at 140°F for 10-18 hours, turning tomatoes and rotating racks as needed

Test for Doneness

Dry tomatoes until they are slightly pliable. Touch your fingers to them, and if they feel sticky, they need more time to dry. You may need to turn tomatoes and rotate racks.

Store

Store dry tomatoes in airtight containers, such as canning jars with tight-fitting lids. You may also store them in freezer bags, but note that these are not insect and rodent proof. Store in a cool (60°F), dark place or refrigerate or freeze, which will extend their storage time. For best quality, use within 6 to 9 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

You can rehydrate in water, but it is not necessary. Add dried tomatoes directly to soups, stews, or sauces. Used dried tomatoes in a savory trail mix, or add to pasta dishes or other favorite recipes.

Sources:

National Center for Home Food Preservation, University of Georgia Extension

Canning and Freezing Tomatoes and Making Salsa, North Dakota State University Extension

How to Dry Tomatoes at Home, University of Minnesota Extension