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See www.pickyourown.org/alllaboutcanning.htm for many other canning directions and recipes

How to Can Fresh Diced or Crushed Tomatoes with a Water Bath Canner!!



Making canned diced or crushed tomatoes is something easy to do and will make your tomato dishes taste so much better. This is ideal when you have a surplus of tomatoes from you garden, at the end of the summer, when the tomatoes are smaller, have blemishes and aren't as suitable for canning whole or eating fresh.

Home-canned diced or crushed tomatoes have been a tradition for many generations. In the middle of the winter, you can use the diced or crushed tomatoes to make a fresh spaghetti sauce, lasagna, chili, or other tomato-based meals for that fresh garden taste.

Here's how to do it, in easy steps and completely illustrated. This method is so easy, ANYONE can do this! It's a great thing to do with your kids!

And if you'd rather can your tomatoes whole or freeze your tomatoes, see this page!

Ingredients and Equipment

- Tomatoes about 35 to 45 lbs to make 7 quarts of finished sauce. Of course, you can reduce the size of batches.
- lemon juice fresh or bottled, about 1/2 cup
- 1 quart tomato juice (or plain water)
- 1 Water bath Canner (a huge pot to sanitize the jars after filling (about \$30 to \$35 \$30 at mall kitchen stores and local "big box" stores. Note: we sell many sizes and types of canners for all types of stoves and needs see canning supplies). Tomatoes are on the border between the high-acid fruits that can be preserved in a boiling-water bath and the low-acid fruits, vegetables and meats that need pressure canning
- 1 large pot (to scald the tomatoes, step 3) and 1
 medium sized pot to heat the tomato juice or
 water to add to the jars (step 6) and 1 small pot
 to sanitize the lids.

- Pint or quart canning jars (Ball or Kerr jars can be found at Publix, Kroger, Safeway and local "big box" stores - about \$9 per dozen jars including the lids and rings).
- Lids thin, flat, round metal lids with a gum binder that seals them against the top of the jar. They may only be used once.
- **Rings** metal bands that secure the lids to the jars. They may be reused many times.
- **Jar grabber** (to pick up the hot jars)
- Lid lifter (has a magnet to pick the lids out of the boiling water where you sanitize them. (\$2 at mall kitchen stores and local "big box" stores, but it's usually cheaper online from our affiliates)t)
- Jar funnel (\$3-Grocery stores, like Publix, Kroger and Safeway and local "big box" stores; sometimes even hardware stores)
- Large spoons and ladles

Process - How to Make Home Canned Diced or Crushed Tomatoes from Fresh Tomatoes

Step 1 - Selecting the tomatoes

It's fun to go pick your own and you can obviously get better quality tomatoes!

At right is a picture of tomatoes from my garden - they are so much better than anything from the grocery store. And if you don't have enough, a pick-your-own farm is the pace to go! At right are 4 common varieties that will work:

> Top left: Beefsteak

Top right: Lemon Boy, vellow

Bottom left:

Bottom right: **Better Boy**

type

Roma, paste-



The picture at right shows the best variety of tomato to use: Roma; also called paste tomatoes. They have fewer sides, thicker, meatier walls, and MUCH less water. And that means thicker sauce in less cooking time!

Also, you don't want mushy, bruised or rotten tomatoes!

For thin sauce - An average of 35 pounds is needed per canner load of 7 quarts; an average of 21 pounds is needed per canner load of 9 pints. A bushel weighs 53 pounds and yields 10 to 12 quarts of sauce-an average of 5 pounds per quart.

For thick sauce - An average of 46 pounds is needed per canner load of 7 quarts; an average of 28 pounds is needed per canner load of 9 pints. A bushel weighs 53 pounds and yields 7 to 9 quarts of sauce-an average of 6½ pounds per quart.



Step 2 - Get the jars and lids sanitizing

The dishwasher is fine for the jars; especially if it has a "sanitize" cycle. I get that going while I'm preparing everything else, so it's done by the time I'm ready to fill the jars. If you don't have a dishwasher, submerge the jars in a large pot (the canner itself) of water and bring it to a boil.

Be sure to let it go through the rinse cycle to get rid of any soap!



Get the canner heating up

Fill the canner about 1/2 full of water and start it heating (with the lid on).



Get a the medium pot of water or tomato juice heating

This is also a good time to get your 1 quart of tomato juice and/or water boiling (you will use it to fill any air spaces in the jars in step 6).

Start the water for the lids

Put the lids into the small pot of boiling water for at least several minutes. Note: everything gets sanitized in the water bath (step 7) anyway, so this just helps to ensure there is no spoilage later!)



Step 3 - Removing the tomato skins

Here's a trick you may not know: put the tomatoes, a few at a time in a large pot of boiling water for no more than 1 minute (30 - 45 seconds is usually enough)



then....

Plunge them into a waiting bowl of ice water.

This makes the skins slide right off of the tomatoes! If you leave the skins in, they become tough and chewy in the sauce, not very pleasant.



Step 4 - Removing the skins, bruises and tough parts

The skins should practically slide off the tomatoes. Then you can cut the tomatoes in quarters and remove the tough part around the stem and any bruised or soft parts.

Why remove the skins? They become tough when you cook them! Some people use a juicer and then cook the resultant juice down. It takes more time, but there's nothing wrong with that approach.



Step 5 - Removing seeds and water

After you have peeled the skins off the tomatoes, cut the tomatoes in half. Now we need to remove the seeds and excess water.



Step 6 - Squeeze of the seeds and water

Just like it sounds: wash your hands then squeeze each tomato and use your finger or a spoon to scoop and shake out most of the seeds. You don't need to get fanatical about it; removing just most will do. Another way to do it is to cut each tomato in half,



across it, instead of lengthwise. Then just shake the seeds and juice out.

Step 7 - Combine 1/6 of the tomatoes and bring to a gentle simmer

Combine one-sixth of the tomatoes in a big pot, crushing them with a wooden mallet or spoon as they are added to the pot. This will exude juice. There's generally no need to add liquid, most types of tomatoes have so much water.

Continue heating the tomatoes, stirring to prevent burning.

Once the tomatoes are boiling, gradually add remaining quartered tomatoes, stirring constantly These remaining tomatoes do not need to be crushed. They will soften with heating and stirring. As they cook, the tomatoes will fall apart into sauce with out much need of crushing or mushing!



Step 8 - Continue to add the rest of the tomatoes

Continue until all tomatoes are added. Then boil gently for 5 minutes.

Step 9 - Add 2 Tablespoons of lemon juice and liquid to each empty jar

Before you fill each jar with tomatoes, add 2 tablespoons of lemon juice per quart jar, 1 per pint jar. This helps to reduce the odds of spoilage and to retain color and flavor.



Step 10 - Fill the jars with heated tomatoes

Fill them to within ¼-inch of the top, seat the lid and hand-tighten the ring around them.

NOTE: if you want to freeze the tomatoes instead, just let the tomatoes cool to room temperature, then fill your freezer containers (I like Ziploc freezer bags in the quart size), fill them completely, eliminate air pockets, seal them and pop them in the freezer. You're done!



Step 11 - Put the lids and rings on

Just screw them on snugly, not too tight. If the is any tomato on the surface of the lip of the jar, wipe it off first with a clean dry cloth or paper towel.

Be sure the contact surfaces (top of the jar and underside of the ring) are clean to get a good seal!



Step 12 - Boil the jars in the water bath canner

Put them in the canner and keep them covered with at least 1 inch of water. Keep the water boiling. Process the jars in a boiling-water bath for 35 minutes for pints and 40 minutes for quarts. Remember to adjust the time if you are at a different altitude other than sea level! Pressure canners work better for tomato sauce and other low acid foods - you'll get less spoilage with a pressure canner.

I prefer a pressure canner as the higher temperatures and shorter cooking time result in better flavor and less spoilage. For more information or to order one, click on Pressure Canners. The recipe and directions for pressure canning tomatoes are coming.



Recommended process time for Standard Diced or Crushed Tomatoes in a boiling-water canner.								
		Process Time at Altitudes of						
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 3,000 f t	3,001 - 6,000 ft	Above 6,000 ft			
Hot	Pints	35 min	40	45	50			
	Quarts	40	45	50	55			

Step 13 - Done

Lift the jars out of the water and let them cool without touching or bumping them in a draft-free place (usually takes overnight) You can then remove the rings if you like, but if you leave them on, at least loosen them quite a bit, so they don't rust in place due to trapped moisture. Once the jars are cool, you can check that they are sealed verifying that the lid has been sucked down. Just press in the center, gently, with your finger. If it pops up and down (often making a popping sound), it is not sealed. If you put the jar in the refrigerator right away, you can still use it. Some people replace the lid and reprocess the jar, then that's a bit iffy. If you heat the contents back up, re-jar them (with a new lid) and the full time in the canner, it's usually ok.

This document was adapted from the "Complete Guide to Home Canning," Agriculture Information Bulletin No. 539, USDA, revised 1994.



Frequently Asked Questions about Canning Diced or Crushed Tomatoes

Why do my tomatoes separate from the liquid?

A frequent problem is the separation of water from the tomatoes. Why does the water separate from the solids in tomatoes?

Scenario 1 - liquid at the top and solids at the bottom

Home canned tomatoes, tomato juice, and diced or crushed tomatoes with liquid at the top and solids at the bottom is quite normal. It only reflects that the juice was made prior to heating. For example, the tomatoes were chopped, run through the steamer, sieve, or food mill while still raw and prior to heating.

As soon as they are chopped or crushed, enzymes start to break down the pectin that helps to hold tomato cells together. The enzyme that causes separation is activated by exposure to air and inactivated by heat. In commercial production, tomatoes are flash heated nearly to boiling in a matter of seconds, using equipment not available to consumers. Because the pectin holding tomato cells together is not exposed to air when cold, it remains intact, and a thick bodied, homogeneous juice is produced.

The solution is to leave tomatoes whole or in large chunks (do not chop). Heat before chopping or juicing to minimize the separation.

The best way to do that at home is to heat quartered tomatoes quickly to boiling temperatures WHILE crushing. You can also heat the blanched, peeled whole tomatoes in the microwave, then crush them!

Make sure the mixture boils constantly and vigorously while you add the remaining tomatoes. Simmer 5 minutes after all tomatoes are added, before juicing. If you are not concerned about juice separating, simply slice or quarter tomatoes into a large saucepan. Crush, heat and simmer for 5 minutes before juicing.

Scenario 2 - liquid at the bottom and solids at the top (note the photo is step 10)

What about the reverse: liquid at the bottom and solids at the top? That indicates too much preheating (more than 5 minutes). Pectin breaks down when it is overheated; then separation results. If separation occurs, just shake the jar before opening or Decant the water off.

References: Ohio State University

What did I do wrong if my jars spoil?

Tomatoes are a borderline acid / low acid fruit (see this page about tomato acidity for more information) - adding lemon juice helps, processing at least 35 minutes in the water bath canner, or better still, using a pressure canner almost eliminates spoilage. If you don't have a pressure canner, you must boost the acid level of the sauce, by adding 2 tablespoons of lemon juice or 1/2 teaspoon of citric acid per quart of sauce.

Other Equipment: From left to right:

- Jar lifting tongs to pick up hot jars
- 2. Lid lifter to remove lids
 from the pot of boiling water
 (sterilizing)
- 3. Lid disposable you may
 only use them once
- 4. Ring holds the lids on the jar until after the jars coolthen you don't need them
- 5. Canning Jar funnel





Home Canning Kits

This is the same type of standard canner that my grandmother used to make everything from applesauce to jams and jellies to tomato and spaghetti sauce. This complete kit includes everything you need and lasts for years: the canner, jar rack, jar grabber tongs, lid lifting wand, a plastic funnel, labels, bubble freer, and the bible of canning, the Ball Blue Book. It's much cheaper than buying the items separately. You'll never need anything else except jars & lids! To see more canners, of different styles, makes and prices, click here! For more information and current pricing:

Average Customer Review: ****
Usually ships in 1-2 business days

Summary - Cost of Making Homemade Canned Diced Tomatoes - makes 7 pint jars, 16 oz each*

i omatoes - makes / pint jars, 10 oz each"							
Item	Quantity	Cost in 2008	Source	Subtotal			
Tomatoes	20 - 25 lbs (to make about 16 cups of prepared tomato)	free from the garden, or \$0.50 cents at a PYO	(-arnan	\$0.00			
Canning jars (quart size, wide mouth), includes lids and rings	7 jars	\$8.00/dozen	Grocery stores, like Publix, Kroger and Safeway and local "big box" stores; sometimes Big Lots and even hardware stores	\$4.50			
Lemon juice	14 Tablespoons	\$0.50	Grocery store	\$0.50			
Total				\$5.00 total or about \$0.72 per jar INCLUDING the jars - which you can reuse!			

^{* -} This assumes you already have the pots, pans, ladles, and reusable equipment. Note that you can reuse the jars! Many products are sold in jars that will take the lids and rings for canning. For example, Classico Spaghetti sauce is in quart sized jars that work with Ball and Kerr lids and rings. Note that the Classico's manufacturer does not recommend reuse of their jars: see what they have to say on this page: