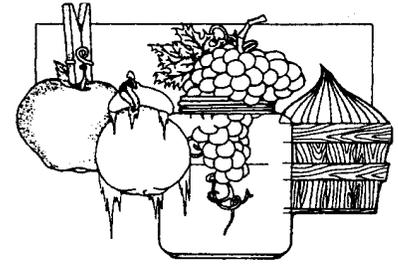


Quality for Keeps



Information for those who produce and preserve food

Spark winter meals with sauce

When gardens are full of tomatoes, turn extras into flavorful sauces and salsas to use during the winter months when fresh produce is scarce.

Follow proper methods exactly to ensure a safe tomato-based sauce or salsa.

Canning salsa at home requires a water-bath canning method. Salsa is an acidified product, because bottled lemon juice or vinegar has been added to reach a safe acidity level. This holds true for tomato-based salsas, as well as fruit-based salsas, such as peach salsa.

Use only vinegar that is at least 5% acidity. Use only lemon and lime juice that is commercially bottled. Do not use home-squeezed lemon or lime juice, since it varies in acidity.

Lemon juice may be safely substituted for vinegar, but vinegar cannot be substituted for lemon juice. Substituting vinegar for lemon juice will result in a lower acid level and a potentially unsafe product. Plan ahead to have the right ingredients on hand.

Spaghetti sauce, (with and without meat), and Mexican style tomato sauces must be pressure canned. These products contain a

mixture of acid and low acid foods, which can create unsafe acidity levels. Unsafe acidity levels can create the perfect environment for the growth of *Clostridium Botulinum*, the bacterium that causes botulism.

Quantities of fresh tomatoes needed for spaghetti sauce:

- 44 pounds of fresh tomatoes are needed for a canner load of 7 quarts.
- 30 pounds of fresh tomatoes are needed for a canner load of 9 pints.

Quantities of fresh tomatoes needed for Mexican tomato sauce:

- 18 pounds of fresh tomatoes are needed for a canner load of 7 quarts.
- 12 pounds of fresh tomatoes are needed for a canner load of 9 pints.

Recipes for these products, and others, can be found at:

<http://extension.missouri.edu/p/GH1456>, Ball Blue Book dated 1989 or after, or the National Center for Home Food Preservation website: <http://nchfp.uga.edu/>.

Source: "So Easy to Preserve", fifth edition, Elizabeth Andress, PhD, Judy A. Harrison, PhD, Cooperative Extension/The University of Georgia/Athens.

Common Herbs & Spices to Use in Sauces

Cilantro – An annual plant with small feathery leaves. The leaves have a pungent smell and can also be used in salads, stews, and other Mexican dishes.

Cumin – An aromatic spice with a distinctive bitter flavor and warm aroma. Very popular in Middle Eastern, Asian, Mediterranean and Mexican cooking.

Oregano – A sprawling plant with small leaves. Commonly used in Italian dishes.

Parsley – A biennial plant, with flat curly leaves depending on the variety. Very mild in taste and used on a variety of dishes from meat to salads.



Inside this issue:

Canned tomatoes versatility	2
Troubleshooting tomatoes	3
Spaghetti sauce without meat ..	4

Canned whole tomatoes offer versatility

Preserve tomatoes in their whole form for use in soups, stews & sauces.

Choose only tomatoes that are disease-free with firm fruit. Vine-ripened is best. Do not use tomatoes from dead or frost-killed vines.

Can yellow, pink, orange, and green tomatoes by the same methods as standard red tomatoes.

Whole tomatoes can be processed in a boiling water canner or a pressure canner. Both methods require the addition of acid.

Since tomatoes have a pH value that falls close to 4.6 they require the addition of citric acid or lemon juice. Add 2 tablespoons of bottled lemon juice, or 1/4 teaspoon of citric acid to each quart of canned tomatoes.

Whole or Halved Tomatoes—Packed in Water:

Procedure: Wash tomatoes and dip in boiling water for 30-60 seconds, or until skins split. Dip in cold water, remove skins and cores. Leave whole or halve.

Acidify tomatoes using 2 tablespoons of bottled lemon juice or 1/2 teaspoon of citric acid per quart of tomatoes. If using pint jars, use 1 tablespoon of bottled lemon juice or 1/4 teaspoon of citric acid.

Hot pack: Add enough water to cover tomatoes and boil gently for 5 minutes. Fill jars with hot tomatoes. Add 1 teaspoon salt per quart if desired and add enough hot water to cover tomatoes, leaving 1/2-inch headspace.

(Cont'd on page 3)

Recommended process times for tomatoes in a boiling-water canner.

Product	Style of pack	Jar size	Minutes of processing at different altitudes (in feet)	
			0 to 1,000 feet	1,001 to 3,000 feet
Whole or halved tomatoes packed in water	Hot or raw	Pints	40	45
		Quarts	45	50
Whole or halved tomatoes packed without added liquid	Raw	Pints	85	90
		Quarts		

Recommended process times for tomatoes in a pressure canner.

Product	Style of pack	Jar size	Process time (minutes)	Canner gauge pressure needed at different altitudes (in feet)		
				Dial gauge (pounds) 0 to 2,000	Weighted gauge (pounds) 0 to 1,000	Weighted gauge (pounds) Above 1,000 feet
Whole or halved tomatoes packed in water	Hot or raw	Pints or quarts	15	6	5	10
			10	11	10	15
Whole or halved tomatoes without added liquid	Raw	Pints or quarts	40	6	5	10
			25	11	10	15

Note: The processing times are longer for “whole or halves packed without additional liquid”.

Canned tomatoes *(Cont'd from page 2)*

Raw pack: Fill jars with raw, peeled tomatoes. Add 1 teaspoon of salt per quart if desired. Add hot water to cover tomatoes leaving ½-inch headspace.

Whole or Halved Tomatoes— Without Added Liquid:

Procedure: Prepare and acidify tomatoes using 2 tablespoons of bottled lemon juice or ½ teaspoon of citric acid per quart of tomatoes. If using pint jars, use 1 table-

spoon of bottled lemon juice or ¼ teaspoon of citric acid.

Add 1 teaspoon of salt per quart, if desired. Fill jars with tomatoes. Press tomatoes in the jars until spaces between them fill with juice. Leave ½-inch headspace.

Some areas of Missouri, such as the Ozarks, are above 1,000 feet. Follow recommended processing times for 1,001 to 3,000 feet in those counties.

See process times in charts provided on page 2.

Source: Quality for Keeps: Tantalizing Tomatoes, University of Missouri Extension guide sheet GH1456 <http://extension.missouri.edu/p/GH1456>.



Troubleshooting tomato issues

Issues can sometimes arise when canning tomato products. Consider what can occur to canned tomatoes and how to avoid it in the future.

- **Discoloration of the underside of metal lids:** Some foods, particularly acid foods, have natural compounds that corrode metal and can make a dark deposit on the underside of jar lids. Properly processed and sealed jars that have this deposit on the lid are harmless.
- **Jars don't seal properly:** If the unsealed jar is discovered within 24 hours of processing, it can be safely reprocessed. In order to do so, remove the lid and check for any imperfections in the seal. If necessary change the jar, add a new lid and reprocess using the same

processing time.

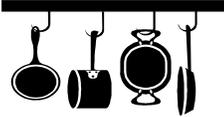
- **Tomatoes are floating in the jar:** Over processing fruits and tomatoes can destroy natural pectin. Be sure to follow directions for processing times exactly. Improper packing can also be the culprit. Pack tomatoes as closely as possible without crushing.
- **Separation of juice:** This is usually due to enzymatic changes during handling of the tomatoes after cutting. When making juice, heat tomatoes very quickly to simmering temperatures. Quickly cut about one pound of tomatoes into quarters and add directly to the saucepan in order to prevent the juice from separating. Heat this mixture to boiling while crushing. Continue to

slowly add and crush fresh tomato quarters to the boiling mix. Be sure the mixture boils rapidly while adding all of the remaining tomatoes.

Source: Common Canning Problems, Clemson Cooperative Extension HGIC 3050 http://www.clemson.edu/extension/hgic/food/food_safety/preservation/hgic3050.html.



THE RECIPE BOX



Spaghetti sauce without meat

- 30 lbs. tomatoes
 - 1 cup chopped onion**
 - 5 cloves garlic, minced
 - 1 cup chopped celery or green pepper**
 - 1 lb. fresh mushrooms, sliced (optional)**
 - 1/4 cup vegetable oil
 - 2 tbs Oregano
 - 4 tbs minced parsley
 - 2 tsp black pepper
 - 4-1/2 tsp salt
 - 1/4 cup brown sugar
- ** do not increase amount of onions, peppers or mushrooms

Procedure: Hot pack: Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skin splits. Dip in cold water and peel off skins. Remove cores and quarter tomatoes. Boil tomatoes for 20 minutes in a large, uncovered saucepan. Press through food mill or sieve.

Sauté onions, garlic, celery or peppers, and mushrooms (optional) in vegetable oil until tender. Combine sautéed vegetables and tomatoes and add remaining spices, salt and sugar. Bring to a boil. Simmer, uncovered, stirring frequently, until thick enough for serving. The volume will be reduced by nearly half. Pour into hot jars, leaving 1-inch headspace. Wipe jar rims with a dampened, clean paper towel and apply two-piece metal canning lids.

In a pressure canner: process pints for 20 minutes, quarts for 25 minutes at 11 pounds of pressure in a dial gauge canner, or in a weighted gauge pressure canner at 10 pounds of pressure.

Yield: approx. 9 pints.

Source: *So Easy to Preserve*, fifth edition, Elizabeth Andress, PhD, Judy A. Harrison, PhD, Cooperative extension/The University of Georgia/Athens.

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