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MICHIGAN STATE UNIVERSITY

Extension

Using, Storing and Preserving

Tomatoes

msue.anr.msu.edu/program/info/mi fresh



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Michigan-grown tomatoes are at their prime in August and September.

Recommended varieties

Select only disease-free, preferably vine-ripened, firm fruit for canning. Slicing varieties are good choices for making juice and crushed and whole tomato products. Paste tomatoes are good for making sauce, ketchup and purees. Yellow tomatoes are not really any lower in acid than red; they contain more sugar and, therefore, have a sweeter taste.

Caution: Do not can tomatoes from dead or frost-killed vines because they have a high microbial load that you don't want to consume. Green tomatoes are more acidic than ripened fruit. You may can them safely with any of the following recommendations.

Storage and food safety

- · Wash hands before and after handling fresh produce.
- Store ripe tomatoes in the refrigerator's vegetable crisper. They do not need to be bagged. Ripe tomatoes will usually keep 2 to 3 days in the refrigerator.
- If tomatoes need to ripen, place them in a loosely closed paper bag at room temperature. Check daily.
- For best flavor, bring tomatoes to room temperature before serving.
- Wash tomatoes using cool running water before preparing or eating.
- Keep tomatoes away from raw meat and meat juices to prevent cross contamination.

Lawn or garden questions?

Visit migarden.msu.edu. Call toll-free 1-888-678-3464. • For best quality and nutritive value, preserve only what your family can consume in 12 months.

Yield

One pound	3 medium tomatoes 2 cups chopped tomatoes
2 ½ to 3 pounds	2 pints canned tomatoes
14 pounds	9 pints, crushed or juice
1 bushel	17 to 20 quarts of crushed or 15 to 18 quarts juice

How to preserve

Acidification: To ensure safe acidity in whole, crushed or juiced tomatoes, add 2 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. You can add lemon juice or citric acid directly to the jars before filling with the product. Add sugar to offset acid taste, if desired. Four tablespoons of a 5-percent acidity vinegar per quart may be used instead of lemon juice or citric acid. However, vinegar may cause undesirable flavor change.

Canning

Tomatoes – whole or halved – no added liquid

Raw Pack – Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins and remove cores. Leave whole or halve and trim off any bruised or discolored areas. Add bottled lemon juice or citric acid (see acidification directions above). Add 1/2 teaspoon salt to each pint jar; 1 teaspoon salt to each quart, if desired. Fill jars with raw tomatoes, pressing until spaces between them fill with juice. Leave 1/2 inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids



and process. Let jars sit undisturbed while they cool from 12 to 24 hours. Then remove rings, wash jars and store.

Processing Option 1 – Process in a boiling-water bath:

Pints or Quarts 85 minutes at 0-1,000 feet altitude 90 minutes at 1,001-3,000 feet altitude 95 minutes at 3,001-6,000 feet altitude 100 minutes over 6,000 feet altitude

Processing Option 2 –

Process in a dial-gauge pressure canner at:

11 pounds pressure at 0-2,000 feet altitude 12 pounds at 2,001-4,000 feet altitude

- 13 pounds at 4,001-6,000 feet altitude
- 14 pounds at 6,001-8,000 feet altitude

Process in a weighted-gauge pressure canner at:

10 pounds pressure at 0-1,000 feet altitude

15 pounds pressure at altitudes above 1,000 feet

Pints or Quarts 25 minutes

Tomatoes - crushed

Hot Pack – Wash tomatoes and dip in boiling water for 30 to 60 seconds or until skins split. Then dip in cold water, slip off skins and remove cores. Trim off any bruised or discolored portions and quarter.

Heat about one pound of the tomato quarters in a large pot, crushing them with a wooden spoon as they are added to the pot. Stir tomatoes to prevent burning. Once the tomatoes are boiling, gradually add remaining quartered tomatoes, stirring constantly. The remaining tomatoes do not need to be crushed; they will soften with heating and stirring. Bring tomatoes to a boil and boil gently for 5 minutes. Add bottled lemon juice or citric acid (see acidification directions above). Add 1/2 teaspoon salt to each pint jar; 1 teaspoon salt to each quart, if desired. Fill jars with hot tomatoes, leaving ½ inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids and process. Let jars sit undisturbed while they cool from 12 to 24 hours. Then remove rings, wash jars and store.

Processing Option 1 – Process in a boiling-water bath

Pints	35 minutes & Quarts: 45 minutes at
	0-1,000 feet altitude
Pints	40 minutes & Quarts: 50 minutes at
	1,001-3,000 feet altitude
Pints	45 minutes & Quarts: 55 minutes at
	3,001-6,000 feet altitude
Pints	50 minutes & Quarts: 60 minutes over
	6,000 feet altitude

Processing Option 2 – Process in a dial-gauge pressure canner

11 pounds pressure at 0-2,000 feet altitude12 pounds at 2,001-4,000 feet altitude13 pounds at 4,001-6,000 feet altitude14 pounds at 6,001-8,000 feet altitude

Process in a weighted-gauge pressure canner at:

10 pounds pressure at 0-1,000 feet altitude 15 pounds pressure at altitudes above 1,000 feet

Pints or Quarts 15 minutes

Freezing

You may freeze tomatoes whole, sliced, chopped or pureed. In recipes, do not try to substitute frozen tomatoes for fresh tomatoes. Freezing causes their texture to become mushy. Season tomatoes before serving rather than before freezing. Freezing may either strengthen or weaken seasonings such as garlic, onion and herbs.

Freezing whole tomatoes with peels:

Select firm, ripe tomatoes with stems removed. Wash each tomato with water. Rub its surface, rinse it with running water and dry it with a paper towel. Place the tomatoes on cookie sheets and freeze. You do not need to blanch them before freezing. Once frozen, transfer them from cookie sheets into freezer bags or other containers. Seal tightly.

Freezing peeled tomatoes:

Wash tomatoes as directed above and then dip into boiling water for about 1 minute or until skins split. Remove tomatoes from boiling water, and immediately place them in ice water. Then peel and freeze.

For more recipes, see:

U.S. Department of Agriculture. (2009). *Complete guide to home canning* (Rev. ed.). (Agriculture Information Bulletin No. 539). Washington, DC: Author. (http://nchfp.uga.edu/publications/publications_usda.html)

University of Georgia Cooperative Extension. (2006). *So easy to preserve* (5th ed.). Athens, GA: Author. (http://setp.uga.edu/)

References:

Henneman, A. (n.d). *Freezing raw tomatoes with and without their skins*. Lincoln, NE: University of Nebraska Extension.

Pennsylvania State University, College of Agricultural Sciences, Agricultural Research and Cooperative Extension. (2007). *Let's preserve tomatoes*. University Park, PA: Author.

Find out more about Michigan Fresh at msue.anr.msu.edu/program/info/mi_fresh.



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