

not add water. If desired, add ½ teaspoon salt to pints, 1 teaspoon to quarts.

If you have decided to acidify the tomatoes (see section below on tomato acidity), add bottled lemon juice (1 tablespoon to pints, 2 tablespoons to quarts) or crystalline citric acid (¼ teaspoon to pints, ½ teaspoon to quarts) to top of jars.⁷

Adjust lids. Process in a boiling water bath—pints for 35 minutes, quarts for 45 minutes.

Hot pack (recommended method)—Heat tomatoes to boiling, stirring frequently. Do not add water. Pack boiling-hot tomatoes into clean, hot jars to ½ inch from top. If desired,

add ½ teaspoon salt to pints, 1 teaspoon to quarts.

If you have decided to acidify the tomatoes (see section above on tomato acidity), add bottled lemon juice (1 tablespoon to pints, 2 tablespoons to quarts) or crystalline citric acid (¼ teaspoon to pints, ½ teaspoon to quarts) to top of jars.⁷

Adjust lids. Process in a boiling water bath—pints for 20 minutes, quarts for 25 minutes.

TOMATO JUICE

Use only firm, ripe tomatoes. Don't use overripe tomatoes, tomatoes with decayed areas, or tomatoes picked from dead vines.

Wash tomatoes thoroughly to re-

move all soil. Remove cores. Cut into halves or quarters. Heat rapidly to boiling while stirring and crushing. Do not add water. Press tomatoes through a strainer or food mill. If desired, add 1 teaspoon salt to each quart juice.

Reheat juice just to boiling. Pour boiling-hot juice into clean, hot jars to ½ inch from top. If you have decided to acidify the juice (see above section on tomato acidity), add bottled lemon juice (1 tablespoon to pints, 2 tablespoons to quarts) or crystalline citric acid (¼ teaspoon to pints, ½ teaspoon to quarts) to top of jars.⁷ Adjust lids. Process in a boiling water bath—pints for 20 minutes, quarts for 25 minutes.

Note: Tomatoes contain both enzymes and pectin, the "cementing material" that holds plant cells together. Once raw tomatoes are crushed, enzymes start breaking down the pectin. Enzymes remain active as the tomatoes are heated, and are not destroyed until the tomatoes reach near-boiling temperatures.

Tomato Acidity

During the last few years, concern has arisen over whether tomatoes are high enough in acid to be canned safely in a boiling water bath. Research has shown that most varieties of tomatoes—unless overripe, decayed, or harvested from dead vines—are sufficiently high in acid for water bath canning. Even cherry, patio, and light-colored (yellow, orange, or pink) tomatoes are suitable for water bath canning, though seed catalogs sometimes describe them as "low acid."

There is evidence that four varieties of red tomatoes—Ace, Ace 55VF, Cal Ace, and Garden State—tend to be undesirably low in acid. Although the risk is minimal, we suggest adding acid when canning any of these varieties. Use lemon juice or citric acid in the amounts given in the directions for canning tomatoes or tomato juice.

It is not necessary to add acid to other varieties of tomatoes before canning. However, lemon juice or citric acid may be used if desired as an extra measure of insurance.

⁷ Crystalline citric acid is available at drug stores. Do not use **fresh** lemon juice, vinegar, or a tomato canning tablet. The acidity of fresh lemon juice may vary and, tablespoon for tablespoon, vinegar is much less effective than bottled lemon juice in acidifying tomatoes; it may also give an off-flavor. Tomato canning tablets may contain less than the suggested amount of citric acid.

Processing Times (in Minutes) for Fruits and Tomatoes*

(For complete directions, see previous section.)

| Fruit | Pack method | Pressure Canner at 5 pounds pressure† | | | |
|--------------|-------------|--|--------|--------|--------|
| | | Water bath canner | | | |
| | | PINTS | QUARTS | PINTS‡ | QUARTS |
| | | Minutes | | | |
| Apples | Hot | 15 | 20 | 10 | 10 |
| Applesauce | Hot | 20 | 20 | 10 | 10 |
| Berries | Raw or | | | | |
| | hot | 10 | 15 | — | — |
| Cherries | Raw | 20 | 25 | — | — |
| | Hot | 10 | 15 | 10 | 10 |
| Grape juice | Hot | 15 | 15 | — | — |
| Peaches | Raw | 25 | 30 | — | — |
| | Hot | 20 | 25 | 10 | 10 |
| Pears | Raw | 25 | 30 | — | — |
| | Hot | 20 | 25 | 10 | 10 |
| Plums | Raw | 20 | 25 | — | — |
| | Hot | 20 | 25 | 10 | 10 |
| Rhubarb | Hot | 10 | 10 | 10 | 10 |
| Tomatoes | Raw | 35 | 45 | — | — |
| | Hot | 20 | 25 | 10 | 10 |
| Tomato juice | Hot | 20 | 25 | 10 | 10 |
| Tomato sauce | Hot | 30 | 40 | — | — |

* When processing time is not given, procedure is not recommended.

† Fruits or tomatoes processed at 5 pounds pressure must be packed hot into jars.

‡ If you are canning pint jars of fruits or tomatoes in a 4- or 6-quart pressure cooker (pressure saucepan), use the processing times shown; longer processing times are not necessary.