# Food Preservation...

Canning Acidic Foods, Lesson 3



FNH-00562C

# Canning Acidic Foods: Fruits & Tomatoes

by Roxie Rodgers Dinstel

Besides the convenience and eating enjoyment of having home canned foods on hand, there is a sense of personal satisfaction every time you open and serve a jar of fruit, fruit juice or tomato products.

### **Selection of Fruits**

The quality of home-canned products can be no better than the quality of the raw product. The old adage of "two hours from garden to jar" is a good one to follow.

Fruit for canning should be fully ripened but firm. Unripened fruit is not as sweet as fully ripened fruit, and the natural flavor has not developed. Canning fruit as soon as possible after gathering will help to hold all of the good flavor and nutritional value. Fruits such as cherries, plums and berries should be carefully picked over and any overripe, bruised or spoiled ones discarded. They must be thoroughly washed to remove all traces of dust. Strawberries should be washed again after

hulls are removed.

Do not allow small fruits to stand in water.

Large fruits, such as peaches, pears and apples, should

be thoroughly washed before they are peeled.

Fresh peaches, apricots and tomatoes peel easier if dipped in boiling water for a short time to loosen the skin.

Water should be at a rolling boil. Fruit should be placed in boiling water for a minute, then placed in cool water. Skins will split, making it easier to peel.

Fruit has a tendency to oxidize when exposed to air, which causes darkening of the fruit. It must be treated as soon as it is cut to preserve the natural color. To prevent darkening of fruit, use one of these solutions:

One teaspoon, or 3,000 mg, ascorbic acid in 1 gallon of water, or 2 tablespoons of salt and 2 tablespoons vinegar in 1 gallon of cold water. Dip fruit in the solution as soon as it is cut. It can stay in the solution while you are preparing the jars for the boiling-water canner.

Commercial preparation of ascorbic acid solutions, such as Fruit Fresh, Sure Fresh and Everfresh, are also available in grocery and hardware stores.

## Raw (Cold) Pack Or Hot-Pack

The raw, or cold-pack, method means packing the cold or raw food into the jar, then adding boiling liquid — syrup, water or fruit juice. The jars are then processed in a boiling-water canner. Fruits such as apricots, berries, cherries, grapes, plums, rhubarb and tomatoes are best if packed raw. Most vegetables can be packed raw (cold-packed) if processed in the pressure canner.

The hot-pack method requires a short precooking period (boiling or heating in some manner). Then the boiling-hot product is packed into clean jars and processed immediately. The hot-pack method is more satisfactory for some vegetables and fruits. It is particularly recommended for peaches, pears and pineapple.

### **Amount Of Sweetness**

One advantage of home-canned fruits is that you can adjust the sweetness to your family preferences. The chart (right) ranks the syrup from not-so-sweet to sweet (light, medium and heavy).

All fruits and fruit juices may be canned successfully without sugar. Sugar helps to retain color and adds sweetness but is not necessary to prevent spoilage. Fruits canned without sugar will have a less firm texture.

## **Boiling-Water Canning**

A boiling-water canner may be purchased, or it can be made from a large kettle that is deep enough to permit water to cover jars at least 1 inch over the top with a little extra space for boiling. The canner must have a rack to hold the jars at least ½ inch above bottom of canner. The rack may be made of wooden strips, wire or other perforated material, and it must be

Syrups For Canning						
Type of Syrup	Sugar to One Quart Water	Yield of Syrup				
Very light	1 cup	4¾ cups				
Light	2 cups	5 cups				
Medium	3 cups	5½ cups				
Heavy	4¾ cups	6½ cups				
Medium with corn syrup: Use 1½ cups sugar, 1 cup corn syrup to 3 cups water.						
Medium with honey: Use 1 cup sugar, 1 cup honey to 4 cups water.						

For all syrups: Boil sugar and water together 5 minutes.

put together in a manner that will allow water to circulate. The canner should have a cover that will make it possible to keep water at a good rolling boil all during processing.

- 1. Before the preparation of the food is begun, place canner on the heat with sufficient water to cover the jars at least 1 inch over the top. This permits water to be heating while food is being prepared. Water should be boiling when jars of food are placed into it.
- 2. Prepare and pack food and tighten lids according to directions for raw- or hot-pack canning as given. Prepare only enough jars of food at one time to fill the canner. Work rapidly so as little time as possible will elapse between precooking or packing the food and getting it into the canner.
- 3. Place the jars of food on the rack in the canner far enough apart to allow the free circulation of water around them. Boiling

water should be 1 or more inches above top of jars. If water does not cover jars at least 1 inch over the top, add boiling water to this depth. Start counting processing time as soon as the water in canner again reaches a good rolling boil. Keep the water boiling during the entire processing period. If the water boils down, add sufficient BOILING water to keep it at the required height.

- 4. Process the required length of time. Check often to make sure the canner has enough water to cover jars by at least 1 inch. See timetables on page 4.
- 5. As soon as the processing time is up, remove jars from the canner. Do not tighten screw bands again. Set jars 2 or 3 inches apart on a rack or several thicknesses of cloth and allow to cool in an upright position. Do not set hot jars in a draft or on a cold, wet surface. Do not cover them.
- 6. When jars are cold, test for seal and remove screw bands. Wash and dry bands. Bands are unnecessary once jars are sealed. Wipe jars and lids. Label and store properly.
- 7. If a jar did not seal, it must be reprocessed within 24 hours, stored in the refrigerator and used within regular storage time, or frozen for longer storage.

#### **Tomatoes**

Tomatoes are a special case because they are close to the acid/low-acid border. Some varieties tend to have a higher pH (lower acidity) than others.

It is a good idea to add acid to tomatoes to ensure adequate acidity. The proper amount of acid is ½ teaspoon citric acid per quart or 2 tablespoons lemon juice per quart.



If tomatoes are pressure-canned, the resulting texture is generally more mushy than water-canned tomatoes. Recommended time is 40 minutes at 6 pounds pressure. At elevations above sea level, the pressure should be adjusted according to the following:

Sea level-2,000 feet	5 pounds
2,000-4,000 feet	6 pounds
4,000-6,000 feet	7 pounds
6,000-8,000 feet	8 pounds

#### References

USDA Complete Guide to Home Canning. Online version: www.uga.edu/nchfp/publications/publications\_usda.html. Print version (\$18): https://mdc.itap.purdue.edu/item.asp?item\_number=AIG-539#.VWTLiZRdWrY.

So Easy to Preserve (\$18). University of Georgia Cooperative Extension Service: www.uga.edu/setp.

*Ball Blue Book.* Ball Corporation, Consumer Products Division, Consumer Affairs, 345 S. High, Muncie, IN 47305-2326.

To simplify information, trade names of products have been used. No endorsement of named products by the University of Alaska Fairbanks Cooperative Extension Service is intended, nor is criticism implied of similar products that are not mentioned.

## **Common Fruits, Type of Syrup and Processing Times**

Time Table For Fruits		Type of Syrup	Boiling-Water Bath Minutes Pints Quarts		Pressure Canner Pints & Quarts Minutes Ibs*	
Apricots	Wash, halve and pit. Add syrup or water. <u>Hot pack</u> . Wash, halve and pit. Add syrup or water. <u>Raw pack</u>	Medium Medium	20 25	25 30	10 10	6
Berries (except strawberries and cranberries)	Wash, stem, pack. Add syrup or water.	Thin	15	20	8	6
Cherries	Wash, stem, pit and pack. Add syrup or water.	**	15	20	10	6
Figs	Cover with fresh water, boil 2 minutes. Drain and use this water to make syrup. Boil 5 minutes in syrup. Pack, add syrup.	Medium	45	50	_	_
Grapes	Wash, stem and pack. Add syrup or water. <u>Hot pack</u> . Wash, stem and pack. Add syrup or water. <u>Raw pack</u> .	Thin Thin	15 20	20 25	_ _	_ _
Peaches	Peel, pack, add syrup or boil 3 minutes in syrup, pack, add syrup. Hot pack. Peel, pack, add syrup or boil 3 minutes in syrup, pack, add syrup. Raw pack.	Medium Medium	20 25	25 30	10	6
Pears	Cull overripe pears, pare, halve, boil 3 to 5 minutes in syrup. Pack. Add syrup.	Medium	20	25	10	6
Pineapple	Slice, peel, remove eyes and core. Boil in syrup 5 to 10 minutes. Pack. Add syrup.	Thin	15	20	_	_
Plums	Wash, prick skins. Pack. Add syrup.	**	20	25	10	6
Rhubarb	Wash, cut into pieces. Pack. Add syrup. Or bake until tender. Pack. Add syrup.	Medium	15	15	8	6
Tomatoes (acid)	Scald ½ minute, cold dip, peel, core, quarter. Pack.	Water	85	85	40	5
Tomato juice	Wash, peel, cut in pieces. Simmer until soft, press through fine sieve. Bring to boil. Pour to within ½ inch of top of jar.		35	40	20	5

<sup>\*</sup> Processing times and pressures are accurate at elevations up to 2,000 feet above sea level. Check with your local Cooperative Extension Service office for recommendations for processing at higher elevations.

#### www.uaf.edu/ces or 1-877-520-5211

Roxie Rodgers Dinstel, Associate Director of Extension.



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<sup>\*\*</sup> Depends on sweetness of fruit