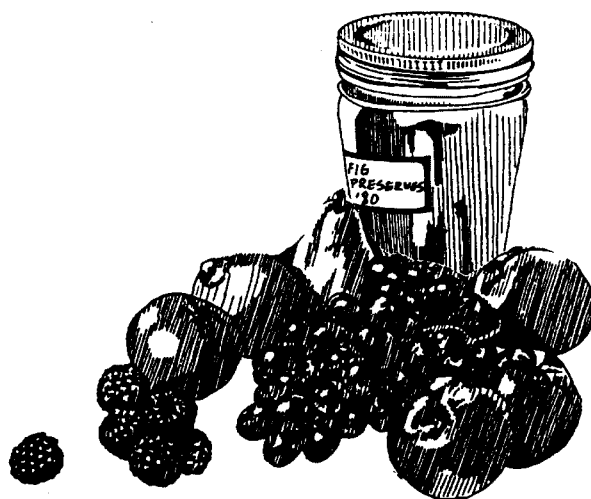




# Selecting, Preparing & Canning Fruit & Fruit Products



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**Featuring new, research-based  
recommendations for safer and  
better quality food at home**

## **Know Your Altitude**

It is important to know your approximate elevation or altitude above sea level in order to determine a safe processing time for canned foods. Since the boiling temperature of liquid is lower at higher elevations, it is critical that additional time be given for the safe processing of foods at altitudes above sea level.

All towns and communities in Kentucky are below 2,000 feet. The processing times given in this canning guide are for altitudes up to 3,000 feet and are safe for all parts of our state.

## **DANGER! Guard Against Food Poisoning**

Pressure canning is the only recommended method for canning meat, poultry, seafood, and most vegetables. The bacterium *Clostridium botulinum* in low-acid foods is destroyed when they are processed at the correct time and pressure in pressure canners. Using boiling-water canners for these foods poses a real risk of botulism poisoning.

If these bacteria survive and grow inside a sealed jar of food, they can produce a poisonous toxin. Even a taste of food containing this toxin can be fatal. Low-acid foods should be boiled after their jars are opened, even if you detect no signs of spoilage and are certain the food has been properly processed. In Kentucky, boiling for 13 minutes destroys the toxin that causes poisoning.

This guide, containing up-to-date instructions for preparing safe home-canned foods, is based on research conducted at the Pennsylvania State University. It is adapted from the USDA Complete Guide to Home Canning.

### **Other publications in the home-canning series include:**

- FCS3-121, *Canning Tomatoes and Tomato Juice*
- FCS3-325, *Principles of Home Canning*
- FCS3-327, *Selecting, Preparing, and Canning Tomatoes and Tomato Products*
- FCS3-328, *Selecting, Preparing, and Canning Vegetables and Vegetable Products*
- FCS3-329, *Preparing and Canning Poultry, Red Meat, and Fish*
- FCS3-330, *Preparing and Canning Fermented Foods and Pickled Vegetables*
- FCS3-331, *Preparing and Canning Jams and Jellies*

These publications are also available on our web site at:

<http://www.ca.uky.edu/agc/pubs/pubs.htm>

*No product endorsement is implied, nor discrimination against similar products intended, by the mention of brand names in this publication.*

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*Revised and adapted for use in Kentucky by Sue Burrier, former Extension Food and Nutrition Specialist*

*Contact: Sandra Bastin, Ph.D., R.D.,  
Extension Specialist in Food and Nutrition*

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## Introduction to the Complete Guide to Home Canning

Home canning has changed greatly in the 170 years since it was introduced as a way to preserve food. Scientists have found ways to produce safer, higher quality products. The first part of this series explains the scientific principles on which canning techniques are based, discusses canning equipment, and describes the proper use of jars and lids. It describes basic canning ingredients and procedures and how to use them to achieve safe, high-quality canned products.

The remaining publications in this series consist of canning guides for specific foods. These guides offer detailed directions for canning fruits and fruit products, tomatoes and tomato products, vegetables, red meats, poultry and fish, pickles and relishes, and jams and jellies. Handy guidelines for choosing the correct quantity and quality of raw foods accompany each set of directions for fruits, tomatoes, and vegetables. Most recipes are designed to yield a full canner load of pints or quarts.

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This publication contains many new research-based recommendations for canning safer and better quality food at home. It is an invaluable resource for persons who are canning for the first time. Experienced canners will find updated information to help them improve their canning practices.

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## A Note About Syrup

Adding syrup to canned fruit helps to retain its flavor, color, and shape. It does not prevent spoilage of these foods. The following guidelines for preparing and using syrups offer a new “very light” syrup, which approximates the natural sugar content of many fruits. The sugar content in each of the four syrups is increased by about 10 percent. Quantities of water and sugar to make enough syrup for a canner load of pints or quarts are provided for each syrup type.



## Preparing and Using Syrups

Use this guide to determine measures of water and sugar:

Syrup Type	Approx. % Sugar	For 9-pint Load*		For 7-quart Load		Fruits commonly packed in syrup**
		Cups Water	Cups Sugar	Cups Water	Cups Sugar	
VERY LIGHT	10	6½	¾	10½	1¼	Approximates natural sugar level in most fruits and adds the fewest calories.
LIGHT	20	5¼	1½	9	2¼	Very sweet fruit. Try a small amount the first time to see if your family likes it.
MEDIUM	30	5¼	2¼	8¼	3¼	Sweet apples, sweet cherries, berries, grapes.
HEAVY	40	5	3¼	7¼	5¼	Tart apples, apricots, sour cherries, gooseberries, nectarines, peaches, pears, plums.

\* This amount is also adequate for a 4-quart load.

\*\* Many fruits typically packed in heavy syrup are excellent and tasty products when packed in lighter syrups. Try lighter syrups since they contain fewer calories from added sugar.

### PROCEDURE:

Heat water and sugar together. Bring to a boil and pour over raw fruits in jars. For hot packs, bring water and sugar to boil, add fruit, reheat to boil, and fill jars immediately.

### OTHER SWEETENERS:

Light corn syrups or mild-flavored honey may be used to replace up to half the table sugar called for in syrups. See the section “Canned Foods for Special Diets” in FCS3-325, *Principles of Home Canning*, page 13.

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## Maintaining Color & Flavor in Canned Food

To maintain good natural color and flavor in stored canned food, you must:

- remove oxygen from food tissues and jars,
- quickly destroy the food enzymes, and
- obtain high jar vacuums and airtight jar seals.

Follow these guidelines to ensure that your canned foods retain optimal colors and flavors during processing and storage:

- Use only high-quality foods that are at the proper maturity and are free of diseases and bruises.
- Use the hot-pack method, especially with acid foods to be processed in boiling water.
- Don't unnecessarily expose prepared foods to air; can them as soon as possible.
- While preparing a canner load of jars, keep peeled, halved, quartered, sliced or diced apples, apricots, nectarines, peaches, and pears in a solution of 3 grams (3000 milligrams) ascorbic acid to 1 gallon of cold water. This procedure is also useful in maintaining the natural color of mushrooms and potatoes and for preventing stem-end discoloration in cherries and grapes. You can get ascorbic acid in several forms:

*Pure powdered form*—seasonally available among canning supplies in supermarkets. One level teaspoon of pure powder weighs about 3 grams. Use 1 teaspoon per gallon of water as a treatment solution.

*Vitamin C tablets*—economical and available year-round in many stores. Buy 500-milligram tablets; crush and dissolve six tablets per gallon of water as a treatment solution.

*Commercially prepared mixes of ascorbic and citric acid*—seasonally available among canning supplies in supermarkets. Sometimes citric acid powder is

sold in supermarkets, but it is less effective in controlling discoloration. If you choose to use these products, follow the manufacturer's directions.

- Fill hot foods into jars and adjust headspace as specified in recipes.
- Tighten screw bands securely, but if you are especially strong, not as tightly as possible.
- Process and cool jars.
- Store the jars in a relatively cool, dark place, preferably between 50°F and 70°F.
- Can no more food than you will use within a year.

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## Apple Butter

**8 pounds apples**

**2 cups cider**

**2 cups vinegar**

**2¼ cups white sugar**

**2¼ cups packed brown sugar**

**2 tablespoons ground cinnamon**

**1 tablespoon ground cloves**

**YIELD:**

About 8 to 9 pints.

**QUALITY:**

Use Jonathan, Winesap, Stayman, Golden Delicious, Macintosh, or other tasty apple varieties for good results.

**PROCEDURE:**

Wash, remove stems, quarter, and core fruit. Cook slowly in cider and vinegar until soft. Press fruit through a colander, food mill, or strainer. Cook fruit pulp with sugars and spices, stirring frequently. To test for doneness, remove a spoonful and hold it away from steam for 2 minutes. It is done if the butter remains mounded on the spoon. Another way to determine when the butter is cooked adequately is to spoon a small quantity onto a plate. When a rim of liquid does not separate around the edge of the butter, it is ready for canning. Fill hot, sterile half-pint or pint jars, leaving ¼-inch headspace. Adjust lids and process.

PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process half-pints or pints for 10 minutes; quarts, 15 minutes.

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## Apple Juice

QUALITY:

Good-quality apple juice is made from a blend of varieties. For best results, buy fresh juice from a local cider maker within 24 hours after it has been pressed.

PROCEDURE:

Refrigerate juice for 24 to 48 hours. Without mixing, carefully pour off clear liquid and discard sediment. Strain clear liquid through a paper coffee filter or double layer of damp cheesecloth. Heat quickly, stirring occasionally, until juice begins to boil. Fill immediately into sterile pint or quart jars, leaving ¼-inch headspace. Adjust lids and process.

PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process pints or quarts for 10 minutes.

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## Apples, sliced

QUANTITY:

An average of 19 pounds is needed per canner load of 7 quarts; an average of 12¼ pounds is needed per canner load of 9 pints. A bushel weighs 48 pounds and yields 16 to 19 quarts—an average of 2¾ pounds per quart.

QUALITY:

Select apples that are juicy, crispy, and preferably both sweet and tart.

PROCEDURE:

Wash, peel, and core apples. To prevent discoloration, slice and immerse in water containing ascorbic acid or one of the mixtures found in grocery stores, such as Fruit Fresh® (see “Maintaining Color and Flavor” on page 5 of this guide). Raw

packs make poor quality products. Place drained slices in large saucepan and add 1 pint water or very light, light, or medium syrup (see page 4) per 5 pounds of sliced apples. Boil 5 minutes, stirring occasionally to prevent burning. Fill jars with hot slices and hot syrup or water, leaving ½-inch headspace. Adjust lids and process.

PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process pints or quarts for 25 minutes.
- *Dial-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 10 pounds of pressure.

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## Applesauce

QUANTITY:

An average of 21 pounds is needed per canner load of 7 quarts; an average of 13½ pounds is needed per canner load of 9 pints. A bushel weighs 48 pounds and yields 14 to 19 quarts of sauce—an average of 3 pounds per quart.

QUALITY:

Select apples that are sweet, juicy, and crisp. For a tart flavor, add 1 to 2 pounds of tart apples to each 3 pounds of sweeter fruit.

PROCEDURE:

Wash, peel, and core apples. If desired, slice into water containing ascorbic acid (see “Maintaining Color and Flavor” on page 5 of this guide) to prevent browning. Place drained slices in an 8- to 10-quart pot. Add ½ cup water. Stirring occasionally to prevent burning, heat quickly until tender (5 to 20 minutes, depending on maturity and variety). Press through a sieve or food mill, or skip the pressing step if you prefer chunk-style sauce. Sauce may be packed without sugar. If desired, add 1/8 cup sugar per quart of sauce. Taste and add more, if preferred. Reheat sauce to boiling.

Fill jars with hot sauce, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process pints for 20 minutes; quarts, 25 minutes.
- *Dial-gauge Pressure Canner*—Hot Pack: process pints for 8 minutes or quarts for 10 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot Pack: process pints for 8 minutes or quarts for 10 minutes at 10 pounds of pressure.

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## Spiced Apple Rings

**12 pounds firm tart apples (maximum diameter: 2½ inches)**

**12 cups sugar**

**6 cups water**

**1¼ cups white vinegar (5 percent)**

**3 tablespoons whole cloves**

**¾ cup red hot cinnamon candies OR  
8 cinnamon sticks and 1 teaspoon  
red food coloring (optional)**

**YIELD:** About 8 to 9 pints.

**PROCEDURE:**

Wash apples. To prevent discoloration, peel and slice one apple at a time. Immediately cut crosswise into ½-inch slices, remove core area with a melon baller, and immerse in ascorbic acid solution (see “Maintaining Color and Flavor” on page 5 of this guide). To make flavored syrup, combine sugar, water, vinegar, cloves, cinnamon candies or cinnamon sticks, and food coloring in a 6-quart saucepan. Stir, heat to boil, and simmer 3 minutes. Drain apples, add to hot syrup, and cook 5 minutes. Fill jars (preferably widemouthed) with apple rings and hot, flavored syrup, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process half-pints or pints for 15 minutes.

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## Spiced Crab Apples

**5 pounds crab apples**

**4½ cups apple vinegar (5 percent)**

**3¾ cups water**

**7½ cups sugar**

**4 teaspoons whole cloves**

**4 sticks cinnamon**

**Six ½-inch cubes of fresh ginger root**

**YIELD:**

About 9 pints.

**PROCEDURE:**

Remove blossom petals and wash apples, but leave stems attached. Puncture the skin of each apple four times with an ice pick or toothpick. Mix vinegar, water, and sugar and bring to a boil. Add spices tied in a spice bag or cheesecloth. Using a blancher basket or sieve, immerse one-third of the apples at a time in the boiling vinegar-syrup solution for 2 minutes. Place cooked apples and spice bag in a clean 1- or 2-gallon crock, and add hot syrup. Cover and let stand overnight. Remove spice bag, drain syrup into a large saucepan, and reheat to boiling. Fill pint jars with apples and hot syrup, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process pints for 25 minutes.

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## Apricots, *halved or sliced*

**QUANTITY:**

An average of 16 pounds is needed per canner load of 7 quarts; an average of 10 pounds is needed per canner load of 9 pints. A bushel weighs 50 pounds and yields 20 to 25 quarts—an average of 2¼ pounds per quart.

**QUALITY:**

Select firm, well-colored, mature fruit of ideal quality for eating fresh.

**PROCEDURE:**

Follow directions for peaches, either hot or raw pack and use the same processing time (see page 10).

## Berries, whole

**QUANTITY:**

An average of 12 pounds is needed per canner load of 7 quarts; an average of 8 pounds is needed per canner load of 9 pints. A 24-quart crate weighs 36 pounds and yields 18 to 24 quarts—an average of 1¾ pounds per quart.

**QUALITY:**

Choose ripe, sweet berries with uniform color. Blackberries, blueberries, currants, dewberries, elderberries, gooseberries, huckleberries, loganberries, mulberries, and raspberries are good choices.

**PROCEDURE:**

Wash 1 or 2 quarts of berries at a time. Drain, cap, and remove stems, if necessary. For gooseberries, snip off heads and tails with scissors. Prepare and boil preferred syrup, if desired (see page 4). Add ½ cup syrup, juice, or water to each clean jar.

**Hot pack**—For blueberries, currants, elderberries, gooseberries, and huckleberries. Heat berries in boiling water for 30 seconds and drain. Fill jars, and cover with hot juice, leaving ½-inch headspace.

**Raw pack**—Fill jars with any of the raw berries, shaking down gently while filling. Cover with hot syrup, juice, or water, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process pints or quarts for 20 minutes. Raw Pack: process pints for 20 minutes; quarts, 30 minutes.

- *Dial-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 7 pounds of pressure.

Raw Pack: process pints for 8 minutes or quarts for 10 minutes at 7 pounds of pressure.

- *Weighted-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 10 pounds of pressure.

Raw Pack: process pints for 8 minutes or quarts for 10 minutes at 10 pounds of pressure.

## Berry Syrup

Juices from fresh or frozen blueberries, cherries, grapes, raspberries (black or red), and strawberries are easily made into toppings for use on ice cream and pastries.

**YIELD:**

About 9 half-pints.

**PROCEDURE:**

Select 6½ cups of fresh or frozen fruit of your choice. Wash, drain, remove caps and stems, and crush fruit in a saucepan. Heat to boiling and simmer until soft (5 to 10 minutes). Strain hot through a colander, and drain until cool enough to handle. Strain the collected juice through a double layer of cheesecloth or jelly bag. Discard the dry pulp. The yield of the pressed juice should be about 4½ to 5 cups. Combine the juice with 6¾ cups of sugar in a large saucepan, bring to boil, and simmer 1 minute. To make a syrup with whole fruit pieces, save 1 or 2 cups of the fresh or frozen fruit, combine these with the sugar, and simmer as in making regular syrup. Remove from heat, skim off foam, and fill into clean half-pint or pint jars, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process half-pints or pints for 15 minutes.

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## Cherries, whole

### QUANTITY:

An average of 17½ pounds is needed per canner load of 7 quarts; an average of 11 pounds is needed per canner load of 9 pints. A lug box weighs 25 pounds and yields 8 to 12 quarts of cherries—an average of 2½ pounds per quart.

### QUALITY:

Select bright, uniformly colored sweet or sour cherries that are mature and of ideal quality for eating fresh or cooking.

### PROCEDURE:

Remove stems and wash cherries. Remove pits if desired. If pitted, place cherries in water containing ascorbic acid (see “Maintaining Color and Flavor” on page 5 of this guide) to prevent stem-end discoloration. If canned unpitted, prick skins on opposite sides with a clean needle to prevent splitting. Cherries may be canned in water, apple juice, white grape juice, or syrup. If syrup is desired, select and prepare preferred type (see page 4).

**Hot pack**—In a large saucepan add ½ cup water, juice, or syrup for each quart of drained fruit and bring to boil. Fill jars with cherries and cooking liquid, leaving ½-inch headspace.

**Raw pack**—Add ½ cup hot water, juice, or syrup to each jar. Fill jars with drained cherries, shaking down gently as you fill. Add more hot liquid, leaving ½-inch headspace. Adjust lids and process.

### PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process pints for 20 minutes; quarts, 25 minutes.  
Raw Pack: process pints or quarts for 30 minutes.
- *Dial-gauge Pressure Canner*—Hot Pack: process pints for 8 minutes or quarts for 10 minutes at 7 pounds of pressure.
- Raw Pack: process pints or quarts for 10 minutes at 7 pounds of pressure.

– *Weighted-gauge Pressure Canner*—Hot Pack: process pints for 8 minutes or quarts for 10 minutes at 10 pounds of pressure.

Raw Pack: process pints or quarts for 10 minutes at 10 pounds of pressure.

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## Fruit Purees, of any fruit except figs and tomatoes

### PROCEDURE:

Remove stems, then wash, drain, peel, and remove pits if necessary. Measure fruit into large saucepan, crushing slightly if desired. Add 1 cup hot water for each quart of fruit. Cook slowly until fruit is soft, stirring frequently. Press through sieve or food mill. If desired for flavor, add sugar to taste. Reheat pulp to boil or until sugar dissolves, if added. Fill hot fruit into clean jars, leaving ¼-inch headspace. Adjust lids and process.

### PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process pints or quarts for 20 minutes.
- *Dial-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 10 pounds of pressure.

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## Grape Juice

### QUANTITY:

An average of 24½ pounds is needed per canner load of 7 quarts; an average of 16 pounds per canner load of 9 pints. A lug box weighs 26 pounds and yields 7 to 9 quarts of juice—an average of 3½ pounds per quart.

**QUALITY:**

Select sweet, well-colored, firm, mature fruit of ideal quality for eating fresh or cooking.

**PROCEDURE:**

Wash and stem grapes. Place grapes in a saucepan and add boiling water to cover grapes. Heat and simmer slowly until skin is soft. Strain through a damp jelly bag or double layers of cheesecloth. Refrigerate juice for 24 to 48 hours. Without mixing, carefully pour off clear liquid and save; discard sediment. If desired, strain through a paper coffee filter for a clearer juice. Add juice to a saucepan and sweeten to taste. Heat and stir until sugar is dissolved. Continue heating with occasional stirring until juice begins to boil. Fill into jars immediately, leaving ¼-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

*Boiling-water Canner*—Hot Pack: process pints or quarts for 10 minutes.

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## **Grapes, whole**

**QUANTITY:**

An average of 14 pounds is needed per canner load of 7 quarts; an average of 9 pounds is needed per canner load of 9 pints. A lug box weighs 26 pounds and yields 12 to 14 quarts of whole grapes—an average of 2 pounds per quart.

**QUALITY:**

Choose unripe, tight-skinned, preferably green seedless grapes harvested 2 weeks before they reach optimal eating quality.

**PROCEDURE:**

Remove stems, wash, and drain grapes. Prepare very light or light syrup (see page 4).

Hot pack—Blanch grapes in boiling water for 30 seconds. Drain and proceed as for raw pack.

Raw pack—Fill jars with grapes and hot syrup, leaving 1 inch of headspace. Adjust lids and process.

**PROCESSING TIME:**

– *Boiling-water Canner*—Hot Pack: process pints or quarts for 15 minutes. Raw Pack: process pints for 20 minutes; quarts, 25 minutes.

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## **Mixed Fruit Cocktail**

**1½ pounds slightly unripe seedless green grapes**

**3 pounds peaches**

**3 pounds pears**

**10-ounce jar maraschino cherries**

**3 cups sugar**

**4 cups water**

**YIELD:**

About 6 pints.

**PROCEDURE:**

Remove stems and wash grapes, then soak in ascorbic acid solution (see “Maintaining Color and Flavor” on page 5 of this guide). Dip ripe but firm peaches, a few at a time, in boiling water for 1 to 1½ minutes to loosen skins. Dip in cold water and slip off skins. Cut in half, remove pits, cut into ½-inch cubes, and add to grape solution. Peel, halve, and core pears. Cut into ½-inch cubes and add to grapes and peaches. Combine sugar and water in a saucepan and bring to boil. Drain mixed fruit. Add ½ cup of hot syrup to each jar. Then add a few cherries and gently fill the jar with mixed fruit and more hot syrup, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

– *Boiling-water Canner*—Raw Pack: process half-pints or pints for 25 minutes.

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## **Nectarines,** *halved or sliced*

### QUANTITY:

An average of 17½ pounds is needed per canner load of 7 quarts; an average of 11 pounds is needed per canner load of 9 pints. A bushel weighs 48 pounds and yields 16 to 24 quarts—an average of 2½ pounds per quart.

### QUALITY:

Choose ripe, mature fruit of ideal quality for eating fresh or cooking.

### PROCEDURE:

Follow directions for peaches, either hot or raw pack, and use the same processing time (see page 10).

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## **Peaches,** *halved or sliced*

### QUANTITY:

An average of 17½ pounds is needed per canner load of 7 quarts; an average of 11 pounds is needed per canner load of 9 pints. A bushel weighs 48 pounds and yields 16 to 24 quarts—an average of 2½ pounds per quart.

### QUALITY:

Choose ripe, mature fruit of ideal quality for eating fresh or cooking.

### PROCEDURE:

Dip fruit in boiling water for 30 to 60 seconds until skins loosen. Dip quickly in cold water and slip off skins. Cut in half, remove pits, and slice if desired. To prevent darkening, soak peeled fruit in ascorbic acid solution (see “Maintaining Color and Flavor” on page 5 of this guide). Prepare and boil a very light, light, or medium syrup (see page 4), or pack peaches in water, apple juice, or white grape juice. Raw packs make poor-quality peaches.

**Hot pack**—In a large saucepan place drained fruit in syrup, water, or juice and bring to boil. Fill jars with hot fruit and cooking liquid, leaving ½-inch headspace. Place halves in layers, cut side down.

**Raw pack**—Fill jars with raw fruit, cut side down, and add hot water, juice, or syrup, leaving ½-inch headspace. Adjust lids and process.

### PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process pints for 25 minutes; quarts, 30 minutes.
- Raw Pack: process pints for 30 minutes; quarts, 35 minutes.
- *Dial-gauge Pressure Canner*—Hot or Raw Pack: process pints or quarts for 10 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot or Raw Pack: process pints or quarts for 10 minutes at 10 pounds of pressure.

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## **Pears, halved**

### QUANTITY:

An average of 17½ pounds is needed per canner load of 7 quarts; an average of 11 pounds is needed per canner load of 9 pints. A bushel weighs 50 pounds and yields 16 to 25 quarts—an average of 2½ pounds per quart.

### QUALITY:

Choose ripe, mature fruit of ideal quality for eating fresh or cooking.

### PROCEDURE:

Wash and peel pears. Cut lengthwise in halves and remove core. A melon baller or metal measuring spoon is suitable for coring pears. To prevent discoloration, soak pears in an ascorbic acid solution (see “Maintaining Color and Flavor” on page 5 of this guide). Prepare a very light, light, or medium syrup (see page 4), or pack pears in apple juice, white grape juice, or water. Raw packs make poor-quality pears. Boil drained pears 5 minutes in syrup, juice, or water. Fill

jars with hot fruit and cooking liquid, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process pints for 25 minutes; quarts, 30 minutes.
- *Dial-gauge Pressure Canner*—Hot Pack: process pints or quarts for 10 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot Pack: process pints or quarts for 10 minutes at 10 pounds of pressure.

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## Pie Fillings

The following fruit fillings are excellent and safe products. Each canned quart makes one 8- to 9-inch pie. The filling also may be used as toppings on dessert or pastries.

“Clear Jel” is a chemically modified starch made from waxy maize, which produces excellent sauce consistency even after fillings are canned and baked. Other available starches break down when used in these pie fillings, causing a runny consistency. Clear Jel is available among canning and freezing supplies in some stores. If you cannot find it, ask your county Extension home economist where to find it.

Because the variety of fruit may alter the flavor of the pie made with it, first can a single quart of filling and make a pie with it. After tasting, you can adjust the sugar and spices in the filling recipe to suit your personal preferences. Do not alter the amount of lemon juice in the recipe, as it aids in controlling the safety and storage stability of the fillings.

When using frozen cherries and blueberries in favorite recipes, select unsweetened fruit. If sugar has been added, rinse it off while fruit is frozen. Then collect, measure, and use juice from thawing fruit to partially replace the water specified in the recipe. With frozen fruit, use only ¼ cup Clear Jel per quart, or 1¾ cups for 7 quarts.

## Apple pie filling

	Quantities of Ingredients Needed For	
	1 Quart	7 Quarts
Blanched sliced apples	3½ cups	6 quarts
Granulated sugar	¾ cup + 2 tbsp.	5½ cups
Modified food starch*	¼ cup	1½ cups
Cinnamon	½ tsp.	1 tbsp.
Cold water	½ cup	2½ cups
Apple juice	¾ cup	5 cups
Bottled lemon juice	2 tbsp.	¾ cup
Nutmeg (optional)	¼ tsp.	1 tsp.
Yellow food coloring (optional)	1 drop	7 drops

\*Clear Jel, for example. Do not substitute cornstarch.

**QUALITY:**

Use firm, crisp apples. Stayman, Golden Delicious, Rome, and other varieties of similar quality are suitable. If apples lack tartness, use an additional ¼ cup of lemon juice for each 6 quarts of slices.

**PROCEDURE:**

Wash, peel, and core apples. Prepare slices ½-inch wide and place in water containing ascorbic acid to prevent browning (see “Maintaining Color and Flavor” on page 5 of this guide). For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar, food starch, cinnamon, and nutmeg in a large kettle with water, apple juice, and food coloring. Stir and cook on medium high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained apple slices immediately, and fill jars with mixture without delay, leaving 1-inch headspace. Adjust lids and process immediately.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process pints or quarts for 30 minutes.

## **Blueberry pie filling**

	Quantities of Ingredients Needed For	
	1 Quart	7 Quarts
Fresh or thawed blueberries	3½ cups	6 quarts
Granulated sugar	¾ cup + 2 tbsp.	6 cups
Modified food starch*	¼ cup + 1 tbsp.	2¼ cups
Cold water	1 cup	7 cups
Bottled lemon juice	3½ tsp.	½ cup
Blue food coloring (optional)	3 drops	20 drops
Red food coloring (optional)	1 drop	7 drops

\*Clear Jel, for example. Do not substitute cornstarch.

### **QUALITY:**

Select fresh, ripe, firm blueberries. Thawed frozen blueberries may be used. If sugar has been added, rinse off while fruit is still frozen.

### **PROCEDURE:**

Wash and drain blueberries. For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch 1 minute after the water returns to a boil. Drain and keep heated fruit in a covered bowl or pot. Combine sugar and food starch in a large kettle. Stir. Add water and, if desired, food coloring. Cook on medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained berries immediately, and fill jars with mixture without delay, leaving 1-inch headspace. Adjust lids and process immediately.

### **PROCESSING TIME:**

– *Boiling-water Canner*—Hot Pack: process pints or quarts for 35 minutes.

## **Cherry pie filling**

	Quantities of Ingredients Needed For	
	1 Quart	7 Quarts
Fresh sour cherries	3⅓ cups	6 quarts
Granulated sugar	1 cup	7 cups
Modified food starch*	¼ cup + 1 tbsp.	1¾ cups
Cold water	1⅓ cups	9⅓ cups
Bottled lemon juice	1 tbsp. + 1 tsp.	½ cup
Cinnamon (optional)	⅛ tsp.	1 tsp.
Almond extract (optional)	¼ tsp.	2 tsp.
Red food coloring (optional)	6 drops	¼ tsp.

\*Clear Jel, for example. Do not substitute cornstarch.

### **QUALITY:**

Select very ripe, firm cherries. Unsweetened frozen cherries may be used. If sweetened, rinse sugar off while still frozen.

### **PROCEDURE:**

Rinse and pit cherries, and soak in cold water until ready to use. To prevent browning of stem ends, use ascorbic acid solution (see “Maintaining Color and Flavor” on page 5 of this guide). For fresh fruit, place 6 cups at a time in 1 gallon of boiling water. Boil each batch 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar, food starch, and cinnamon in a large saucepan. Add water, food coloring, and almond extract, if desired. Stir mixture and cook over medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained cherries immediately, and fill jars with mixture without delay, leaving 1-inch headspace. Adjust lids and process immediately.

### **PROCESSING TIME:**

– *Boiling-water Canner*—Hot Pack: process pints or quarts for 35 minutes.

## **Mincemeat pie filling**

- 1 cup finely chopped suet**
- 3 pounds beef or 3 pounds venison and 1 pound sausage**
- 5 quarts chopped apples**
- 2 pounds dark seedless raisins**
- 1 pound white raisins**
- 2 quarts apple cider**
- 2 tablespoons ground cinnamon**
- 2 teaspoons ground cloves**
- 2 teaspoons ground nutmeg**
- 5 cups sugar**
- 2 tablespoons salt**

**YIELD:**

About 5 quarts.

**PROCEDURE:**

Cook suet and meat in water to avoid browning. Peel, core, and quarter apples. Put suet, meat, and apples through food grinder using a medium blade. Combine all ingredients in a large saucepan and simmer 1 hour or until slightly thickened. Stir often. Fill jars with mixture without delay, leaving 1 inch of headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Dial-gauge Pressure Canner*—Hot Pack: process quarts for 90 minutes at 12 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot Pack: process quarts for 90 minutes at 15 pounds of pressure.

## **Green tomato pie filling**

- 4 quarts chopped green tomatoes**
- 3 quarts peeled and chopped tart apples**
- 1 pound dark seedless raisins**
- 1 pound white raisins**
- ¼ cup minced citron, lemon or orange peel**
- 2 cups water**
- 2½ cups brown sugar**
- 2½ cups white sugar**
- ½ cup vinegar (5 percent)**
- 1 cup bottled lemon juice**
- 2 tablespoons ground cinnamon**
- 1 teaspoon ground nutmeg**
- 1 teaspoon ground cloves**

**YIELD:**

About 7 quarts.

**PROCEDURE:**

Combine all ingredients in a large saucepan. Cook slowly, stirring often, until tender and slightly thickened, about 35 to 40 minutes. Fill jars with hot mixture, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot Pack: process quarts for 20 minutes.

## **Peach pie filling**

	<b>Quantities of Ingredients Needed For</b>	
	<b>1 Quart</b>	<b>7 Quarts</b>
Sliced peaches	3½ cups	6 quarts
Granulated sugar	1 cup	7 cups
Modified food starch*	¼ cup + 1 tbsp.	2 cups + 3 tbsp.
Cold water	¾ cup	5¼ cups
Cinnamon (optional)	⅛ tsp.	1 tsp.
Almond extract (optional)	⅛ tsp.	1 tsp.
Bottled lemon juice	¼ cup	1¾ cups

\*Clear Jel, for example. Do not substitute cornstarch.

**QUALITY:**

Select ripe but firm peaches. Red Haven, Redskin, Sun High, and varieties of similar quality are suitable.

**PROCEDURE:** Peel peaches. To loosen skins, submerge peaches in boiling water for approximately 30 to 60 seconds, and then place in cold water for 20 seconds. Slip off skins and prepare slices ½-inch thick. Place slices in water containing anti-darkening agent available in grocery (1 teaspoon per quart of water) or six 500-milligram vitamin C tablets in 1 gallon of water to prevent browning.

For fresh fruit, place 6 cups at a time in 1 gallon boiling water. Boil each batch 1 minute after the water returns to a boil. Drain but keep heated fruit in a covered bowl or pot. Combine sugar, food starch, and cinnamon and/or almond extract in a large kettle of water. Stir and cook over medium-high heat until mixture thickens and begins to bubble. Add lemon juice and boil sauce 1 minute more, stirring constantly. Fold in drained peach slices and continue to heat mixture for 3 minutes. Fill jars without delay, leaving 1-inch headspace. Adjust lids and process immediately.

**PROCESSING TIME:**

– *Boiling-water Canner*—Hot Pack: process pints or quarts for 35 minutes.

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## Plums, *halved or whole*

**QUANTITY:**

An average of 14 pounds is needed per canner load of 7 quarts; an average of 9 pounds is needed per canner load of 9 pints. A bushel weighs 56 pounds and yields 22 to 36 quarts—an average of 2 pounds per quart.

**QUALITY:**

Select deep-colored, mature fruit of ideal quality for eating fresh or cooking. Plums may be packed in water or syrup.

**PROCEDURE:**

Remove stems and wash plums. To can whole, prick skins on two sides of plums with fork to prevent splitting. Freestone varieties may be halved and pitted. If you use syrup, prepare very light, light, or medium syrup (see page 4).

**Hot pack**—Add plums to water or hot syrup and boil 2 minutes. Cover saucepan and let stand 20 to 30 minutes. Fill jars with hot plums and cooking liquid or syrup, leaving ½-inch headspace.

**Raw pack**—Fill jars with raw plums, packing firmly. Add hot water or syrup, leaving ½-inch headspace. Adjust lids and process.

**PROCESSING TIME:**

- *Boiling-water Canner*—Hot or Raw Pack: process pints for 25 minutes; quarts, 30 minutes.
- *Dial-gauge Pressure Canner*—Hot or Raw Pack: process pints or quarts for 10 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot or Raw Pack: process pints or quarts for 10 minutes at 10 pounds of pressure.

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## Rhubarb, stewed

**QUANTITY:**

An average of 10½ pounds is needed per canner load of 7 quarts; an average of 7 pounds is needed per canner load of 9 pints. A lug box weighs 28 pounds and yields 14 to 28 quarts of rhubarb—an average of 1½ pounds per quart.

**QUALITY:**

Select young, tender, well-colored stalks from the spring or late fall crop.

**PROCEDURE:**

Trim and discard leaves. Wash stalks and cut into ½-inch to 1-inch pieces. In a large saucepan add ½ cup sugar for each quart of fruit. Let stand until juice appears. Heat gently to boiling. Fill jars without delay, leaving ½-inch headspace. Adjust and process.

PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process pints or quarts for 20 minutes.
- *Dial-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 7 pounds of pressure.
- *Weighted-gauge Pressure Canner*—Hot Pack: process pints or quarts for 8 minutes at 10 pounds of pressure.

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## Zucchini-Pineapple

**4 quarts cubed or shredded zucchini**

**46 ounces canned unsweetened  
pineapple juice**

**1½ cups bottled lemon juice**

**3 cups sugar**

YIELD:

8 to 9 pints.

PROCEDURE:

Peel zucchini, and either cut into ½-inch cubes or shred. Mix zucchini with other ingredients in a large saucepan and bring to a boil. Simmer 20 minutes. Fill jars with hot mixture and cooking liquid, leaving ½-inch headspace. Adjust lids and process.

PROCESSING TIME:

- *Boiling-water Canner*—Hot Pack: process half-pints or pints for 20 minutes.