B0430

University of Wisconsin–Madison Division of Extension

Wisconsin Safe Food Preservation Series

Canning Fruits Safely

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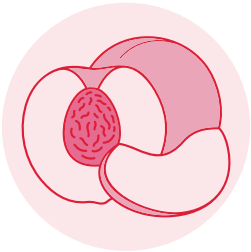
Caution against using white-fleshed peaches or nectarines



New research has shown that white-fleshed peaches and nectarines are **higher in pH and lower in acid** than traditional yellow-fleshed varieties. Do not use white-fleshed peaches or nectarines for any of the recipes in this publication. The recipes in this publication that call for peaches are only safe when using the yellow-fleshed variety.

Caution against canning elderberries and elderberry juice

Research published in 2015 investigated varietal characteristics of 12 different genotypes of elderberry (*Sambucus* spp.) grown in Oregon and Missouri. Over 400 samples were analyzed, and the average pH of the fruit was 4.92. Elderberries and their juice are **low in acid** (high in pH) **and cannot be safely used in Extension-recommended recipes** that have been tested with other berries that are naturally high in acid, such as blueberries or blackberries.

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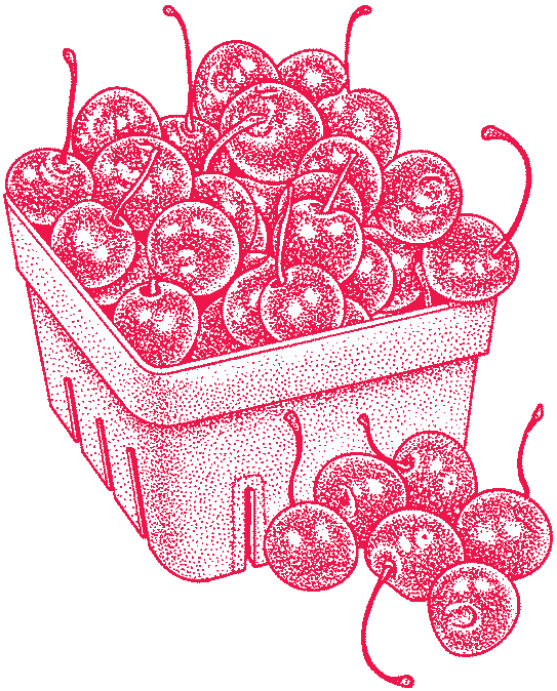
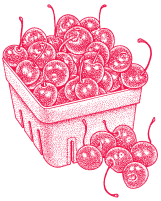




Do you ever wish you could savor the taste of orchard-fresh ripe, juicy fruit all year long? Canning is one way of preserving fruits, and it can be fun — and very rewarding. Follow these research-tested recipes for safe and easy preparation and preservation of your garden and orchard bounty.

Ripe, juicy cherries, peaches, pears and other fruits are some of the most delicious foods available. Canning fruits can bring a colorful touch of summer to family meals all year round.

Fruit can be safely and healthily canned in either a sweet syrup, or in water or fruit juice. Fruit canned in syrup holds its shape, color and flavor, even after canning. Canning fruit in water or fruit juice helps reduce the sugar content of the canned fruit.

Properly canned peaches, pears and plums are usually superior in quality to the same fruits when frozen. But other fruits, especially soft berries, look and taste better if you freeze them.

To avoid spoilage, all fruits must be heat processed after jars are properly filled and capped. Most recipes for canned fruit call for processing in a **boiling water canner**. This yields a safe, high quality product.

The processing times in this publication are designed to prevent spoilage caused by bacteria, yeasts or molds at Wisconsin elevations, and have been tested in U.S. Department of Agriculture laboratories or by food scientists at state universities.

Open-kettle canning — filling canning jars with hot fruit and then sealing the jars without heating the filled jars in a boiling water canner — is **not recommended** because of the likelihood of spoilage.

Start with the right ingredients

For the best quality canned fruit, use tree-ripened, undamaged fruits. Choose fruit ripe enough to eat. Under-ripe fruit will lack flavor and sweetness. Do not can over-ripe, bruised, moldy or damaged fruit, because an unsafe product may result.

Getting started

For safe, high quality canned fruit, use ripe, undamaged fruit and process in a boiling water canner.

Assembling equipment

Boiling water canners are available in several sizes. They should have a rack to keep jars off the bottom of the canner. Some canners have a divided rack or basket to help keep jars upright, and to make it easier to move jars in and out of the canner. The canner must have a tight-fitting lid.

For canning in quart jars, a canner that holds up to seven quart jars is convenient for use on most home ranges. Larger canners may be too big to fit well on even the largest burner of a 30-inch stove top.

For canning in pint jars, you can use a smaller canner or kettle with a rack — provided that the kettle is deep enough that water can be added to cover the jars by 1 to 2 inches and boil freely. The canner must also have a tight-fitting lid.

If a steam pressure canner is deep enough, it can be used as a boiling water canner. Fill the pressure canner with jars, cover with water, and place the lid on the canner. But do not lock the lid in place, and leave the petcock open or weighted pressure control off.

Alternately, fruits may be safely processed in a pressure canner, but this will not produce a high quality product. For instructions on pressure canning fruits, see page 13.

Process all fruits in a boiling water canner for a safe, high quality product. Any kettle deep enough to allow 1 to 2 inches of water to cover filled jars and boil freely can serve as a boiling water canner. The kettle must have a tight-fitting lid, and a rack or basket so jars do not rest on the bottom of the canner.

Preparing canning jars and lids

Jars: Use standard home canning jars free of cracks or chips. Wash jars in hot, soapy water and rinse well. Wash and rinse all metal screw bands. Keep jars hot until filled.

Sterilizing jars before filling them is not usually necessary, since boiling water processing will heat the jars and contents sufficiently. However, sterilizing is necessary when:

- using large volume jars such as half-gallons for canning fruit juice, or
- processing time is very short (less than 10 minutes).

Sterilize half-gallon jars by boiling for 10 minutes. Keep all jars in hot water until you are ready to fill them. This prevents breakage when the jars are filled with hot fruit or syrup.

Lids: The two-piece vacuum seal lid is the most popular and dependable for home canning. This consists of a flat metal lid with sealing compound to be used only once, and a reusable metal screw band. Follow package directions for pretreating lids.

Do not use porcelain-lined zinc caps or other lids with separate rubber rings. New rubber rings are no longer available.

Equipment you will need

Assemble the following items before you start to can fruit:

Colander, knife, melon baller, 1 to 2 large pans with covers, bowls, blanching basket, sieve, scale, measuring cups and spoons, mixing spoons, spice bag or cheesecloth, thermometer, timer, standard home canning jars, 2-piece lids, jar-filling supplies (funnel, ladle, rubber spatula, lid and jar lifters), pot holders, boiling water canner, wire rack, and labeling supplies.

Selecting fruit

For the best quality canned fruit, use only fresh, firm and undamaged fruits. Fruit should be ripe enough to eat. Fruit allowed to ripen on the plant is sweetest, and first choice to preserve.

Work in small batches as fruit ripens.

If you buy fruit to process, sort out the ripest first, allowing the rest to ripen before canning. Under-ripe fruit will not have fully developed flavor, and will lack natural sweetness.

You can hasten the ripening of some fruits by placing them in a paper bag with an apple, folding over the top of the bag, and letting the fruit stand on your kitchen counter for a day or two. Open the bag each day and remove ripened fruit. Under-ripe fruits that benefit from this treatment include apples, apricots, peaches, pears, plums and tomatoes.

Although it is possible to can soft berries such as strawberries or blackberries, freezing will produce a more attractive product. Ask your county UW-Extension office for the publication *Freezing Fruits and Vegetables* (B3278), also available from Cooperative Extension Publications (learningstore.uwex.edu).

Do not can over-ripe, bruised, moldy or damaged fruit, because an unsafe product may result.

Fruit varieties recommended for Wisconsin can be found in these publications, available from your county UW-Extension office (www.uwex.edu/ces/cty) or Cooperative Extension Publications (learningstore.uwex.edu):

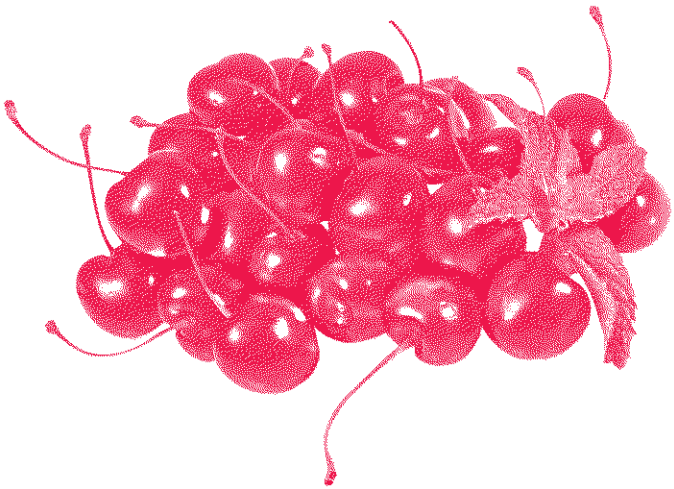
***Apple Cultivars for Wisconsin* (A2105)**

***Home Fruit Cultivars for Northern Wisconsin* (A2488)**

***Home Fruit Cultivars for Southern Wisconsin* (A2582)**

The number of quarts of canned fruit you can get from a given quantity of fresh fruit depends on the fruit's quality, variety, maturity and size. Yield will also vary according to the size of the pieces canned and whether the fruit is packed hot or raw.

The following chart is a rough guide to help you estimate the amount of canned product you can get from fresh fruit.



YIELD OF CANNED FRUIT FROM FRESH*

Fruit	Measure	Quarts needed	Pounds per quart
Apples	1 bu. (48 lbs.)	16 to 20	2 1/2 to 3
Apples, for sauce	1 bu. (48 lbs.)	15 to 18	2 1/2 to 3 1/2
Apricots	1 lug (24 lbs.)	9 to 12	2 to 2 1/2
Berries — except strawberries and cranberries	24-qt. crate (36 lbs.)	12 to 18	1 1/2 to 3 (1- to 2-qt. boxes)
Cherries, with stems, unpitted	1 lug (15 lbs.) 1 bu. (56 lbs.)	6 to 7 22 to 32	2 to 2 1/2 2 to 2 1/2
Cranberries	1 box (25 lbs.) 1 bu. (100 lbs.)	25 100	1 1
Figs	1 box (6 lbs.)	2 to 3	2 to 2 1/2
Grapes	4-qt. basket (4 lbs.) 12-qt. basket 1 bu. (48 lbs.)	1 3 to 4 10 to 12	4 4 4
Nectarines	1 flat (18 lbs.)	6 to 9	2 to 3
Peaches	1 bu. (50 lbs.)	19 to 25	2 to 2 1/2
Pears	1 crate (22 lbs.) 1 box (46 lbs.) 1 bu. (50 lbs.)	8 to 11 19 to 23 20 to 25	2 to 2 1/2 2 to 2 1/2 2 to 2 1/2
Plums	1 bu. (56 lbs.)	24 to 30	2 to 2 1/2
Rhubarb	15 lbs.	7 to 11	2
Strawberries	24-qt. crate (36 lbs.)	12 to 16	6 to 8 cups

* A lug is a shipping container for produce. Weights and measures are those set for Georgia by the Georgia Department of Agriculture, adapted with permission from *So Easy to Preserve* Bulletin 989 by Elizabeth L. Andress and Judy A. Harrison (Athens, Ga.: University of Georgia College of Family and Consumer Sciences), 2006.

Note: bu. = bushel lb. = pound qt. = quart

32 quarts = 4 pecks = 1 bushel

Preparing fruit

Wash fruits just before processing them, including those you will peel. Dirt contains some of the bacteria hardest to destroy. Wash small amounts at a time under running water or through several changes of water, lifting the fruit out of the water so dirt that has been washed off will not settle back on the food. A colander is a handy tool for thoroughly washing fruit.

Handle berries very carefully and do not let them soak in water.

Wash fruits just before canning. Most fruits should be scrubbed individually under running water. Delicate fruits such as berries can be rinsed and drained using a colander.

Preventing browning

Many light-colored fruits will darken rapidly after peeling exposes them to oxygen. This is called oxidative browning. There are several ways to prevent this color change using antioxidants.

Ascorbic acid — vitamin C — is effective in preventing oxidation of most fruits. Ascorbic acid is most readily available in tablets. Pharmacies, groceries and health food stores all sell vitamin C tablets of various strengths measured in milligrams (mg). Fillers in these tablets may make syrup cloudy, but are not harmful.

To use vitamin C tablets to prevent browning, first crush or grind to a fine powder. Use three 500 mg tablets (1500 mg total) per quart of water as a dip for sliced apples, peaches, pears or similar fruits while you get them ready. Place prepared fruit in the dip for 1 minute, then drain.

Ascorbic acid may also be crushed and added to:

- **syrup for syrup packs** — 1500 mg per quart of cold syrup — or
- **fruit purées and juices** — 500 mg per quart.

Ascorbic acid mixtures such as FruitFresh,®* can be purchased at most grocery stores. These are most often a mix of ascorbic acid and sugar. Follow the package directions for use.

* Reference to products is not intended to endorse them, nor to exclude others that may be similar. If you use these products, follow the manufacturer's current label directions.

The cut surfaces of some fruits such as apples, apricots, peaches and pears darken quickly when exposed to air. You can prevent darkening by:

- **dipping in a solution of vitamin C — 1500 mg per quart of water,**
- **sprinkling with a commercial ascorbic acid mixture as the package directs, or**
- **dipping in a solution of bottled lemon juice — 3 tablespoons per quart of water.**

Lemon juice or **citric acid** can help prevent darkening of some fruits — but not as effectively as ascorbic acid. Use 3 tablespoons bottled lemon juice per quart of water as a dip. Place prepared fruit in the dip for 1 or 2 minutes, then drain.

Sweetening fruit

Sweetening with sugar syrup: Sugar helps canned fruit hold its shape, color and flavor. For that reason, sugar syrups are called for in most canning instructions. Use 1 to 1 1/2 cups of syrup per quart to cover the fruit.

To make sugar syrup: Mix sugar with water or fruit juice. Use a syrup suited to the fruit's natural sweetness and your taste. Fruit canned in lighter syrup will have fewer calories and be more economical.

Proportions of sugar and liquid for various syrups are listed in the chart below. Heat sugar and water or juice together until the sugar dissolves.

- If you are packing fruit raw, bring the syrup to a boil. Pour boiling hot syrup over fruit in jars.
- If you are packing fruit hot, cook fruit in syrup before packing into jars.

Proportions for sugar syrups

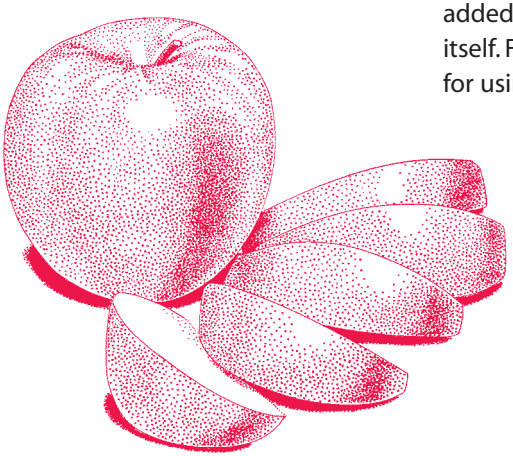
Syrup	Water or juice	Sugar	Yield of syrup	Calories per cup
Very light	4 cups	1/2 cup	4 cups	77
Light	4 cups	1 cup	4 1/2 cups	154
Medium	4 cups	2 cups	5 cups	308
Heavy	4 cups	3 cups	5 1/2 cups	420
Very heavy	4 cups	4 cups	6 1/2 cups	563

Note: 1 quart = 2 pints = 4 cups

Sweeteners other than sugar: Light corn syrup or mild-flavored honey can replace up to half the sugar in canning fruit.

Do not use brown sugar, molasses, sorghum or other strong-flavored syrups. Their flavors overpower the fruit flavor, and may darken the fruit.

Using fruit juice to sweeten fruit: Most fruits can be successfully canned in unsweetened fruit juice or water, rather than the traditional sugar syrup. Fruit juices may be canned without sweeteners as well. Because sugar is not used to prevent spoilage, processing times are the same for unsweetened fruit as for fruits in syrup.



For the best flavor and eating quality, select fully ripe yet firm fruits, and can them in their own juice, or in a mild fruit juice such as white grape juice. Apple juice, white grape juice, pineapple juice or blends of these three juices are all good for canning many fruits.

A juice-packed fruit will usually be more flavorful than a water pack because the natural fruit flavors are not diluted by water surrounding the pieces of fruit. However, either may be used as an alternative to sugar syrup.

If you are on a diabetic exchange diet, count exchanges for home preserved no-sugar-added fruits as you would fresh or commercially prepared sugar-free fruits. Remember, however, that juice-packed products do contain some added natural sugars from the juice itself. Follow your diet's instructions for using juice-packed fruits.

Suggested juice syrups*

Apple/mixed juice syrups

Juice syrup	Fruit juice	Bottled lemon juice	Boiling water	Yield of syrup
Light	1/3 cup apple	1 teaspoon	2/3 cup	1 cup
Medium	2/3 cup apple 2/3 cup apple-pear	1 1/4 teaspoon 1 teaspoon	1/3 cup 1/3 cup	1 cup 1 cup
Heavy	1/2 cup apple concentrate (frozen)	1 1/2 teaspoon	1/2 cup	1 cup

White grape juice syrups

Juice syrup	White grape juice	Bottled lemon juice	Boiling water	Yield of syrup
Light	1/4 cup	1 teaspoon	3/4 cup	1 cup
Medium	1/2 cup	1 1/2 teaspoon	1/2 cup	1 cup
Heavy	1 cup	2 teaspoons	None	1 cup

* Yields are approximate. Adapted from *Canning & Preserving Without Sugar* © 2000 by Norma MacRae with permission from The Globe Pequot Press, Guilford, Connecticut, (800) 962-0973, www.globe-pequot.com.

Using sugar substitutes (artificial sweeteners): In general, non-nutritive sweeteners are not recommended for canning. Sugar substitutes containing aspartame (brand names Equal® and NutraSweet®) lose their sweetening power on heating, and should not be used for canning. Saccharine-based sweeteners — such as Sweet 'N Low®, Sugar Twin® or Sweet 10® — become bitter on prolonged heating.

Sucralose® — also labeled Splenda® — is a relatively new non-nutritive sweetener made from sugar. This stable sweetener will not produce an aftertaste on heating, and may be used in canning fruits.**

Follow package directions if you use non-nutritive sweeteners in canning.

Many fully ripe fruits can be successfully canned in unsweetened fruit juice or water.

You can add sugar substitutes to the fruit or juice before serving.

** Reference to products is not intended to endorse them, nor to exclude others that may be similar. If you use these products, follow the manufacturer's current label directions.

Fruit can be canned in a sugar-based syrup, fruit juice or water. Sugar helps canned fruit hold its shape, color and flavor. For that reason, sugar syrups are called for in most canning instructions. But for those seeking to limit the sweetness or calories of canned fruit, many fruits can be successfully canned in unsweetened fruit juice. Fruit canned in juice should be fully ripe, and canned in its own juice when possible. Because sugar is not required to prevent spoilage, processing times are the same for fruit canned in syrup or in juice.

Hot pack: Heat fruits in syrup, juice or water for packing. Juicy fruits may be preheated without added liquid and packed in the juice that cooks out. Pack hot fruit loosely into clean, hot jars. Be sure to leave the recommended amount of headspace.

Syrup or other liquid should completely cover the fruit and fill in around solid pieces in the jar. Fruit at the top of the jar tends to darken if it is not covered with liquid.

To prevent light-colored fruit such as apples, peaches or pears from darkening during storage, add a small amount of ascorbic acid or citric acid — 1/4 teaspoon per quart — to each jar before processing.

Packing fruit into jars

Before filling clean, hot jars, pretreat two-piece vacuum seal lids as the package directs.

Fruits may be packed raw into jars or preheated and packed hot. Fruits are less likely to float in syrup if they are packed hot.

Raw pack: Put cold, raw fruit into clean, hot jars and cover with boiling hot syrup, juice or water. Most raw fruits should be tightly packed, since they will shrink slightly during processing. But do leave the full amount of headspace required between the top of the liquid and the top of the jar (see next page).

Fruits may be packed raw or hot into clean, hot jars:

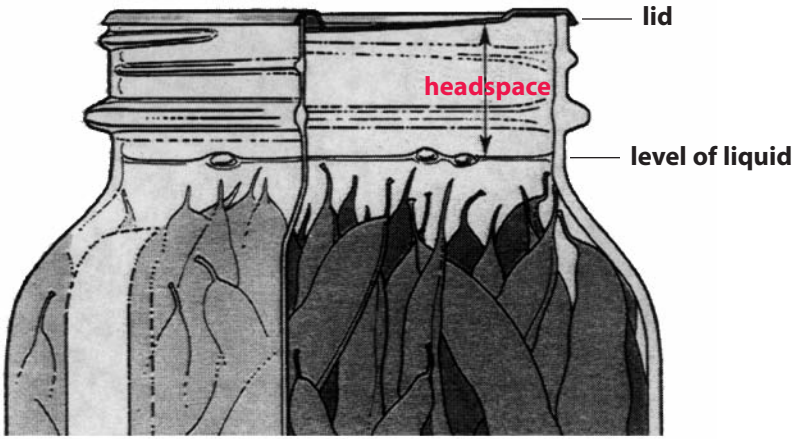
- **For raw pack, tightly pack raw fruit into jars and cover with boiling hot syrup, juice or water.**
- **For hot pack, heat fruit first in syrup, water or juice, then loosely pack hot into jars with hot liquid.**

Headspace is the unfilled space above the food in a jar and below the lid. When canning fruits, most recipes call for 1/2-inch headspace. See the illustration below.

Remove air bubbles by sliding a rubber spatula or bubble freer between the fruit and the sides of the jar in several places. Add hot liquid as needed to adjust headspace to the recommended level.

Wipe jar rims and threads with a clean damp cloth or towel to remove any food particles or syrup. Place a pretreated lid on each jar. Screw the metal band on firmly, but not too tightly.

During processing, the metal bands will expand enough to allow air and steam to escape from jars. Then, as contents cool after processing, the remaining steam condenses and a partial vacuum forms. This keeps the center of the lid depressed when the jar is properly sealed.



Reprinted with permission from *Complete Guide to Home Canning*. Agriculture Information Bulletin No. 539 (Washington, D.C.: U.S. Department of Agriculture), 2008: www.uga.edu/nchfp/

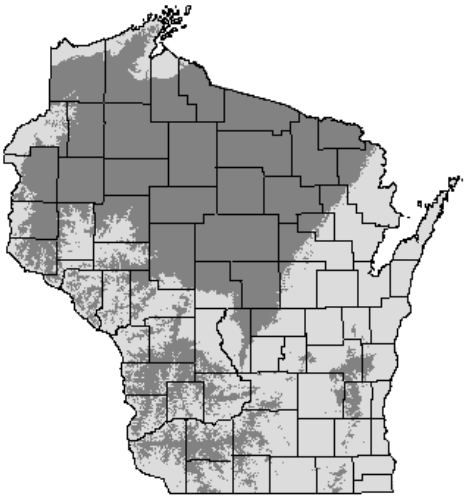
Processing in a boiling water canner

Whether you packed fruit raw or hot determines how hot the canner will be when you add the jars. Fill a boiling water canner with:

- **hot water** (140˚ F) for raw-packed fruits.
- **very hot water** (170˚ F) for hot–packed fruits.

Place filled jars in enough hot water to cover the jars and lids by at least 1 inch. Add boiling water carefully around jars if needed to bring the level to this point. Do not pour boiling water directly on jar lids.

Put a tight-fitting lid on the canner. When the water returns to a full rolling boil, start counting the processing time. Process for the time indicated. Adjust processing time for elevation if needed.



Remember to adjust for elevation above sea level when boiling water canning. Wisconsin elevations vary from 580 to 1,953 feet above sea level. Using the process time for sea level may lead to spoilage if you live at higher elevations. **If you live above 1,000 feet elevation, increase all boiling water canner processing times by 5 minutes.** For example, process apple slices (page 15) for 20 minutes (pints or quarts) for elevations up to 1,000 feet and 25 minutes for elevations above 1,000 feet.

When the processing time is complete, carefully remove jars from the canner without tilting, and place them upright on a rack or counter. Do not cover the jars during cooling.

Elevation map

Remember to adjust for elevation above sea level when canning fruits. Consult the elevation map, or call your county Land Information office (listed under county government in your phone book). If you share recipes with friends and relatives, be sure to include adjustments for changes in elevation.

Elevation above 1,000 feet

Elevation below 1,000 feet

Source: *Wisconsin Geological and Natural History Survey*

Do not retighten the bands on two-piece lids, even though they will be loose. If liquid has boiled out during processing, do not remove the lid to add more. As the jar of fruit cools, the lid will snap down in the center, forming a concave surface.

When jars have cooled, test for seal. Lid tops should be depressed and remain that way, and will ring when tapped with a spoon. After 24 hours, you can carefully remove the screw bands.

Wash and dry the jar lids and threads. Label, date and store the jars in a cool, dry place out of direct sunlight for up to 1 year.

When jars fail to seal

If any jars fail to seal, use the fruit right away, or refrigerate it and use it within a day or two.

Jars of fruit that fail to seal can also be reprocessed within 24 hours. Repack the jars with hot fruit and boiling syrup, and process it just as if it were freshly packed. Use new lids for reprocessing.

Canning fruits in a pressure canner

Fruits may be safely processed in a pressure canner, but may overcook and become mushy. A boiling water canner is preferable for most fruits.

Pressure canners have dial gauges or weighted gauges. Pressure is measured in **pounds per square inch (psi)**. When pressure is applied, water boils at a temperature higher than the boiling point — 212˚ F at sea level. Food can be processed in a pressure canner quickly and safely at these higher temperatures.

If you choose to process fruit in a pressure canner, always **hot-pack fruit**, and process pints or quarts:

- **10 minutes at 6 pounds pressure (6 psi) in a dial-gauge pressure canner,** or
- **10 minutes at 5 pounds pressure (5 psi) in a weighted gauge pressure canner for elevations up to 1,000 feet; 10 minutes at 10 pounds pressure for elevations above 1,000 feet** (see elevation map on page 12).

These processing times and pressures will produce a safe product at all Wisconsin elevations, but may over-process some fruits unnecessarily.

Fruits that can be successfully pressure canned are noted in the following Canning Fruits Guide.

Storing canned fruit

Remove screw bands carefully, and wipe the outside of the jars before storing. Label each jar to show the date canned, variety or other pertinent information about the product. Store in a cool, dry place out of direct sunlight for up to 1 year.

Protect jars from freezing if you store them in an unheated area. Freezing will not make the fruit unsafe to eat unless the liquid in the jar expands enough to break the seal. Freezing makes the texture of canned fruits less desirable.

Do not taste any suspect foods.

Before using home-canned fruits: Check the jar carefully before opening it. Bulging jar lids, loose lids or leaks all indicate possible spoilage. When a container is opened, look for other signs — spurting liquid, off-odors or mold. Discard any foods showing these signs of spoilage.

Follow instructions carefully to ensure safe, high quality home-canned fruit. After processing, label each jar, and store in a cool, dry, dark place for up to 1 year. Check for signs of spoilage — mold, bulging lids, bubbles — before consuming jar contents. And remember: If in doubt, throw it out!

Use the following canning guidelines:

Preventing browning (antioxidants), page 6

Sugar syrups, page 7

Fruit-based syrups, page 9

Times in this guide are for processing in a boiling water canner yielding a safe, high quality product. If you have a steam pressure canner that is deep enough, you can use it as a boiling water canner — with the lid on but not locked in place, and the petcock open or weighted gauge off.

Apple rings, spiced; hot pack

12 lbs. firm tart apples (no larger than 2 1/2 inches)

12 cups sugar

6 cups water

1 1/4 cups white vinegar (5% acetic acid)

3 tbsp. whole cloves

3/4 cup red hot cinnamon candies or 8 cinnamon sticks

1 tsp. red food coloring (optional)

Wash apples. To prevent browning, peel and slice one apple at a time. Immediately cut crosswise into 1/2-inch slices, remove core area with a melon baller, and immerse in an antioxidant solution (see page 6). To make syrup, combine sugar, water, vinegar, cloves, cinnamon candies or cinnamon sticks, and food coloring if desired in a 6-quart saucepan. Stir, heat to boil, and simmer 3 minutes. Drain apple rings, add to hot syrup, and cook 5 minutes.

Pack hot rings and syrup into clean, hot jars (preferably wide-mouth), leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 10 minutes for half–pints or pints.*

Apples, sliced; hot pack

Select apples that are juicy, crispy, and preferably both sweet and tart. Wash, peel and core apples. To prevent browning, slice apples into water containing an antioxidant solution (see page 6). Drain slices, weigh, and place in a large saucepan. Add 2 cups water or very light, light, or medium sugar or fruit juice syrup (see page 7 or 9) per 5 pounds of sliced apples. Boil 5 minutes, stirring occasionally to prevent burning.

Pack hot apple slices into clean, hot jars and cover with boiling water or syrup, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for pints or quarts.*

Note: Sliced apples can be successfully canned in a pressure canner. See processing directions on page 13.

*Adjust time for elevation; see map on page 12.

Note: **lb. = pound** **mg. = milligram** **1 quart = 2 pints = 4 cups**
tbsp. = tablespoon **tsp. = teaspoon**

Applesauce; hot pack

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. Wash, peel and core apples. To prevent browning, slice apples into an antioxidant solution (see page 6). Drain slices and place into an 8- to 10-quart kettle. Add 1/2 cup water. Heat quickly until tender 5 to 20 minutes, stirring occasionally to prevent burning. Press through a sieve or food mill, or skip the pressing step if you desire 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.

Pack hot sauce into clean, hot jars, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints, 20 minutes for quarts.*

Note: Applesauce can be successfully canned in a pressure canner. See processing directions on page 13.

*Adjust time for elevation; see map on page 12.

Apricots; hot or raw pack

Select firm, well-colored mature fruit of ideal quality for eating fresh. Wash fruit. To remove skins, 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 and remove pits. To prevent darkening, keep fruit in an antioxidant solution (see page 6). Prepare and boil a very light, light, or medium syrup, or pack apricots in water, apple juice or white grape juice (see page 7 or 9).

Hot pack: Drain fruit. In a large saucepan, place drained fruit in syrup, water or juice and bring to a boil. Fill clean, hot jars with hot fruit and cooking liquid, leaving 1/2-inch headspace. Place halves in layers, cut side down. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for pints, 25 minutes for quarts.*

Raw pack: Fill clean, hot jars with layers of fruit, cut side down. Add hot syrup or juice, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 25 minutes for pints, 30 minutes for quarts.*

Note: Apricots can be successfully canned in a pressure canner. See processing directions on page 13.

Berries, whole

Hot or raw pack:
Blueberries, currants, gooseberries and huckleberries

Raw pack:
Blackberries, boysenberries and raspberries

Choose ripe, sweet berries with uniform color. Wash 1 or 2 quarts of berries at a time. Drain, cap and stem if necessary. For gooseberries, snip off heads and tails with scissors. Prepare and boil syrup (see page 7 or 9), if desired. Add 1/2 cup syrup, juice or water to each clean canning jar.

Hot pack: Heat berries for 30 seconds in boiling water and drain. Fill clean, hot jars with drained berries, and cover with hot juice or syrup, leaving 1/2-inch headspace. Remove bubbles, wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints or quarts.*

Raw pack: Fill clean, hot jars with any of the washed, raw berries, shaking gently to get a full pack. Cover with boiling syrup, juice or water, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints, 20 minutes for quarts.*

Caution: Do not can elderberries. An unsafe product may result.

Note: Freezing berries produces a more flavorful and attractive product.

Cherries, sweet or tart; hot or raw pack

Sort, stem and wash cherries. Remove pits if desired. If pitted, place cherries in an antioxidant solution (see page 6) to prevent stem-end darkening. If canned unpitted, prick skins on opposite sides with a clean needle to prevent splitting. Cherries can be canned in water or juice syrup (see page 9) or sugar syrup (see page 7).

Hot pack: Drain cherries. In a large saucepan, add 1/2 cup water, juice or syrup for each quart (4 cups) of drained fruit. To prevent browning, add 1/4 teaspoon ascorbic acid to each quart jar. Bring fruit mixture to a boil, stirring to prevent sticking. Fill clean, hot jars with hot cherries and cooking liquid, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints, 20 minutes for quarts.*

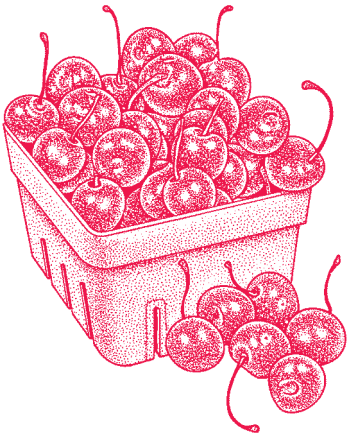
continued

Cherries, sweet or tart; hot or raw pack *(continued)*

Raw pack: Pack fruit into clean, hot jars, shaking jars to get a full pack. To prevent browning, add 1/4 teaspoon ascorbic acid to each quart jar. Cover with boiling apple juice or white grape juice, water or syrup (see page 7 or 9), leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 25 minutes for pints or quarts.*

Note: Cherries can be successfully canned in a pressure canner. See processing directions on page 13.



Cranberries, whole; hot pack

Make heavy syrup (see page 7). Wash, sort and remove stems from cranberries. Drop cranberries into boiling syrup. Boil 3 minutes.

Pack hot into clean, hot jars, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints or quarts.*

Cranberry sauce; hot pack

1 quart cranberries

1 cup water

2 cups sugar

Wash and sort cranberries. Cook berries in water until soft. Press through a fine sieve. Add sugar and boil 3 minutes.

Pour boiling hot sauce into clean, hot jars, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints or quarts.*

*Adjust time for elevation; see map on page 12.

Crabapples, spiced; hot pack

5 lbs. crabapples

4 1/2 cups apple vinegar (5% acetic acid)

3 3/4 cups water

7 1/2 cups sugar

4 tsp. whole cloves

4 sticks cinnamon

6 cubes of fresh ginger root, 1/2-inch square

Remove blossom petals and wash crabapples, but leave stems attached. Puncture the skin of each crabapple four times with an ice pick or tooth pick. 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 1/3 of the crabapples at a time in the boiling vinegar/syrup solution for 2 minutes. Place cooked fruit 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 clean, hot pint jars with apples and hot syrup, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

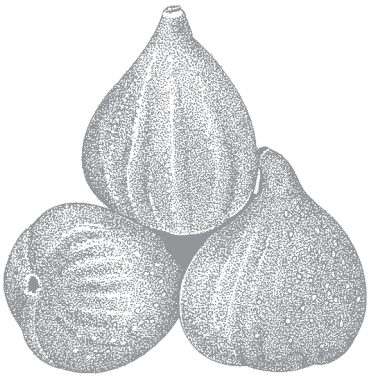
Process in a boiling water canner: 20 minutes for pints.*

Figs; hot pack

Wash figs thoroughly in clean water. Drain. Do not peel or remove stems. Cover figs with water and boil 2 minutes. Drain. Gently boil figs in light syrup (see page 7 or 9) for 5 minutes.

All home-canned figs must be acidified. Add to each quart jar 2 tablespoons bottled lemon juice; add to each pint jar 1 tablespoon bottled lemon juice. Fill clean, hot jars with hot figs and cooking syrup, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 45 minutes for pints, 50 minutes for quarts.*



Fruit cocktail; raw pack

3 lbs. peaches (12 medium)

3 lbs. pears

1 1/2 lbs. slightly under-ripe seedless green grapes

10-oz. jar maraschino cherries

3 cups sugar

4 cups water

Stem and wash grapes, and keep in an antioxidant solution (see page 6). Wash other fruits. Dip ripe but firm peaches, a few at a time, in boiling water for 1 to 1 1/2 minutes to loosen skins. Dip in cool water and slip off skins. Cut skinned peaches in half, remove pits, cut into 1/2-inch cubes and keep in the anti-browning solution with grapes. Peel, halve and core pears. Cut into 1/2-inch cubes, and keep in solution with grapes and peaches. Drain mixed fruit. To prepare syrup, combine sugar and water in a saucepan and bring to boil or use one of the recipes on page 7 or 9.

Ladle 1/2 cup hot syrup into each clean, hot jar. Add a few cherries to each jar. Then gently fill with mixed fruit and more hot syrup, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for half-pints or pints.*

Yield: About 6 pints

Fruit juice; hot pack

Wash and crush fruit. To extract juice, heat to simmering and strain through a damp jelly bag or cheesecloth, or press through a sieve or food mill. Add sugar if desired. Do not sweeten juice if you plan to use it for making jelly later. Refrigerate juice for 24 to 48 hours to allow sediment to settle out. Without mixing, carefully pour off clear liquid and discard sediment. Strain clear liquid through a paper coffee filter or double layers of cheesecloth. Rapidly heat juice in a large saucepan, stirring occasionally, until juice begins to boil.

Sterilize clean jars by covering with water and boiling for 10 minutes. Remove and drain hot sterilized jars for filling.

Pour hot juice into **sterilized** pint, quart or half-gallon jars, leaving just 1/4-inch headspace. Wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 5 minutes for pints or quarts, 10 minutes for half-gallons.*

Caution: Do not use elderberry juice. An unsafe product may result.

*Adjust time for elevation; see map on page 12.

Fruit puree — Except those listed below;* hot pack

Stem, wash, drain, peel and remove pits, if necessary. Measure fruit into a large saucepan, crushing slightly if desired to create a smoother purée. Add 1 cup hot water for each quart of fruit. Cook slowly until fruit is soft, stirring often. Press through a sieve or food mill. If desired for flavor, add sugar to taste. Reheat pulp and boil until sugar dissolves.

Pack hot purée into clean, hot pint or half-pint jars, leaving just 1/4-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints or quarts.*

Note: Fruit purées can be successfully canned in a pressure canner. See processing directions on page 13.

*** Caution: Do not can** fig, tomato, elderberry, or the puree of white-fleshed peaches or nectarines. An unsafe product may result.

Grapes, whole; hot or raw pack

Choose unripe, tight-skinned, preferably green seedless grapes harvested 2 weeks before they reach optimum eating quality. Stem, wash and drain grapes. Prepare very light or light syrup (see page 7 or 9).

Hot pack: Blanch grapes in boiling water for 30 seconds. Drain. Fill clean, hot jars with hot grapes and hot syrup, leaving 1-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 10 minutes for pints or quarts.*

Raw pack: Fill clean, hot jars with raw grapes and cover with hot syrup, leaving 1-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints, 20 minutes for quarts.*

Peaches or nectarines, halved or sliced; hot or raw pack

Wash fruit and dip in boiling water for 30 to 60 seconds until skins loosen. Dip quickly into cold water and slip skins off. Cut in half and remove pits, slice if desired. To prevent browning, keep peeled fruit in an antioxidant solution (see page 6). Drain before heating. Prepare and boil a very light, light or medium syrup (see page 7 or 9). Or pack peaches in water, apple juice or white grape juice.

Hot pack: Place prepared peaches in a large saucepan and heat in syrup, water or juice. Very juicy peaches may be heated with sugar and no added liquid. Bring to a full boil. Fill clean, hot jars with hot fruit and liquid, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for pints, 25 minutes for quarts.*

Raw pack: Fill hot jars with raw fruit, cut side down, and add hot water, juice or syrup, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 25 minutes for pints, 30 minutes for quarts.*

Note: Peaches can be successfully canned in a pressure canner. See processing directions on page 13.

Pears; hot pack

Wash and peel pears. Cut lengthwise into halves and remove cores. To prevent browning, dip pears in an antioxidant solution (see page 6). Prepare a very light, light or medium syrup (see page 7 or 9). Or pack pears in apple juice, pear juice or water. Boil drained pears 5 minutes in syrup, juice or water.

Fill clean, hot jars with hot pears and cooking liquid, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for pints, 25 minutes for quarts.*

Note: Pears can be successfully canned in a pressure canner. See processing directions on page 13.

Asian pears are lower in acid than other varieties and acid must be added to each jar before canning. Follow the recipe for pears (above), adding 1 tablespoon bottled lemon juice per pint jar or 2 tablespoons per quart jar. Process in a boiling water canner as directed above.

Caution: Do not use white-fleshed peaches or nectarines. An unsafe product may result.

Plums, halved or whole; hot or raw pack

Select deep-colored, mature fruit of ideal quality for eating fresh or cooking. Stem and wash plums. To can whole, prick skins to prevent splitting. Freestone varieties can be halved and pitted. Prepare a very light, light or medium syrup (see page 7 or 9). Or heat water for packing fruit.

Hot pack: Add plums to hot water or hot syrup and boil 2 minutes. Cover saucepan and let stand 20 to 30 minutes. Fill clean, hot jars with hot plums and cooking liquid or syrup, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for pints, 25 minutes for quarts.*

Raw pack: Fill clean, hot jars with raw plums, packing tightly. Cover with boiling syrup, juice or water, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 20 minutes for pints, 25 minutes for quarts.*

Note: Plums can be successfully canned in a pressure canner. See processing directions on page 13.

Rhubarb, stewed; hot pack

Trim leaves from stalks and discard. Rhubarb leaves are toxic. Wash stalks and cut into 1/2-inch pieces. Measure fruit into a large saucepan, and add 1/2 cup sugar per quart of rhubarb. Let stand at room temperature 2 to 3 hours to draw out juice, or add to the saucepan 1/4 cup water for each cup of rhubarb. Slowly heat rhubarb in juice or water, stirring to prevent sticking. Bring to a boil.

Ladle hot rhubarb and juice into clean, hot jars, leaving 1/2-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Process in a boiling water canner: 15 minutes for pints or quarts.*

Note: Stewed rhubarb can be successfully canned in a pressure canner. See processing directions on page 13.

*Adjust time for elevation; see map on page 12.

Berry syrup

Fresh or frozen blueberries, cherries, grapes, raspberries (black or red), and strawberries

Select 6 1/2 cups of fresh or frozen fruit of your choice. Wash, cap, stem, and crush fresh fruit in a saucepan. Heat to boiling and simmer until soft (5 to 10 minutes). While hot, strain mixture 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. Combine 4 1/2 to 5 cups juice with 6 3/4 cups of sugar in a large saucepan, bring to boil, and simmer 1 minute. To make 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 1/2 inch headspace. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 9 half-pints

Process in a boiling water canner: 10 minutes for half-pints or pints*.

*Adjust time for elevation; see map on page 12.

Canned lemon curd; hot pack

2 1/2 cups superfine sugar†

1/2 cup fresh lemon zest (optional)

1 cup bottled lemon juice (not fresh)

3/4 cup unsalted butter, chilled, cut into 3/4" pieces

7 large egg yolks

4 large whole eggs

Yield: 3 to 4 half-pint jars

1. Combine the sugar and lemon zest in a small bowl, stir to mix, and set aside for about 30 minutes. Pre-measure the lemon juice and prepare the chilled butter pieces.
2. Heat 3 inches of water in the bottom pan of the double boiler until it boils gently.
3. In the top of the double boiler, on the countertop or table, whisk the egg yolks and whole eggs together until thoroughly mixed. Slowly whisk in the sugar and zest, blending until well-mixed and smooth. Blend in the lemon juice and then add the butter pieces to the mixture.

LEMON CURD

4. Place the top of the double boiler over boiling water in the bottom pan. Stir gently but continuously to prevent the mixture from sticking to the bottom of the pan. Continue cooking until the mixture reaches a temperature of 170˚F.
5. Remove the double boiler pan from the stove and place on a dish cloth or towel on the countertop. Continue to stir gently until the curd thickens (about 5 minutes). Strain curd through a mesh strainer into a glass or stainless steel bowl; discard collected zest.
6. Fill hot, strained curd into clean, hot half-pint jars, leaving 1/2 inch headspace. Remove air bubbles, wipe jar rims and adjust lids.

Process in a boiling water canner: half-pints for 15 minutes.*

Caution: Do not heat the water in the canner to more than 180˚F before jars are added. If the water in the canner is too hot when jars are added, the process time will not be long enough. The time it takes for the canner to reach boiling after the jars are added is expected to be 25 to 30 minutes for this product. Process time starts after the water in the canner comes to a full boil over the tops of the jars.

Shelf life: For best quality, store in a cool, dark place (away from light). Plan to use canned lemon curd within 3 to 4 months. Browning and/or separation may occur with longer storage; discard any time these changes are observed.

Variation: For lime curd, use the same recipe but substitute 1 cup bottled lime juice and 1/4 cup fresh lime zest for the lemon juice and zest.

Other citrus or fruit curds are not recommended for canning at this time.

Freezing lemon curd: Prepared lemon curd can also be frozen for up to 1 year instead of canned. Package in freezer containers after straining and cooling to room temperature. Thaw in refrigerator and use within 4 weeks.

Notes: †If superfine sugar is not available, run granulated sugar through a grinder or food processor for 1 minute, let settle, and use in place of superfine sugar. Do not use powdered sugar.

Canning fruit pie fillings

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

For successful pies or pastries from canned fruit, Clearjel® is a chemically modified corn starch that produces excellent sauce consistency even after fillings are canned and baked. Other available starches break down when used in these pie fillings, producing a runny sauce.

Clearjel® is hard to find in stores, but available in 1-pound ($3\frac{1}{2}$ cups) or 5-pound packages from some local country markets, or the following companies: *

Kitchen Krafts
(800) 776-0575
www.kitchenkrafts.com

Sweet Celebrations (Maid of Scandinavia)
(800) 328-6722
www.sweetc.com

Follow recipe directions for how much Clearjel® to add.

The fruit variety may alter the pie's flavor. So first make a single quart, make a pie with that, and serve. Then adjust the sugar and spices in the recipe to suit your personal preferences.

But use the amount of bottled lemon juice listed in these recipes. Do not use less than called for, or an unsafe product may result.

Use fresh fruit in the apple and peach pie filling recipes.

When using frozen cherries and blueberries, select unsweetened fruit. If sugar has been added, reduce the sugar in the recipe somewhat. Thaw fruit overnight in the refrigerator, then collect, measure and use juice from fruit to partially replace the water specified in the recipe.

* Mention of products or services is not intended to endorse them, nor to exclude others that may be similar. These are listed as a convenience to readers. If you use this product, follow the manufacturer's current package directions.

CANNING FRUIT PIE FILLINGS

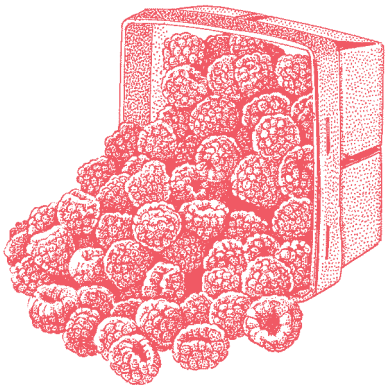
Times in these recipes are for processing in a boiling water canner, yielding a safe, high quality product. If you have a steam pressure canner that is deep enough, you can use it as a boiling water canner — with the lid on but not locked in place, and the petcock open or weighted gauge off. Note that head-space for fruit fillings is 1 inch.

You may wish to try 1 quart, then adapt the recipe to suit your taste.

But use the amount of bottled lemon juice listed in these recipes — or more for a tarter apple filling. Do not use less than called for, or an unsafe product may result.

Note:

lb. = pound
oz. = ounce
tbsp. = tablespoon
tsp. = teaspoon
1 quart = 2 pints = 4 cups



Apple pie filling

6 quarts apples, blanched, sliced fresh

5 1/2 cups sugar

1 1/2 cups Clearjel®

1 tbsp. cinnamon

2 1/2 cups cold water

5 cups apple juice

3/4 cup bottled lemon juice

1 tsp. nutmeg (optional)

Use firm, crisp apples such as Stayman, Cortland, Golden Delicious, or Rome. If apples lack tartness, add 1/4 cup more (total 1 cup) bottled lemon juice for each 6 quarts of slices.

Hot pack: Wash, peel and core apples. Prepare slices 1/2 inch wide, and place in water containing ascorbic acid to prevent browning (see page 6). Blanch 2 quarts at a time for 1 minute in boiling water, then drain. While blanching other batches of apples, keep blanched apples in a covered pot so they will stay warm. Combine sugar, Clearjel® and cinnamon in a large kettle with water and apple juice. If desired, add nutmeg. Stir and cook on medium high heat until mixture thickens and begins to bubble. Add bottled lemon juice and boil 1 minute, stirring constantly. Fold in apple slices immediately and fill clean, hot jars with mixture without delay, leaving 1-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Yield: 7 quarts

Process in a boiling water canner: 25 minutes for pints or quarts. *

Blueberry pie filling

6 quarts blueberries, fresh or thawed

6 cups sugar

2 1/4 cups Clearjel®

7 cups cold water or water and juice

1/2 cup bottled lemon juice

Select fresh, ripe and firm blueberries. Or select unsweetened frozen berries, thaw, then collect and measure the juice and use it to replace all or part of the water in the recipe.

Hot pack: Wash and drain fresh blueberries. In a large kettle, combine sugar, Clearjel® and water or water and juice. Cook on medium-high heat until mixture thickens and begins to bubble. Add bottled lemon juice and boil 1 minute, stirring constantly. Fold in berries immediately and fill clean, hot jars without delay, leaving 1-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Yield: 7 quarts

Process in a boiling water canner: 30 minutes for pints or quarts.*

FRUIT PIE FILLING RECIPES

Cherry pie filling

6 quarts tart cherries, fresh or thawed

7 cups sugar

1 3/4 cups Clearjel®

9 1/3 cups cold water or water and juice

1/2 cup bottled lemon juice

1 tsp. cinnamon (optional)

2 tsp. almond extract (optional)

Select fresh, very ripe and firm cherries. Or select unsweetened frozen cherries, thaw, then collect and measure the juice and use it to replace all or part of the water in the recipe.

Hot pack: Wash and pit fresh cherries, and hold in cold water. To prevent stem end browning, add ascorbic acid (see page 6). Combine sugar and Clearjel® in a large saucepan and add water, or water and juice. If desired, add cinnamon and almond extract. Stir and cook over medium-high heat until mixture thickens and begins to bubble. Add bottled lemon juice and boil 1 minute, stirring constantly. Fold in cherries immediately and fill clean, hot jars without delay, leaving 1-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Yield: 7 quarts

Process in a boiling water canner: 30 minutes for pints or quarts.*

*Adjust time for elevation; see map on page 12.

Peach pie filling

6 quarts peaches, sliced fresh

7 cups sugar

2 cups + 3 tbsp. Clearjel®

5 1/4 cups cold water

1 3/4 cups bottled lemon juice

1 tsp. cinnamon (optional)

1 tsp. almond extract (optional)

Select ripe but firm, fresh peaches.

Hot pack: Wash and peel peaches. To loosen skins, submerge peaches in boiling water for about 30 to 60 seconds, and then place in cold water. Slip off skins and prepare slices 1/2 inch thick. Place slices in an antioxidant solution (see page 6). In a large kettle, combine water, sugar, Clearjel®, and, if desired, cinnamon and almond extract. Stir and cook over medium-high heat until mixture thickens and begins to bubble. Add bottled lemon juice and boil sauce 1 minute more, stirring constantly. Drain peach slices. Fold in drained peach slices and continue to heat mixture for 3 minutes. Fill clean, hot jars without delay, leaving 1-inch headspace. Remove bubbles and wipe jar rims clean. Adjust lids.

Yield: 7 quarts

Process in a boiling water canner: 30 minutes for pints or quarts*.

Caution: Do not use white-fleshed peaches or nectarines. An unsafe product may result.

FRUIT PIE FILLING RECIPES

Green tomato pie filling

4 quarts green tomatoes, chopped

3 quarts tart apples, cored, peeled and chopped

1 lb. dark seedless raisins

1 lb. white raisins

1/4 cup minced citron, lemon or orange peel

2 cups water

2 1/2 cups brown sugar

2 1/2 cups white sugar

1/2 cup vinegar (5% acetic acid)

1 cup bottled lemon juice

2 tbsp. ground cinnamon

1 tsp. ground nutmeg

1 tsp. ground cloves

Combine all ingredients in a large saucepan. Cook slowly, stirring often, until tender and slightly thickened (about 35 to 40 minutes). Fill hot jars with hot mixture, leaving 1/2-inch headspace. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 7 quarts

Process in a boiling water canner: 15 minutes for quarts.*

*Adjust time for elevation; see map on page 12.

Festive mincemeat pie filling

2 cups suet, finely chopped

4 lbs. ground beef (or 4 lbs. ground venison and 1 lb. sausage)

5 qts. apples, chopped

2 lbs. dark seedless raisins

1 lb. white raisins

2 qts. apple cider

2 tbsp. ground cinnamon

2 tsp. ground nutmeg

5 cups sugar

2 tbsp. salt

Cook suet and meat in water to avoid browning. Peel, core, and quarter apples. Put meat, suet, 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 headspace. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 7 quarts

Process in a pressure canner: 90 minutes in a dial-gauge canner at 11 pounds pressure or 90 minutes in a weighted-gauge canner at 10 pounds pressure up to 1,000 feet and 15 pounds pressure over 1,000 feet (see map on page 12).

Apple butter; hot pack

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

8 lbs. apples

2 cups cider

2 cups vinegar

2 1/4 cups white sugar

2 1/4 cups packed brown sugar

2 tbsp. ground cinnamon

1 tbsp. ground cloves

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 sugar 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.

Sterilize clean half-pint and pint jars by covering with water and boiling for 10 minutes. Remove and drain hot sterilized jars for filling. Quart jars need not be pre-sterilized.

Fill hot jars with hot fruit butter, leaving 1/4-inch headspace. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 8 to 9 pints

Process in a boiling water canner: 5 minutes for half-pints or pints, 10 minutes for quarts.*

Pear butter

2 qts. pear pulp (20 medium, fully ripe whole)

4 cups sugar

1 tsp. grated orange rind

1/3 cup orange juice

1/2 tsp. ground nutmeg

To prepare pulp, quarter and core pears. Cook until soft, adding only enough water to prevent sticking. Press through a sieve or food mill. Measure pulp.

Add remaining ingredients; cook until thick, about 15 minutes. As mixture thickens, stir frequently to prevent sticking. Sterilize canning jars. Pour hot butter into hot jars, leaving 1/4-inch headspace. Remove air bubbles, wipe jar rims and adjust lids.

Process in a boiling water canner: 5 minutes for half-pints.*

Yield: 4 half-pint jars

Peach butter

2 qts. peach pulp (18 medium, fully ripe whole)

4 cups sugar

To prepare pulp, wash, scald, pit, peel, and chop peaches; cook until soft, adding only enough water to prevent sticking. Press through a sieve or food mill. Measure pulp.

To make butter, add sugar; cook until thick, about 30 minutes. As mixture thickens, stir frequently to prevent sticking. Meanwhile, sterilize canning jars. Pour hot butter into hot jars, leaving 1/4-inch headspace. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 8 half-pint jars

Process in a boiling water canner: 5 minutes for half-pints.*

Caution: Do not use white-fleshed peaches or nectarines. An unsafe product may result.

Spicy cranberry salsa; hot pack

6 cups red onion, chopped

4 large Serrano peppers, finely chopped

1 1/2 cups water

1 1/2 cups cider vinegar (5% acetic acid)

1 tbsp. canning salt

1 1/3 cups sugar

6 tbsp. clover honey

12 cups (2 3/4 lbs.) fresh, whole cranberries, rinsed

Caution: Wear plastic or rubber gloves and do not touch your face while handling or cutting hot peppers. If you do not wear gloves, wash hands thoroughly with soap and water before touching your face or eyes.

Combine all ingredients except cranberries in a large Dutch oven. Bring to a boil over high heat; reduce heat slightly and boil gently for 5 minutes.

Add cranberries, reduce heat slightly, and simmer for 20 minutes, stirring occasionally to prevent scorching.

Fill the hot mixture into clean, hot pint jars, leaving 1/4-inch headspace. Leave saucepot over low heat while filling jars. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 6 pint jars

Process in a boiling water canner: 10 minutes for pints or half-pints.*

Mango or peach salsa

6 cups diced unripe mango
(3 to 4 large, hard green mangoes)
OR 6 cups unripe peaches

1 1/2 cups red bell pepper, diced

1/2 cup yellow onion, finely chopped

1/2 tsp. red pepper flakes, crushed

2 tsp. garlic, finely chopped

2 tsp. ginger, finely chopped

1 cup light brown sugar

1 1/4 cups cider vinegar (5% acetic acid)

1/2 cup water

Caution: Handling green mangoes may irritate the skin of some people in the same way as poison ivy. (They belong to the same plant family.) To avoid this reaction, wear plastic or rubber gloves while working with raw green mango. Do not touch your face, lips, or eyes after touching or cutting raw green mangoes until all traces are washed away.

Wash all produce well. Peel and chop mango into 1/2-inch cubes. Dice bell pepper into 1/2-inch pieces. Finely chop yellow onions.

Combine all ingredients in an 8-quart Dutch oven or stockpot. Bring to a boil over high heat, stirring to dissolve sugar. Reduce heat, and simmer 5 minutes.

Fill hot solids into clean, hot half-pint jars, leaving 1/2-inch headspace. Cover with hot liquid, leaving 1/2 inch of headspace. Remove air bubbles, wipe jar rims and adjust lids.

Yield: 6 half-pint jars

Process in a boiling water canner: 10 minutes for half-pints.*

Caution: Do not use white-fleshed peaches or nectarines. An unsafe product may result.

*Adjust time for elevation; see map on page 12.

Peach apple salsa

6 cups Roma tomatoes, chopped (3 lbs. whole)

2 1/2 cups yellow onions, diced (2 large)

2 cups green bell peppers, chopped (1 1/2 large)

10 cups (3 1/2 lbs.) chopped hard, unripe peaches (9 medium)

2 cups chopped Granny Smith apples (2 large)

4 tbsp. mixed pickling spice

1 tbsp. canning salt

2 tsp. crushed red pepper flakes

3 3/4 cups (1 1/4 lbs.) packed light brown sugar

2 1/4 cups cider vinegar (5% acetic acid)

Wash and peel tomatoes. To peel, place tomatoes in boiling water for 1 minute, immediately place in cold water, and slip off skins. Chop into 1/2-inch pieces. Peel, wash, and dice onions into 1/4-inch pieces. Wash, core, and seed bell peppers; chop into 1/4-inch pieces. Combine chopped tomatoes, onions, and peppers in an 8- or 10-quart Dutch oven or saucepot.

Wash, peel, and pit peaches; cut into halves and soak for 10 minutes in an ascorbic acid solution (1500 mg in 1/2 gallon water). Wash, peel, and core apples; cut into halves and soak for 10 minutes in ascorbic acid solution.

Quickly chop peaches and apples into 1/2-inch cubes to prevent browning. Add chopped peaches and apples to the saucepot with the vegetables.

Prepare spice bag using clean cheese cloth. Add the pickling spice bag to the saucepot; stir in the salt, red pepper flakes, brown sugar, and vinegar. Bring to boiling, stirring gently to mix ingredients. Reduce heat and simmer 30 minutes, stirring occasionally. Remove spice bag from pan and discard.

With a slotted spoon, fill salsa solids into hot, clean pint jars, leaving 1 1/4-inches headspace. Cover with cooking liquid, leaving 1/2-inch headspace.

Remove air bubbles, wipe jar rims and adjust lids.

Yield: 7 pint jars

Process in a boiling water canner: 15 minutes for pints.*

Caution: Do not use white-fleshed peaches or nectarines. An unsafe product may result.

*Adjust time for elevation; see map on page 12.

Remedies for canning problems

Problem	Cause	Prevention
Browning or darkening	Exposure to oxygen in the air.	Dip prepared fruit in an antioxidant solution (see page 6).
	Liquid does not cover fruit in the jar.	Leave the recommended headspace for both fruit and liquid (see page 11).
	Under-processed fruit — oxidative enzymes naturally present in fruit remain active.	Follow tested recipes and process for the full time.
Bubbling or fermented fruit	Under-processing. **Do not use.** Moving bubbles and sour smell indicate spoilage.	Follow recommended methods to process. **Do not shorten process times or omit processing.** Proper processing destroys bacteria, molds and yeasts that cause spoilage.
Crystals form	Tartrate crystals in Concord grape juice.	Refrigerate juice from fresh Concord grapes overnight, then strain.
Fruit floats	Heavy syrup.	Use a light to medium syrup instead.
	Over-ripe fruit.	Use just-ripe fruit.
	Raw packing fruits that should be packed hot — too much air remains in fruit tissue.	Follow tested recipe directions for type of pack.
Liquid lost from jar	Failing to keep water in the canner boiling steadily throughout processing.	Follow recommended processing methods and maintain constant heat.
	Overfilling jars.	Leave the recommended headspace (see page 11).
Mold	Imperfect seal.	Wipe jar rims clean, seal with pretreated standard two-piece lids, and process as recommended.

Remedies for canning problems

Problem	Cause	Prevention
Seal fails, incomplete seal	Fruit or syrup on jar rim.	Wipe jar rims with a clean, damp cloth or towel, then cap.
	Jars with chipped rims.	Inspect standard home canning jars for chips and cracks.
	Reusing single-use lids.	Seal with new pretreated standard two-piece vacuum seal canning lids.
	Improperly pretreating lids, or lids are defective.	Use new lids and pretreat as the package directs.
	Retightening the band after processing.	Let jars cool, test for seal, then carefully remove metal bands.

Pears and apples sometimes turn pink or blue. This discoloration is caused by a chemical change in these fruits' pigments. Discolored fruit is safe to eat — provided no signs of spoilage are present.

Wisconsin Safe Food Preservation Series publications

Canning Fruits Safely (B0430)

Canning Meat, Wild Game, Poultry and Fish Safely (B3345)

Canning Salsa Safely (B3570)

Canning Vegetables Safely (B1159)

Freezing Fruits and Vegetables (B3278)

Homemade Pickles and Relishes (B2267)

Making Jams, Jellies and Fruit Preserves (B2909)

T*omatoes Tart and Tasty* (B2605)

Using and Caring for a Pressure Canner (B2593)

Wisconsin's Wild Game: Enjoying the Harvest (B3573)

To start with the right ingredients, see also:

Apple Cultivars for Wisconsin (A2105)

Home Fruit Cultivars for Northern Wisconsin (A2488)

Home Fruit Cultivars for Southern Wisconsin (A2582)

Vegetable Cultivars and Planting Guide for Wisconsin Gardens (A1653)

These are all available from your county UW-Extension office, or the address on the back cover.

Web sites — If you do not have a computer, try your local library. Most public libraries have a free computer connected with the Internet.

Resources

Andress, Elizabeth L., and Judy A. Harrison, *So Easy to Preserve* Bulletin 989 (Athens, Ga.: University of Georgia College of Family and Consumer Sciences), 2006.

Complete Guide to Home Canning. Agriculture Information Bulletin No. 539 (Washington, D.C.: U.S. Department of Agriculture), 2008. www.uga.edu/nchfp/.

MacRae, Norma M., *Canning and Preserving Without Sugar* 4th edition (Guilford, Conn.: Globe Pequot Press), 2000. ISBN 1-56440-992-9. The Globe Pequot Press — (800) 962-0973: www.globe-pequot.com

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Canning Fruits Safely (B0430)

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