

Harvest the







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Cherries

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Did you know?

- Cherries are grouped according to taste into sweet and sour types. Within each of these groups, cherries are classified on the basis of the color and firmness of their flesh.
- In general, the darker the cherry the sweeter its flavor, but there are exceptions such as yellow cherry varieties.



Utah Varieties

Sweet cherry varieties common to Utah include Bing, Stella, Van, and Rainier. Their firm juicy flesh is black-red in color. These varieties can be adapted many places in Utah, however they are not as cold hearty as sour cherries. If the area is prone to early spring frosts, developing fruit may be killed.

The best sour cherry variety for Utah is Montmorency. It is hearty and can withstand more frost than sweet varieties because it blooms later in the spring. The bright red flesh has good flavor. It is the standard for pie cherries in home and commercial processing.

Season Availability

From Box Elder County south to Salt Lake County, sweet cherries ripen around June 10 to the 25. Utah and Juab County cherries are usually ready anytime during the last week of June to the 4th of July. Warmer climates such as Grand, Washington and parts of San Juan counties may see ripe fruit as early as June 1 to the 10.

Generally, sour cherries are ripe two weeks after sweet cherries ripen.

SELECTION AND PREPARATION OF CHERRIES

Choose freshly harvested cherries with a deep uniform color. Flesh should be firm and not bruised. Don't delay preserving.

Stem and wash thoroughly just before using, handling carefully to avoid bruising. If desired, pits may be removed. If pitted, drop cherries in a solution of 1 tsp. powdered ascorbic

acid per gallon of water to prevent discoloration. Drain fruit before processing. If unpitted, prick skins on opposite sides with a clean needle to prevent splitting.

Yield. A lug weighs 25 pounds and yields 8 to 12 quarts. An average of 17 1/2 pounds makes a 7 quart canner load (approx. 2 1/2 pounds per quart); 11 pounds makes 9 pints. An average of 1 3/8 pounds makes 1 pint of frozen cherries.

FREEZING

There are several ways to pack cherries for freezing. The best method selected will depend on how you want to use the frozen product.

Sugar pack. Mix 2/3 cup sugar per quart of sour cherries; or 1/3 cup sugar per quart of sweet cherries. To package, fill freezer containers to within 1/2 inch from top. If pint or quart freezer bags are used, fill to within 3/4 inches from the top. Squeeze out as much air as possible. Seal and label.

Unsweetened pack. Without liquid or sweetening, pack cherries into containers to within 1/2 inch from top. If pint or quart freezer bags are used, fill to within 3/4 inches from the top. Squeeze out as much air as possible. Seal and label. The fruit may be sweetened at the time of serving.

Loose cherry pack. Spread whole sweet cherries in a single layer on shallow trays or cookie sheets and freeze. Remove and quickly package in labeled freezer bags or containers removing as much air as possible from containers. Seal and return promptly to freezer.

Syrup pack. A light syrup is recommended for sweet cherries and medium syrup for sour cherries. Allow 1/2 to 2/3 cup of syrup for each pint of fruit.

Sugar Syrup Recipes

Type of Syrup	Sugar (cups)	Water (cups)	Approx. Yield (cups)			
Light	1 1/2	5 3/4	6 1/2			
Medium	2 1/4	5 1/4	6 1/2			
Heavy	3 1/4	5	6 1/2			

CANNING

Wash jars. Prepare lids according to manufacturer's directions.

Stem and wash cherries. Remove pits if desired. If pitted, place cherries in water containing ascorbic acid to prevent stem-end discoloration (1 teaspoon of ascorbic acid or 3 grams in 1 gallon water). If canned unpitted, pricking skins on opposite sides with a clean needle will prevent splitting. Cherries may be canned in water, apple juice, white grape juice, or syrup. If syrup is desired, select and prepare preferred type as directed above. Medium syrup works well for sweet cherries and heavy syrup for sour cherries.

Hot pack– In a large saucepan add cherries and 1/2 cup water, juice, or syrup for each quart of drained fruit and bring to a boil. Fill jars with cherries and cooking liquid, leaving 1/2" headspace. Wipe the sealing edge of the jar with a clean, damp paper towel. Adjust lids and process in a boiling water bath or pressure canner. Process in either a boiling water canner or a pressure canner as described below based on the altitude in your location.

Raw pack– Add 1/2 cup hot water, juice, or syrup to each jar. Fill jars with drained cherries, shaking them down gently as filled. Add more hot liquid, leaving 1/2" headspace. Wipe

the sealing edge of the jar with a clean, damp paper towel. Adjust lids and process in a boiling water bath or pressure canner. Process in either a boiling water canner or a pressure canner as described below based on the altitude in your location.

To process in a boiling water canner, fill canner halfway with water and preheat to 180° F for hot packs or 140° F for raw packs. Load sealed jars onto the canner rack and lower with handles. Add water if needed to a level of 1 inch above jars. Cover. When water boils vigorously, lower heat to maintain a gentle boil and process for recommended time according to the following table.

		Process time at altitudes of:			
Style of Pack	Jar Size	0-1,000 ft	1,001-3,000 ft	3,001-6,000 ft	above 6,000 ft
Hot	Pints Quarts	15 min 20 min	20 min 25 min	20 min 30 min	25 min 35 min
Raw	Pints or quarts	25 min	30 min	35 min	40 min

To process in a pressure canner, place the jar rack, 2 inches of water, and sealed jars in canner. Fasten lids, and heat canner on high setting. After exhausting steam 10 minutes, add weighted gauge or close petcock to pressurize the canner. Start timing the recommended process time when the desired pressure is reached.

			Canner gauge pressure at altitudes of:					
			Dial gauge canner			Weighted gauge canner		
Style of Pack	Jar Size	Process time (min)	0- 2,000 ft (lbs)	2,001- 4,000 ft (lbs)	4,001- 6,000 ft (lbs)	6,001- 8,000 ft (lbs)	0-1,000 ft (lbs)	above 1,000 ft (lbs)
Hot	Pint Quart	8 10	6 6	7 7	8 8	9 9	5 5	10 10
Raw	Pints or Quarts	10	6	7	8	9	5	10

Regulate heat to maintain a uniform pressure. When processing is complete, remove canner from heat. Air-cool canner until it is fully depressurized. Slowly remove weighted gauge or open petcock, *wait 2 more minutes*, then unfasten and carefully remove canner lid. Remove jars from canner with a jar lifter and place on a towel or rack. Do not retighten screw bands. Air-cool jars 12 to 24 hours. Remove screw bands and check lid seals. The center of the lid should be indented and make a ping sound when tapped. Wash, dry, label, and store jar in a clean, cool, dark place. If lid failed to seal examine and replace jar if defective, use new lid, and reprocess as before within 24 hours

Cherry Pie Filling

	Quantities of Ingredients Needed for:		
	1 Quart	7 Quarts	
Fresh or thawed sour cherries	3 1/3 cups 6 quarts		
Granulated sugar	1 cup	7 cups	
Clear Jel®	1/4 cup + 1 Tbsp	1 3/4 cups	
Cold water	1 1/3 cups	9 1/3 cups	
Bottled lemon juice	1 Tbsp + 1 tsp	1/2 cup	
Cinnamon (optional)	1/8 tsp	1 tsp	
Almond extract (optional)	1/4 tsp	2 tsp	
Red food coloring (optional)	6 drops	1/4 tsp	

Quality: Select fresh, very ripe, and firm cherries. Unsweetened frozen cherries may be used. If sugar has been added, rinse it off while the fruit is still frozen.

Yield: 1 quart or 7 quarts.

Procedure: Rinse and pit fresh cherries, and hold in cold water. To prevent stem end browning, use ascorbic acid solution (see pages 1-2). 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 in a covered bowl or pot. Combine sugar and Clear Jel in a large saucepan and add water. If desired, add cinnamon, almond extract, and food coloring. 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.

Recommended process time for Cherry Pie Filling in a BOILING WATER canner

		Process Time at Altitudes of:				
Style of Pack	Jar Size	0-1,000 ft				
Hot	Pints or Quarts	30 min	35 min	40 min	45 min	

DRYING

Wash fruit. Cut in half and remove pits. Cherries can be dried safely without any pretreatment, but pretreating may preserve the natural color and speed drying.

To pretreat: Ascorbic acid, available at drug stores, may be used. Prepare a solution of 1 to 2 1/2 teaspoons of pure ascorbic acid crystals to 1 quart cold water. Vitamin C tablets can be crushed and used (six 500 milligram tablets equal 1 teaspoon ascorbic acid). One cup treats about 5 quarts of cut cherries. Dip cut cherries in ascorbic acid solution. Soak for a few minutes, remove with a slotted spoon and drain well. Commercial antioxidant mixtures are not as concentrated as ascorbic acid but are more readily available in grocery stores.

Arrange fruit on drying trays in single layers, pit cavity up. Cherries will dry in 24 to 36 hours in a dehydrator, in the sun from 12 hours to four or five days, and in the oven from six to 24 hours. Properly dried cherries are leathery and shriveled.

Cherry Raisins

Wash and pit pie cherries. Heat 2 cups of cherries and 1/2 cup of sugar until the liquid boils for 1 minute. (Cherry-sugar mixture will form own juice.) With a slotted spoon, transfer cherries to a drying rack. Dry at 140-150°F until the moisture is decreased so that you have 80% solids or until the cherries are firm and rubbery to the touch. You will have best results if you base the drying on the final solids content of 80% and then either freeze the cherries or vacuum package to avoid mold growth.

To calculate desired final cherry weight for 80% solids:

- 1. Weigh a <u>container</u> for fresh and dried cherries on a scale. Note weight.
- 2. **Fresh cherries**. Add fresh cherries to container. Weigh. Subtract container weight.
- 3. Calculate desired final weight. (Fresh cherry weight) times (.175) = desired weight of <u>dried</u> cherries.
- 4. Add calculated desired final weight (#3 above) and weight of container (#1). When dried cherries reach this point, they are ready.



To vacuum pack the dried cherries, place in canning jars, attach lids loosely and place in a 325° oven for 15 minutes. At the end of the 15 minutes, remove jars and tighten lids. Vacuum packaged cherries will keep longer.

Making Fruit Leathers

Select ripe or slightly overripe fruit. Wash, pit, and drain well. Puree cherries in blender. Sweetener may be added in the form of corn syrup, honey, or sugar. Corn syrup or honey is best for long storage because it doesn't crystallize. Sugar is good for immediate use or short storage. Sweeten to taste. Sweet cherries do not require as much added sweetening as tart varieties. Bring cherry puree to a boil. Line a plate or cookie sheet with edges with plastic wrap. Smooth out the wrinkles. Pour the pureed fruit onto the cookie sheet in a 1/4 inch thick layer. Spread evenly.

To dry in an oven- Place the tray on the center rack in an oven at lowest setting and prop oven door slightly open. Approximate drying time may be up to 18 hours.

To dry in a dehydrator- Use specially designed dehydrator trays or plastic trays. Line with plastic wrap. Pour pureed fruit on the trays in a 1/8 inch thick layer. Spread evenly. Approximate drying time is 6-8 hours.

Leather that is dry can be easily pulled from the plastic wrap. Fruit leather can be left on plastic or pulled from plastic wrap while still warm. Cool and re-wrap in plastic if needed.

JAM

Fresh cherries can be used with commercially prepared powdered or liquid pectins to make jam. The order of combining ingredients depends on the type of pectin used. Complete directions for jam are provided with packaged pectin.

Be sure to use hot canning jars, self-sealing two-piece lids, and a boiling water bath with the correct processing time for your altitude.

If your altitude is less than 1000 feet, sterilize empty jars by boiling 10 minutes. It is not necessary to sterilize jars when the processing time will be 10 minutes or longer.

Recommended Process Time for Cherry Jam in a BOILING-WATER Canner

		Process Time at Altitudes of:			
Style of Pack	Jar Size	0-1,000 ft	1,001-6,000 ft	6,001-8,000 ft	
Hot	Half-pints or pints	5 min	10 min	15 min	

LABELING AND STORAGE

Fresh cherries: Store ripe cherries in the refrigerator uncovered and use within 3 to 5 days. Either don't wash until ready to eat since moisture can cause them to spoil more rapidly or dry thoroughly to avoid molding

Canned cherries: If lids are tightly vacuum sealed after processing, remove the screw bands, wash the lid and jar to remove food residue; then rinse and dry jars. Label and date the jars and store them in a clean, cool, dark, dry place. For best quality, don't keep canned cherries more than 24 months at 40°F or 18 months at 70°F or 9 months at 90°F.

Frozen cherries: Label and date the packages. Properly packaged and frozen, the fruit should maintain high quality for approximately one year.

Dried cherries: Pack cooled, dried foods in small amounts in glass jars or in moisture and vapor-proof freezer containers, boxes or bags. Store in a cool, dry, dark place. Vacuum packaged dried cherries can be held for 48 months at 40°F, 24 months at 70°F or 12 months at 90°F.

Jams: Before storing, remove screw bands and check seals. Label jars with the name and date. Store in a cool, dry, dark, clean area. The shorter the storage time, the better the eating quality of the product. Flavor and quality may begin to decrease within a few months, although most jellied products should keep for at least one year.

NUTRITIONAL INFORMATION

	Sour cherries, raw 1/2 c.	Sour cherries, canned, light syrup, 1/2 c.	Sweet cherries, raw 1/2 c.	Sweet cherries, light syrup 1/2 c.	Sweet cherries, frozen 1/2 c.
Calories	38	94	37	84	115
Fiber, grams	1.2	1.0	1.2	1.9	2.7
Vitamin C, mg	8	2.5	4.1	4.7	1.3
Vitamin A, Iu	944	915	37	196	245
Folate, mg	6.2	10	2.3	5	5
Iron, mg	.25	1.7	.21	.45	.45

Cherries are relatively high in potassium and low in sodium. They are an insignificant source of vitamins not listed above.

Savor the Season All Year Long

References

Ball Blue Book. The Complete Guide to Home Canning and Freezing, 1995. Alltrista Corporation. Muncie, Indiana

Bowes, Anna DePlanter, Church, Charles, Church, Helen Nichols, Pennington, Carmella Genene, & Pennington, Jean A. T. Bowes & Church's Food Value of Portions Commonly Used. 1998. Lippincott-Raven Publishers. Philadelphia, Pennsylvania.

Brennand, Charlotte. 1994. Home Drying of Food. (FN330) Utah State University Extension. Logan, Utah. http://extension.usu.edu/files/foodpubs/fn330.pdf.

Complete Guide to Home Canning (Agriculture Information Bulletin No. 539). 1988. USDA & Extension Service. http://extension.usu.edu/files/foodpubs/cangui2.pdf

Section 5. Subsistence. Department of Defense 4145.19-R-1, 1979

USDA Food Composition, USDA Nutrient Data Laboratory,

http://www.nal.usda.gov/fnic/foodcomp/Data/index.html

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