## $\sigma$ <br> K-STATE <br> PRESERVEIT FRESH HESAFE p乃是 CHERRIES

When preserving fresh foods at home, follow proper techniques to prevent foodborne illness. These tested methods can be used to process sweet or sour cherries.
Always wash your hands before preparing any recipe.

## Quality

Select freshly harvested cherries with a deep uniform color and ideal maturity for eating fresh. Do not delay processing.

## Preparation

Stem and rinse cherries. Pit if desired. Immediately place pitted cherries into cold water. Add 1 teaspoon of powdered ascorbic acid or six crushed $500-\mathrm{mg}$ vitamin $C$ tablets per gallon to prevent stem-end discoloration. For unpitted cherries, prick skin on both sides with a clean needle to prevent splitting.

## Freezing

Freezer manuals offer guidelines for the maximum amount that can be frozen at one time to maintain quality - usually 2 to 3 pounds of food for each cubic foot of freezer space. Approximate freezer storage time is 8 to 12 months.
An average of $13 / 8$ pounds makes 1 pint of frozen cherries. Cherries can be packed with syrup, dry sugar, or left unsweetened.
To make a syrup pack: Mix and dissolve 4 cups of sugar in 4 cups of lukewarm water for sour cherries; or mix $2^{33 / 4}$ cups of sugar in 4 cups of lukewarm water for sweet cherries. Add 1 cup of syrup to each quart of prepared cherries. Add $1 / 2$ teaspoon ascorbic acid for better quality.
For a sugar pack: Mix $3 / 4$ cup of dry sugar per quart ( $1 \frac{1}{3}$ pounds) of sour cherries.
For unsweetened pack: Spread cherries on a baking sheet. Freeze until firm. Package, seal, and freeze.
To package, fill pint- or quart-sized freezer containers. Squeeze out air, leave 1-inch headspace, seal, label, and freeze. Before freezing, bags may be inserted into
reusable, rigid-plastic freezer containers for added protection against puncture and leakage.
Nutrition: Frozen Cherries, unsweetened, dry pack
Serving size: 1 cup - 95 calories, 0 g fat, 24 g carbohydrate, 2 g protein, 3 g fiber, 0 mg sodium, 19 g sugar

## Dehydrating

For information on dehydrating fruit or fruit leathers, see https://www.rrc.k-state.edu/preservation/drying. btml for resources.

## Preparing Jars and Lids

For all canning recipes processed less than 10 minutes, wash and sterilize jars by placing them inside a boiling water canner and cover with water. Boil jars for at least 10 minutes and keep them hot. For recipes processed longer than 10 minutes, jars will get sterilized during the canning process. All jars must be warm prior to filling with food.
Preheating is not required for standard metal lids. Always wash lids in hot, soapy water before use. If using reusable plastic lid systems with rubber rings, follow the manufacturer's directions.

## Canning

To learn more about canning, see How-to Guide to Water Bath Canning and Steam Canning (MF3241) and How-to Guide to Pressure Canning (MF3242).

## Quantity

An average of $171 / 2$ pounds makes a 7 -quart canner load; 11 pounds makes 9 pints.
Cherries can be covered with water, apple juice, or white grape juice, but medium syrup or heavy syrup is more common. Medium syrup is suggested for sweet cherries and a heavy syrup for sour cherries. To make a medium syrup for a canner load of seven quarts,
mix $33 / 4$ cups of sugar in $81 / 4$ cups of water and heat to dissolve. For heavy syrup, mix $51 / 4$ cups sugar and $73 / 4$ cups water and heat to dissolve. More information can be found at bttps://nchfp.uga.edu/how/can/canning-fruits-and-fruit-products/preparing-and-using-syrups-for-canning-fruit/.
Hot pack: In a large saucepan, add $1 / 2$ cup of liquid for each quart of drained cherries; bring to a boil. Fill clean jars with hot cherries and cooking liquid, leaving $1 / 2$-inch headspace.
Raw pack: Pour $1 / 2$ cup hot water, juice, or syrup into each jar. Fill jars with drained cherries, shaking cherries down as you fill, and cover with your choice of boiling liquid, leaving $1 / 2$-inch headspace.
Remove air bubbles and adjust headspace. Wipe jar rims with a clean, damp paper towel. Apply lids and rings fingertip-tight. Process in a water-bath, steam, or pressure canner according to recommendations in Table 1 and Table 2. When processing is complete, turn off heat, and remove lid from water-bath or steam canner. If pressure canning, let the canner depressurize naturally before removing the lid. Let jars cool 5 minutes. Remove jars from canner. Do not retighten bands. Cool completely, check seals, label, date, and store.
Nutrition: Canned Sweet Cherries, in water
Serving size: $1 / 2$ cup - 64 calories, 0 g fat, 16 g carbohydrate, 1 g protein, 2 g fiber, 1 mg sodium, 14 g sugar

## Cherry Pie Filling

Each canned quart makes one 8-inch to 9-inch pie. Clear Jel ${ }^{\circledR}$ (cook-type) is a starch modified to produce excellent sauce consistency even after fillings are canned and baked. Do not use Instant Clear Jel ${ }^{\circledR}$. Other cooking starches are not recommended as they break down, causing a runny sauce consistency when they are used in pie fillings. Clear $\mathrm{Jel}^{\circledR}$ is available in bulk food stores or on the internet.
Because fruit variety may alter the flavor of the pie, make a single quart and use in a pie. Serve it, and then adjust sugar and spices to suit your taste. Do not alter the amount of lemon juice, which ensures the safety and storage stability of the fillings. If filling is too tart, add more sugar to taste.
When using frozen cherries, select unsweetened fruit. If sugar has been added, rinse fruit while it is frozen. Collect and measure juice from thawing fruit, reserving it for a portion of the water called for in the recipe.

Cherry Pie Filling

|  | Quantities of ingredients needed for: |  |
| :--- | :--- | :--- |
| Ingredient | $\mathbf{1}$ quart | $\mathbf{7}$ quarts |
| Fresh or thawed sour <br> cherries | $31 / 3$ cups | 6 quarts |
| Granulated sugar | 1 cup | 7 cups |
| Clear Jel $^{\oplus}$ | $1 / 4$ cup +1 tbsp. | $13 / 4$ cups |
| Cold water $^{\text {Bottled lemon juice }}$ | $11 / 3$ cups | 1 tbsp. +1 tsp. |
| Cinnamon (optional) | $1 / 3$ cups cup |  |
| Almond extract (optional) | $1 / 4$ tsp. | 1 tsp. |
| Red food coloring <br> (optional) | 6 drops | $1 / 4$ tsp. |

## Procedure

Select ripe, firm, tart cherries. Rinse and pit cherries and hold in cold water. To prevent stem-end browning, hold pitted cherries in water containing 1 teaspoon of ascorbic acid crystals, or crush six $500-\mathrm{mg}$ vitamin $C$ tablets in 1 gallon of water.
Blanch fresh cherries by placing 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 the heated fruit in a covered bowl or pot. Combine sugar and Clear $\mathrm{Jel}^{\circledR}$ in a large saucepan. Add water and, if desired, the cinnamon, food coloring, and almond extract. Stir mixture and cook over medium-high heat until the mixture thickens and begins to bubble. Add lemon juice and boil 1 minute, stirring constantly. Fold in drained cherries; fill jars immediately, leaving 1-inch headspace. Remove air bubbles and adjust headspace. Wipe jar rims. Apply lids and rings fingertip-tight.
Process in a boiling water canner or steam canner according to processing recommendations in Table 1. Turn off heat and remove canner lid. Let jars cool 5 minutes. Remove jars from canner; do not retighten bands. Cool completely, check seals, label, date, and store.
Nutrition: Cherry Pie Filling
Serving size: 113 cup - 98 calories, 0 g fat, 24 g carbohydrate, 0 g protein, 0 g fiber, 15 mg sodium, 24 g sugar

## Sour Cherry Jelly

Yield: About 8 half-pints

- 3 cups prepared juice (about 3 pounds and $1 / 2$ cup water)
- 7 cups sugar
- 2 3-ounce pouches liquid pectin

Sort, wash, and remove stems of fully ripe cherries. Crush cherries. Add $1 / 2$ cup water; simmer 10 minutes, covered, stirring occasionally. Place prepared fruit in dampened jelly bag or several layers of dampened cheesecloth. Let juice drip, undisturbed, for at least 2 hours or overnight. Note: Squeezing the jelly bag may cause jelly to be cloudy. As an alternative, use a stovetop steamer/juicer to extract juice. Measure and combine juice and sugar in a 6 - or 8 -quart saucepan. Bring mixture to a full rolling boil that cannot be stirred down, over high heat, stirring frequently. Add liquid pectin and heat to a rolling boil. Boil hard for 1 minute, stirring constantly. Remove from heat. Skim foam if necessary. Ladle hot jelly into hot jars, leaving $1 / 4$-inch headspace. Wipe rims of jars with a clean paper towel. Apply lids and rings fingertip-tight. Process in a boiling water canner or steam canner. according to recommendations in Table 1. Turn off heat and remove lid from canner. Let jars cool for 5 minutes. Remove from canner; do not retighten
bands. Cool completely, check seals, label, date, and store.

Nutrition: Sour Cherry Jelly
Serving size: 1 tablespoon - 50 calories, 0 g fat, 13 g
carbohydrate, 0 g protein, 0 g fiber, 0 mg sodium, 13 g sugar

## Sweet Cherry Topping

Yield: 2 pints

- 5 cups pitted, halved Bing cherries (about 2.5 pounds as purchased)
- $1 / 4$ cup water
- 2 cups sugar
- 1 pouch liquid pectin (3 fluid ounces)

Rinse cherries with water, remove stems and pits. Cut cherries in half. Measure 5 cups of prepared cherries into a 4-quart Dutch oven. Stir in water. Heat over medium-high heat while stirring to prevent sticking and scorching. Simmer until cherries are softened enough to mash with a potato masher, about 8 to 10 minutes. Mash cherries. Stir in 2 cups sugar. Bring to a full boil that cannot be stirred down. Boil 1 minutes. Remove from heat. Stir in liquid pectin until thoroughly combined. Skim foam from top. Pour hot cherry topping into clean hot jars, leaving $1 / 2$-inch headspace. Remove air bubbles and adjust headspace. Wipe jar rims with a clean, dampened paper towel.

Table 1. Recommended processing times in a water-bath canner or steam canner

|  |  |  | Minutes of processing at different elevations (in ft.) |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Product | Style of Pack | Jar Size | $\mathbf{0 - 1 , 0 0 0}$ | $\mathbf{1 , 0 0 1 - 3 , 0 0 0}$ | $\mathbf{3 , 0 0 1 - 6 , 0 0 0}$ |
| Cherries | Hot | Pints | 15 | 20 | 20 |
|  | Quarts | 20 | 25 | 30 |  |
| Cherries | Raw | Pints or Quarts | 25 | 30 | 35 |
| Cherry pie filling | Hot | Pints or Quarts | 30 | 35 | 40 |
| Sour cherry jelly | Hot | Half Pints | 5 | 10 | 15 |
| Sweet Cherry Topping | Hot | Half Pints or Pints | 15 | 20 | 25 |

Table 2. Recommended processing times for cherries in a pressure canner

|  |  | Canner gauge pressure for different elevations (in feet) |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dial gauge (lbs.) | Weighted gauge (lbs.) |  |  |
|  |  | Process Time |  |  |  |  |
| Style of pack | Jar Size | 8 | $\mathbf{0 - 2 , 0 0 0}$ | $\mathbf{2 , 0 0 1 - 4 , 0 0 0}$ | $\mathbf{0 - 1 , 0 0 0}$ | Above 1,000 |
| Hot | Pints | 10 | 6 | 7 | 5 | 10 |
|  | Quarts | 10 | 6 | 7 | 5 | 10 |
| Raw | Pints or quarts | 6 | 7 | 5 | 10 |  |

Apply lids and rings fingertip-tight. Process in a boiling water canner or steam canner. according to recommendations in Table 1. Turn off heat and remove lid from canner. Let jars cool for 5 minutes. Remove from canner; do not retighten bands. Cool completely, check seals, label, date, and store.
Nutrition: Sweet Cherry Topping
Serving size: 2 tablespoons - 50 calories, 0 g fat, 14 g
carbohydrate, 0 g protein, 1 g fiber, 0 mg sodium, 13 g sugar

## Problems and Solutions

## 1. How can I reduce the amount of foaming in jam or jelly?

Add $1 / 2$ teaspoon butter or margarine to the fruit mixture before boiling.

## 2. Is paraffin wax still safe to use on top of jams and jellies?

Because of possible mold contamination, paraffin or wax seals are no longer recommended for any type of sweet spread, including jams and jellies. Always process sweet spreads in a water bath canner or steam canner to prevent mold and preserve flavor and color.

## 3. What are some steps to prevent oozing in canned pie filling?

When canning pie filling, sometimes the pie filling expands and oozes out the top of the jar after removing the jars from the canner. Some prevention tips include:

1. Prepare the fruit carefully, such as completely thawing frozen fruit and blanching fresh fruit. This helps remove air from inside the fruit.
2. Remove air bubbles before applying the lid and ring.
3. Reduce the amount of ClearJel ${ }^{\circledR}$ to $3 / 4$ the amount stated in the recipe. For example, if the recipe states $11 / 2$ cups of ClearJel ${ }^{\circledR}$, use 1 cup plus 2 tablespoons. Do not use regular cornstarch or flour when canning pie filling as these thickeners give poor quality results.
4. Do not double recipes.
5. Leave at least 1-inch headspace. It is acceptable to leave $1 \frac{1}{4}$-inch headspace in this case.
6. Keep the filling hot and have a hot canner ready to go.
7. After processing, leave the jars in the water bath canner for 10 minutes. If using a steam canner, remove the jars after processing time has ended.
Source: Safe Preserving: Oozing canned pie filling, Dr. Barbara H. Ingham, University of Wisconsin-Madison, https:///fyi. extension. wisc.edu/safefood/2017/10/23/safe-preserving-oozing-canned-pie-filing/

> Revised by Karen Blakeslee, M.S., Extension Associate, Food Science
> Complete Guide to Home Canning, USDA AIB No. 539, 2015; and So Easy to Preserve, 6th ed., The University of Georgia Cooperative Extension Service. Nutrition data provided by USDA FoodData Central, https://fdc.nal. usda.gov/index.htm/ and ESHA Genesis R\&D Food Formulation \& Labeling Software, version 11.13 Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.
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