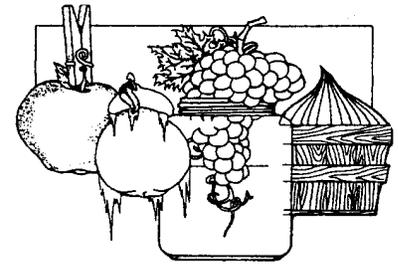


# Quality for Keeps



Information for those who produce and preserve food

## Enjoy strawberries now and later

*Welcome to the first issue of Quality for Keeps for 2009! We look forward to bringing you the latest and safest USDA-based information and to hearing from you. This year's publications will be co-authored by Mary Schroepfer and Judith Lueders.*

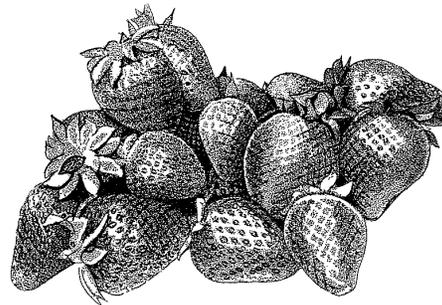
Now let's get started! Celebrate the spring by picking and enjoying fresh strawberries. Strawberries will soon be at their best in Missouri. Strawberries are high in vitamin C and low in calories. While the berries are plentiful, it is also time to freeze, dehydrate, or make sweet spreads to enjoy the flavor the rest of the year.

When picking strawberries, handle berries gently and place them loosely in containers to avoid crushing fragile berries. Whether harvesting berries in the field, or purchasing them in the store, choose wisely. The large berries are pretty, but small to medium size berries may have a better flavor. Choose clean, dry berries that are red, plump, and bright, without uncolored or seedy areas. Strawberries are very perishable and will not ripen after picking. The attached caps on the strawberries should be bright green and fresh when they are purchased.

Avoid strawberries showing signs of moisture, staining or mold. These signs indicate ruined fruit. If there is visible mold, all of the strawberries in the package probably contain mold spores. When purchasing strawberries by the pound, 1-1/2 pounds equal

1 quart; this will yield about four cups of sliced strawberries.

At home, sort berries, discarding any soft or moldy berries. Place the berries in a single layer and store in the refrigerator until ready for use. DO NOT remove the caps until after the berries are washed to prevent the absorption of water into the berries. Do not wash strawberries until just before using. Rinse gently, only a few berries at a time, in flowing cold water in a colander. Remove the caps by giving them an easy twist with a



strawberry huller or sharp knife. Use or preserve the strawberries as soon as possible after they are purchased.

**Freezing strawberries.** The easiest way to preserve strawberries is to freeze them. It takes 6 to 8 cups of berries to fill a one-quart container. Sort and wash the berries before stemming.

**Individual dry pack.** Freeze whole berries by placing clean, dry berries on a jelly roll pan in the freezer until just frozen. Immediately package frozen berries in the freezer bags or cartons; seal, label, and return to

freezer. Individually frozen berries are convenient to use a few berries at a time.

**Sugar pack.** Combine  $\frac{3}{4}$  cup sugar with one quart (1-1/3 pound) of whole, sliced, or slightly crushed strawberries, and mix thoroughly. Let stand 15 minutes, then stir. Place the sweetened strawberries in a freezer container leaving  $\frac{1}{2}$ -inch of headspace; label and freeze.

**Syrup pack.** Mix 4 cups of sugar with 4 cups of lukewarm water, stir until all the sugar is dissolved, and chill. Fill a freezer container with sliced or whole berries, leaving  $\frac{1}{2}$ -inch headspace. Pour the syrup over whole or sliced strawberries, until the fruit is covered. Seal and label before freezing.

### Dehydrating Strawberries.

Dehydrating strawberries provides a fair to good quality product. Since they do not rehydrate well, use as snacks, in pudding, yogurt, cereal, or desserts. Before placing in the dehydrator, the berries need to be washed gently, hulled, and cut into  $\frac{1}{2}$ -inch slices. Dry the berries at 130° to 135° F until pliable. It will take 24 to 36 hours in a dehydrator. Strawberries make excellent fruit leathers, (see page 4).

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## Quantities of produce needed for frequently canned foods

In today's economy many people are considering preserving food at home to save money, but be aware of all the costs involved. Produce may be grown in a large garden, or purchased at a farmer's market. For example, consider the price of a standard can of vegetables or fruit, with the cost of a

pint (2 cups) of produce. If grown at home, consider cost of seeds, fertilizers, and tools; and to can, add cost of jars, flats and lids. To help evaluate the costs and determine how much produce is needed, the charts below show the approximate quantities and approximate weights of fruits and

vegetables needed when home-canning. Style of pack and produce size will affect the yield. A full canner makes best use of electricity needed to safely process the foods. Use the first and second columns to decide the approximate amounts needed to fill a canner for best use of your energy expense.

Vegetable	Pounds per 7 quart canner	Pounds per 9 pint canner	Amount per jar	Weight of a bushel	Jars per bushel
Dried beans or peas, shelled	5 pounds	3-1/4 pounds	3/4 pound per quart		
Fresh lima beans, shelled	28 pounds	18 pounds	4 pounds per quart	32 pounds	6-10 quarts
Green or wax beans, pieces	14 pounds	9 pounds	2 pounds per quart	30 pounds	12-20 quarts
Beets, without tops	21 pounds	13-1/2 pounds	3 pounds per quart	52 pounds	15-20 quarts
Carrots, without tops	17-1/2 pounds	11 pounds	2-1/2 pounds per quart	50 pounds	17-25 quarts
Cream style corn		20 pounds in husks	2-1/4 pounds per pint	35 pounds in husks	12-20 pints
Whole kernel corn	31-1/2 pounds in husks	20 pounds in husks	4-1/2 pounds per quart	35 pounds in husks	6-11 quarts
Okra	11 pounds	7 pounds	1-1/2 pounds per quart	26 pounds	16-18 quarts
Green peas, shelled	31-1/2 pounds in pods	20 pounds in pods	4-1/2 pounds per quart	30 pounds in pods	5-10 quarts
Hot or sweet peppers		9 pounds	1 pound per pint	25 pounds	20-30 pints
Sweet potato, not mashed	17-1/2 pounds	11 pounds	2-1/2 pounds per quart	50 pounds	17-25 quarts
Potatoes, white	35 pounds	22-1/2 pounds	5 pounds per quart	60 pounds	20 quarts per
Pumpkin, not mashed	16 pounds	10 pounds	2-1/4 pounds per quart		
Spinach or other greens	28 pounds	18 pounds	4 pounds per quart	18 pounds	3-9 quarts
Tomatoes	22 pounds	14 pounds	3 pounds per quart; 1-1/2 pounds per pint	53 pounds	15-20 quarts

<b>Fruit</b>	<b>Pounds per 7 quart canner</b>	<b>Pounds per 9 pint canner</b>	<b>Amount per jar</b>	<b>Weight of a bushel</b>	<b>Jars per bushel</b>
Apples, sliced	19 pounds	12-1/4 pounds	2-3/4 pounds per quart	48 pounds	16-19 quarts
Applesauce	21 pounds of apples	13-1/2 pounds of apples	3 pounds per quart	48 pounds	14-19 quarts
Apricots	16 pounds	10 pounds	2-1/4 pounds per quart	50 pounds	20-25 quarts
Berries, whole	12 pounds	8 pounds	1-3/4 pounds per quart	36 pounds per 24 quart crate	18-24 quarts per crate
Cherries	17-1/2 pounds	11 pounds	2-1/2 pounds per quart	25 pounds per lug	8-12 quarts per lug
Grape juice	24-1/2 pounds of grapes	16 pounds of grapes	3-1/2 pounds of per quart	26 pounds of grapes per lug	7-9 quarts per lug
Grapes, whole	14 pounds	9 pounds	2 pounds per quart	26 pounds per lug	12-14 quarts
Peaches, sliced or halved	17-1/2 pounds	11 pounds	2-1/2 pounds per quart	48 pounds	16-24 quarts
Pears, halved	17-1/2 pounds	11 pounds	2-1/2 pounds per quart	50 pounds	16-25 quarts
Plums	14 pounds	9 pounds	2 pounds per quart	56 pounds	22-36 quarts
Rhubarb	10-1/2 pounds	7 pounds	1-1/2 pounds per quart	28 pounds per lug	14-28 quarts per lug

*Source: Information for these tables was taken from GH1454, Quality for Keeps: Preserve Your Garden Delights - How to Can Fresh Vegetables, University of Missouri Extension, and GH1455, Quality for Keeps: Food Preservation - Fruitful Canning, University of Missouri Extension.*

## Sweet spreads and syrups

Strawberries can be made into jams, jellies, preserves, syrup, and strawberry honey. Freezer jam, sugar-free strawberry jam, and standard jam use crushed strawberries, while the preserves use small whole fruit or pieces of fruit in a lightly jelled syrup. Freezer and processed jelly is made from juice of the fruit and will have no pieces of fruit in it. For best results in the sweet spreads, follow the directions in the pectin manufacturer's package, or an approved recipe available on-line at <http://www.uga.edu/nchfp/>, or <http://www.freshpreserving.com/>.

“So Easy to Preserve”, the Ball® Complete Book of Home Preserving or the Ball® Blue Book are all good sources of printed food preservation recipes.

Enjoy the fresh strawberries now and enjoy the ones you have preserved throughout the year.

*Source:* <http://ohioline.osu.edu/hyg-Fact/5000/5531.html> or [http://www.michigan.gov/mda/0,1607,7-125-1570\\_2468\\_2471-13036--,00.html](http://www.michigan.gov/mda/0,1607,7-125-1570_2468_2471-13036--,00.html)



## Homemade fruit leather

Fruit leather can be easily made at home out of fresh, frozen or drained canned fruit. Fruit pulp that is remaining after making jelly also makes a good fruit leather. Fruit leather made at home costs less, may have less added sugar, and offers the opportunity to combine fruit for a unique flavor.

To make fruit leather, use two cups of fruit chunks to make a 13 X 15 inch leather. Use ripe or overripe fruit that has the peeling, seeds, and stems removed. Simply drain canned fruit, but save the liquid.

Puree the fresh, frozen, or canned fruit, or the fruit pulp left from jelly making. Applesauce may be added to any fruit to yield the two cups of fruit. If the product is too thick to get a smooth puree, add reserved liquid from canned fruit, fruit juice, or water. When using a light colored fruit, add 2 teaspoons of lemon juice or 1/8 teaspoon of ascorbic acid to prevent

discoloration. If desired, add ¼ to ½ cup of sweetener to the fruit puree; such as honey, corn syrup, or sugar. If using artificial sweeteners, avoid aspartame, because it may lose sweetness when dried. Spices or other flavorings may also be added.

To make the leather in the oven, spread the pureed fruit onto plastic wrap on a raised edge baking sheet. Do not use aluminum foil or waxed paper. The puree can be divided into smaller single servings, or poured in one 13 X 15 inch sheet. Pour 1/8-inch thick, keeping puree 1-inch from the edges of the cookie sheet. Dry for 18 hours in a conventional oven 140° to 150°F.

When using a dehydrator, pour the puree 1/8-inch thick on a dehydrator tray covered with plastic wrap or specially designed plastic inserts. Dry leather at 140°F for 6 to 8 hours in a dehydrator.

When the leather is dry, there should be no indentation in the center when it is touched and it should not be sticky. The leather will dry around the outside first. Cut the leather into strips while it is still warm. When cooled, roll the leather and wrap it in plastic; store at room temperature for up to a month. For longer storage wrap tightly and store in the freezer. Fruit leathers are great for lunch boxes, hiking trips, or just a tasty snack.

Sources: "So Easy to Preserve", fifth edition, Elizabeth Andress, PhD, Judy A. Harrison, PhD, Cooperative Extension/ The University of Georgia/Athens. The Ball Blue Book, Alltrista Corporation, Muncie, Indiana, 2002

**Caution:**

Missouri humidity is too high to successfully make dried products outdoors!

*Quality for Keeps*, published monthly, April through October, is made available to residents of East Central and Southeast Missouri by their Extension Councils. Contact your county Extension office to subscribe or visit our website <http://extension.missouri.edu/franklin>. Questions may be directed to:

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