



University of California Cooperative Extension Marin Master Gardener Program

Strawberries

MMG Help Desk
1682 Novato Blvd
Suite 150B
Novato, CA 94947

Monday - Friday
9 a.m. - noon
1:00 p.m. - 4:00 p.m.

Tel: (415) 499-4204

HelpDesk@MarinMG.org



WHAT IS A STRAWBERRY?

The strawberry is a member of the rose family. A strawberry consists of many tiny individual fruits embedded in a fleshy scarlet receptacle. The brownish or whitish specks, commonly considered seeds, are the true fruits. These berry components make strawberries relatively high in fiber. Strawberries are also an excellent source of vitamin C, a good source of folate and potassium, and are relatively low in calories.

STORING FRESH STRAWBERRIES

The optimum storage temperature for strawberries in the home is 32° to 36°F (00 to 2°C). The optimum humidity for storage of berries to prevent water loss and shriveling is 90 to 95 percent. Store the fruit in the crisper drawer of your refrigerator. Keep strawberries packaged in closed plastic clamshell containers or place fruit in a partially opened plastic bag to maintain high humidity. Do not wash berries until just before eating or preserving. Washing will add moisture and will cause the berries to spoil more rapidly. Strawberries can only be stored for up to 7 days under optimum conditions, and that shelf life also depends on how ripe the fruit was when purchased or picked.

WASHING STRAWBERRIES

Strawberries should be washed just before eating or preserving. To wash, rinse strawberries thoroughly under cool running water, drain in a clean strainer, and pat dry with a clean paper towel. For maximum cleaning, gently rub each berry under the running water. Washing strawberries in a sink filled with water is not recommended since the standing water can spread contamination from one berry to another. The use of soap or detergent is not recommended or approved for washing fruits and vegetables because the produce can absorb detergent residues.

FREEZING STRAWBERRIES

Select firm, fully ripe, red berries, preferably with a slightly tart flavor. Wash and sort berries according to the method described under "Washing Strawberries" above, and remove the caps. You will need about 2/3 quart of fresh strawberries to prepare a pint of frozen berries. Strawberries may be frozen whole, sliced, crushed, or pureed, depending on their intended use in recipes. Large strawberries give a better product when sliced or crushed before freezing. Frozen strawberries can be substituted for fresh berries in recipes, but thawed whole berries will have a much softer texture than the fresh fruit. Frozen whole strawberries are served with a few ice crystals still remaining -- if thawed completely, the berries will be mushy. Syrup and sugar packs produce higher quality frozen strawberries, with a better flavor and texture, than berries packed without sweetening.

Syrup pack for whole berries

To make the very heavy (50%) sugar syrup recommended for this type of pack, dissolve 4 cups of sugar in 4 cups of lukewarm water. Stir until the solution is clear. Chill before use. Pack prepared berries into containers and cover with cold syrup. Leave ½ - 1 inch headspace. Keep the berries submerged in the syrup by placing a small piece of crumpled waxed paper or parchment paper on top of the fruit in each container. Seal the containers and freeze.



STRAWBERRY FRUIT LEATHER

Fruit leathers are homemade dried fruit rolls. Fruit leathers are made by pouring pureed fruit onto a flat surface and drying. When dried, the product is pulled from the surface and rolled. The fruit roll is shiny and has the texture of leather.

Select ripe or slightly overripe but not spoiled strawberries. (You can use fruits with minor blemishes and bruises that are not suitable for canning or freezing, if you remove the imperfections.) Wash the fruit as recommended above, and remove caps. Cut berries into slices or chunks. To make a mixed-fruit leather you can cut up kiwi or other fruits to add to the strawberries. Use 2 cups of prepared fruit for each 13 by 15 inch fruit leather.

Preheating the berries before pureeing is recommended—it helps to destroy bacteria and molds that may be present on the fruit, preserves the natural color of the berries, and speeds up the drying process. Place prepared berries in a microwaveable casserole dish, cover, and microwave on full power (high) for 6 to 8 minutes per 2 cups of fruit, stirring every 2 minutes until the fruit is soft and has reached 160°. Alternatively, place prepared berries in the top of a double boiler, cover, and steam over boiling water for 10 to 15 minutes. Puree the heated fruit until smooth. Strain to remove seeds, if desired. To prevent darkening of the fruit leather during drying, you can add 2 teaspoons of lemon juice or 1/4 teaspoon of ascorbic acid for each 2 cups of fruit. (You can buy pure ascorbic acid crystals from pharmacies and hardware stores).

RECIPE: FRESH STRAWBERRY FREEZER JAM

(using Ball "Freezer Jam Pectin")

Makes about 4 or 5 half-pint (250 ml) containers -- glass canning jars may be used and reusable plastic freezer jam jars are available. Other plastic containers are also suitable.

Ingredients

- 4 cups crushed strawberries
- 1 1/2 cups sugar (Splenda may be substituted)
- 1 package Ball "Freezer Jam Pectin"
- 1 cup water

**This is an example of a basic Freezer jam recipe to use with one of the newer powdered pectins specifically intended for freezer jam (or no-cook jam). Jams made with these pectins use significantly less sugar and are much quicker to prepare. However; freezer jams can also be made with traditional pectin. For best results in both cases, follow the specific pectin manufacturer's recipes and directions. Directions will differ from brand to brand.*

Preparation

1. Thoroughly wash your hands, utensils, and work surfaces, and then prepare the ingredients.
2. Wash fully ripe strawberries; remove stems and caps. Crush berries.
3. Mix sugar and pectin thoroughly in a large bowl.
4. Measure crushed berries and add to the sugar/pectin mixture.
5. Stir for 3 minutes.
6. Ladle jam into clean jars or freezer containers, leaving 1/2-inch headspace. Cover with an airtight lid.
7. Let stand at room temperature until thickened (about 30 minutes).
8. Store in freezer (for up to 1 year), or in the refrigerator if to be used within 3 weeks.

Variation: Strawberry/Kiwi Freezer Jam

Substitute 2 cups of strawberries and 2 cups of diced, peeled kiwi fruit for the 4 cups of strawberries in the recipe above.

GROWING STRAWBERRIES IN THE HOME GARDEN

Information on growing strawberries is available online through the University of California, Davis, Fruit and Nut Research and Information Center homepage: <http://fruitsandnuts.ucdavis.edu> The site also contains useful information on strawberry pest and disease management, and control of disorders such as black root rot, gray mold, nematode problems, wilting, and virus diseases.

More Strawberry references – including strawberry preservation methods:
ANR Publication 8256: Strawberries: Safe Methods to Store, Preserve and Enjoy
Free at: <http://anrcatalog.ucdavis.edu/pdf/8256.pdf>