Fruit Freezing Methods

Freezing is a simple, quick way to preserve foods. Fruits freeze well and retain their distinct fruit flavor. Texture is usually softened somewhat by freezing, but serving partially frozen fruit with ice crystals will compensate for texture changes. Lighter colored fruits may require special treatment to retain color, texture and flavor.

Containers for Freezing

The prime purpose of packaging is to exclude air and keep food from drying out and preserve the food value, flavor, color, and texture.

To retain highest quality in frozen food, packaging materials should be moisture-vapor proof. Glass, metal and rigid plastics are examples of moisture-vapor proof packaging materials. Most plastic bags, wrapping materials and waxed cartons made for freezing are moisture vapor resistant and retain satisfactory quality during storage. Ordinary waxed papers and paper cartons from cottage cheese, ice cream or milk are not sufficiently moisture-vapor resistant.

Selection

Select fruit that is fully ripe, but still firm. Freeze the fruit as soon as possible after it is harvested. Sort fruits for size and ripeness. Over-ripe fruits or those with bruised spots will spoil quickly. Wash fruits thoroughly. Wash small lots at a time, and lift the fruit out of the water, rather than pour the water off the fruit. Rinse in clear water. Handle berries carefully. Place a few berries in a strainer or colander, and gently spray or rinse will help retain the shape of the berries.

Preparation

Peel, trim, pit and slice the fruit in the same way as for serving. Large fruits should be cut in pieces or crushed for best results. Prepare small amounts at a time, especially those fruits that darken rapidly. Specific directions are given for each fruit.

Anti-Darkening Treatment

Some fruits darken during freezing if not treated. Several types of anti-darkening treatments are used.

Ascorbic Acid

For most fruits that need treatment, ascorbic acid (vitamin C) may be used. This is very effective in preserving color and flavor of fruit, and adds nutritive value. Ascorbic acid in crystalline or powdered form is available at pharmacies. One teaspoon weighs about 3 grams. Dissolve ascorbic acid in a little cold water. Add to syrup or sprinkle over fruit and mix carefully.

Ascorbic Acid Mixtures

Special anti-darkening preparations made of ascorbic acid and citric acid mixed with sugar are available. Follow the manufacturer's directions. Citric Acid, Lemon Juice.

Citric acid or lemon juice

Makes a suitable anti-darkening agent; neither is as effective as ascorbic acid. Citric acid in crystalline or powdered form is available at pharmacies. When using citric acid, dissolve it in a little cold water before adding to the fruit according to directions for that fruit.

Steam

For some fruits, steaming for a few minutes before packing is enough to control darkening.

Methods of Packing

Most fruits have a better texture and flavor if packed in sugar or syrup. Some may be packed without sweetening. Fruits packed in a syrup are best for desserts; those packed in dry sugar or unsweetened are best for most cooking purposes.

Syrup Pack. A 40-percent syrup is recommended for most fruits. It takes one-half to two-thirds cup of syrup for each pint package of fruit.

Type of Syrup	Cups of Sugar	Cups of Water	Cups Yield
20 percent	1½	4	4½
30 percent	2	4	5
40 percent	3	4	5½
50 percent	4¾	4	6½
60 percent	7	4	7¾

Dissolve sugar in cold or hot water. If hot water is used, cook syrup before using: Syrup may be made the day before and kept cold in the refrigerator.

Sugar Pack

Sprinkle sugar over the fruit. Mix gently until juice is drawn out and sugar is dissolved.

Unsweetened Pack

Pack prepared fruit into containers, without added liquid or sweetening.

Tray Pack

Small fruits or pieces may be frozen in a single layer on a cookie sheet or tray, then packaged for "free flowing" removal.

Seal

Exclude as much air as possible, label and place in freezer. Freeze as quickly as possible, separating packages until completely frozen.

Fruit Freezing Guide

Apples

Wash, peel, core and slice into anti-darkening solution (3 Tablespoons lemon juice per quart of water). Syrup pack in 40% syrup, adding ½ teaspoon ascorbic acid per quart syrup. Or, sugar pack by sprinkling ¼ teaspoon ascorbic acid dissolved in ¼ cup cold water per quart of fruit with ½ cup sugar per quart of apple slices. Fruit may be packed with no added sugar.

Applesauce

Wash, peel if desired, core and slice. Add a cup water to each quart of apple slices. Cook until tender. Cool and strain. Sweeten to taste with ¼ to ¾ cup sugar per quart of sauce. Pack into containers.

Apricots

Wash, halve, pit. Peel and slice if desired. If apricots are not peeled, heat in boiling water for ½ minute to keep skins from toughening during freezing. Cool in cold water, drain. Pack in 40% syrup, adding ¾ teaspoon ascorbic acid per quart. Or, sprinkle with ascorbic acid solution and pack with or without sugar as described for apples.

Avocados

Peel soft, ripe avocados. Cut in half, remove pit, mash pulp. Add c teaspoon ascorbic acid to each quart of puree. Package in recipe-size amounts.

Berries

Select firm, fully-ripe berries. Sort, wash, drain. Use 40% syrup pack, dry unsweetened pack, dry sugar pack, ¾ cup sugar per quart, or tray pack.

Cherries (sour or sweet)

Select well-colored, tree-ripened cherries. Stem, sort, wash thoroughly. Drain and pit. Sour cherries: Dry pack in sugar (¾ cup sugar per quart of fruit) or syrup pack in 50-65% syrup. Sweet cherries: Pack in 40% syrup with ½ teaspoon ascorbic acid per quart.

Fruit-juices (non-citrus)

Select fully ripe fruit. Crush. Heat slightly until juice flows from pulp. Strain through cloth bag. Add sugar to taste. Pour into containers and/or ice cube trays and freeze. Remove cubes from trays and store in freezer bags.

Grapes

Select firm, ripe grapes. Wash and stem. Leave seedless grapes whole. Cut grapes with seeds in half and remove seeds. Pack in 40% syrup or pack without sugar using dry pack for halved grapes and tray pack for whole grapes.

Grapefruit, Oranges

Select firm fruit, free of soft spots. Wash and peel. Section fruit, removing all membranes and seeds. Pack in 40% syrup or in fruit juice, adding ½ teaspoon ascorbic acid per quart of syrup or juice.

Grapefruit Juice, Orange Juice

Select fruit as directed for sections. Squeeze juice from fruit using squeezer that does not press oil from rind. Sweeten with 2 Tablespoons sugar per quart of juice or pack unsweetened. Add ¾ teaspoon ascorbic acid per gallon of juice.

Kiwi

Select fully ripe, firm fruit. Peel. Cut into ¼-inch slices. Pack unsweetened.

Melons (cantaloupe, honeydew, watermelon)

Select firm-fleshed, well-colored, ripe melons. Cut into cubes, slices or balls. Pack in 30% syrup or pack dry using no sugar. Pulp also may be crushed (except watermelon), adding 1 Tablespoon sugar per quart.

Peaches, Nectarines

Select firm, ripe fruit. Sort, wash, pit and peel. Cut in halves, quarters or slices into anti-darkening solution (3 tablespoons lemon juice per quart of water) or into syrup. Pack in 40% syrup, adding ½ teaspoon ascorbic acid per quart syrup. Or, sprinkle each quart of fruit with solution of ¼ teaspoon ascorbic acid dissolved in ¼ cup cold water, add up to b cup sugar, mix well and pack into containers. May also be packed in cold water containing 1 teaspoon ascorbic acid per quart of water.

Pears

Select firm, well-ripened fruit. Wash, peel, core; cut in halves or slices. Heat in boiling 40% syrup 1-2 minutes, depending on size of pieces. Drain and cool. Pack in cold 40% syrup, adding ¾ teaspoon ascorbic acid to each quart of syrup, if desired.

Pineapple

Select firm, ripe fruit. Pare and remove core and eyes. Slice, dice, crush or cut into wedges. Pack without sugar or in 30% syrup.

Plums, Prunes

Select firm, deep-colored fruit. Sort and wash. Leave whole or cut in halves or quarters. Pack in 40 to 50% syrup, adding ½ teaspoon ascorbic acid per quart syrup. Or, pack whole fruit into containers without sugar or syrup.

Rhubarb

Select firm, tender, well-colored stalks. Wash, trim and cut into 1-2 inch pieces. Heat in boiling water 1 minute and cool promptly in cool water to help retain color and flavor, if desired. Pack tightly into containers without sugar or with 40% syrup.

References

- Home Freezing of Fruits and Vegetables, USDA Home & Garden Bulletin 10.
- Ball Blue Book, Guide to Home Canning and Freezing, Ball Corporation, Muncie, IN 47302.

- Freezing Fruits, Pat Kendall, Colorado State University Extension Service, Fort Collins, CO.

Authors

Georgia C. Lauritzen, PhD, Nutrition & Food Sciences

Quick Find

- Containers
- Selection
- Preparation
- Packing
- Sealing
- Freezing
- References