

GENERAL DIRECTIONS

1. Choose top quality fruit (produce) at optimum maturity and freshness. Correct freezing techniques will maintain quality but will not improve it.
2. If fruit cannot be frozen immediately, refrigerate to retain maximum freshness. For home-grown fruit, the guideline is 3 – 4 hours from garden to freezer.
3. Work with small quantities, enough for only a few containers at a time.
4. Wash and drain all fruit before removing hulls, cores, pits, seeds or skins. Wash small quantities at a time through several changes of cold water. Do not soak. Lift fruit out of water to prevent dirt from re-depositing on produce.
5. Prepare fruit according to chart (see SPECIFIC DIRECTIONS FOR FREEZING FRUITS).
6. Enzymes in fruit can cause browning and loss of vitamin C. These changes are more apparent in light coloured fruit, but can be lessened or prevented (see PREVENTING DISCOLOURATION).
7. Use freezer containers. Freezer bags or rigid plastic freezer containers are suitable. Remove as much air as possible from freezer bags. Allow enough headspace in rigid containers for food to expand.
8. Label containers with date, contents, amount of fruit and amount of added ingredients. Labelling is especially important if freezing fruit for later use in jams, jellies or pies.
9. Freeze prepared product immediately. Leave space between packages so they freeze more evenly and quickly. Large ice crystals form in fruit when too much is placed in the freezer at one time and the freezing process takes too long. Large ice crystals result in texture loss (softening or mushiness) and moisture loss in a fruit when it is thawed. When fruit is frozen quickly, smaller ice crystals are formed, resulting in a better quality product. As a guideline, freeze 2 lb (1 kg) of produce per cubic foot of freezer space per 24 hour period.
10. The temperature of a freezer should be 0°F (-18°C) or lower. This very low temperature slows enzyme activity that effects the quality of fruit.
11. For best quality and maximum nutrient value, use frozen fruit within one year.

TYPES OF PACKS

There are several ways to pack fruit for freezing. Fruit may be packed in syrup, in sugar, dry (plain) or in unsweetened fruit juice or water. The type of pack used will depend on the intended use of the fruit. Most fruits will have a better texture and flavour if packed in syrup or sugar. The sugar, however, is not necessary to safely preserve fruit. Fruits packed using a syrup pack or sugar pack is best used in uncooked desserts. Label the container with the amount of sugar added so adjustments can be made in the recipe used. Fruits packed using a dry pack are best for jam and jelly making or cooked desserts.

1. Syrup Pack

Type of Syrup	Sugar	Water	Yield
Very light	1 cup (250 mL)	3 cups (750 mL)	3 1/2 cups (875 mL)
Light	1 cup (250 mL)	2 cups (500 mL)	2 1/2 cups (625 mL)
Medium	1 cup (250 mL)	1 1/2 cups (375 mL)	2 cups (500 mL)
Heavy	1 cup (250 mL)	1 cup (250 mL)	1 1/2 cups (375 mL)

Dissolve sugar in warm water; chill. Keep refrigerated until used. Cover fruit completely with syrup. Allow 1/2 – 3/4 cup (125 – 175 mL) syrup for each 2 cups (500 mL) fruit. If desired, up to 1/4 of the sugar may be replaced by corn syrup or honey.

2. Sugar Pack

The amount of sugar used may vary with sweetness of fruit, intended use and personal preference. As a guideline, use 1/2 cup (125 mL) sugar to 4 cups (1 L) fruit. Sprinkle sugar over fruit and mix gently until the juice is drawn out and sugar dissolved.

3. Dry Pack

Unsweetened fruit may be packed directly into freezer bags or freezer containers and frozen. Alternatively, fruit may be tray packed. To tray pack, place fruit in a single layer on a tray and freeze. When frozen, package fruit promptly and return to freezer. Tray-packed fruit remains loose and can be poured from the container and the package reclosed.

4. Unsweetened Pack

Fruit may be packed in unsweetened fruit juice or water but will not retain the texture, flavour and colour as well as when packed with sugar. Artificial sweeteners may be added to taste after thawing.

USING FROZEN FRUIT

- Thaw fruit in its original container in refrigerator for approximately 4 – 6 hours per 2 cups (500 mL) of fruit.
- For best flavour, texture and appearance, serve fruit with a few ice crystals remaining.
- In cooked desserts, baking and sauces, use fruit when partially thawed to minimize moisture loss.
- For pies, increase thickener by approximately 1/3 of amount used with fresh fruits.
- When making jam, use fruit immediately after thawing to prevent discolouration.

FRUIT JUICE

- Wash fruit; extract juice. Sweeten, if desired.
- Fruit juice **must** be heated (pasteurized) by boiling for 1 minute and then chilled before freezing. Juice from juicers (machines that extract juice using steam) can be frozen without additional heating.

PREVENTING DISCOLOURATION

Some fruits darken when exposed to air and during freezing. This darkening may be lessened or prevented by treating fruit with an anti-darkening agent at the time it is peeled and sliced, or as the fruit is packed for freezing, or at both times.

To prevent darkening of fruit, use one of the following **anti-darkening agents**.

Ascorbic acid crystals – These are the most economical because of the small amount used. Ascorbic acid crystals are available in drugstores, health food stores and sometimes in stores carrying canning supplies.

Ascorbic acid tablets – These may be used, but they are difficult to crush and dissolve. Fillers in the tablets may make the packing syrup cloudy.

Fruit Fresh[®] – This is a commercial product which may be used by following instructions on the package or the guidelines below.

Salt or lemon juice – Either of these may be used but are not as effective as Fruit Fresh[®] or ascorbic acid crystals. Salt or lemon juice are only suitable to treat fruit as it is peeled and sliced.

Steam – For fruit such as apples that will be cooked after freezing, steam may be used to prevent discolouration. Steam small quantities of fruit at a time, just until fruit is heated through.

Anti-darkening Holding Solutions

As fruit is peeled and sliced, it may be placed into one of the following solutions to prevent discolouration. This is sometimes called an **anti-darkening holding solution**.

- 1 tsp (5 mL) ascorbic acid crystals dissolved in 4 cups (1 L) cold water.
- Nine 500 mg ascorbic acid tablets dissolved in 4 cups (1 L) cold water.
- 2 tbsp (25 mL) Fruit Fresh[®] dissolved in 4 cups (1 L) water.
- 1 tbsp (15 mL) salt dissolved in 8 cups (2 L) cold water. Leave fruit in this solution a maximum of 20 minutes to prevent flavour changes.
- 1/4 cup (50 mL) bottled lemon juice stirred into 4 cups (1 L) cold water. Leave fruit in this solution a maximum of 20 minutes to prevent flavour changes.

Anti-darkening Methods

As fruit is packed for freezing, use one of the following **anti-darkening methods** to prevent discolouration.

In syrup pack:

- 1 tsp (5 mL) ascorbic acid crystals gently stirred into 4 cups (1 L) cold syrup shortly before using
- 2 tsp (10 mL) Fruit Fresh[®] gently stirred into 1 cup (250 mL) cold syrup shortly before using

In sugar pack:

- 1/2 tsp (2 mL) ascorbic acid crystals dissolved in 3 tbsp (40 mL) cold water, tossed with fruit before adding sugar
- 1 tbsp (15 mL) Fruit Fresh[®] dissolved in 3 tbsp (40 mL) cold water, tossed with fruit before adding sugar
- 1 tbsp (15 mL) Fruit Fresh[®] mixed with 1/2 cup (125 mL) sugar, tossed with fruit

In dry pack:

- 1/2 tsp (2 mL) ascorbic acid crystals dissolved in 3 tbsp (40 mL) cold water, tossed with fruit
- 1 tbsp (15 mL) Fruit Fresh[®] dissolved in 3 tbsp (40 mL) cold water, tossed with fruit
- 1 tbsp (15 mL) Fruit Fresh[®] sprinkled over 4 cups (1 L) fruit and tossed gently to distribute natural juices

In unsweetened pack:

- 1 tsp (5 mL) ascorbic acid crystals dissolved in 4 cups (1 L) cold unsweetened fruit juice or water shortly before using
- 2 tsp (10 mL) Fruit Fresh[®] dissolved in 1 cup (250 mL) cold unsweetened fruit juice or water shortly before using

SPECIFIC DIRECTIONS FOR FREEZING FRUITS

While fruit can be frozen using any of the packing methods (see TYPES OF PACKS), some methods yield better products than other methods. The following chart lists the methods that generally yield the best products for each fruit.

<p>Apples</p> <ul style="list-style-type: none"> Wash, peel and core. Slice into 1/4 inch (6 mm) slices directly into an anti-darkening holding solution. Use an anti-darkening method in a medium syrup pack if apples are to be used for uncooked desserts. Use an anti-darkening method in a sugar pack or dry pack if apples are to be used for pie making or applesauce. 	<p>Cranberries</p> <ul style="list-style-type: none"> Wash and stem. Choose a medium syrup pack or dry pack. 	<p>Pears</p> <ul style="list-style-type: none"> Wash, peel, core and slice. Choose a medium syrup pack used as follows: Heat pears in boiling syrup for 2 minutes. Drain, reserving syrup. Chill fruit and syrup. Pack pear slices into containers and cover with chilled syrup using an anti-darkening method.
<p>Apricots</p> <ul style="list-style-type: none"> Wash, halve and pit; peel, if desired. If apricots are not peeled, blanch for 30 seconds to keep skins from toughening. Chill in ice water and drain before packing. Use an anti-darkening method in a medium syrup pack or sugar pack. 	<p>Gooseberries</p> <ul style="list-style-type: none"> Choose fully ripe berries for pies and slightly underripe berries for jam or jelly making. Wash and remove stems and blossom ends. Choose a medium syrup pack if berries are to be used for uncooked desserts. Choose a dry pack if berries are to be used for pies or jam. 	<p>Pineapples</p> <ul style="list-style-type: none"> Wash, peel, core and remove eyes. Cut into wedges, slice, dice or crush. Choose a medium syrup pack made with pineapple juice or water, or pack in unsweetened pineapple juice.
<p>Bananas</p> <ul style="list-style-type: none"> Choose ripe bananas. Peel; leave whole or mash. Use when just thawed. 	<p>Grapes</p> <ul style="list-style-type: none"> Wash and stem. Cut in half and remove seeds, if necessary. Choose a medium syrup pack or dry pack. 	<p>Plums</p> <ul style="list-style-type: none"> Wash. Leave whole or cut into halves or quarters and pit. Use an anti-darkening method in a medium syrup pack, heavy syrup pack or dry pack.
<p>Blueberries, Currants, Saskatoons</p> <ul style="list-style-type: none"> Wash and stem. Choose a light syrup pack, sugar pack or dry pack. 	<p>Mangos</p> <ul style="list-style-type: none"> Wash, peel and slice. Choose a medium syrup pack or dry pack. Mango slices may also be pureed and packed with or without the addition of sugar. 	<p>Pomegranates</p> <ul style="list-style-type: none"> Wash, score rind in quarters, break apart and remove seeds. Choose a dry pack and freeze seeds only.
<p>Cherries</p> <ul style="list-style-type: none"> Wash, stem and pit. Use an anti-darkening method in a medium syrup pack, sugar pack or dry pack. 	<p>Melons (cantaloupe, honeydew, watermelon)</p> <ul style="list-style-type: none"> Wash, peel, remove seeds and cut into balls, cubes or slices. Choose a light syrup pack or unsweetened pack. Melon may have a musty flavour after freezing. 	<p>Raspberries, Strawberries</p> <ul style="list-style-type: none"> Wash and stem. Leave whole, slice or crush berries. Choose a medium syrup pack, sugar pack or dry pack. A syrup pack or sugar pack is preferred for sliced or crushed strawberries.
<p>Citrus Fruits (grapefruit, oranges)</p> <ul style="list-style-type: none"> Wash, peel and section, removing all membrane and seeds. Choose a light or medium syrup pack or dry pack. 	<p>Nectarines, Peaches</p> <ul style="list-style-type: none"> Wash, peel and pit. Slice directly into anti-darkening holding solution. Use an anti-darkening method in a medium syrup pack or sugar pack. 	<p>Rhubarb</p> <ul style="list-style-type: none"> Wash, trim and slice. Choose a medium syrup pack or dry pack.