

Freezing Fruit

Select high quality, fresh, firm fruit. Wash and prepare just before freezing. Work in small quantities. Do NOT use galvanized, copper, or iron equipment.

Most fruit will have a better texture and flavor if packed in sugar or a sugar syrup. Sugar can be omitted or artificial sweetener can be used.

Dry Pack

Wash fruit, pack into a container and freeze. Tray pack method will allow smaller amounts to be used from frozen package. Used for small whole fruits, like berries.

Sugar Pack

Wash fruit. Sugar is sprinkled over fruit, gently mixed, allowing juice to be drawn out of fruit before freezing. Used for peaches, strawberries and cherries.

Syrup Pack

Sugar is dissolved in hot water, then cooled. Place fruit in container and pour cooled syrup over it. Normally used on fruit used in uncooked desserts. Proportion of sugar to water depends upon the sweetness of the fruit to be frozen.

Discoloration

Peaches, apples, pears and apricots darken quickly and can lose flavor when exposed to air and during freezing.

Using ascorbic acid, citric acid or lemon juice can lesson discoloration. They are used by adding to syrups or sugar before putting on fruit, dissolved in water and sprinkled on fruit, or dipping the fruit in the solution. Steaming can also be used on some fruits.



Science of Freezing

Freezing does not improve quality.

Freezing slows down chemical changes that affect quality.

Best Texture: Freeze food FAST = small ice crystals.

Slow freezing will rupture cells, leaving food mushy.

Maintain freezer temperature of 0°F or less for best quality.

Sources: National Center For Home Food Preservation

<https://nchfp.uga.edu/how/freeze.html>

University of Minnesota Extension

<https://extension.umn.edu/preserving-and-preparing/vegetable-blanching-directions-and-times-home-freezer-storage>

6-2022, Larvick



Freezing Produce

Freezing is easy, quick and convenient.

- ▶ Freezing temperatures stop the growth of microorganisms.
- ▶ Freezing slows down the chemical reactions that break food down and reduce quality.
- ▶ Properly frozen foods maintain more of their original color, flavor, and generally more nutrients than food preserved by other methods.

Freezing foods is a great way to keep them to use later.

Blanching Vegetables

Blanching is a must for most vegetables to be frozen for long term storage.

Blanching is a short heat treatment with boiling water or steam that slows or stops the enzyme action. Enzymes help the produce to ripen. Enzymes can still work slowly in a freezer causing loss of flavor, color, and texture.

Blanching time is very important and varies with the vegetable and size.

- ▶ **Under-blanching** stimulates the activity of enzymes and is worse than no blanching.
- ▶ **Over-blanching** causes loss of flavor, color, vitamins and minerals.

Vegetables that do NOT need to be blanched are onions, peppers and tomatoes.

Nebraska Extension Food Preservation web site.
<https://food.unl.edu/food-preservation>



The University of Nebraska does not discriminate based upon any protected status. Please see go.unl.edu/nondiscrimination.

Step by Step Blanch Vegetables

1. Wash, drain, sort, trim and cut vegetables.
2. Use 1 gallon water per pound of prepared vegetables or 2 gallons water per pound leafy greens.
3. Put vegetables into blancher (wire basket, coarse mesh bag or perforated metal strainer) and lower into boiling water. (Or steam blanch: boil 1-2 inches of water in a pot, bring to boil and then put a single layer of vegetables in basket above the water.)
4. Cover. Start counting blanching time as soon as water returns to a boil. Or if steam blanching, start counting immediately.
5. Keep heat high for the time given in the directions.
6. Cool immediately in ice water or cold water (60° F or below) for the same time used in blanching (except for corn-on-the-cob for which cooling time is twice the time of blanching). Stir vegetables several times during cooling.
7. Drain vegetables thoroughly. Pack the vegetables either by dry-pack or tray-pack.
 - ▶ **Dry-pack:** Pack vegetable tightly into containers or freezer bags. Press out air and seal tightly.
 - ▶ **Tray-pack:** Put a single layer of the vegetable on a shallow pan and put the pan into the freezer. As soon as the vegetable is frozen, put them into a freezer bag or container. Press out air and seal tightly.
8. Label with date and product. Freeze.



Tray Pack Method



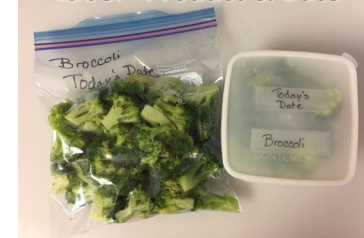
Dry Pack Method



Characteristics of Suitable Freezer Containers:

- ▶ Moisture vapor resistant
- ▶ Durable and leakproof
- ▶ Not brittle at low temperatures
- ▶ Resistant to oil, grease, and water
- ▶ Protects foods from absorbing odors
- ▶ Easy to seal
- ▶ Can be labeled

Label - Product & Date



Laying Flat in a Freezer Bag



Vegetable Blanching Time in Boiling Water

| Vegetable | Size of Pieces | Minutes in Boiling Water |
|------------------------------------|-------------------------------------|--------------------------|
| Asparagus | Medium stalk | 3 |
| Beans - snap, green or wax | | 3 |
| Broccoli - flowerets | 1 1/2 inches across | 3 |
| Carrots | Diced, sliced or strips | 2 |
| Corn - whole kernel or cream style | Blanch before cutting corn from cob | 4 |

Frozen vegetables will maintain high quality for 8 to 12 months at zero degrees F or lower.

For more vegetable blanching times follow this link <https://go.unl.edu/blanchtofreeze>