



Blanching and Freezing Foods

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Freezing is one of the simplest and quickest methods of preserving foods. The process involves slowing down the chemical changes that affect the quality or spoilage of foods. By following these directions, you can enjoy high quality, nutritious frozen food.

Freezing Vegetables:

- Select fresh, tender vegetables. Freezing does not improve quality.
- If vegetables cannot be frozen immediately, refrigerate them.
- Thoroughly wash and drain vegetables. Solid vegetables can be scrubbed with a brush or cloth. Rinse small quantities at one time using several changes of cold water. Do not let vegetables soak in the water.

Blanching is necessary for almost all vegetables that will be frozen.

- Water blanching – Use 1 gallon of water per pound of prepared vegetables. Put the vegetables in a blanching basket or metal strainer and lower them into a large pot of rapidly boiling water. Cover. Wait for the water to return to boiling. Start counting blanching time when water returns to a full boil. It should take only



a minute to come back to a boil. If it takes longer, too many vegetables have been added to the boiling water.

- Steam blanching – To steam, use a pot with a tight lid and a basket that holds the food at least 3 inches above the bottom of the pot. Put 1 to 2 inches of water in the pot and bring to a boil. Place vegetables in a single layer, cover and keep on high heat. Start counting steaming time as soon as the lid is on.

Cooling – As soon as the water or steam blanching is complete, vegetables should be placed in ice-cold water. Change water often or use cold running water

or ice water. Cooling vegetables should take the same amount of time as blanching. Drain vegetables very well and carefully pat dry, then pack vegetables into containers or freezer bags, removing as much air as possible. Allow for 1/2 inch headspace.

A few vegetables – such as raw tomatoes, fresh herbs, green onions, white onions and peppers – do not require blanching before freezing.

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Blanching and Freezing Foods

Blanching Times

Vegetable	In boiling water (minutes)	In steam (minutes)
Artichoke – globe (hearts)	7	-
Artichoke – Jerusalem	3-5	-
Asparagus		
Small stalk	2	3
Medium stalk	3	5
Large stalk	4	6
Beans – snap, green or wax	3	5
Beans – lima, butter or pinto		
Small	2	3
Medium	3	5
Large	4	6
Broccoli (flowerets 1½ inches across)	3	5
Brussels sprouts		
Small heads	3	5
Medium heads	4	6
Large heads	5	7
Cabbage or Chinese cabbage (shredded)	1 1/2	2 1/2
Carrots		
Small	5	8
Diced, sliced or lengthwise strips	2	3
Cauliflower (flowerets, 1 inch across)	3	5
Celery	3	-
Corn		
Corn on the cob		
Small ears	7	10
Medium ears	9	13
Large ears	11	16
Whole-kernel or cream-style <i>(blanch ears before cutting corn from cob)</i>	4	6
Eggplant	4	6
Greens		
Collards	3	5
All others	2	3

Blanching and Freezing Foods

Blanching Times (*continued*)

Vegetable	In boiling water (minutes)	In steam (minutes)
Kohlrabi		
Whole	3	1
Cubes	1	-
Mushrooms		
Whole	-	9
Buttons or quarters	-	9
Slices	-	5
Okra		
Small pods	3	5
Large pods	5	8
Peas – edible pods	2-3	4-5
Peas – field (black-eyed)	2	-
Peas – green	1 1/2 - 2 1/2	3-5
Peppers – halves	3	5
Potatoes – Irish (new)	3-5	5-8
Pumpkin	Cook	-
Rutabaga	3	5
Soybeans – green	5	-
Squash – chayote	2	-
Squash – summer	3	5
Squash – winter	Cook	-
Sweet potatoes	Cook	-
Turnips or parsnips		
Cubes	3	5

Freezing Fruits:

- Select fresh, firm-ripe fruits. Freezing does not improve quality.
- If fruits cannot be frozen immediately, refrigerate them.
- Thoroughly rinse and drain fruits. Solid fruits can be scrubbed with a brush or cloth. Rinse small quantities at one time using several changes of cold water. Do not let fruit soak in the water.
- Do not use galvanized, copper or iron equipment when preparing fruit. The acid in the fruit can react with the metals and contaminate the food.

Types of packs:

- Syrup pack – The type of syrup depends on the sweetness of the fruit to be frozen. The lighter syrups are recommended for mild-flavored fruits; heavier syrups may be needed for sour fruits. Fruits frozen in syrup have a better texture and flavor and hold their shape better when thawed than fruit frozen in water without sugar. Sugar is not necessary to safely preserve fruit, however.

To make syrup, dissolve sugar in lukewarm water, mixing until the solution is clear. Chill syrup before using. Use just enough cold syrup to cover the prepared fruit after it's placed in the freezer container – about 1/2 to 2/3 cup of

Blanching and Freezing Foods

syrup per pint. To keep fruit under the syrup, place a small piece of crumpled parchment paper or other water-resistant wrapping material on top, and press fruit down into the syrup before sealing the container.

- Sugar pack – Sugar is sprinkled over the fruit and stirred until sugar is dissolved. This pack is good for sliced soft fruits such as peaches, strawberries, grapes, plums and cherries.
- Unsweetened – Fruit can be packed dry, covered with water containing ascorbic acid or packed in unsweetened juice.
- Tray pack – This method is excellent for small whole fruits such as blueberries, raspberries and cranberries. The fruit is put in a single layer on a shallow tray, frozen and then packaged. The fruit pieces are loose, so you can take out small servings and reseal the package.

- Artificial sweetener pack – Sugar substitutes may be used in any of the unsweetened packs above. They can be added before freezing or just before serving. Equivalents for a standard amount of sugar vary with each brand of artificial sweetener. Use directions on the package to determine the amount of sweetener needed.

Proper packaging is essential to protect the flavor, color, moisture content and nutritive value of frozen foods. Label each package with the name of the contents and the date. Effective freezer packaging is:

- Moisture- and air-resistant.
- Strong and leakproof.
- Resistant to oil, grease and water.
- Easy to seal and write on.

It also protects foods from absorbing off-flavors or odors.

Syrups for Use in Freezing Fruits

Type of syrup	Percent syrup	Cups of sugar	Cups of water	Yield in cups
Very light	10%	1/2	4	4 1/2 cups
Light	20%	1	4	4 3/4 cups
Medium	30%	1 3/4	4	5 cups
Heavy	40%	2 3/4	4	5 1/3 cups
Very heavy	50%	4	4	6 cups

To find more helpful bulletins related to food preservation or gardening, please visit:

msue.anr.msu.edu/program/info/mi_fresh

Sources:

So Easy to Preserve. Bulletin 989. Cooperative Extension, University of Georgia.

Home Food Preservation Desk Reference for Michigan State University Extension Home Economists.

U.S. Department of Agriculture Complete Guide to Home Canning.