

Freezing Vegetables

Most vegetables freeze very well. Fresh, tender vegetables right from the garden are best for freezing. Among the products easily frozen are some that are the most difficult to can—corn, peas, and green lima beans.

Tomatoes lose their firm texture and become soft and flabby, as do salad vegetables, such as celery, lettuce, green onions, and radishes. Tomato juice can be frozen satisfactorily but is so easy to can that you probably won't want to use premium freezer space for it.

Vegetables high in starch content, such as potatoes and mature lima beans, do not freeze well. Over-mature vegetables do not freeze well either.

Washing and Sorting

Washing is the first step in preparing most vegetables for freezing. Wash them thoroughly in cold water. *Lift* them out of the water because grit settles to the bottom of the pan. Sort vegetables according to size for heating and packing unless they are to be cut into pieces of uniform size. Broccoli and cauliflower may be soaked for 30 minutes in 1 tablespoon of salt per gallon of water to remove insects before blanching.

Heating before Packing

Vegetables for freezing must be blanched before packaging. With the exception of green pepper, vegetables maintain a better quality in frozen storage if they are heated before packaging.

Blanching slows or stops the action of enzymes that help vegetables grow and mature. After maturity, enzymes cause loss of flavor and color. If vegetables are

not heated enough, the enzymes continue to be active during frozen storage. Then the vegetables may develop off-flavors, discolor or toughen, and lose nutritional value. Heating also wilts or softens vegetables and makes them easier to pack. Heating time varies with the vegetable and size of pieces.

The most satisfactory way to blanch most vegetables is in boiling water. Use a blancher, which has a blanching basket and cover, or fit a wire basket into a large kettle and add the cover. Using at least 1 gallon of boiling water for each pound of prepared vegetables, follow the blanching directions given for the vegetable you are freezing.

Broccoli, pumpkin, sweet potatoes, and winter squash can be either boiled or steamed. To steam, use a kettle with a tight lid and a rack that holds a steaming basket at least 3 inches above the bottom of the kettle. Put 1 or 2 inches of water in the kettle and bring the water to a boil. Put the vegetables in the basket in a single layer so that steam reaches all parts quickly. Cover the kettle and keep the heat high. Follow the directions given for the vegetable you are freezing.

Recommended Blanching Times

Vegetable	Cut/Size	Blanching Time
Asparagus	Small stalks	2 minutes
	Medium stalks	3 minutes
	Large stalks	4 minutes
Beans, green or wax	Regular cut	3 minutes
	French cut	2 minutes
Beans, lima	Small	2 minutes
	Medium	3 minutes
	Large or Fordhook	4 minutes
Beets	Small	25-30 minutes
	Medium	45-50 minutes
Broccoli	Uniform stalk	3 minutes
Brussels sprouts	Small heads	3 minutes
	Medium heads	4 minutes
	Large heads	5 minutes
Cabbage or Chinese cabbage	Medium wedges	1½ minutes
Carrots	Diced or sliced	2 minutes
	Small whole	5 minutes
Cauliflower	1-inch pieces	3 minutes
Corn, whole kernel		4 minutes
Corn-on-the-cob	Small ears	7 minutes
	Medium ears	9 minutes
	Large ears	11 minutes
Greens (beet, chard, kale, and mustard)		2 minutes
Greens (collards and spinach)		3 minutes
	Tender leaves	1½ minutes
Okra	Small pods	3 minutes
	Large pods	4 minutes
Peas, green	Plump	1½ minutes
Peas, sugar snap and snow	Small pods	1½ minutes
	Large pods	2 minutes
Pepper, green		Blanching optional

Cooling

After vegetables are heated, they should be cooled quickly and thoroughly to stop the cooking. Plunge the basket of vegetables immediately into a large quantity of cold water (60°F or below). Change the water frequently, or use cold running

water or ice water. If ice is used, you'll need about 1 pound of ice for each pound of vegetables. It will take as long to cool the food as it does to heat it. When the vegetables are cool, remove them from the water and drain thoroughly.

Vegetable Yields

The number of pints of frozen vegetables from a given quantity of fresh vegetables depends on the quality, condition, maturity, variety, trim, and cut size. Yields given in the following table are approximate.

Packaging

Package vegetables in suitable freezer containers. Vegetables that package loosely, such as asparagus, Brussels sprouts, cauliflower, corn-on-the-cob, and hot peppers, need no headspace. Tomato juice and sections, as well as sweet potatoes, need a 1-inch headspace. All other vegetables need a ½-inch headspace. Seal, label, and freeze immediately.

Vegetable Yields

Vegetable	Fresh	Frozen
Asparagus	1 crate (12 2-lb bunches)	15 to 22 pt
Beans, lima (in pods)	1 bu (32 lb)	12 to 16 pt
Beans, green and wax	1 bu (30 lb)	30 to 45 pt
Beet greens	15 lb	10 to 15 pt
Beets (without tops)	1 bu (52 lb)	35 to 42 pt
Broccoli	1 crate (25 lb)	24 pt
Brussels sprouts	4 qt boxes	6 pt
Carrots (without tops)	1 bu (50 lb)	32 to 40 pt
Cauliflower	2 medium heads	3 pt
Chard	1 bu (12 lb)	8 to 12 pt
Collards	1 bu (12 lb)	8 to 12 pt
Corn, sweet (in husks)	1 bu (35 lb)	14 to 17 pt
Kale	1 bu (18 lb)	12 to 18 pt
Mustard greens	1 bu (12 lb)	8 to 12 pt
Peas	1 bu (30 lb)	12 to 15 pt
Peppers, green	⅔ lb (3 peppers)	1 pt
Pumpkin	3 lb	2 pt
Spinach	1 bu (18 lb)	12 to 18 pt
Squash, summer	1 bu (40 lb)	32 to 40 pt
Squash, winter	3 lb	2 pt
Sweet potatoes	⅔ lb	1 pt

*Prepared by Sandra Bastin, Ph.D., R.D.,
Extension Food and Nutrition Specialist*

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Nancy M. Cox, Director of Cooperative Extension Programs, University of Kentucky College of Agriculture, Food and Environment, Lexington, and Kentucky State University, Frankfort. Copyright © 2017 for materials developed by University of Kentucky Cooperative Extension. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the author(s) and include this copyright notice. Publications are also available on the World Wide Web at www.ca.uky.edu.