



Cooperative Extension Service
Institute of Food and Agricultural Sciences

Pretreating Vegetables¹

Susan Reynolds, M.S.²

Blanching is a necessary step in preparing vegetables for drying. By definition, blanching is the process of heating vegetables to a temperature high enough to destroy enzymes present in the tissue. It stops the enzyme action which causes loss of color and flavor during drying and storage. It also sets the color and shortens the drying and rehydration time by relaxing the tissue walls so moisture can escape or re-enter more rapidly. In water blanching, the vegetables are submerged in boiling water. In steam blanching, the vegetables are suspended above the boiling water and heated only by the steam. Water blanching usually results in a greater loss of nutrients, but it takes less time than steam blanching. (See Table 1 on “Drying Vegetables at Home.”)

Not all vegetables require blanching. Onions, green peppers and mushrooms can be dried without blanching.

WATER BLANCHING

Fill a large pot two-thirds full of water, cover and bring to a rolling boil. Place the vegetables in a wire basket or a colander and submerge them in the water. Cover and blanch according to directions for each vegetable (see Table 1 on “Drying Vegetables at Home”). If it takes longer than one minute for the water to come back to boiling, too many vegetables were added. Reduce the amount in the next batch.

STEAM BLANCHING

Use a deep pot with a close-fitting lid and a wire basket, colander or sieve placed so the steam will circulate freely around the vegetables. Add water to the pot and bring to a rolling boil. Loosely place the vegetables in the basket no more than 2 inches deep. Place the basket of vegetables in the pot. Make sure the water does not come in contact with the vegetables. Cover and steam according to the directions for each vegetable (see Table 1 on “Drying Vegetables at Home”).

-
1. This document is FCS 8500, one of a series of the Department of Family, Youth and Community Sciences, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: July 1998. First published: February 1994. Reviewed: July 1998. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu>
 2. Written by Susan Reynolds, M.S., former Extension Foods Specialist, University of Georgia, College of Agricultural and Environmental Sciences, Athens. Reviewed for use in Florida by Mark L. Tamplin, associate professor, Food Safety Specialist, Department of Family, Youth and Community Sciences, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

The Institute of Food and Agricultural Sciences is an equal opportunity/affirmative action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap, or national origin. For information on obtaining other extension publications, contact your county Cooperative Extension Service office. Florida Cooperative Extension Service / Institute of Food and Agricultural Sciences / University of Florida / Christine Taylor Waddill, Dean

Table 1. Drying Vegetables At Home				
Vegetable	Preparation	Blanching Time		Drying Time Dehydrator (hours)
		Steam (minutes)	Water (minutes)	
Artichokes, globe	Cut hearts into 1/8-inch strips. Heat in boiling solution of ¾ cups water and 1 tablespoon lemon juice.		6-8	4-6
Asparagus	Wash thoroughly. Cut large tips in half.	4-5	3½-4½	4-6
Beans, green	Wash thoroughly. Cut in short pieces or lengthwise. (May freeze for 30 to 40 minutes after blanching for better texture.)	2-2½	2	8-14
Beets	Cook as usual. Cool; peel. Cut into shoestring strips 1/8-inch thick.	Already cooked no further blanching required.		10-12
Broccoli	Trim, cut as for serving. Wash thoroughly. Quarter stalks lengthwise.	3-3½	2	12-15
Brussels sprouts	Cut in half lengthwise through stem.	6-7	4½-5½	12-18
Cabbage	Remove outer leaves; quarter and core. Cut into strips 1/8-inch thick.	2½-3"	1½-2	10-12
Carrots	Use only crisp, tender carrots. Wash thoroughly. Cut off roots and tops; preferably peel, cut in slices or strips 1/8-inch thick.	3-3½	3½	110-12
Cauliflower	Prepare as for serving.	4-5	3-4	12-15
Celery	Trim stalks. Wash stalks and leaves thoroughly. Slice stalks.	2	2	10-16
Corn, cut	Select tender, mature sweet corn. Husk and trim. Cut the kernels from the cob after blanching.	5-6	4-5	6-10
Eggplant	Use the directions for summer squash.	3½	3	12-14
Garlic (chard, kale, turnips, spinach)	Peel and finely chop garlic bulbs. No other pretreatment is needed. Odor is pungent.	No blanching needed.		6-8

Table 1. Drying Vegetables At Home				
Vegetable	Preparation	Blanching Time		Drying Time Dehydrator (hours)
		Steam (minutes)	Water (minutes)	
Greens (chard, kale, turnips, spinach)	Use only young tender leaves. Wash and trim very thoroughly.	2-2½	1½	8-10
Horseradish	Wash; remove small rootlets and stubs. Peel or scrape roots. Grate.		None	4-10
Mushrooms (WARNING, see footnote **)	Scrub thoroughly. Discard any tough, woody stalks. Cut tender stalks into short sections. Do not peel small mushrooms. Peel large mushrooms, slice.		None	8-10
Okra	Wash, trim, slice crosswise in 1/8 to ¼-inch disks.		None	8-10
Onions	Wash, remove outer "paper shell." Remove tops and root ends, slice 1/8-to ¼-inch thick.		None	3-9
Parsley	Wash thoroughly. Separate cluster. Discard long or tough stems.		None	1-2
Peas, green	Shell.	3	2	8-10
Peppers and Pimientos	Wash, stem, core. Remove "partitions." Cut into disks about 3/8- by 3/8-inch.		None	8-12
Potatoes	Wash, peel. Cut into shoestring strips ¼-inch thick, or cut in slices 1/8-inch thick.	6-8	5-6	8-12
Pumpkin and hubbard squash	Cut or break into pieces. Remove seeds and cavity pulp. Cut into 1-inch strips. Peel rind. Cut strips crosswise into pieces about 1/8-inch thick.	2½-3	1	10-16
Squash, summer	Wash, trim, cut into ¼-inch slices.	2½-3	1½	10-12
Tomatoes, for stewing	Steam or dip in boiling water to loosen skins. Chill in cold water. Peel. Cut into sections about ¾-inch wide, or slice. Cut small pear or plum tomatoes in half.	3	1	10-18

Table 1. Drying Vegetables At Home				
Vegetable	Preparation	Blanching Time		Drying Time Dehydrator[*](hours)
		Steam (minutes)	Water (minutes)	
<p>[*] Drying times in a conventional oven could be up to twice as long, depending on air circulation.</p> <p>^{**} Steam until wilted.</p> <p>^{***} WARNING: The toxins of poisonous varieties of mushrooms are not destroyed by drying or by cooking. Only an expert can differentiate between poisonous and edible varieties.</p>				