

Preserving Vegetables

Asparagus – Broccoli – Mushrooms – Okra – Peppers – Squash – Mixed Vegetables – Soups

CANNING ASPARAGUS — SPEARS OR PIECES

Quantity: An average of 24½ pounds is needed per canner load of 7 quarts; an average of 16 pounds is needed per canner load of 9 pints. A crate weighs 31 pounds and yields 7 to 12 quarts — an average of 3½ pounds per quart.

Quality: Use tender, tight-tipped spears, 4 to 6 inches long.

Procedure: Wash asparagus and trim off tough scales. Break off tough stems and wash again. Cut into 1-inch pieces or can whole.

Hot pack: Cover asparagus with boiling water. Boil 2 or 3 minutes. Loosely fill jars with hot asparagus, leaving 1-inch headspace.

Raw pack: Fill jars with raw asparagus, packing as tightly as possible without crushing, leaving 1-inch headspace.

Add 1 teaspoon of salt per quart to the jars, if desired. Add boiling water, leaving 1-inch headspace. Adjust lids and process as recommended in Table 1 or Table 2.

CANNING MUSHROOMS — WHOLE OR SLICED

Quantity: An average of 14½ pounds is needed per canner load of 9 pints; an average of 7½ pounds is needed per canner load of 9 half-pints — an average of 2 pounds per pint.

Quality: Select only brightly colored, small to medium-size domestic mushrooms with short stems, tight veils (unopened caps) and no discoloration.

CAUTION: Do not can wild mushrooms.

Procedure: Trim stems and discolored parts. Soak in cold water for 10 minutes to remove dirt. Wash in clean water. Leave small mushrooms whole; cut large ones. Cover with water in a saucepan and boil 5 minutes. Fill jars with hot mushrooms, leaving 1-inch headspace. Add ½ teaspoon of salt per pint to the jar, if desired. For better color, add ⅛ teaspoon of ascorbic acid powder or a 500-milligram tablet of vitamin C. Add fresh hot water, leaving 1-inch headspace. Adjust lids and process following the recommendations in Table 1 or Table 2.

CANNING MIXED VEGETABLES

For 7 quarts of mixed vegetables you will need:

- 6 cups sliced carrots
- 6 cups cut, whole kernel sweet corn
- 6 cups cut green beans
- 6 cups shelled lima beans
- 4 cups whole or crushed tomatoes
- 4 cups diced zucchini

Optional Mix: You may change the suggested proportions or substitute other favorite vegetables except leafy greens, dried beans, cream-style corn, winter squash and sweet potatoes.

Procedure: Prepare each vegetable as for canning and cut into desired sizes. Mix vegetables together, cover with boiling water and bring back to a boil. Boil 5 minutes. Add 1 teaspoon salt per quart to the jar, if desired. Pack hot vegetables into hot jars, leaving 1-inch headspace. Fill jars to 1 inch from top with boiling water. Remove air bubbles. Wipe jar rims. Adjust lids and process following the recommendations in Table 1 or Table 2.

CANNING OKRA

Quantity: An average of 11 pounds is needed per canner load of 7 quarts; an average of 7 pounds is needed per canner load of 9 pints. A bushel weighs 26 pounds and yields 16 to 18 quarts — an average of 1½ pounds per quart.

Quality: Select young, tender pods. Remove and discard diseased and rust-spotted pods.

Procedure: Wash pods and trim ends. Leave whole or cut into 1-inch pieces. Cover with hot water in a saucepan; boil 2 minutes and drain. Fill jars with hot okra and cooking liquid, leaving 1-inch headspace. Add 1 teaspoon of salt per quart to the jar, if desired. Adjust lids and process following the recommendations in Table 1 and Table 2 according to the method of canning used.

CANNING PEPPERS, HOT OR SWEET (including chiles, jalapeno and pimiento)

Quantity: An average of 9 pounds is needed per canner load of 9 pints. A bushel weighs 25 pounds and yields 20 to 30 pints — an average of 1 pound per pint.

Quality: Select firm yellow, green or red peppers. Do not use soft or diseased peppers.

Procedure: Select your favorite pepper(s).
CAUTION: If you choose hot peppers, wear plastic gloves while handling them or wash hands thoroughly with soap and water before touching your face. Small peppers may be left whole. Large peppers may be quartered. Remove cores and seeds. Slash two or four slits in each pepper, and either blanch in boiling water or blister using one of the following methods:

Oven or Broiler Method Place peppers in a hot oven (400 °F) or broiler for 6 to 8 minutes until skins blister.

Range-Top Method Cover hot burner, either gas or electric, with heavy wire mesh. Place peppers on burner for several minutes until skins blister. Allow peppers to cool. Place in a pan and cover with a damp cloth. This will make peeling the peppers easier. After several minutes, peel each pepper.

Flatten whole peppers. Add ½ teaspoon of salt to each pint jar, if desired. Fill jars loosely with peppers and add fresh boiled water, leaving 1-inch headspace. Wipe jar rims.

Adjust lids and process pints in a weighted gauge canner at 10 pounds pressure or in a dial gauge canner at 11 pounds pressure for 35 minutes.

CANNING SOUPS

Soups: Vegetable, dried bean or pea, meat, poultry or seafood soups can be canned.

Procedure: Select, wash and prepare vegetables, meat and seafood. Prepare as for hot pack canning. Cover meat with water and cook until tender. Cool meat and remove bones. Cook vegetables. For each cup of dried beans or peas, add 3 cups of water, boil 2 minutes, remove from heat, soak 1 hour and heat to boil. Drain and combine with meat broth, tomatoes or water to cover. Boil 5 minutes. Caution: Do not thicken. Salt to taste, if desired. Fill jars halfway with solid mixture. Add remaining liquid, leaving 1-inch headspace. Adjust lids and process following the recommendations in Table 1 or Table 2.

FREEZING ASPARAGUS

Select young, tender spears. Wash thoroughly and sort into sizes. Trim stalks by removing scales with a sharp knife. Cut into even lengths to fit containers. Water blanch small spears 2 minutes, medium spears 3 minutes and large spears 4 minutes. Cool promptly, drain and package, leaving no headspace. Seal and freeze.

FREEZING BROCCOLI

Select firm, young, tender stalks with compact heads. Remove leaves and woody portions. Separate heads into convenient-size sections and immerse in brine (4 teaspoons salt to 1 gallon water) for 30 minutes to remove insects. Split lengthwise so flowerets are no more than 1½ inches across.

Water blanch 3 minutes in boiling water or steam blanch 5 minutes. Cool promptly, drain and package, leaving no headspace. Seal and freeze.

FREEZING OKRA

Quality: The smooth type varieties freeze as well as, or better than, the ridged varieties because they do not split as easily.

Procedure: Select young, tender pods and separate into small pods (4 inches or under) and large pods. Wash. Remove the stems at the end of the seed cells, being careful not to expose the seed cell. Water blanch small pods 3 minutes and large pods 4 minutes. Cool promptly and drain. Leave whole or slice crosswise. Package, leaving ½-inch headspace. Seal and freeze.

For Frying: Wash and remove stems. Blanch small pods 3 minutes and large pods 4 minutes. Cool promptly and drain. Slice crosswise and dredge with meal or flour. Spread in a single layer on shallow trays. Place in freezer just long enough to freeze firm. Package quickly leaving ½-inch headspace. Seal and freeze.

FREEZING MUSHROOMS

Choose mushrooms free from spots and decay. Sort according to size. Wash thoroughly in cold water. Trim off ends of stems. If mushrooms are larger than 1 inch across, slice them or cut them into quarters. Mushrooms can be steamed or heated in fat in a frying pan. Steamed mushrooms will keep longer than those heated in fat.

Mushrooms to be steamed have better color if given anti-darkening treatment first. To do this, dip for 5 minutes in a solution containing 1 teaspoon lemon juice or 1½ teaspoon citric acid to a pint of water. Then steam whole mushrooms 5 minutes, buttons or quarters 3½ minutes and slices 3 minutes.

Cool promptly, drain and package, leaving ½-inch headspace. Seal and freeze.

FREEZING BELL OR SWEET PEPPERS

Quality: Select crisp, tender, green or bright red pods. Wash, cut out stems, cut in half and remove seeds. If desired, cut into ½-inch strips or rings.

Heated: Good for use in cooking. Water blanch halves 3 minutes, strips or rings 2 minutes. Cool promptly, drain and package, leaving ½-inch headspace. Seal and freeze.

Unheated: Good for use in uncooked foods because they have a crisper texture, or in cooked foods. Package raw, leaving no headspace. Seal and freeze.

FREEZING PIMIENTOS

Select firm, crisp pimientos of deep red color. Peel by roasting in 400 to 450 °F oven for 6 to 8 minutes or until skins can be rubbed off. Wash off the charred skins, cut out stems and remove seeds. Package, leaving ½-inch headspace. Seal and freeze.

FREEZING SUMMER SQUASH

Cocozelle, Crookneck, Straightneck, White Scallop, Zucchini

Choose young squash with tender skin. Wash and cut in ½-inch slices. Water blanch 3 minutes. Cool promptly, drain and package, leaving ½-inch headspace. Seal and freeze.

FREEZING GRATED ZUCCHINI (FOR BAKING)

Choose young tender zucchini. Wash and grate. Steam blanch in small quantities 1 to 2 minutes until translucent. Pack in measured amounts into containers, leaving ½-inch headspace. Cool by placing the containers in cold water. Seal and freeze. If watery when thawed, discard the liquid before using the zucchini.

TABLE 1. RECOMMENDED PROCESS TIMES FOR VARIOUS CANNED VEGETABLES IN A DIAL-GAUGE PRESSURE CANNER

				CANNER PRESSURE (PSI) AT ALTITUDES OF:			
Canned Product	Style of Pack	Jar Size	Process Time (Min.)	0-2000 ft.	2001-4000 ft.	4001-6000 ft.	Above 6000 ft.
Asparagus	Hot and Raw	Pints Quarts	30 40	11 lb.	12 lb.	13 lb.	14 lb.
Mushrooms	Hot	Half Pints or Pints	45	11 lb.	12 lb.	13 lb.	14 lb.
Okra	Hot	Pints	25	11 lb.	12 lb.	13 lb.	14 lb.
Mixed Vegetables	Hot	Pints Quarts	75 90	11 lb.	12 lb.	13 lb.	14 lb.
Soups	Hot	Pints Quarts	60* 75*	11 lb.	12 lb.	13 lb.	14 lb.

*Caution: Process 100 min. if soup contains seafood.

TABLE 2. RECOMMENDED PROCESS TIMES FOR VARIOUS CANNED VEGETABLES IN A WEIGHTED-GAUGE PRESSURE CANNER

				CANNER PRESSURE (PSI) AT ALTITUDES OF:	
Canned Product	Style of Pack	Jar Size	Process Time (Min.)	0-1000 ft.	Above 1000 ft.
Asparagus	Hot and Raw	Pints Quarts	30 40	10 lb.	15 lb.
Mushrooms	Hot	Half-Pints or Pints	45	10 lb.	15 lb.
Okra	Hot	Pints	25	10 lb.	15 lb.
Mixed Vegetables	Hot	Pints Quarts	75 90	10 lb.	15 lb.
Soups	Hot	Pints Quarts	60* 75*	10 lb.	15 lb.

*Caution: Process 100 min. if soup contains seafood.

Sources:

1. USDA. *Complete Guide to Home Canning*. Agriculture Information Bulletin No. 539. (Reviewed 1994).
2. Reynolds, Susan and Paulette Williams. *So Easy to Preserve*. Bulletin 989. Cooperative Extension Service, University of Georgia. Revised 1993 by Judy Harrison.

This information has been reviewed and adapted for use in South Carolina by E.H. Hoyle, Extension Food Safety Specialist, Clemson University.

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