

VICTORY CANNING



JUNIOR 4-H CLUBS

Victory Canning for Junior 4-H Clubs

By RUBY SCHOLZ

Extension Economist in Food Conservation and Marketing

Food preservation is important at all times in order that families can be assured of good healthful food throughout the year. Safe food preservation methods are especially necessary. The method recommended here is simple, the equipment is inexpensive, so no food need be wasted.

Foods successfully canned in the hot-water canner include only products that can be safely canned at boiling temperature, 212°F. This list includes only fruits, freshly gathered; tomatoes; young, tender string beans; and a pre-cooked soup mixture containing a large proportion of tomatoes.

EQUIPMENT AND METHOD

The Hot-Water Canner: The simplest hot-water canner outfit is one to be placed on the kitchen stove. This outfit may be made from any vessel that has a tight cover and is large enough to hold a convenient number of jars of food and to permit covering them with one inch of water. It should be fitted with a rack to hold the jars. This rack may be made of coarse mesh screen. Have the water in the canner somewhat hotter than the contents of the filled jars.

Care of Jars: Jars should be washed thoroughly, then inverted in a pan holding 1 or 2 inches of water. Boil 8 to 10 minutes. Let the jars remain in this water until they are filled.

STEPS NECESSARY FOR GOOD RESULTS

The canned food will be no better than the food that goes into the can. For this reason, use only clean, fresh, sound products.

1. Prepare the jars.
2. Precook or blanch the food to be canned.
3. Pack quickly into hot, sterilized containers.
4. Use enough liquid when packing to prevent too dense a pack and to prevent air bubbles.
5. Allow one-half inch of head space for all products that are canned in the hot-water canner.
6. Wipe the rim, adjust the rubber ring and top, and partially seal. Seal other types of tops according to directions.
7. Place the jar in the canner. In order to keep glass jars from breaking, pack hot sterilized jars quickly with hot products, then lower gently into the hot-water bath.
8. Count time in the water bath as soon as the water begins to boil vigorously.
9. Keep the water boiling constantly during the processing period.
10. When the processing time is up, remove the jars from the water, one at a time and seal tightly at once, except the automatic seal top jars, which should not be tightened again.
11. Cool all jars in air, out of drafts.
12. Never invert jars to cool.
13. Should the jar have a faulty seal, replace the rubber ring or top if necessary, and process the food a second time for 5 minutes.
14. Never use canning powders as they may be harmful.

KINDS OF TOPS AND HOW TO SEAL THEM

1. A one-piece cap lined with porcelain, equipped with a rubber ring between cap and shoulder of jar, this is called a shoulder rubber.
2. A glass cap with a rubber ring that fits between the glass cap and the jar top, both of which are held in place with a metal screw band. This ring is called a top rubber.
3. A metal disk with a flowed-on composition, the disk is held on the jar by a metal screw band.

4. Another type has an all-glass top. This uses a rubber ring and the top is held in place with a wire clamp.

Types 1, 2, and 4 are partially sealed before placing in the hot-water bath. After the processing period, they are completely sealed. Type 3 is completely sealed before placing in the hot water bath. After the processing period, it is not sealed again.

Remove the screw bands from Type 3 tops one to three days after canning. Dry these thoroughly to prevent them from rusting during storage.

THE MEANING OF TERMS USED

Sterilizing: Boiling to destroy bacteria.

Precooking: Boiling or steaming to shrink the product and improve the flavor and texture.

Blanching: Plunging fruit or vegetables into boiling water or steaming for a minute to shrink them before packing the jars.

Processing: Cooking fruits or vegetables in the jar.

SIRUPS

To make the sirups recommended, boil sugar and water together in proportions given below:

Sirup	Sugar	Water
Thin	½ cup	1 quart
Medium	1 cup	1 quart
Moderately Heavy	1¾ cups	1 quart

Quantity of Sirup:

Each quart of fruit will require 1½ to 2 cups sirup.

CANNING YIELDS

Fruit	Amount required for 1 quart		1 bushel will yield
	Pounds	Units	
Apples	2½	7 to 8 apples	20 quarts
Peaches	2 -2½	8 to 10 peaches	20 quarts
Pears	2 -2½	5 to 6 pears	25 quarts
Tomatoes	2½-3½	8 to 10 tomatoes	18 quarts
Berries	1¼-1½	5 cups	30 quarts
Beans, snap	1¾		14 quarts

APPLES

Late fall and winter varieties are best for canning. Peel, cut and drop into a brine made of 1 tablespoon salt and 1 quart water. Drain. Drop apples into boiling thin sirup. Cook 5 minutes. Fill jars, cover with boiling sirup. Partly seal. Process quart jars 15 minutes. Remove from hot-water canner and seal completely.

PEACHES

Peaches should be selected when they are fully ripe and of a uniform size and color. Peaches may be peeled by first plunging into boiling water and then into cold. After peeling, cut into halves and remove the pit. Drop peaches into medium sirup which is boiling, allow them to cook for 1 minute, or until tender but not soft. Pack in jars in overlapping layers with the pit side down and the stem end towards the center of the jar. Cover with hot sirup, partly seal. Process the quart jars 25 minutes. Remove jars from the canner and seal.

PEARS

Select ripe, sound, medium-sized fruit, peel and cut in halves or quarters. Remove all hard portions around the seed and dip in brine similar to that

or apples. Plunge halves into boiling medium sirup and allow them until they can be pierced with a straw. Pack into quart jars. Cover with sirup, partly seal. Process 25 minutes. Remove jars from the canner and seal.

Dewberries, Blackberries, Raspberries

Choose ripe, but firm berries. Place in a thin muslin sack and plunge into boiling water one minute. Fill jars quite full. Fill the spaces and cover the berries with a thin sirup. Partly seal. Process quart jars 13 minutes. Lift jars from the canner and seal tightly.

TOMATOES

Choose ripe tomatoes for canning. Blanch for one minute. Peel quickly. Be careful to remove with a sharp knife the hard part of the tomato at the stem. Pack as many as possible into the jars. Fill jars to within $\frac{1}{4}$ inch of the top, press gently and shake down fruit to fill crevices. Add one level teaspoon of sugar and a level teaspoon of salt to each quart jar. Use no water with tomatoes. Seal partly. Process 40 minutes. Remove from the canner. Seal at once.

SOUP MIXTURE

Corn, butterbeans, and okra when combined with a large proportion of tomatoes, can be canned safely in a hot-water canner. The acid in the tomatoes helps to destroy the bacteria.

5 cups tomatoes
2 cups corn
2 tablespoons sugar

2 cups okra or lima beans
or
1 cup okra and 1 cup lima beans
2 tablespoons salt

Scald and peel tomatoes, cutting out green and hard spots. Chop and measure. Cut young tender corn from cob. Slice okra in rings one-half inch thick. Place all in open kettle (agate) and boil until thick. Pour into jars, partially seal and process $1\frac{1}{2}$ hours. Remove from the canner and seal. Use an asbestos mat under the kettle to prevent scorching.

String Beans

Select young, tender beans which have few strings. Wash, string, and cut into uniform pieces. Cover with boiling water and simmer for 5 minutes. Pack hot into containers. Cover with the hot water in which they were cooked and add 1 teaspoon salt for each quart. Partly seal. Process for one hour and 30 minutes in a hot-water canner.

If the beans are older and small beans have formed, process 3 hours. Remove from canner. Seal at once. Do not can mature beans. Do not use canning powders.

REQUIREMENTS

Junior 4-H Club members are required to can 8 quarts of fruits and vegetables selected from the following: apples, peaches, pears, tomatoes, berries, soup mixture, and young tender green beans.

Required Products	Fruits and Berries	Tomatoes	Soup Mixture	String Beans
Total No. of Quarts Canned				

North Carolina State College of Agriculture and Engineering of the University of North Carolina and U. S. Department of Agriculture, Co-operating. N. C. Agricultural Extension Service, I. O. Schaub, Director, State College Station, Raleigh. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.