University of Kentucky — College of Agriculture

EXTENSION DIVISION

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Circular No. 282 May, 1936

Published in connection with the agricultural extension work carried on by cooperation of the College of Agriculture, University of Kentucky, with the U. S. Department of Agriculture, and distributed in furtherance of the work provided for in the Act of Congress of May 8, 1914.

HOW TO CAN FRUITS AND VEGETABLES

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REASONS FOR CANNING

A well-balanced diet must include a liberal amount of fruits and vegetables every day in the year. The health of an individual depends upon the amount and kind of food consumed. A variety of fruits and vegetables supply the human body with minerals, roughage and vitamins which are essential to good health.

Since the proper supply of home produced fruits and vegetables cannot be had at all times, it is necessary to can and store enough during the summer and fall to meet the requirements for the winter. The variety and amount of food which should be canned depends upon the size of the household and the food requirements of individuals. Two generous servings of vegetables, exclusive of potatoes and dried beans, and two generous servings of fruits should be provided daily for each member of the family.

EQUIPMENT FOR CANNING

Good equipment is necessary for successful canning but it does not have to be expensive.

Canners. The water-bath canner is commonly used for canning fruits and vegetables. It is possible to purchase this type of canner or one may be assembled from household equipment. The canner should be of such a depth that the jars will be covered with one inch of water and still the sides of the canner extend several inches above the surface of the water. It must have a close-fitting lid to confine the steam and to prevent the water from boiling away. A rack or false bottom in the canner enables free circulation of water under the jars, prevents breakage, and lessens the likelihood of loss of liquid from the jars. For a home-made canner, a large bucket, lard can or wash boiler may be used, with a rack made of wire netting or wooden strips nailed together. A flat piece of iron may be fastened to the bottom of the wooden rack to weight it down on the bottom of the canner.

Steam pressure is the most satisfactory means of canning non-acid vegetables. The same degree of high temperature and pressure as used in commercial canning may be had in the steam pressure canners used by the housekeeper. Pressure reduces the time of processing and practically eliminates spoilage in non-acid vegetables.

The open-kettle method is sometimes used for canning fruits,

but products canned by this method are inferior in flavor, color, texture and food value to those cooked in the jar. Processing fruit in the jar lessens liability of mold, softening of the fruit and darkening of the product at the top of the jar.

Jars. Either glass jars or tin cans may be used for canning fruits and vegetables. There are three well-known types of jars–the mason jar with the screw top, the glass-top jar secured by wires, and the vacuum-seal jar. If screw-top jars are used, it is preferable to use new lids for canning non-acid vegetables.

Jars should be examined carefully before they are used, to see that the lids fit, that the bails on the glass-top jars are tight, and that there are no nicks or chips around the rim of the glass.

Non-acid vegetables should be canned in pint or quart jars. Fruits and tomatoes, which are especially acid, may be canned in half-gallon jars.

Rubbers. An important part of the canning equipment is the rubber ring which seals the jar. It is poor economy to buy cheap, inferior jar rubbers because they may not make a perfect seal and the products canned are apt to spoil. The practice of using rubbers which were left over from last year or using two rubbers on the same jar is not advised.

Tests for rubbers

1. There should be no signs of cracking or breaking when a rubber is bent sharply back.
2. A rubber should return almost immediately to its original size when stretched to about twice its length.
3. A rubber, when crumpled in the hand, should bounce into its original shape as soon as released.

SEALING

Jars may be either completely or partially sealed before processing, depending on the temperature of the product to be packed in the jar and the type of canner used.

Water Bath. Jars packed with boiling-hot precooked products may be completely sealed before processing. Many home canners follow successfully the practice of completely sealing jars packed with an uncooked product to which boiling syrup or liquid is added. However, it is safer to only partially seal the jars before processing because the temperature of the contents of jars so prepared is reduced below the boiling point by the temperature of the uncooked product so that expansion may cause breakage or blowing of rubbers during processing.

Pressure Cookers. Because of the high temperature reached in the pressure canner it is advisable only to partially seal all jars. The way to partially seal a screw top is to turn the top until it is tight then turn it back only enough to break the seal, about 1/4 to 1/2 inch. To partially seal a glass-top jar, put the top clamp in place for sealing but leave the lower clamp up.

PROCESSING

Processing means the cooking of food in the jars. The length of the processing period is determined by the kind of product to be canned and the type of equipment used.

Water Bath. The water in the canner should be boiling hot before putting in the jars or cans. The jars or cans will already be hot from the precooked food or from the boiling liquid added to the uncooked products. The water should cover the jars to the depth of at least one inch. Begin counting time when the water surrounding the jars boils hard. Keep the water boiling thruout the entire processing period.

Steam Pressure Canner. Add water to reach the rack in the bottom of the canner and let it come to a boil. Place the containers on the rack and put the lid on the canner. Partially tighten the clamps opposite each other then screw them all down very tight. Place pressure canner over a hot fire to run pressure up quickly. Leave the pet cock open and let the steam escape for about three minutes. Close pet cock and watch the gage until desired pressure is reached. Then begin to count time. Adjust heat to maintain an even pressure thruout the processing period.

GENERAL RULES FOR CANNING

1. Select fresh, sound fruit and vegetables in prime condition and can them immediately. "An hour from the garden to the can" is a good rule.
2. Wash product thoroly and discard at once bruised, decayed or otherwise imperfect pieces.
3. Wash the jars, lids, rubbers, in hot soapy water, and rinse them in boiling water.
4. Sterilize the jars by boiling them thirty minutes.
5. Place the new, tested rubbers on the jars.
6. Prepare the product to be canned according to the recipe.
7. Pack boiling hot precooked vegetables into sterilized jars, add 1 teaspoon of salt to a quart of vegetables and cover with boiling hot liquid. Completely seal jars that are to be processed in a water bath and partially seal those to be processed in a steam-pressure canner.
8. Pack fruits into sterilized jars, cover with boiling hot syrup, completely seal precooked fruit packed boiling hot, partially seal raw fruits to which boiling syrup has been added.
9. Process according to directions.
10. Remove the jars from the canner one at a time, complete the seal of partially sealed jars.
11. Place glass jars out of a draft to cool.
12. Store canned products in a cool, dry place.

Syrups

Fruits have a better flavor if canned in syrup. Make the syrup by slowly heating water and sugar together. Stir the mixture until

all sugar is dissolved and let it come to the boiling point. Fruit juice may be substituted for water in making the syrup.

Syrup	Sugar	Water	For use with
Thin	1 c.	3 c.	Sweet fruits such as sweet apples and pineapples
Medium	1 c.	2 c.	Apricots, berries, sweet cherries, grapes, peaches, pears, plums and strawberries
Thick	1 c.	1 c.	Sour fruits such as sour cherries, gooseberries and rhubarb

RECIPES FOR CANNING FRUITS

Apples

1. Select firm, sound, tart varieties.
2. Wash, pare, core, and drop the apples into water, salted one tablespoon to one quart of water, to prevent discoloration.
3. Make a thin syrup of 1 part of sugar to 3 parts of water.
4. Remove the apples from salted water, drain, place them in the boiling syrup and boil 5 minutes.
5. Pack the boiling hot apples in jars, cover fruit with the syrup in which it was cooked and completely seal the jars.
6. Process 5 minutes in the water bath.

Peaches

1. Select peaches which are ripe but not soft.
2. Immerse peaches about one minute in boiling water or until the skins can be slipped off easily.
3. Plunge fruit at once into cold water, peel and stone.
4. Pack fruit into jars at once, placing the halves in overlapping layers, concave side down with blossom end facing the glass.
5. Cover with medium syrup, boiling hot.
6. Partially seal the jars and process 20 minutes in hot-water bath.

Note: Apricots may be canned by the same directions as peaches.

Berries

Method No. 1

1. Gather berries in shallow trays or baskets.
2. Remove caps and stems, separating the small and imperfect berries from the good ones.
3. Wash the berries by placing them in a shallow colander and dipping them in and out of water or by pouring water over them.

4. Pack the berries into containers and press them gently into place to make a full pack.
5. Cover with medium, boiling-hot syrup.
6. Partially seal the jars and process quart or pint jars 20 minutes in hot-water bath.
7. Remove the jars from the canner and completely seal.

Method No. 2

Precook the berries by bringing them to a boil in a medium syrup which prevents them from rising to the top of the jar. Pack hot into jars, completely seal and process 5 minutes.

TIME TABLE FOR FRUIT

Product	Precook or blanch	Syrup	Time of Processing in Water-Bath Canner Glass jars-qts. or pts.
Apples	Precook in thin syrup 5 min.	Thin	5 min.
	Not precooked	Thin	15 min.
Applesauce			5 min.
Apricots		Medium	20 min.
Blackberries, Huckleberries, Raspberries	No precooking	Medium	20 min.
	or		
	Precook 5 min. in syrup	Medium	5 min.
Cherries	No precooking	Thick for sour cherries Medium for sweet	25 min.
Peaches	Blanch 1 min. to loosen skins	Medium	20 min. for ripe fruit 30 min. for firm fruit
Pears	Precook 4–8 min.	Medium	20 min.
Plums	No precooking	Medium	20 min.
	or		
	To boiling with sugar		5 min.
Rhubarb	Bake in ¼ as much sugar as rhubarb by measure		5 min.
	or		
	No precooking	Thick	20 min.
Grapes	No precooking	Medium	15 min.

RECIPES FOR CANNING VEGETABLES

Tomatoes

1. Select firm, ripe tomatoes of medium size and uniform shape.
2. Place in a wire basket or cloth bag and scald until skins loosen.
3. Dip the tomatoes in cold water, peel them and remove the core from the stem end.

4. Pack closely into jars without crushing.
5. Cover with boiling tomato juice prepared from small, misshapen and very large tomatoes. (Never add water to tomatoes to be canned.)
6. Add 1 teaspoon salt per quart and partially seal the jars.
7. Process quart jars 30 minutes, pints 25 minutes, in water-bath canner, or 10 minutes at 5 pounds pressure in pressure cooker.

String Beans

1. Select young, tender beans.
2. Wash thoroly, string and cut into convenient lengths.
3. Cover with boiling water and boil 5 minutes in an uncovered saucepan.
4. Pack sterilized containers with boiling hot beans and fill with liquid in which they were cooked.
5. Add 1 teaspoon of salt for each quart.
6. Seal and process quarts 180 minutes in a water-bath canner, or partially seal and process 40 minutes at 10 pounds pressure in a steam-pressure canner.

Concentrated Vegetable Soup Mixture

1. Almost any desired combination of vegetables may be canned for soup mixture.

A good combination is:

1 quart thick tomato pulp
1 quart corn, tiny lima beans or peas
1 pint of okra
½ cup chopped sweet red pepper
1½ teaspoon salt

2. Cook together the tomatoes and peppers; put thru a sieve to remove seeds and cook to the consistency of catsup.
3. Add corn and other vegetables which have previously been prepared for canning.
4. Bring to a boil, pack hot and seal.
5. Process pint or quart jars 120 minutes in water-bath or 40 minutes at 10 pounds pressure.

Corn

1. Gather the corn at the proper stage of ripeness which is about 17 to 25 days after silking. When corn has passed the milky stage it should not be canned.
2. Shuck, silk, and clean carefully.
3. Cut from the cob before precooking.
4. Measure the corn and add one-third as much boiling water as corn and heat to boiling.
5. Add 1 teaspoon of salt to each quart and fill containers with the boiling-hot mixture. Avoid a close pack as corn swells in cooking.
6. Seal the jars and process 180 minutes in a water-bath or partially seal and process quart jars 80 minutes and pints 75 minutes at 10 pounds pressure in a steam-pressure canner.

Greens

1. Select fresh, crisp greens.
2. Clean carefully by washing them in running water or thru several waters.
3. Heat the greens until completely wilted, in a covered vessel with just enough water to prevent scorching.
4. Pack boiling hot into jars, but not so solidly as to prevent the circulation of the liquid.
5. Add 1 teaspoon of salt to each quart jar and cover the greens with the liquid in which they were precooked.
6. Seal and process 180 minutes in a water-bath or partially seal and process quart jars 65 minutes or pints 60 minutes at 10 pounds pressure in a steam-pressure canner.

TIME TABLE FOR VEGETABLES

Product	Precook by Boiling	Time of Procession (Minutes)		
		Steam pressure canner, 10 lbs.		Water-bath canner or steamer
		Quart	Pint	Quart Pint
Asparagus	2 - 4 min.	40	35	120
Beans				
Green or wax	5 min	40	35	180
Lima	2 – 10 min.	60	55	180
Beets	Enough to loosen skin (About 15 min.)	40	35	90
Carrots	5 - 10 min.	40	35	90
Cauliflower	3 min.	40	35	90
Corn	To boiling	80	75	180
Greens (including spinach)	Until wilted	65	60	180
Okra	To boiling	40	35	120
Peas, green	To boiling	60	50	180
Peas, black–eyed	(See lima beans)			
Pumpkin	Until tender	75	60	180
Soup mixture	(See directions)	40	40	180
Sauerkraut		40	40	60
Squash	Until tender	75	60	180
Succotash	Corn, 5 min.) Beans, 3 min.)	60	55	180
Sweetpotatoes	Until skin slips readily	75	65	180
Tomatoes	Scald before peeling	10*	10*	30

* At 5 pounds pressure.

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Good pasture

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