



# Home Canning of Fruits and Vegetables

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PREPARED BY

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# CANNING FRUITS AND VEGETABLES

Canning is an economical way for homemakers to preserve high quality fruits and vegetables when they are plentiful. There is great satisfaction in having a well-stocked cupboard of home canned foods to use throughout the year. From experience, homemakers know that time and effort spent in canning means work and time saved later in preparing good meals for the family.

## Can With Care

Before beginning to can, even before buying or gathering any fruits or vegetables, it is most important to read the instructions given in this bulletin. By following the directions carefully even the beginner may feel confident of successful results.

There are two main requirements for successful canning. The first is to allow sufficient processing time to destroy all spoilage organisms such as yeasts, molds and bacteria. The second is to use air-tight containers so that no spoilage organisms can find their way into the containers after the processing is complete.

## Can High Quality Fruits and Vegetables

When selecting fruits and vegetables for canning, make sure that they are in good condition. They should be sound, fresh and of just the right maturity.

Fruits and tomatoes should be firm, well formed and well ripened. Any that are underripe should be allowed to ripen in a warm place to develop their full flavor before they are canned.

Vegetables should be young and tender. They should be as freshly gathered as possible, for within even a few hours after picking changes take place in the vegetables which impair their flavor and to some extent their keeping qualities. Green or wax beans should be gathered before the beans are too developed in the pod. Asparagus tips should be compact and stalks firm. Peas should be freshly gathered and should not be too mature. Corn should be canned while the kernels are milky and tender.

## Check Equipment

Equipment essential for home canning consists of comparatively few articles, most of which are found in the average kitchen. Before commencing to can, it is important to see that the necessary equipment is on hand and in good order. The supply of containers should also be checked.

# EQUIPMENT FOR CANNING

## Boiling Water Bath

A large kettle, pail or wash boiler with closely fitting cover may be used. It should have a rack which allows circulation of water under sealers or cans. This may be a wire rack, a perforated metal rack or one made from slats of wood nailed together in lattice fashion. The canner should be deep enough to allow water to cover the containers by at least two inches. If the water does not cover the containers, the food will not cook evenly and the portion above the water line may become discolored.

The boiling water bath is the processor most generally used for fruits, tomatoes and peppers.

## Pressure Canner

This canner is specially designed to heat foods to a higher temperature than can be reached in the boiling water bath, oven or steamer. This high temperature kills the harmful bacteria which may not be destroyed at boiling temperature in non-acid foods. For this reason, the pressure canner is particularly recommended for all vegetables, except tomatoes. It may, however, be used for tomatoes and fruits.

If using a pressure canner, carefully follow specific directions supplied by the manufacturer.

## Can Sealing Machines

For canning in tin cans, there are several types of sealing machines available. When buying a machine, choose one that is guaranteed to seal satisfactorily. The machine should be well made, durable and easy to operate.

The machine should be tested occasionally to see that it is sealing perfectly. To do this, place a little cold water in an empty can and seal it. Then, using a pair of tongs, immerse the can in very hot water, keeping the newly-sealed end up and holding the can immersed for a minute or two. If no bubbles are seen coming from the top of the can, the seal is perfect and the sealing machine is operating properly.

## Small Utensils

Sharp knives, preferably stainless steel, a colander, bowls, measuring cups and spoons, towels, pie plates and wooden spoons are essential. In addition, a jar lifter, wide-mouth funnel, strawberry huller, cherry pitter, small brush, wire basket and cheesecloth are useful.

# CONTAINERS FOR CANNING

## Glass Sealers

There are three main types of glass sealers sold for home canning:

**Screw-top sealer**—with glass lid, rubber ring and metal screw band.

**Spring-top sealer**—with glass lid, rubber ring and wire bails.

**Vacuum-type sealer**—(1) with metal or glass lid, rubber ring and metal screw band or clamp.

(2) with metal lid, edge lined with sealing compound, metal screw band or clamp.

## SIZES OF GLASS SEALERS

**Small** (so-called pint)—capacity about 2 cups.

**Medium** (so-called quart)—capacity about 4 cups.

**Large** (so-called half gallon)—capacity about 8 cups.

## RUBBER RINGS

**Rubber rings are made in two widths. Be sure to buy the right sized ring.** The narrower ring should be used only on screw-top sealers and the wider ring only on spring-top sealers. The boxes of rings made in Canada are marked with the trade-names of the sealers on which the rings should be used.

## Preparing Glass Sealers

Carefully examine each part of the sealer. See that the sealer is not cracked and that the rim or glass lid is not chipped. Use new metal screw bands to replace any that have become cracked, bent, stretched or corroded. Be sure that the wire bails on the spring-top sealers spring into position with a snap. Metal lids having edges lined with sealing compound should not be used a second time.

Wash sealers and glass lids thoroughly in hot, soapy water and rinse well with clear hot water.

To prevent sealers cracking they should be heated before hot food is placed in them. They may be heated in the oven or in water.

If heating in oven, place empty sealers on oven rack and place glass lids on sealers. Heat oven to 200°F. Remove sealers from oven as needed and place on a wire rack, dry cloth or folded paper for filling. Do not heat metal lids from vacuum-type sealers in the oven as the sealing compound on this type of lid may be damaged.

If heating in water, half fill sealers with water and stand them on a rack in large kettle or boiler containing sufficient water to come about half way up the sealers. If using glass lids, place on sealers. Bring water to boiling point and leave sealers in the water until ready to fill.

Dip rubber rings and metal lids into boiling water before placing on sealers.

# CONTAINERS FOR CANNING

## Tin Cans

There are three types of tin cans sold for home canning . . . Plain, R or Standard enamel and C-enamel. Be sure to use the cans as recommended below:

**Plain can**—a general-purpose can which may be used for all foods except red-colored fruits and beets. Use only Plain cans for tomatoes and tomato juice.

If red fruits and beets are canned in Plain cans they will fade in color and also lose much of their flavor.

**R or Standard enamel can**—with bright reddish gold lining, should be used for reddish fruits such as red berries, red and purple plums, red and black cherries, rhubarb and for beets. The special enamel lining prevents the fading of the color. Do NOT use R or Standard enamel cans for tomatoes, tomato juice, light colored fruits or for any vegetables except beets. If the R or Standard enamel can is used for any of these foods they will turn dark and lose flavor.

**C-enamel can**—with dull gold lining. Although this special lining helps to prevent discoloration in corn a Plain can may also be used for corn. Do NOT use C-enamel cans for fruits, tomatoes or vegetables other than corn since these will turn dark and lose flavor.

**Can covers**—Plain, R or Standard enamel and C-enamel, to correspond with the three types of tin cans. The inside edge of the cover is lined with a rubber compound.

## SIZES OF TIN CANS

20 ounce.....capacity about 2½ cups

28 ounce.....capacity about 3½ cups

C-enamel cans are sold in 20 ounce size only.

## Preparing Tin Cans

See that the rim of each can is smooth and in good condition. Do not use any cans that are badly dented.

Wash cans thoroughly in hot, soapy water, rinse with boiling water and invert to drain.

Since some covers have paper gaskets, do not put them into water. Simply wipe carefully with clean, slightly dampened cloth.

## PREPARING FRUITS AND VEGETABLES

### Sorting

Sort fruit or vegetable for size and maturity. Immature or over-mature fruits and vegetables should not be canned. Unripe fruit and tomatoes should be allowed to ripen before canning. Bruised or spotted fruit should not be canned. If bruises are cut out, the good portion of the fruit may be used for jam or fruit juices.

### Washing

Fruits and vegetables must be thoroughly washed. Wash only a small quantity at a time. To remove all sand, lift fruits or vegetables from the water instead of draining it off. A wire basket is excellent for this purpose. Greens should be washed in several waters. Strawberries should be washed before hulling.

### Blanching

Blanching consists of placing peaches or tomatoes in boiling water for 15 to 60 seconds, depending on maturity or variety and then dipping immediately in cold water. The peaches or tomatoes should be removed from the water as soon as cool enough to handle. Blanching loosens the skins so that they will slip off easily. Only sufficient fruit for two or three containers should be blanched at one time. A wire basket, large strainer or a square of cheesecloth may be used for blanching.

### Peeling

Some fruits and vegetables need peeling or scraping with a knife, in which case the thinnest possible portion should be removed.

### Brine Bath

To prevent discoloration, peaches, pears and apples should be dropped, as soon as peeled, into a brine bath made in the proportion of 1 teaspoon salt to 1 quart (5 cups) cold water. Put in only sufficient fruit to fill two or three containers. Long standing in brine gives a definitely salty taste. Change brine as it becomes discolored. Drain fruit thoroughly before packing or precooking.

## PACKING FRUITS AND VEGETABLES

Two methods of packing commonly known as Cold Pack and Hot Pack are used in canning fruits and vegetables.

### Cold Pack

The Cold Pack method may be used for fruits and tomatoes. With fruits the prepared raw fruit is placed cold in the container. Then the fruit is completely covered with hot syrup. In the case of tomatoes

# PACKING FRUITS AND VEGETABLES

## Cold Pack (Continued)

the raw prepared vegetable is placed cold in the container, then covered with hot tomato juice and salt is added.

For directions for preparing fruits and tomatoes using Cold Pack method (see Pages 14-16).

## Hot Pack

The Hot Pack method **must** be used for all vegetables except tomatoes. The Hot Pack is used also for juices and may be used for tomatoes and most fruits. With vegetables the prepared raw vegetable is partially cooked with water in a covered kettle, then placed hot in the container and covered with the water in which the vegetable was cooked or with fresh boiling water. Then salt is added, allowing  $\frac{1}{2}$  teaspoon for each "small" (pint) sealer or 20-ounce can and 1 teaspoon for each "medium" (quart) sealer or 28-ounce can.

For directions for preparing vegetables using Hot Pack method (see Pages 19-21).

In the case of fruits, the prepared fruit is simmered for a short time in syrup in a broad saucepan or kettle then placed hot in the container and covered with the hot syrup, adding extra syrup if necessary. Only sufficient fruit to fill three or four containers should be simmered at a time, otherwise it may be unevenly cooked. Prepared tomatoes and extracted juices are heated to boiling point, then placed hot in containers and, in the case of tomatoes, salt is added.

For directions for preparing fruits, tomatoes and juices using Hot Pack method (see Pages 14-17).

## Filling Containers

Work as quickly as possible when packing prepared fruits and vegetables into containers. To prevent hot empty sealers cracking place them on a wire rack, dry cloth or folded paper. Fill the containers one at a time with the actual fruit or vegetable, leaving at least 1 inch at the top to allow for sufficient liquid to be added. Then add liquid leaving necessary headspace.

Headspace is the space between the surface of the liquid and the rim of the container. Leaving proper headspace helps to prevent loss of liquid from sealers or bulging of tin cans.

Glass sealers should be filled with liquid to within  $\frac{1}{2}$  inch of top except in the case of corn and peas which require 1 inch headspace as these two vegetables expand more than other foods during processing.

Tin cans should be filled with liquid to within  $\frac{1}{4}$  inch of top except in the case of corn and peas which require  $\frac{1}{2}$  inch headspace.

After filling the container work out air bubbles by running the blade of a knife down the sides of the container. With large fruits tilt container to allow any trapped air to escape.

**Do not fill more containers than your boiling water bath or pressure canner will hold.**

## CLOSING CONTAINERS

After filling each container and before closing make sure that there are no seeds or particles of food adhering to the rim. Close as directed:

### Glass Sealers

**Screw-top sealer**—Fit wet rubber ring (see page 5 for correct size) on lid or on sealer, making sure it is flat, then put lid in place. Partially seal by screwing metal band tightly and then loosening slightly, unscrewing not more than 1 inch.

**Spring-top sealer**—Fit wet rubber ring (see page 5 for correct size) on sealer, making sure it is flat, then put lid in place. Partially seal by pushing the long wire bail into groove on lid, but do not spring down the lower bail.

**Vacuum-type sealer**—For the type with separate rubber ring, place wet rubber ring on lid, then put lid in place. For the type having edge of metal lid lined with sealing compound, dip lid in boiling water and put in place. Then screw metal band as tightly as possible or adjust metal clamp.

### Tin Cans

Place lid on top of can and close with sealing machine according to manufacturer's directions.

## PROCESSING FRUITS AND VEGETABLES

Processing is the heating of food in containers to preserve it safely for later use. Every particle of food in the containers must be brought to a high enough temperature and held at that temperature for a long enough time to destroy all organisms such as bacteria, yeasts and molds that may cause spoilage.

Have processor ready so that the containers may be placed in it immediately after closing. **Never allow filled sealers or tin cans to stand and cool before processing.**

Allow exact processing time. Count time from the moment the water in the boiling water bath starts to boil vigorously or the gauge on the pressure canner registers the required pressure.

### When Using Boiling Water Bath

1. Place kettle to be used for water bath on stove and half fill with water. To prevent cracking of sealers the water in the bath should be near the temperature of the filled sealers. Place filled sealers on rack, 1 inch apart. Cans may be stacked but they must be arranged so that there is sufficient space for circulation of water around, over and under each can.
2. Add hot water to cover tops of sealers or cans by at least 2 inches. Do not pour hot water directly on sealers as tops may crack.



# PROCESSING FRUITS AND VEGETABLES

## When Using Boiling Water Bath (Continued)

3. Put cover on boiling water bath. Bring water to boiling point. Start to count processing time from moment water is actually boiling vigorously, not just beginning to show bubbles.
4. Keep water boiling until processing is finished. If necessary, add boiling water to keep 2 inch depth over containers.
5. Process the required time for fruit (see Pages 14-17) or vegetable (see Pages 19-21).
6. Immediately remove containers from water to prevent overcooking.

## When Using Pressure Canner

1. Keep the pressure canner clean, particularly the openings to the petcock, safety valve and pressure gauge . . . a toothpick or sharpened match may be used. Make sure the gasket is clean and fits perfectly. Replace when necessary. Never immerse the pressure gauge in water.
2. Before placing filled containers in canner, pour in water to a depth of 2 inches. This is sufficient water if any number of tin cans are being processed or if the canner is filled to capacity with sealers. If, however, the canner is not filled to capacity with sealers, add 2 cups extra water for each one missing to help prevent liquid being drawn from the sealers.
3. Place filled containers on rack in canner at least 1 inch apart. Tin cans may be stacked if they are arranged so that there is good circulation of steam around, over and under them.
4. Adjust lid of canner and fasten securely. Keep petcock open until steam escapes with a hissing sound. This takes 5 to 10 minutes.
5. Close petcock and allow pressure to rise slowly until the gauge indicates the required pressure. Start to count processing time at this point. Regulate heat to keep pressure constant. Liquid will be drawn out of sealers if pressure fluctuates.
6. Process fruit or vegetable the required time (see note Page 16 and Tables, Pages 19-21).
7. At end of processing time, remove canner from heat and place on board or heavy rack. Allow pressure to drop gradually to zero of its own accord. Sudden cooling will cause loss of liquid from sealers and may crack canner.
8. When gauge reaches zero, let canner stand 1 to 2 minutes, then slowly open petcock. Let canner cool 2 or 3 minutes before removing lid.
9. Remove lid so that steam is directed away from the face. Immediately cover open canner with a dish towel and let stand 1 or 2 minutes.
10. Remove towel and leave sealers in canner until bubbling in sealers ceases. Then remove from canner.
11. With tin cans, the petcock may be opened as soon as the gauge registers zero. Remove cans immediately and cool.

## SEALING CONTAINERS

1. After removing glass sealers from processor, place on a wire rack, folded dry cloth or newspapers. To avoid cracking, do not place hot sealers on metal or porcelain surfaces or in a draught.
2. As soon as all bubbling in sealers has ceased, complete the seal as directed:

**Screw-top sealer**—Screw the metal band down until it is just tight, but no more as this may stretch the band out of shape.

**Spring-top sealer**—Push down lower bail until it snaps into position.

**Vacuum-type sealer**—No further tightening is necessary since the seal is formed as sealers cool. Any further tightening may break the seal.

**Never open a sealer after processing.** Sometimes there may be considerable space at the top of the sealer due to shrinkage of the food or loss of liquid during processing. This space will not affect the keeping quality. Opening the sealer to fill up the space may expose the food to spoilage organisms.

## COOLING CONTAINERS

### Glass Sealers

1. Cool sealers in an upright position. Turning sealers upside-down may break the seal that has already formed.
2. Cool sealers out of draughts and uncovered. A cold draught may crack the sealers. Covering them with a cloth will retard cooling.
3. Never tighten or remove the band after a screw-top sealer is cold. This may break the seal.

### Tin Cans

1. Cool tin cans by plunging them immediately into cold water after removing them from the processor.
2. In order to cool cans rapidly, keep water cold by changing it or by leaving tap running slowly.
3. Gently turn cans over several times so that the food near the center of the can will have a chance to cool.
4. Leave cans in water until cold.

### Test For Seal

**Screw-top or spring-top sealers**—When cold, carefully invert each one for a minute or two to see if there is leakage.

**Vacuum-type sealers with metal lids**—When cold, gently tap lids with a spoon. If properly sealed they will give a clear ringing sound and be curved slightly inward. It is not necessary to invert vacuum-type sealers to test for seal.

**If the seal is not air-tight, use up the food before it spoils. Re-processing is not recommended since the food would be badly over-cooked.**

## STORING CANNED FRUITS AND VEGETABLES

1. Before storing canned foods, wipe containers with a damp cloth and then dry thoroughly.
2. Always label tin cans. Label glass sealers if desired.

For tin cans use a wax marking pencil or a narrow strip of paper long enough to circle the can, fastened at the ends with gummed tape. Another way is to write or etch the label on the can with a pointed stick or wooden skewer dipped in a solution of bluestone (copper sulphate). This can be made up by a druggist in the proportion of 10% copper sulphate, 10% hydrochloric acid and 80% water.

For glass sealers use a wax marking pencil or gummed label.

3. After 1 week examine each sealer. Any sign of leakage from glass sealers or bulging of tin cans indicates the presence of spoilage organisms.
4. Store containers in a cool, dark, dry place. Heat and light affect the color and, to some extent, the flavor of the food. The storage place should therefore be cool but there should be no danger of freezing. If the storage place cannot be kept dark, wrap each sealer in newspaper or store in cartons since light affects the color of the food.

Freezing may change the appearance and texture of canned fruits and vegetables. There is no danger, however, in using canned fruits or vegetables which have been frozen, so long as there is no sign of leakage after the food has been allowed to thaw in the container.

If tin cans containing fruits and vegetables are stored in a damp place the outside of the cans may rust. There is no danger, however, in using the food from rusted cans, so long as there is no sign of leakage.

As each sealer is emptied, wash thoroughly and make sure it is **completely dry** before putting top in place. Then store in a clean cupboard until needed.

### DO NOT USE CHEMICALS OR CANNING COMPOUNDS

Air-tight containers and sufficient processing are all that are needed to preserve fruits and vegetables satisfactorily. Such chemicals as boracic acid, salicylic acid and saccharine are prohibited for commercial canning and may be harmful. Others, such as sulphur compounds, are restricted in commercial use.

## APPROXIMATE YIELDS OF CANNED FRUITS

FRUIT	TYPE OF STANDARD CONTAINER (Box, basket, etc.)	Weight of Fruit (pounds)	Medium (quart) Sealers of Canned Fruit (approximate)
APRICOTS	Small box (lug)	15	9
BERRIES except STRAW- BERRIES	12 qt. boxes	15	12
	24 pt. boxes (crate)	15	12
CHERRIES	6 qt. basket (flat)	8	5
	4 basket crate	20	13
	Small box (lug)	15	10
	Large box	25	16
PEACHES	6 qt. basket	8	4
	6 qt. basket (heaped)	10	5
	Box	20	10 - 11
PEARS	6 qt. basket (heaped)	11	5
	11 qt. basket (flat)	15	7
	Box	42	18 - 20
PLUMS and PRUNES	6 qt. basket (flat)	8	5
	6 qt. basket (heaped)	11	7
	Small box (lug)	15	9
STRAW- BERRIES	12 qt. boxes	15	9 - 11
	24 pt. boxes (crate)	15	9 - 11

### Quantity of Syrup to Make

Using the above yield chart, estimate the amount of syrup required for fruit to be canned. Make syrup before preparing fruit by adding water to sugar and bringing to boil. Skim syrup if necessary, keep hot.

When canning by the Cold Pack method, for each "medium" (quart) sealer allow:

$\frac{3}{4}$  to 1 cup syrup for blueberries and saskatoons

1 to  $1\frac{1}{2}$  cups for raspberries, strawberries, gooseberries, cherries and rhubarb

$1\frac{1}{2}$  to 2 cups syrup for apricots, plums, pears and peaches

When canning by the Hot Pack method, use the minimum amounts of syrup suggested above.

### Syrups to Use

TYPE OF SYRUP	SUGAR	WATER	YIELD
Very Thin	1 cup	3 cups	about $3\frac{1}{2}$ cups syrup
Thin	1 cup	2 cups	about $2\frac{1}{2}$ cups syrup
Moderately Thin	1 cup	$1\frac{1}{2}$ cups	about 2 cups syrup
Medium	1 cup	1 cup	about $1\frac{1}{2}$ cups syrup
Heavy	1 cup	$\frac{3}{4}$ cup	about $1\frac{1}{4}$ cups syrup

NOTE:—In making any of the above syrups, up to  $\frac{1}{4}$  of the sugar may be replaced with an equal quantity of honey or corn syrup. A mild-flavoured honey or white corn syrup is suggested for bland or light-coloured fruits.

## TABLE FOR FRUITS – BOILING WATER BATH

FRUIT	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
APPLES	Syrup to use—Thin HOT PACK—Wash, peel, core and slice or quarter, drop in brine bath. Drain. Bring to boil in syrup and simmer 3 minutes. Pack hot, leaving headspace.	15 mins.	15 mins.
APPLE-SAUCE	HOT PACK—Make applesauce, sweeten if desired. Pack hot, leaving headspace.	15 mins.	15 mins.
APRICOTS	Syrup to use—Moderately thin COLD PACK—Wash, halve and pit or leave whole. Pack, cups down if halved. Cover with boiling syrup, leaving headspace. HOT PACK—Wash, halve and pit or leave whole. Bring to boil in syrup and simmer 2 to 3 minutes. Pack hot, leaving headspace.	20 mins.  15 mins.	25 mins.  15 mins.
BERRIES except STRAW- BERRIES	Syrup to use— Blueberries—Very thin Blackberries, saskatoons—Thin Raspberries—Moderately thin or Medium Gooseberries, loganberries—Medium or Heavy COLD PACK—Wash. (Top and tail gooseberries.) Pack. Cover with boiling syrup, leaving headspace.	15 mins.	20 mins.
CHERRIES	Syrup to use— Sweet Cherries—Thin Sour Cherries—Medium or Heavy COLD PACK—Wash, stem, pit if desired. Pack. Cover with boiling syrup, leaving headspace. HOT PACK—Wash, stem, pit if desired. Bring to boil in syrup and simmer 3 minutes. Pack hot, leaving headspace.	20 mins.  15 mins.	25 mins.  15 mins.

### HEADSPACE

When using glass sealers allow  $\frac{1}{2}$  inch headspace.

When using tin cans allow  $\frac{1}{4}$  inch headspace.

## TABLE FOR FRUITS – BOILING WATER BATH

FRUIT	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
PEACHES	<p>Syrup to use—Moderately thin</p> <p><b>COLD PACK</b>—Blanch 15 to 60 seconds, cold dip. Remove skins and pit. Drop in brine bath. Drain. Leave in halves or slice. Pack, cups down if halved. Cover with boiling syrup, leaving headspace.</p>	20 mins.	25 mins.
	<p><b>HOT PACK</b>—Blanch 15 to 60 seconds, cold dip. Remove skins and pit. Drop in brine bath. Drain. Leave in halves or slice. Bring to boil in syrup and simmer 3 minutes. Pack hot, leaving headspace.</p>	15 mins.	15 mins.
PEARS	<p>Syrup to use—Very thin</p> <p><b>COLD PACK</b>—Wash, peel, halve or quarter, remove core. Drop in brine bath. Drain. Pack, cups down. Cover with boiling syrup, leaving headspace.</p>	20 mins.	25 mins.
	<p><b>HOT PACK</b>—Wash, peel, halve or quarter, remove core. Drop in brine bath. Drain. Bring to boil in syrup and simmer tender-fleshed varieties 3 minutes; firm-fleshed varieties 5 minutes. Pack hot, leaving headspace.</p>	15 mins.	15 mins.
PLUMS	<p>Syrup to use—</p> <p style="padding-left: 20px;">Sour Plums—Moderately thin</p> <p style="padding-left: 20px;">Prune Plums—Thin</p>		
	<p><b>COLD PACK</b>—Wash. Leave whole, or halve and pit. Pack. Cover with boiling syrup, leaving headspace.</p> <p><b>HOT PACK</b>—Wash. Leave whole or halve and pit. Bring to boil in syrup and simmer 2 minutes. Pack hot, leaving headspace.</p>	15 mins.	20 mins.
		10 mins.	10 mins.

### TO PREVENT DISCOLORATION

Ascorbic acid (Vitamin C) helps prevent discoloration of light colored fruits canned in glass sealers. It is available in both powdered and tablet form. Place the ascorbic acid in the bottom of the sealer before filling with fruit, allowing 1/16 teaspoon (powder) or 200 milligrams (tablets) for each pint or quart sealer. When the processing is complete allow sealers to cool, then invert for a short time to distribute the dissolved ascorbic acid more evenly.

## TABLE FOR FRUITS – BOILING WATER BATH

FRUIT	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
<b>RHUBARB</b>	<p>Syrup to use—Medium</p> <p><b>COLD PACK</b>—Wash, cut in ½-inch pieces. Pack. Cover with boiling syrup, leaving headspace.</p>	<b>10 mins.</b>	<b>15 mins.</b>
<b>STRAW-BERRIES</b>	<p>Syrup to use—Medium or Heavy</p> <p><b>COLD PACK</b>—Wash, hull. Bring slowly to boil in syrup. Cover, remove from heat and let stand 1 hour. Pack, leaving headspace.</p> <p><b>HOT PACK</b>—Wash, hull. Bring syrup to boil in kettle, add strawberries. Cover, remove from heat and let stand 1 hour. Bring to boil. Pack hot, leaving headspace.</p>	<b>15 mins.</b>  <b>10 mins.</b>	<b>20 mins.</b>  <b>10 mins.</b>
<b>SWEET RED PEPPERS</b>	<p><b>COLD PACK</b>—Wash. Cover with boiling water, bring to boil and boil, covered, for 10 minutes; OR place on a tray in a very hot oven (450°F.) for 6 to 8 minutes, turning several times, until skins blister. Dip into cold water. Remove skins, cores and seeds. Pack cold. Add ½ teaspoon salt per "small" (pint) sealer. Do not add any liquid.</p>	<b>40 mins.</b>	—
<b>TOMATOES</b>	<p><b>COLD PACK</b>—Blanch 15 to 60 seconds, cold dip, remove stem end, peel. Pack. Add ½ teaspoon salt per "small" (pint) sealer. Cover with hot tomato juice, leaving headspace.</p> <p><b>HOT PACK</b>—Blanch, cold dip, remove stem end, peel. Quarter or leave whole. Heat to boiling point. Pack hot, leaving headspace. Add ½ teaspoon salt per "small" (pint) sealer.</p>	<b>30 mins.</b>  <b>15 mins.</b>	<b>35 mins.</b>  <b>15 mins.</b>

### PRESSURE CANNER

If a pressure canner is used for fruits or tomatoes, use the Cold Pack Method and allow 5 minutes at 5 pounds pressure for all containers of fruit and 8 minutes at 5 pounds pressure for tomatoes.

## TABLE FOR JUICES – BOILING WATER BATH

JUICE	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
CURRANT JUICE	<b>HOT PACK</b> —Wash, measure and crush currants thoroughly. Add 1 cup water per cup of currants. Bring to boil and simmer, covered, 10 minutes. Strain through moistened jelly bag. Add sugar if desired. Reheat to boiling point. Pour into hot containers, leaving headspace.	10 mins.	10 mins.
GRAPE JUICE	<b>HOT PACK</b> —Wash, stem and crush grapes. Add water, allowing 2½ cups per 6 quart basket of grapes. Bring to boil, and simmer, covered, 15 minutes. Strain through moistened jelly bag. Add sugar if desired. Reheat to boiling point. Pour into hot containers, leaving headspace.	10 mins.	10 mins.
RHUBARB JUICE	<b>HOT PACK</b> —Wash and cut rhubarb into small pieces. Add water, using half as much water as rhubarb. Bring to boil and simmer, covered, 5 minutes. Strain through moistened jelly bag. Add sugar if desired. Reheat to boiling point. Pour into hot containers, leaving headspace.	10 mins.	10 mins.
TOMATO JUICE	<b>HOT PACK</b> 1. Wash tomatoes, remove core, cut into pieces. Bring to boil and simmer, covered, 5 minutes. Press through sieve or pureer. Bring juice to boiling point. Pour into containers, leaving headspace. Add ½ teaspoon salt per "small" (pint) sealer.	15 mins.	15 mins.
	2. Wash, remove core. Extract juice, using juice extractor. Heat juice to boiling point. Pour into containers, leaving headspace. Add ½ teaspoon salt per "small" (pint) sealer.	15 mins.	15 mins.

### ALTITUDE

The processing times given for boiling water bath are for altitudes under 2000 feet. At 2000 feet increase the times by one-fifth and for every additional 1000 feet add another fifth.

- e.g.** If processing time is 20 minutes then —
- at 2000 feet increase by one-fifth of 20 minutes or by 4 minutes;
  - at 3000 feet increase by two-fifths of 20 minutes or by 8 minutes.



# SPECIAL METHODS OF CANNING FRUITS

## Dry Sugar Method

Half fill sealer or can with fruit then add sugar and fruit in alternate layers. Cover fruit with boiling water, leaving headspace. Close container and tilt several times to dissolve sugar. Process as for Cold Pack (see Tables, Pages 14-16).

## Quantities of Sugar to Use in Dry Sugar Method

For 1 "medium" (quart) sealer (large fruit)		For 1 "medium" (quart) sealer (small fruit)	
SUGAR	EQUIVALENT SYRUP	SUGAR	EQUIVALENT SYRUP
½ cup	Very thin	⅓ cup	Very thin
⅔ cup	Thin	½ cup	Thin
¾ cup	Moderately thin	⅔ cup	Moderately thin
1 cup	Medium	¾ cup	Medium
1¼ cups	Heavy	1 cup	Heavy

## Solid Pack Method

This method is especially recommended for rhubarb, blueberries and cherries to be used in making pies or puddings. It may also be used for other fruits.

Wash, prepare fruit and crush part of it in the bottom of a preserving kettle. Add remaining fruit and heat for a few minutes. Stir occasionally and, if necessary, add a little water to prevent scorching. Pack in sealers or cans, crushing fruit down slightly so that it is covered with its own juice. Sprinkle between layers of fruit the amount of sugar recommended for dry-sugar canning. Leave headspace and process as for Cold Pack (see Tables, Pages 14-16).

## Sugarless Method

Follow Solid Pack method but omit sugar. The keeping quality of canned fruit does not depend on the addition of sugar but rather on sufficient processing and the use of air-tight containers. However, the color and flavor of some fruits are retained better when some sugar is added.

## Raw Canning Method

This method may be used for raspberries, strawberries and rhubarb. Pack raw fruit in sterilized sealers or cans and cover with boiling syrup, leaving headspace. Completely seal. Put several layers of newspapers under and in the bottom of a large kettle or tub. Place sealers in tub and pour in enough boiling water to cover tops of containers by at least 3 inches. When adding boiling water, care should be taken not to pour it directly on sealers. Cover closely and place a blanket or rug over the kettle or tub, tucking it in well around the sides. Leave 10 to 12 hours.

# TABLE FOR VEGETABLES – PRESSURE CANNER

VEGETABLE	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
<b>ASPARAGUS</b>	Wash, break off tough end of stalks. Remove scales if necessary to help wash away sand. Cut into lengths to fit containers. Tie in uniform bundles, stand upright in sufficient boiling water to come half way up stalks. Cover, bring to boil and boil 3 minutes. Pack hot, all tips up, except a few in center to help keep stalks upright.	10 lb. Pressure  30 mins.	35 mins.
<b>BEANS Green or Wax</b>	Wash young tender beans. Trim ends, string if necessary. Leave whole or cut in pieces. Cover with boiling water. Bring to boil and boil, covered, 3 minutes. Pack hot. Add salt. Cover with hot cooking liquid from beans, leaving headspace.	10 lb. Pressure  30 mins.	35 mins.
<b>BEETS</b>	Wash small, young beets. Leave on roots and 2 inches of stem. Cover with boiling water. Bring to boil and boil, covered, until skins slip off easily, about 20 minutes. Remove skins and roots. Pack hot. Add salt. Cover with boiling water, leaving headspace.	10 lb. Pressure  30 mins.	35 mins.
<b>CARROTS</b>	Wash and scrape young tender carrots. Cover with boiling water. Bring to boil and boil, covered, 5 minutes. Pack hot in upright position, alternating stem and root ends. Add salt. Cover with boiling water, leaving headspace.	10 lb. Pressure  30 mins.	35 mins.

## HEADSPACE

When using glass sealers, allow 1 inch headspace for corn and peas and  $\frac{1}{2}$  inch headspace for all other vegetables.

When using tin cans, allow  $\frac{1}{2}$  inch headspace for corn and peas and  $\frac{1}{4}$  inch headspace for all other vegetables.

# TABLE FOR VEGETABLES – PRESSURE CANNER

VEGETABLE	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
<b>CORN</b> Whole Kernel	Cover cobs with boiling water. Bring to boil and boil, covered, 4 minutes. Dip into cold water. Cut whole kernels from cob. Add boiling water, using half as much water as corn. Bring to boil and pack hot, very loosely, leaving headspace. Add salt.	10 lb. Pressure  60 mins.	70 mins.
<b>CORN</b> Cream Style	Wash cobs. Slice thin layer from kernels of cob. Next, slice remainder of kernels from cob and finally scrape cob to remove any cream or juice. Add boiling water, using half as much water as corn. Bring to boil, stirring to prevent scorching. Pack hot, very loosely, leaving headspace. Add salt.	10 lb. Pressure  75 mins.	—
<b>GREENS</b> Spinach Chard Beet Tops	Wash thoroughly. Cook, covered, in very little water until thoroughly wilted, about 5 to 8 minutes, turning several times during cooking. Pack hot, loosely. Cut greens crosswise with a sharp knife to bottom of container. Add salt. Cover with boiling water, leaving headspace.	10 lb. Pressure  50 mins.	60 mins.
<b>MUSH-ROOMS</b>	Wash and peel. Drop into acidulated water (1 tablespoon vinegar per quart water). Drain. Boil 3 minutes in fresh water to which vinegar and salt are added (1 tablespoon vinegar and 1 teaspoon salt per quart water). Pack hot. Cover with boiling water, leaving headspace.	10 lb. Pressure  30 mins.	35 mins.

## SALT

Add ½ teaspoon salt to each "small" (pint) sealer or 20-oz. can.

Add 1 teaspoon salt to each "medium" (quart) sealer or 28-oz. can.

## TABLE FOR VEGETABLES – PRESSURE CANNER

VEGETABLE	PREPARING AND PACKING	"Small" (pint) Sealers 20-oz. Cans	"Medium" (quart) Sealers 28-oz. Cans
PEAS	Shell and wash young tender peas. Cover with boiling water. Bring to boil and boil, covered, 1 minute. Pack hot, loosely. Add salt. Cover with hot cooking liquid from peas, leaving headspace.	10 lb. Pressure 40 mins.	45 mins.
PUMPKIN and SQUASH	Cut or break apart. Remove seeds and stringy fibres. Cut into pieces. Steam, bake or boil in small amount of water until tender. Scrape from skins and mash or sieve. Bring to boiling point, adding a little water, if necessary, to prevent scorching. Pack hot, leaving headspace.	10 lb. Pressure 70 mins.	80 mins.
SWEET RED PEPPERS	See under fruits.		
TOMATOES	See under fruits.		

### Boiling Water Bath

It is strongly recommended that all vegetables except tomatoes be processed in a pressure canner rather than in the boiling water bath (see "Pressure Canner", Page 4). If a pressure canner is not available and the boiling water bath must be used for canning vegetables, great care must be taken to allow the full processing time. For asparagus, green or wax beans, beets, carrots and mushrooms allow 2 hours; for whole kernel corn, cream style corn (pints and 20-oz. cans only), greens, peas, pumpkin and squash allow 3 hours.

Any vegetable, except tomatoes, processed in the boiling water bath should be boiled for 10 minutes in an uncovered saucepan before using or even tasting. Discard any canned vegetable that has a bad odour or looks spoiled.

### ALTITUDE

When using the pressure canner, increase the pressure by 1 pound for each 2,000 feet above sea level.

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