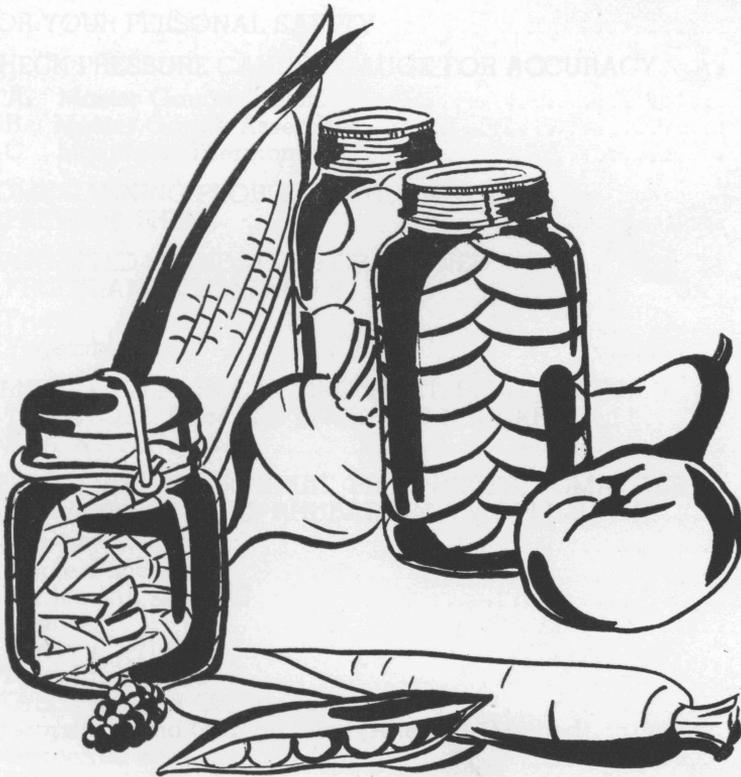


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- fruits
- vegetables



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- fruits
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The National Canning Association
 1700 K Street, N.W., Washington, D.C.
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HOME CANNING . . . fruits and vegetables

Canning has been a popular way for homemakers to preserve food for generations, but recommended methods have changed from those of grandmother's day as more has been learned about causes of food spoilage.

Canned food, if it is to "keep", must be free from the tiny organisms that bring about spoilage. These yeasts, molds, and bacteria as well as enzymes that cause decay must be destroyed by heat after the food is in the containers. Once they are destroyed, the food must be kept from contamination by a tight seal on the jars or cans. The amount and temperature of heat needed are different for different kinds of food.

Canning fruits and vegetables at home for family use makes possible a variety in the diet, reduces the cost of living, and releases commercial food products for other purposes.

Not only must fruit and vegetables be canned properly but they must be stored correctly in order to retain their color and food value.

RECOMMENDED CANNING METHODS

The water bath method is considered the best way to can fruit, fruit juices, tomatoes, tomato juice, rhubarb and kraut. It is **not recommended for any other vegetable**. Water bath canners may be purchased; however, any big, clean kettle with a rack and tight fitting lid will do if it is deep enough to hold the cans or jars upright and permit the water to boil 1 or 2 inches over the top of them.

A steamer may be used for canning fruits but requires longer processing than water bath canning. One may be improvised from any large container with a rack and a tight fitting lid. A pressure canner may be used as a steamer if the petcock is left open the entire time to prevent the temperature from going higher than the boiling point.

The pressure canner method is recommended for processing all non-acid vegetables. This method is necessary to prevent possible spoilage and/or poisoning from botulism. Botulism cannot be detected except in extreme cases as the flavor, texture and odor are not necessarily affected. Boil all home canned non-acid vegetables for 10 minutes in an uncovered kettle or sauce-

pan before tasting. Instructions in this bulletin are for any brand of pressure canner.

Pressure saucepans of adequate size and provided with an indicator or gauge, operating accurately at 10 pounds pressure, may be used for canning small amounts of vegetables.

METHODS NOT RECOMMENDED

The open kettle method is not recommended for canning fruits or vegetables. Other methods which are not recommended as being safe are:

1. Oven canning
2. Intermittent sterilization
3. Acidification of low acid vegetables
4. Addition of canning powders, compounds or antibiotics

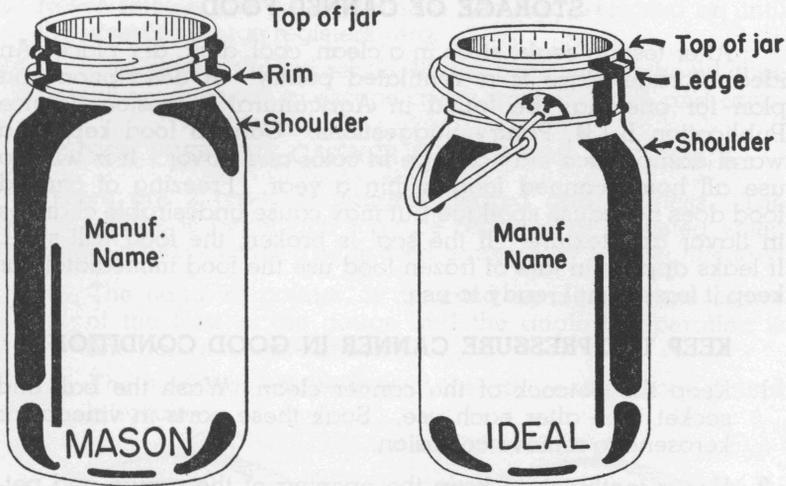
TYPES OF JARS AND CLOSURES

1. Use only standard make jars, with the manufacturer's name imprinted on the jar, when canning in a pressure canner.
2. Test all seals 12 to 24 hours after canning. If there is a poor seal, use the food immediately.
3. A two-piece self seal lid has a metal disc and metal ring. It is self-sealing as the jar cools after processing. **The top of the jar must have a smooth edge to make a seal.** The metal disc can be used only once, but the ring may be used again. Use the same brand disc and ring. Adjust the lids and tighten the metal ring according to the manufacturer's instructions. The metal ring may be removed from the jar when the canned product is thoroughly cool.

To test the seal, shake food down so that none is touching the lid. Remove the metal ring. Tap the metal disc with a spoon or fork. If the seal is good there will be a clear ringing sound. If the seal is poor, there will be a dull thud.

4. The three-piece glass top lid has a glass disc and a rubber ring for sealing. The glass lid is held in place by a metal ring. **The top of the jar must be smooth** in order to seal. Follow the manufacturer's instructions for closing and sealing. To test the seal, remove the metal ring. The rubber ring is smooth and the glass lid is securely attached to the rubber.
5. The old fashioned zinc lid has a porcelain lining. A rubber ring fits on the rim of the jar. **The rim of the jar must be free**

from nicks to insure a seal. Close and seal according to the manufacturer's instructions. To test the seal, tilt the jar. If the seal is good there will be no leakage.



For use with: (1) Two-piece self seal lid, (2) Three-piece glass top, (3) Old fashioned zinc lid.

For use with: (1) Lightning type lid.

6. The lightning type lid is a glass top with a wire bail attached to the jar. A rubber ring fits on the ledge at the top of the jar. **The jar and lid must be free from nicks to insure a seal.** Close and seal according to the manufacturer's instructions. To test the seal, tilt the jar. If the seal is good there will be no leakage.

REMEMBER THESE POINTS WHEN USING TIN CANS

1. Adjust the sealer to make a good seal. Follow manufacturer's directions on adjusting and using the sealer. If the directions have been lost write the manufacturer for them.
2. The lids with rubber compound gaskets require a tighter seal than lids with paper gaskets.
3. Do not place lids with paper gaskets in water. Wipe them with a damp cloth just before sealing. Wash lids with composition gaskets.
4. R or C enamel cans are used for certain foods to prevent discoloration. Otherwise any kind of can may be used for any food.

5. The seal on tin cans may be tested when the can is plunged into cold water. If bubbles rise the seal is not good.

STORAGE OF CANNED FOOD

After testing seals, store in a clean, cool, dark, dry place. An ideal storage place is a ventilated pantry. A description and plan for one may be found in Agricultural Extension Service Publication B-134, Pantry Suggestions. Canned food kept in a warm damp place may change in color and flavor. It is wise to use all home canned food within a year. Freezing of canned food does not cause spoilage but may cause undesirable changes in flavor and texture. If the seal is broken, the food will spoil. If leaks appear in jars of frozen food use the food immediately or keep it frozen until ready to use.

KEEP THE PRESSURE CANNER IN GOOD CONDITION

1. Keep the petcock of the canner clean. Wash the ball and socket type after each use. Soak these parts in vinegar or kerosene to remove corrosion.
2. Use a toothpick to keep the opening of the gauge and petcock clean.
3. Never let water stand in the pressure canner. Never immerse the lid in water.
4. To remove odors and stains use one of the following and process at 5 pounds pressure for 5 minutes:
 - a. Juice of 1 lemon and 2 quarts of water.
 - b. Two tablespoons vinegar and 2 quarts of water.
 - c. Handful of Irish potato peelings and 2 quarts of water.
5. Do not use harsh scouring powders.
6. Never add cold water to a hot canner. Guard against sudden cooling that might cause it to warp or crack.
7. Grease the closing surfaces of a pressure canner, which seals metal to metal, with salt free fat if the lid is difficult to remove or steam escapes.
8. Keep a canner lid with a rubber gasket clean and free from grease. Some types of rubber gaskets may be turned upside down when they no longer give a perfect seal in their original position. If necessary, purchase a new rubber gasket according to the manufacturer's instructions.
9. Store the canner stuffed with newspaper to absorb moisture and odors. Wrap the lid in paper and invert on top of the canner.

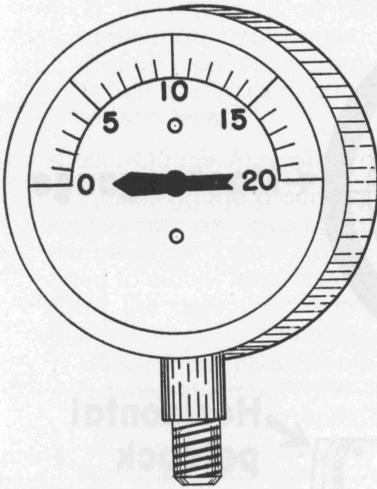
FOR YOUR PERSONAL SAFETY

1. Never release steam suddenly.
2. Never remove the lid until steam has been released or until the pressure gauge registers zero.
3. When removing the canner lid, lift the back side of the lid, thus permitting the heat to escape away from the face and arms.

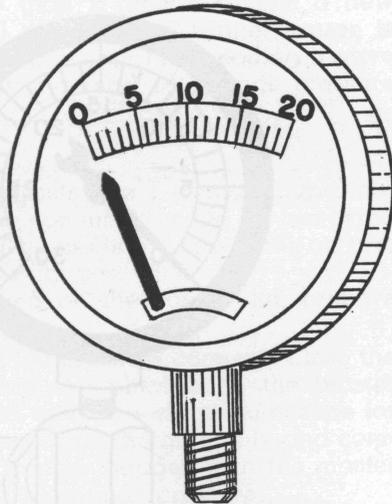
CHECK PRESSURE CANNER GAUGE FOR ACCURACY

There are 2 types of gauges—geared and gearless. The geared gauge is better and may be repaired or adjusted when it is slightly out of order. The geared gauge may be identified by:

- a. The hand, or pointer, is mounted on a pin in the center of the face of the gauge and the angle of operation is one-half of a circle or more.
- b. The markings on the face of the gauge are at one-pound intervals.



Geared Gauge



Gearless Gauge

The gearless gauge costs less than the geared gauge. It becomes inaccurate more readily and cannot be repaired. The gearless gauge is recognized by:

- a. The pointer is directly connected to the mechanism, coming out of an opening in the lower portion of the face of the gauge and the angle of operation is one-fourth of a circle.

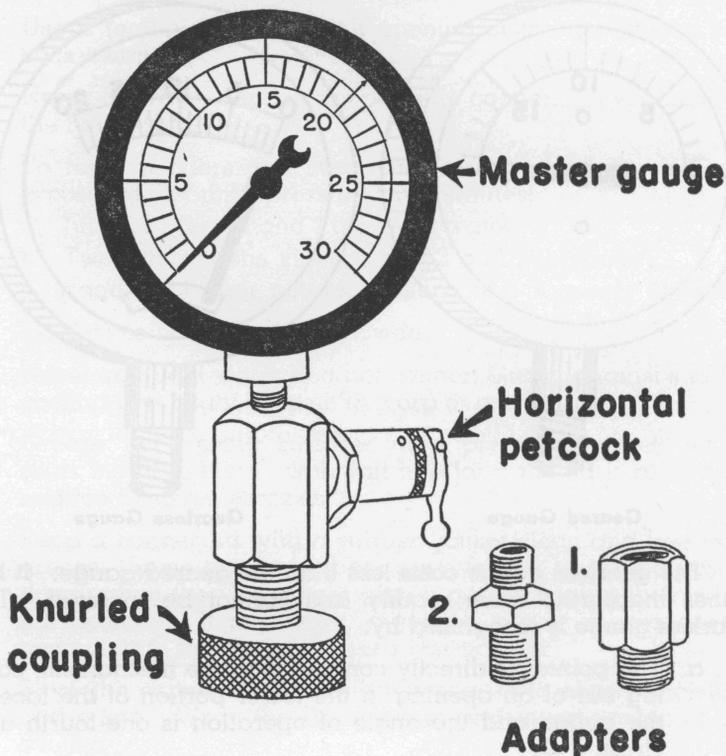
- b. The markings on the face of the gauge are at five-pound intervals.

Check the gauge on the pressure canner at least once each year. It is necessary to check the gauge because if it is registering low, the actual pressure in the canner will be higher than the gauge reading. If the gauge is registering high, the actual pressure in the canner will be lower than the gauge reading and there is danger of underprocessing the food, which may cause spoilage. One of the following methods may be used to check the gauge:

A. Master Gauge Tester

This is the easiest method. The pressure gauge may be tested without removing the gauge from the canner and the seal of the canner may be checked at the same time.

1. Depending upon the make of the canner, use one of the following methods:
 - a. Remove the upper half of the petcock on cover, and replace with master gauge tester. Tighten the knurled coupling (with fingers only).



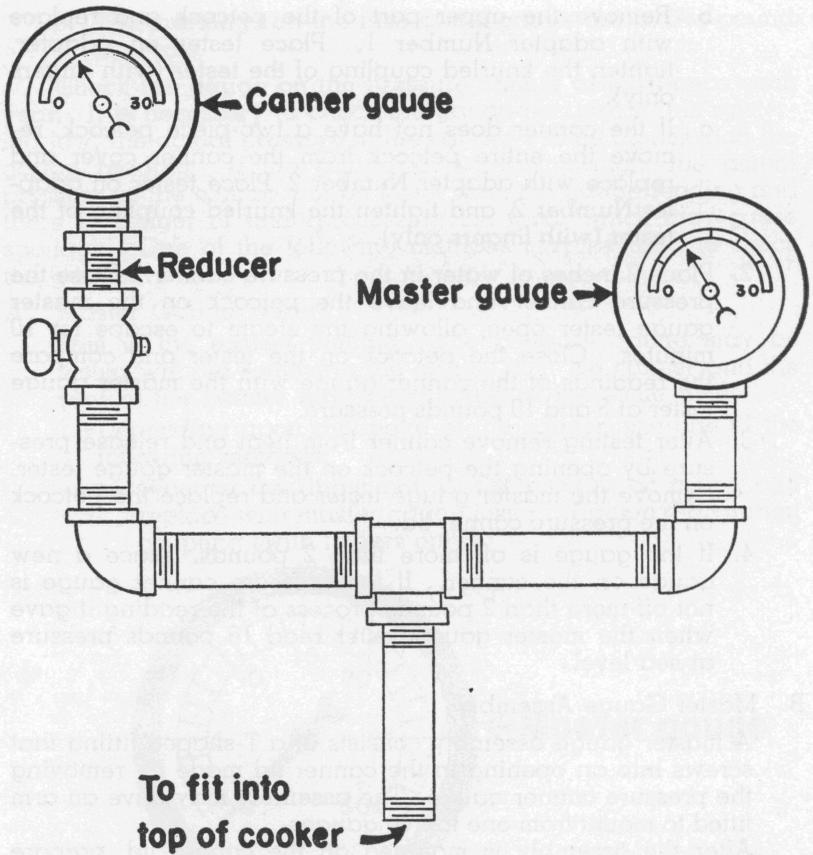
- b. Remove the upper part of the petcock and replace with adapter Number 1. Place tester on adapter, tighten the knurled coupling of the tester (with fingers only).
 - c. If the canner does not have a two-piece petcock, remove the entire petcock from the canner cover and replace with adapter Number 2. Place tester on adapter Number 2, and tighten the knurled coupling of the tester (with fingers only).
2. Place 2 inches of water in the pressure canner. Close the pressure canner and leave the petcock on the master gauge tester open, allowing the steam to escape for 10 minutes. Close the petcock on the tester and compare the readings of the canner gauge with the master gauge tester at 5 and 10 pounds pressure.
 3. After testing remove canner from heat and release pressure by opening the petcock on the master gauge tester. Remove the master gauge tester and replace the petcock on the pressure canner lid.
 4. If the gauge is off more than 2 pounds, place a new gauge on the canner. If the pressure canner gauge is not off more than 2 pounds process at the reading it gave when the master gauge tester read 10 pounds pressure at sea level.

B. Master Gauge Assembly

A master gauge assembly consists of a T-shaped fitting that screws into an opening in the canner lid made by removing the pressure canner gauge. The assembly may have an arm fitted to mount from one to five gauges.

After the assembly is mounted on the canner lid, prepare the canner as for canning:

1. Place 2 inches of water in the pressure canner. Close the pressure canner and leave the petcock on the master gauge assembly open and allow the steam to escape for 10 minutes. Close the petcock on the assembly and compare the readings of the canner gauges with the master gauge assembly at 5 and 10 pounds pressure.
2. After testing remove the canner from the heat and release the pressure by opening the petcock on the pressure canner. Remove the master gauge assembly and replace the canner gauge on the pressure canner lid.
3. If the gauge is off more than 2 pounds, place a new gauge on the canner. If the pressure canner gauge is not off more than 2 pounds, process at the reading it gave when the master gauge on the assembly read 10 pounds pressure at sea level.



C. Maximum Thermometer

1. Test maximum thermometer in boiling water. Shake the mercury below 212 degrees Fahrenheit before testing. The thermometer should register:
 - 212 degrees Fahrenheit at Sea Level
 - 210 degrees Fahrenheit at 1000 feet altitude
 - 208 degrees Fahrenheit at 2000 feet altitude
 - 206 degrees Fahrenheit at 3000 feet altitude
 - 204 degrees Fahrenheit at 4000 feet altitude
2. Place 2 inches of water in the canner.
3. Suspend the thermometer in the center of the canner from a thermometer rack or place the thermometer in an empty jar on a rack in the canner. (Be sure bulb of thermometer is not submerged in water.)
4. Close the canner and allow the steam to escape from the petcock for 10 minutes.

5. Close the petcock and bring the pressure to 10 pounds and hold this pressure for 5 minutes.
6. Remove from fire and allow gauge to return to zero. Do not jolt the canner. Let stand 5 minutes; open the petcock slowly, allowing all of the steam to escape.
7. Open the canner, remove the thermometer and take the reading, hold the thermometer on a level with the eye and read as a fever thermometer.
8. The thermometer should read 240 degrees Fahrenheit at sea level for 10 pounds pressure.
9. If the thermometer reading indicates that the gauge is off more than 2 pounds, place a new gauge on the canner. If the temperature inside the canner is higher than the gauge indicates, use a processing pressure lower by 1 pound for each 2 degrees on the maximum thermometer. On the other hand, if the temperature inside the canner is lower than the gauge indicates, increase the pressure 1 pound for each 2 degrees.

SOME CANNING PROBLEMS AND HOW TO PREVENT THEM

PROBLEM	HOW TO PREVENT	REMARKS
Product dark at top of container	Steam food for length of time recommended. Have hot liquid or syrup over top of food when container is closed. Work air bubbles out of jar with a knife inserted along inside of the jar. Complete seal if necessary immediately after processing.	The darkening in itself is not a sign of spoilage. Discolored food is not harmful to eat if the seal is good, if there is no gas present and no off-odor. Darkening may be due to sealing air in the container.
Change of color throughout jar of food as: Fading Uneven color Different color Darkening	Keep food cool after it is gathered and before it is canned. Use fresh young tender products. Use evenly ripened fruit. Steam quickly for recommended length of time. Avoid contact of food with iron and copper utensils. Avoid over-processing. To prevent brownish discoloration in corn use when at right milk stage (neither too young nor too old).	Pink to light purple color in canned apples and peaches may be due to chemical changes in coloring matter of fruit. Fruit grown in very dry hot weather often turns pink. Water in some localities may cause color changes. Liquid or syrup dissolves some of the color of fruits and vegetables. Faded food is all right to eat if there is no gas or off-odor.

PROBLEM	HOW TO PREVENT	REMARKS
Jars of food not covered with liquid.	Work out air bubbles with knife after product is steamed and before closing. Add more liquid if necessary to make a standard fill. Thoroughly exhaust canner before closing petcock. Maintain constant even pressure during processing of food. When canning in jars allow pressure to return to zero before opening petcock.	Starchy vegetables absorb more liquid than non-starchy vegetables. Low liquid is not a sign of spoilage. Do not open container and refill with liquid as this would cause food spoilage.
Floating	Preheat or steam food as recommended to drive out air. Avoid over-ripe fruit. Avoid too heavy a syrup for fruit. Have good fill. Have food hot when sealed. Avoid over-processing.	Too much air in cells of food may cause floating.
Yellow deposits	Cannot be prevented as far as is now known. It is thought to be due to soil and climatic conditions during growth.	Yellow deposits are found several weeks or 6 months after canning. When the container is vigorously shaken or the contents heated the deposits dissolve and disappear. There is no off-odor or unusual flavor. The food may be eaten without danger of poisoning if the food is safe otherwise.

SUGGESTED STANDARDS FOR CANNED FRUITS AND VEGETABLES

Full pack with syrup or liquid just covering the product and coming to $\frac{1}{2}$ inch from top of the jar. Have containers free of air bubbles.

Fruits

APPLES—Practical packs important, shape held, color good for type of apple, clear syrup.

APPLE SAUCE—Fine particles, no lumps. Color will depend on amount of sugar and spices added.

BERRIES—Full pack, shape held, uniform in size and degree of ripeness, good color for type of berry, clear syrup.

CHERRIES—Shape held, good color, clear syrup.

FRUIT JUICE—Good color for type of fruit. No seeds or skin, fine even pulp.

FRUIT PUREE—Fine uniform particles, color characteristic of fruit used.

GRAPEFRUIT—Sections held shape, even light color, clear syrup.

PEACHES, PEARS AND APRICOTS—Pack halves in over lapping layers. The concave surface of each half is placed downward. Uniform size, shape held, color characteristic of fruit, unfaded, even ripeness, clear syrup. Not mushy from over-ripeness, over-cooking or flat sour.

PINEAPPLE—Uniform in size and color, no eyes or core, clear syrup.

PLUMS AND PRUNES—Uniform in size and color, even ripeness, shape held, good even color, clear syrup. Not mushy from over-ripeness or over-cooking.

RHUBARB—Pieces hold shape and retain most of their color. Syrup slightly pink.

TOMATOES CANNED—Even, rich color characteristic of variety, packed in their own juice, seeds visible.

TOMATOES CANNED WHOLE—Shape held, even, rich color characteristic of variety, tomatoes packed in tomato juice, no seeds.

TOMATO JUICE—A rich color characteristic of fruit, free from seed and skins. Fine even division of pulp, which stands suspended in the liquid with little or no separation.

Vegetables

ASPARAGUS—Uniform in size and color, clear liquid.

BEETS—Shape held, uniform size or pieces, dark red beets and clear red liquid.

BLACK-EYED PEAS—About half mature, uniform maturity, good color, slightly starchy liquid.

CARROTS—Practical pack, deep orange color, clear liquid.

CORN—Yellow or white as to variety.

Whole grain style; evenly graded, good color, clear liquid. Cream style; evenly graded, good color. Semi-solid but should not be stiff.

- ENGLISH PEAS—Uniform size; good green color, clear liquid or slightly starchy.
- GREEN SNAP BEANS AND PEAS—As classed under **leafy, green** or **yellow** vegetables, in Texas Food Standard. Pod about one-fourth inch in diameter, even length, seeds not larger than pin heads, good green color, clear liquid.
- GREEN SNAP BEANS—As classed under **other vegetables** in Texas Food Standard. Half-matured beans with pods, even lengths, uniform maturity, olive green in color, clear liquid.
- GREENS—Good green color according to **kind** of greens, clear liquid.
- LIMA BEANS—About half mature, color dependent on variety, liquid slightly starchy.
- OKRA—Dull or gray-green color according to variety, shape held, few seeds visible, starchy liquid.
- PUMPKIN—Orange color, shape held, liquid slightly starchy.
- SHELLED FRESH PINTO BEANS—Light brown color, uniform size and maturity, shape held, starchy liquid.
- SHELLED FRESH CREAM PEAS—Shape held, uniform size and maturity, **cream** color, starchy liquid.
- SQUASH—Uniform size or pieces, shape held, clear liquid, good color depending on variety.
- SWEET POTATOES—Uniform size and pieces, shape held, color characteristics of variety, slightly starchy amber colored liquid.

GENERAL STEPS IN CANNING FRUIT, FRUIT JUICES, TOMATOES, TOMATO JUICE AND RHUBARB IN A WATER BATH

1. Wash all jars and cans in hot soapy water and rinse well before canning. It is not necessary to sterilize jars when canning in the water bath or steam bath.
2. Make sugar syrup according to personal taste:
 - a. Thin syrup: 1 cup sugar, 3 cups water, yield $3\frac{1}{4}$ cups syrup.
 - b. Medium syrup: 1 cup sugar, 2 cups water, yield $2\frac{3}{8}$ cups syrup.
 - c. Heavy syrup: 1 cup sugar, 1 cup water, yield $1\frac{1}{2}$ cups syrup.

One cup of syrup usually covers 1 quart of fruit when it is well packed.

3. Prevent discoloration of such fruits as peaches, pears, apricots and apples by using **one** of the following methods:
 - a. Use 125 mg. of ascorbic acid (vitamin C) for each pint of fruit, or for each $\frac{1}{2}$ cup of syrup. Ascorbic acid comes in tablets of 25 mg., 50 mg., and 100 mg. Dissolve the tablets in the hot sugar syrup which is to cover the fruit. Powdered ascorbic acid may be used instead of the tablets. It is added to the syrup just before pouring it over the fruit. Use $\frac{1}{4}$ teaspoon of powdered ascorbic acid per pint of syrup.
 - b. Dissolve $\frac{1}{4}$ teaspoon of citric acid in 1 quart cool water. Leave fruit in the solution only 15 to 20 minutes, remove, pack jars and cover with sugar syrup. Use about a gallon of solution for a bushel of fruit.
 - c. There are special commercial preparations of ascorbic acid for canning fruits on the market. These usually contain added sugar and citric acid. When using commercial mixes, follow manufacturer's directions and be sure to use enough liquid to cover the fruit.
 - d. Mix 2 tablespoons of vinegar or lemon juice and 2 tablespoons of salt with 1 gallon of cold water. Allow the peeled pieces to remain in the solution not longer than 15 to 25 minutes. Drain and pack in jars immediately. This method is not as effective as the above methods but it is less expensive.
4. Treatment for discoloration may be omitted by packing the fruit as it is peeled and adding the syrup immediately.
5. Prepare and pack the fruit according to the instructions given for each fruit.

6. Place the filled containers without lids, on a rack in boiling water in the water bath canner for steaming, allowing the water to come 2 inches below the top of the container.
7. Place a pan with extra fruit and syrup on top of the containers. This extra fruit is to be used for refilling containers when fruit has shrunk after steaming.
8. Place the lid on the water bath canner.
9. Count steaming time as soon as the water begins to boil. See specific fruit for the length of time to steam.
10. At the end of the steaming time, remove the lid from the canner. Leave the canner on low heat to keep it hot. Take out one container at a time. Press the food down and work out air bubbles with a knife. Have the food just covered with the syrup allowing $\frac{1}{2}$ inch headspace from top of syrup to top of jar for all fruits. For tin cans, allow $\frac{1}{4}$ inch headspace from the top of the syrup to the top of the can for all fruits. It may be necessary to remove or to add some food at this time to get the correct fill. Wipe off the sealing surface. Close according to the type of closure being used.
11. Place the closed containers of hot food in the water bath canner and add additional boiling water to the water bath canner to cover the containers 1 to 2 inches.
12. Place the lid on the water bath canner.
13. Count the processing time as soon as the water begins to boil again. Adjust the processing time according to the following table for altitudes more than 1000 feet:

Feet Elevation	If processing time is 20 minutes or less	If processing time is more than 20 minutes
	Minutes Added	Minutes Added
0-1000	0	0
1000-2000	1	2
2000-3000	2	4
3000-4000	3	6

See specific fruit for the length of time to process.

14. At the end of the processing time remove the containers from the water bath. Plunge the cans in cold water. Place the jars right side up on a rack far enough apart to cool quickly.

STEPS FOR CANNING FRUIT, FRUIT JUICES, TOMATOES, TOMATO JUICE AND RHUBARB IN A WATER BATH

Use only fresh, sound, ripe fruit and read previous pages 17 and 18, "General Steps in Canning Fruits, Fruit Juices, Tomatoes, Tomato Juice and Rhubarb in a Water Bath" before starting to can.

Apples

Prepare and Pack

Can cooking apples. Wash, peel, cut into halves or smaller pieces. Remove seed and core. Pack tightly and pile above the top of the glass jar or plain tin can. Pour boiling syrup to 2 inches from top of container.

Steam

Pints and No. 2 cans	10 minutes
Quarts and No. 3 cans	15 minutes
Half gallons	20 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	10 minutes
Pints and quarts	15 minutes
Half gallons	20 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (48 lbs.) 30-44 pints

Apple Sauce

Prepare and Pack

Use cooking apples. Scrub well. Cut into small pieces. Add 1 cup boiling water to each gallon of apples. Cover the kettle and cook about 20 minutes. Press through sieve to remove cores, seeds and peelings. Add sugar and spices according to taste. Pack while hot in glass jar or plain tin can.

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	5 minutes
Pints and quarts	10 minutes
Half gallons	15 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Berries

(All Kinds)

Prepare and Pack

Wash in cold water. Cap and discard soft or moldy berries. Pack tight and pile above top of glass jar or R-enamel can.

Crush smaller and imperfect berries for juice. Add sugar to juice. Bring to boil. Pour over raw berries to 2 inches from top of container.

Steam

Pints and No. 2 cans.....	5 minutes
Quarts and No. 3 cans.....	8 minutes
Half gallons.....	10 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans.....	10 minutes
Pints and quarts.....	15 minutes
Half gallons.....	20 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 24-quart crate.....24-36 pints

Cherries

Prepare and Pack

Wash and sort. They may be pitted or not, according to way of serving. If not pitted, the fruit may be punctured with a needle. Pack tightly in glass jar or R-enamel can until full. Pour boiling syrup to 1½ inches from top of container.

Steam

Pints and No. 2 cans.....	10 minutes
Quarts and No. 3 cans.....	12 minutes
Half gallons.....	15 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans.....	10 minutes
Pints and quarts.....	15 minutes
Half gallons.....	20 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (56 lbs.).....40-60 pints

Figs

The canning of figs is not recommended because of the danger of botulism poisoning. Freezing and preserving are the recommended methods.

Fruit Juice

Plum, Berry, Cherry, Grape or Blends of These

Prepare and Pack

Wash fruit. Crush and heat to simmering. Extract juice. Add ½ to 2 cups sugar to a gallon of juice according to

taste. Add no sugar to juice which is to be used later for making jelly. Heat again to simmering. Pour into hot clean jar or R-enamel can.

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans.....	5 minutes
Pints and quarts.....	10 minutes
Half gallons.....	15 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Grapefruit and Orange Juice

Prepare and Pack

Wash fruit. Extract juice by reaming. Do not ream too close to the white peel. Heat to simmering. Fill while hot into plain can.

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans.....	5 minutes
Pints and quarts.....	7 minutes
Half gallons.....	12 minutes

Remove from water bath, complete seal if closure is not of sealing type, and cool.

Grapefruit and Orange Juice

(Alternate Method)

This method is to be used **when a thermometer is available.**

Wash fruit. Extract juice from citrus fruit with electric or hand reamer, being careful not to get the oil from the fruit peel in the juice. Screen out seeds and any white membrane which gets into juice.

Heat the juice rapidly to 180-190 degrees Fahrenheit. Remove from heat. Fill clean plain tin can full of the hot juice. Seal and invert can for 1 minute to sterilize the lids.

Cool immediately in cold water. The rapid cooling of the juice helps retain its natural flavor.

Extract and heat only enough juice to fill four to six cans at one time. Temperature of the juice should be 180 degrees Fahrenheit, or above when it is sealed. Hot pint glass jars may be used for this method. Sterilize self sealing lid by placing in boiling water. There will likely be a loss of color and flavor in glass jars.

Grapefruit Sections

Prepare and Pack

Wash fruit. With a sharp knife cut slices from both ends of the unpeeled fruit, cutting into the flesh or segment. Then

remove the rest of the peel and white membrane in wide slices, cutting from one end to the other. Run the blade of a paring knife between the segments and separate them from the rest of the membrane. Pack tightly into glass jar or plain can until full. Cover with boiling syrup.

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	5 minutes
Pints and quarts	7 minutes
Half gallons	12 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Peaches and Apricots

Prepare and Pack

Wash. Peel or place fully ripe, firm fruit in wire basket or cheesecloth and dip in boiling water 2 minutes or until skins slip. Plunge into cold water quickly. Slip off skins. Cut into halves and remove seed. Pack tightly and pile above top of glass jar or plain can. Pour boiling syrup to 1 or 2 inches from top of container. Add less syrup for softer fruit.

Steam

Pints and No. 2 cans	10 minutes
Quarts and No. 3 cans	15 minutes
Half gallons	20 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	15 minutes
Pints and quarts	15 minutes
Half gallons	25 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (48 lbs.) 30-44 pints

Peach, Apricot and Pear Puree

Prepare and Pack

Wash. Remove peel and seeds from very soft fruit. Chop fine or mash. Add about 1/2 cup sugar for each quart of raw fruit. Heat to boiling. Pour into hot, clean glass jar or plain can.

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	15 minutes
Pints and quarts	20 minutes
Half gallons	25 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Pears

Prepare and Pack

Can only ripe, mellow pears. Gather Kieffer pears when they become slightly yellow. Wrap in paper and allow to mellow. This may require two to three weeks. Summer pears may be canned after ripening on tree. Wash and peel. Cut in halves and core. Pack tightly and pile above top of glass jar or plain can. Pour boiling syrup to 1 inch from top of container.

Steam

Pints and No. 2 cans	20 minutes
Quarts and No. 3 cans	25 minutes
Half gallons	30 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	20 minutes
Pints and quarts	25 minutes
Half gallons	35 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (50 lbs.) 40-50 pints

Pineapple

Prepare and Pack

Select ripe fruit from which spines may be pulled easily. Wash, cut off stem end and twist out top. Cut $\frac{1}{2}$ inch slices. Peel each slice as it is cut. Remove core and eyes. Pack tightly and pile above top of glass jar or plain can. Pour boiling syrup to 1 inch from top of container.

Steam

Pints and No. 2 cans	5 minutes
Quarts and No. 3 cans	10 minutes
Half gallons	15 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	15 minutes
Pints and quarts	20 minutes
Half gallons	25 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Plums and Prunes

Prepare and Pack

Wash. Prick skin of each plum or prune with needle to prevent bursting. Pack tightly and pile above top of glass jar or R-enamel can. Pour boiling syrup to 1 or 2 inches from top of container.

Steam

Pints and No. 2 cans	5 minutes
Quarts and No. 3 cans	8 minutes
Half gallons	10 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	12 minutes
Pints and quarts	15 minutes
Half gallons	20 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (56 lbs.) 40-60 pints

Rhubarb

Prepare and Pack

Wash. Remove leaves and blemishes. Cut into $\frac{1}{2}$ inch lengths. Pack tightly and pile above the top of glass jar or R-enamel can. Pour boiling syrup to 2 inches from top of container.

Steam

Pints and No. 2 cans	5 minutes
Quarts and No. 3 cans	8 minutes
Half gallons	10 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	5 minutes
Pints and quarts	10 minutes
Half gallons	15 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Tomatoes

Prepare and Pack

Wash and sort fresh, firm, vine-ripened fruit. Put in wire basket or thin cheesecloth bag. Dip in boiling water 1 minute or until skins crack. Plunge into cold water immediately. Remove core and skins. Add $\frac{1}{2}$ teaspoon salt to each pint or No. 2 can and 1 teaspoon salt to each quart or No. 3 can. Pack in glass jar or plain can. Press together so that juice will cover solid pieces. If canned whole tomatoes are desired, pack slightly above top of jar or plain can. Pour hot tomato juice to 2 inches from top of container.

NOTE: For a firmer tomato, add calcium chloride mixed according to the following directions:

$2\frac{1}{4}$ ounce Anhydrous Calcium Chloride dissolved in one pint distilled water or boiled tap water. (Obtain from druggist.) Add 1 teaspoon of this solution to 1 quart of tomatoes

along with salt and juice. One pint of this solution is sufficient for about 100 quarts of tomatoes.

Steam

Pints and No. 2 cans	10 minutes
Quarts and No. 3 cans	12 minutes
Half gallons	15 minutes

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	20 minutes
Pints and quarts	25 minutes
Half gallons	35 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (50-60 lbs.) 30-40 pints

Tomato Juice

Prepare and Pack

Wash well-ripened tomatoes. Cut away any bruised or green portions. Quarter. If seposieve is available, put tomatoes through it without heating. Otherwise, simmer 10 minutes in covered pan (without adding water) and press through a fine strainer or cheesecloth. Heat juice to simmering in a covered pan. Add $\frac{1}{2}$ teaspoon salt to a pint or No. 2 can and 1 teaspoon salt to a quart or No. 3 can. Pour into glass jar or plain can.

Close and Process in Boiling Water Bath

No. 2 and No. 3 cans	10 minutes
Pints and quarts	15 minutes
Half gallons	25 minutes

Remove from water bath, complete seal if closure is not of self sealing type, and cool.

STEAMING TIMES FOR FRUIT

(ALTERNATE TO BOILING WATER BATH METHOD)

Processing by this method is done in steam rather than water. The temperature attained in the jars is slightly less than that attained by the boiling water bath method. Therefore, the processing time is longer when the steam method is used.

A pressure canner, with the petcock left open during the entire time, or any suitable container with a tight fitting lid, may be used for this method. Place a rack in the container and add 2 to 3 inches of hot water. Prepare and pack fruit, tomatoes or rhubarb as given on pages 17 and 18. Preheat and process in steam as given in the following chart. Count steaming time as

soon as steam issues from the petcock of the pressure canner or when steam begins to escape from around tight fitting lid.

Fruit	MINUTES TO PREHEAT IN STEAM				MINUTES TO PROCESS IN STEAM		
	Pts. & No. 2	Qts. & No. 3	Half Gallons	Close	Pts. & Qts.	No. 2 & No. 3	Half Gallons
Apples	10	15	20	Close	19	13	25
Apple Sauce	No	No	No	Close	13	7	19
Berries	5	8	10	Close	19	13	25
Cherries	10	12	15	Close	19	13	25
Fruit Juice	No	No	No	Close	13	7	19
Grapefruit and Orange Juice	No	No	No	Close	9	7	15
Grapefruit Sections	No	No	No	Close	9	7	15
Peaches and Apricots	10	15	20	Close	19	19	32
Peach, Apricot & Pear Puree	No	No	No	Close	25	19	32
Pears	20	25	30	Close	32	25	44
Pineapple	5	10	15	Close	25	19	32
Plums and Prunes	5	8	10	Close	19	15	25
Rhubarb	5	8	10	Close	13	7	19
Tomatoes	10	12	15	Close	32	25	44
Tomato Juice	No	No	No	Close	19	13	32

Remove from steamer, complete seal if closure is not of self sealing type, and cool.

GENERAL STEPS IN CANNING VEGETABLES IN A PRESSURE CANNER

1. Wash all jars and cans in hot soapy water and rinse well before canning. Jars need not be sterilized when canning in the pressure canner.
2. Prepare and pack the vegetables for steaming according to instructions given for each vegetable.
3. Have at least 1½ to 2 inches of boiling water in the canner. Place the filled containers, without lids, on a rack in boiling water. Cans may be staggered. Do not stack jars.
4. Fasten the lid on the canner, leave the petcock open the entire time of steaming.
5. Count steaming time as soon as there is a good issue of steam from the petcock. See specific vegetable for length of time to steam.
6. At the end of the steaming time, remove lid from the canner. Leave the canner on low heat to keep hot. Lift out 1 con-

tainer at a time. Press the food down and work out air bubbles with a knife. Have the food just covered with the liquid allowing $\frac{1}{2}$ inch headspace from the top of the liquid to the top of the jar for all vegetables except corn, shelled beans and peas. Allow 1 inch headspace for these vegetables. For tin cans allow $\frac{1}{4}$ inch headspace from the top of the liquid to the top of the can for all vegetables except corn, shelled beans and peas. Allow $\frac{1}{2}$ inch headspace for these vegetables. Some food may need to be removed or added at this time to get the correct fill. Wipe off the sealing surface. Close according to the type of closure being used.

7. Place the closed containers of hot food in the canner, which contains $1\frac{1}{2}$ to 2 inches of boiling water.
8. Place the lid on the canner and fasten securely. If the lid is fastened by clamps, tighten opposite clamps moderately at first. Then go back over the whole set to tighten each pair as much as possible (with fingers only).
9. Leave the petcock open until the steam escapes steadily for 10 minutes so that no air will remain in the canner. Close the petcock.
10. Count processing time as soon as the pressure reaches 10 pounds or the adjusted pressure. Adjust pressure according to the following table for altitudes more than 1000 feet:

Feet Elevation	Pounds Pressure To Use
1-1000	10
1000-3000	11
3000-5000	12

See specific vegetable for the length of time to process.

11. Keep a uniform pressure by adjusting the heat or by moving the canner carefully.
12. At the end of the processing time, remove the canner from the heat.
 - a. For No. 2 cans or smaller, open the petcock slowly until all the steam is released and the dial registers zero. Open the canner and remove the cans, plunging at once into cold water.
 - b. For No. 3 cans and glass jars, allow the canner to cool until the gauge registers zero; open the petcock gradually, and remove the cover. Plunge No. 3 cans into cold water immediately. Leave glass jars in the canner about 5 minutes. Remove jars and place right side up on a rack far enough apart to cool quickly. Do not place in a draft or on a cold surface.

13. Directions for completing seals on various kinds of closures:
 - a. Do not adjust the metal ring on a two-piece self sealing closure.
 - b. Tighten the metal ring on the three-piece glass top closure immediately after removing from the canner.
 - c. Tighten the zinc lid immediately after removing from the canner.
 - d. Push the short wire clamp down on the lightning type lid immediately after removing from the canner.

STEPS FOR CANNING EACH VEGETABLE IN A PRESSURE CANNER

Use only fresh, young, tender, clean vegetables and can them quickly. One hour from the garden to the container is a good rule to follow. Read previous pages 26-28, "General Steps in Canning Vegetables in a Pressure Canner", before starting to can.

Salt: Add 1/2 teaspoon of salt to each pint and No. 2 can and 1 teaspoon salt to each quart and No. 3 can to all vegetables.

Asparagus

Prepare and Pack

Sort according to size. Wash and brush thoroughly, trim off scales. Cut into lengths to fit container. Pack raw asparagus tightly with tips up. Pour boiling water to 1 inch from top of the container.

Steam

Pint jars and No. 2 cans	5 minutes
Quart jars and No. 3 cans	10 minutes

Close and Process at 10 pounds pressure

Pint jars	25 minutes
Quart jars	55 minutes
No. 2 and No. 3 cans	20 minutes

Remove from canner, complete seal if closure is not of self sealing type and cool.

Yield: 1 bushel (45 lbs.) 22 pints

Beets

Prepare and Pack

Can small, dark red beets. Wash. Leave roots and 1 inch of stems. Add boiling water. Cover kettle with lid. Cook until skin slips (15 to 25 minutes for small beets). Dip beets in cold water. Skin and trim. Leave small ones whole. Quarter larger ones. Pack beets to 1/2 inch from top of jar

or 1/4 inch from top of R-enamel can. Cover with boiling water.

Steam

- Pint jars and No. 2 cans 5 minutes
- Quart jars and No. 3 cans 10 minutes

Close and Process at 10 Pounds Pressure

- Pint jars 25 minutes
- Quart jars 55 minutes
- No. 2 and No. 3 cans 30 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bu. (52 lbs.) 30-40 pints

Carrots

Prepare and Pack

Wash and scrape, or wash and cook in boiling water until skins slip. Dip cooked carrots in cold water and skin. Can small carrots whole or cut larger ones length-wise. Pack tightly. Pack carrots about 1/2 inch from top of glass jar or 1/4 inch from top of can. Cover with boiling water.

Steam

- Pint jars and No. 2 cans 10 minutes
- Quart jars and No. 3 cans 15 minutes

Close and Process at 10 Pounds Pressure

- Pint jars and No. 2 cans 20 minutes
- Quart jars and No. 3 cans 25 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bu. (52 lbs.) 30-40 pints

Corn

Whole Grain Style

Prepare and Pack

Shuck by cutting off both ends of the cob and removing the shuck. Silk and trim. Cut from cob to remove most of kernel but no husks. Do not scrape the cob. If field corn is used, pour corn loosely in jar or C-enamel can 1/2 to 2/3 full. If sweet corn is used fill pint jar or No. 2 can to 1 inch from top and quart jar or No. 3 can to 2 inches from top. Fill container with boiling water to 1/2 inch from top. Stir well before steaming and again after steaming.

Steam

- Pint jar and No. 2 cans 15 minutes
- Quart jars and No. 3 cans 20 minutes

Close and Process at 10 Pounds Pressure

Pint jars.....	55 minutes
Quart jars.....	85 minutes
No. 2 and No. 3 cans.....	60 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Approximate yield: (Sweet in husks)

1 bu. (35 lbs.).....	16 to 18 pints
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Corn

Cream Style

Prepare and Pack

This method is not recommended for field corn. Shuck, wash and silk. Cut end of grain from the cob, then scrape out the milk. Pour corn loosely to 1½ inches from top of pint jar or No. 2 C-enamel can. Fill container with boiling water to ½ inch from top. Stir well before steaming and stir again after steaming.

Steam

Pint jars and No. 2 cans.....	15 minutes
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Close and Process at 10 Pounds Pressure

Pint jars.....	85 minutes
No. 2 cans.....	105 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Approximate yield: (Sweet in husks)

1 bu. (35 lbs.).....	16-18 pints
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Greens

**(Mustard, Tender Greens, Turnip Tops, Spinach
Swiss Chard and/or Wild Greens)**

Prepare and Pack

Wash thoroughly. Trim and discard any bad parts. Simmer with small amount of water 5 minutes or until completely wilted in a covered kettle. Fill to ½ inch from top of jar or ¼ inch from top of plain can. Cut through center several times with a knife. Cover with boiling water. Close while hot.

Close and Process at 10 Pounds Pressure

Pint jars.....	45 minutes
Quart jars.....	70 minutes
No. 2 cans.....	60 minutes
No. 3 cans.....	75 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bu. (18 lbs.).....12-18 pints

Okra

Prepare and Pack

Can small, whole pods. Wash well. Leave $\frac{1}{8}$ inch stem. Pack tightly with slight amount above top of jar or plain can. Pour boiling water to 1 inch of top of container.

Steam

Pint jars and No. 2 cans 7 minutes
Quart jars and No. 3 cans.....12 minutes

Close and Process at 10 Pounds Pressure

Pint jars and No. 2 cans.....25 minutes
Quart jars40 minutes
No. 3 cans35 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bu. (26 pounds).....34 pints

Okra and Tomatoes

Prepare and Pack

Wash okra. Cut into one-inch lengths. Skin tomatoes. Remove cores. Cut into quarters. Mix okra and tomatoes. Fill to top of glass jar or plain can, pressing enough juice from tomatoes to cover solid pieces. Add no water.

Steam

Pint jars and No. 2 cans.....10 minutes
Quart jars and No. 3 cans.....15 minutes

Close and Process at 10 Pounds Pressure

Pint jars and No. 2 cans.....25 minutes
Quart jars.....40 minutes
No. 3 cans.....35 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Pork and Beans

Prepare and Pack

Sort and wash dry kidney, navy, or pinto beans. Soak in water for 15 hours (overnight). Drain water off and bring to boil. Work with enough soaked beans to fill only 4 containers at one time. Immerse beans in boiling water and boil for 5 minutes. Drain. Fill hot glass jar or plain can three-fourths full with hot prepared beans, add small piece of salt pork, ham or bacon, and fill to $\frac{1}{2}$ inch of top of jar

and $\frac{1}{4}$ inch of top of plain can with boiling tomato sauce. Close container and place in hot canner. Follow same procedure until canner is filled.

Tomato Sauce

Mix and heat to boiling:

- 1 quart tomato juice
- 4 tablespoons sugar
- 3 teaspoons salt
- 2 tablespoons chopped onion
- $\frac{1}{4}$ teaspoon each of ground cloves, allspice, mace, and cayenne (or add spices to taste)

Or heat to boiling:

- Use 1 cup tomato catsup and 3 cups water
- Close canner and process.

Process at 10 pounds pressure

- Pint jars and No. 2 cans 65 minutes
- Quart jars and No. 3 cans 75 minutes
- Remove from canner and cool.
- Yield: 1 pound dry beans approximately 3 pints

Pumpkin

Prepare and Pack

Wash and peel. Discard seed. Cut into 1 or 2 inch cubes. Pack tightly to top of glass jar, R-enamel or plain can. Pour boiling water to 1 inch from top of container.

Steam

- Pint jars and No. 2 cans 10 minutes
- Quart jars and No. 3 cans 15 minutes

Close and Process at 10 Pounds Pressure

- Pint jars 55 minutes
- Quart jars 90 minutes
- No. 2 cans 50 minutes
- No. 3 cans 75 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

- Yield: 50 pounds 30 pints

Shelled Fresh Beans and Peas

Fresh Lima Beans, Pinto Beans, Cream Peas, English Peas, Black-eyed Peas

Prepare and Pack

Wash and shell. Pack to top of jar, C-enamel or plain can. Pour boiling water to $\frac{1}{2}$ inch from top of container.

Steam

- Pint jar and No. 2 cans 10 minutes
- Quart jars and No. 3 cans 15 minutes

Close and Process at 10 Pounds Pressure

Pint jars.....	35 minutes
Quart jars.....	60 minutes
No. 2 and No. 3 cans.....	40 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bu. (30 lbs.).....12-15 pints

Shelled Fresh Black-eyed Peas

Alternate One-Step Method

Use **only** with two-piece metal closures so that some of the air may escape as the peas get hot.

Prepare, Pack and Close

Wash and shell. Pour into clean, hot glass jars. Fill pints to 1½ inches from rim, and quarts to 2 inches from rim. Do not push or shake down peas. To do so would increase the amount of peas in the jar and give a poor fill. Cover the peas with fresh, boiling water and work out bubbles with a knife blade. Add more water to ½ inch from top of jar. Wipe the top of the jar with a clean, damp cloth. Close with two-piece closure. Place in hot pressure canner.

Process at 10 pounds pressure

Pints.....	35 minutes
Quarts.....	40 minutes

Remove from canner and cool.

Snap Beans and Peas

Prepare and Pack

Wash. Snap or cut into two-inch pieces. Pack tightly into jar or plain can. Pile slightly above top. Pour boiling water to 1 inch from top of container.

Steam

Pint jars and No. 2 cans.....	8 minutes
Quart jars and No. 3 cans.....	13 minutes

Close and Process at 10 Pounds Pressure

Pint jars.....	20 minutes
Quart jars and No. 2 cans.....	25 minutes
No. 3 cans.....	30 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bu. (30 lbs.).....30-40 pints

Summer Squash

(White or Yellow Variety)

Prepare and Pack

Wash. Remove stems and blemishes. Do not peel. Use small ones whole. Quarter larger ones. Pack tightly and fill slightly above top of glass jar or plain can. Pour boiling water to 2 inches from top of container.

Steam

Pint jars and No. 2 cans.....	8 minutes
Quart jars and No. 3 cans.....	13 minutes

Close and Process at 10 Pounds Pressure

Pint jars.....	30 minutes
Quart jars.....	40 minutes
No. 2 and No. 3 cans.....	20 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (40 lbs.).....30-40 pints

Sweet Potatoes

Prepare and Pack

Wash. Boil until skins slip. Remove skins and blemishes. Cut into sections. Pack loosely to top of glass jar or plain can. Pour boiling water to 1/2 inch from top of container.

Steam

Pints and No. 2 cans.....	10 minutes
Quarts and No. 3 cans.....	20 minutes

Close and Process at 10 Pounds Pressure

Pint jars.....	55 minutes
Quart jars.....	90 minutes
No. 2 cans.....	70 minutes
No. 3 cans.....	90 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Yield: 1 bushel (55 lbs.).....36-44 pints

Vegetable Soup Mixture

Prepare and Pack

Use 1 quart tomato pulp, 1 pint corn or green shelled beans, 1 pint okra, carrots or snap beans, 1 cup chopped onion, 1 1/2 teaspoon salt. Cook tomatoes and onions together. Put through sieve to remove seed. Cook until thick. Add salt. Add corn and other vegetables which have been prepared

as for canning. Bring to a boil. Pack hot, to $\frac{1}{2}$ inch of top of jar or $\frac{1}{4}$ inch of top of can.

Close and Process at 10 Pounds Pressure

Pint jars and No. 3 cans.....	60 minutes
Quart jars.....	70 minutes
No. 2 cans.....	50 minutes

Remove from canner, complete seal if closure is not of self sealing type, and cool.

Vegetable-Beef Stew

(Raw Pack)

Prepare and Pack

Prepare and mix thoroughly the following ingredients:

- 2 quarts stewing beef, cut in $\frac{1}{2}$ inch cubes
- 2 quarts potatoes, pared or scraped, cut in $\frac{1}{2}$ inch cubes
- 2 quarts carrots, pared or scraped, cut in $\frac{1}{2}$ inch cubes
- 3 cups celery, cut in $\frac{1}{4}$ inch pieces
- 7 cups onion, small, peeled (whole, if 1 inch or less in diameter).

Put $\frac{1}{2}$ teaspoon salt in pint jar and 1 teaspoon salt in quart jar.

Fill containers with raw vegetable-meat mixture, leaving no headspace.

Adjust self seal lid on glass jar and process at once.

Process at 10 pounds pressure

Pint jars.....	60 minutes
Quart jars.....	75 minutes

Remove from canner and cool.

CANNING VEGETABLES IN THE PRESSURE SAUCEPAN

This method is recommended for not more than 3 or 4 pints at one time. The processing times are longer than for the pressure canner to allow for the more rapid 'coming up time' and 'cooling time'.

1. The food is prepared and packed as for the regular pressure canner method.
2. Use a rack to keep the jars off the bottom of the saucepan.
3. Have one quart of water boiling in the pressure saucepan.
4. Place the hot jars of food in the saucepan; adjust the saucepan cover.
5. Allow the steam to escape briskly for at least one minute. Place the gauge on the vent and allow the pressure to reach 10 pounds.

6. Count the time exactly from the moment 10 pounds pressure is reached. (See table for processing time.)
7. At the end of the processing time remove the saucepan from the heat and allow it to cool normally until the pressure has returned to zero. If the saucepan has a weighted gauge, nudge the gauge slightly. If no steam escapes when the gauge is lifted slightly, the pressure is down and the saucepan may be opened safely.
8. Remove the jars, complete the seal if the closure is not of the self sealing type, and place right side up on a rack far enough apart to cool quickly. Do not place in a draft or on a cold surface.

TIME TABLE FOR CANNING VEGETABLES IN A PRESSURE SAUCEPAN

Vegetable	Processing Time	Cooling Time	Water in Saucepan	Pressure
	Minutes		Quarts	Pounds
Asparagus	45		1	10
Beets	45	Until	1	10
Carrots	40		1	10
Corn, Cream-style	105	pressure	1	10
Corn, Whole-kernel	75		1	10
Greens	65	in	1	10
Lima Beans	55		1	10
Okra	45	saucepan	1	10
Peas	60		1	10
Pumpkin, cubed	75	is	1	10
Snap Beans	40		1	10
Squash, Summer	50	reduced	1	10
Sweet Potatoes, Wet-pack	75		1	10