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# Home Canning of Vegetables

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FORT COLLINS, COLO.

# Home Canning of Vegetables

#### In a Pressure Cooker

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Recent surveys have shown that many Colorado families lack fruits and vegetables in their diets. This is true even in communities where homes have ample garden space and where the foods suggested in the garden list are easily raised.

Now, during a period of war emergency, garden produce and efficient storage, preservation, and utilization of surplus vegetables is of paramount importance to family health and welfare and to the Nation's welfare.

Knowing just how many times per week different vegetables should be served during the growing season, and in planning ahead for winter use—knowing how many quarts of each should be canned or how many pounds stored—are problems which perplex many a housewife. To solve this problem the chart on page 19 has been prepared. Home Food Supply and Garden Plans are available at your County Extension Office.

(Caution: Avoid tasting canned vegetables processed in water bath, open kettle or pressure cooker before they have been heated. Boil vigorously in an open pan for 15 or more minutes before tasting.)

The aim in canning any vegetable is to sterilize with heat and preserve in air-tight containers. Non-acid vegetables require high temperatures in order that harmful bacteria may be destroyed. Therefore, **only** the pressure-cooker method of canning is advised for such products. Oven canning, the hot-water bath and open kettle methods are not recommended.

# For quality canned vegetables—

- 1. Select only quality vegetables in prime condition—fresh, young and tender.
- 2. Clean thoroughly and carefully.
- 3. Have good equipment in working condition and ready for use.
- 4. Can as soon as product is gathered.
- 5. Work rapidly while canning.
- 6. Precook and process according to directions.

# Selection and Preparation of Equipment

#### Equipment needed-

Paring knives (stainless steel); fork

Case knife or spatula

Wooden spoon (for stirring); measuring spoons

Jar lifter

Colander, wire basket, or cloth bag

Jars, lids and rubbers

Funnel (wide mouthed)

Bowls or pans (for washing vegetables)

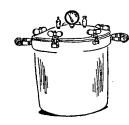
Pressure cooker

Sauce pan (for precooking vegetables)

Cutting board

Vegetable brush.

Pressure Cooker.—A pressure cooker is a specially constructed closed vessel made of heavy metal which is usually cast



aluminum. It has a steam-tight cover which is locked onto the base. It must cook at required amounts of pressure.

A pressure cooker will save much time and prevent food spoilage. It may be used for the preparation of entire meals, or for the cooking of individual foods. It is invaluable in canning.

The size of a pressure cooker is gaged according to its capacity, either jar or liquid. The following table gives the different sizes in which cookers may be purchased and the approximate number of jars which each will hold.

# **Capacity of Pressure Cookers**

Amount of Liquid	10 quart	12 quart	18 quart	25 quart
No. 2 cans	8	10	14	20
No. 3 cans	3	5	8	10
Pint jars	5	7	18	18
Quart jars	3	4	5	7

In selecting a pressure cooker choose one:

- 1. Of a reliable make
- 2. Of a size suited to the family
- 3. That will accommodate the kind and size of jars or cans on hand

- 4. That is not too heavy to handle
- 5. On which repair service will be easy to secure
- 6. Which is simple to operate.

Use of a Pressure Cooker.—Before starting to use a pressure cooker, it is well to become acquainted with all its parts, and the manner in which they work.

A petcock, a thermometer or pressure gage, and a safety valve are devices on the cover. The petcock is used to release air and steam in opening and closing the cooker. The pressure gage indicates the temperature inside the cooker. For example, if the gage registers 15 pounds it shows that the temperature inside the cooker is equal at sea level to 250° Fahrenheit.



The safety valve operates automatically, releasing steam when the pressure inside the cooker becomes too high. The pressure gage should be watched carefully as a sudden release of steam will draw juices from the jars.

The top of a pressure cooker must clamp on tightly so that no steam can escape. A hissing sound during processing indicates leaking steam which will result in lowered pressure and loss of liquid from the jars.

The gages on pressure cookers which have been in use for some time frequently read from 1 to 10 pounds off. When the accuracy of a gage is in doubt, it is advisable to have it tested and corrections made. Information about testing may be obtained from the Extension Service through county or home demonstration agents.

The idea that oven-canning provides temperatures comparable to those in the pressure cooker is erroneous. Even though the oven is set at 400° Fahrenheit or higher, the temperature of the food within the jars or cans never exceeds the boiling point which is 203° Fahrenheit in Colorado at 5,000 feet elevation. The only way the temperature may be increased is by putting steam under pressure as in a pressure cooker.

To obtain the desired temperature inside the cooker, the amount of pressure required will vary at different altitudes. The following table shows the amount of pressure required at various altitudes to obtain the desired temperature.

For example, if you live at an altitude of 5,000 feet, use 17 pounds pressure for your vegetable canning. This pressure cor-

responds to 15 pounds at sea level	, the amount frequently given
in directions for the use of pressu	re cookers.

Altitude	Boiling point of water degrees F.	Corrected gage pressure to equal 10 lb. at sea level and 239.6° F.	Corrected gage pressure to equal 15 lb. at sea level and 249.7° F
0	212.0	10.00	15.00
3,000	206.5	11.51	16.51
5,000	202.9	12.42	17.42
8,000	197.6	13.70	18.70
10,000	193.6	14.58	19.58

Processing with a Pressure Cooker.—Water to the depth of about 1 inch or extending to the rack should be put in the bottom of the cooker. When the jars are ready, place them in the cooker, then adjust the lid of the pressure cooker by matching the indicating numbers or arrows. Close tightly.



Devices for closing pressure cookers vary according to the brand of cooker. Some have only one clamp, others a band to be put in place and screwed firmly, or there may be a set of several clamps. If there are several clamps, partially tighten at the same time those on opposite sides, then continue tight-

ening evenly. Do not tighten with a wrench or pliers. A clothespin is useful in tightening or releasing hot clamps.

After steam has been allowed to escape fully 7 to 10 minutes, the petcock is closed and the pressure gage watched carefully. In this way the pressure of the steam only is measured and not a mixture of steam and air.

The presence of air in the cooker allows the gage to register a higher temperature than really exists and this will often cause loss of food. Begin counting the processing time when the gage reaches the required pressure. Keep the pressure uniform during this time because as little as 2 pounds change may result in loss of liquid from glass jars.

When the processing time is finished, remove the cooker from the stove and allow the pressure to drop slowly to zero. Then open petcock slowly, as rapid escape of steam means loss of liquid from jars. Release clamps and remove lid carefully. Allowing cooker to stand for a period of time with petcock closed may cause loss of liquid, and will injure the accuracy of the gage.

If small tin cans are being used, the pressure may be decreased rapidly by opening the petcock when the pressure has dropped somewhat. The cans should be cooled at once in cold water, thus stopping the cooking process.

Care of a Cooker.—The care of a pressure cooker is most important. There is no danger in using one if directions are carefully followed. It is necessary that the safety valve always be



kept clean and in good condition. Remove the ball or weight and the spring in the safety valve. See that these are dry and do not stick. Do not scour the ball with steel wool or any other scouring material. When not in use the spring over the ball should be released.

After each using be sure to wipe all moisture and grease from the inside of the lid. In removing the lid from the cooker, never turn it upside down, as this allows grease to collect in the gage and valve. Keep the cooker clean and well-aired. Food cooked in a well-cared-for

utensil will not have an objectionable taste.

Consult your county extension office for the best method of operating a pressure cooker. Follow the directions for care and use, as given in Circular 1875 "Care of the Pressure Cooker", and the cooker will serve you faithfully. Get your cooker gage checked periodically.

Jars, Lids, and Rubbers.—Several types of jars are in common use. Follow closely the directions accompanying lids for their proper use. One should be sure that the containers selected have an air-tight seal that will keep the product free from contamination as long as it is to be stored.

Examine all glass jars for cracks or nicks. The condition of the sealing edge or rim of the jar is particularly important. A precautionary measure is to run the finger around the edge to



see that there are no nicks in the edge and no rough places which will cut into the rubber.

# 1. Screw top lids are of three kinds:

a. Porcelain lining top with a separate rubber ring. Linings should be free from cracks. Lids that are old or dark should be boiled in a weak vinegar solution using 2 tablespoonfuls of vinegar to a quart of water.

- b. Glass-top lids with metal bands and a rubber ring. These should be free from cracks and sharp edges.
- c. Composition rubber on metal lid with a metal screw band that holds lid on during processing.

#### 2. Clamp type:

a. With a glass lid, separate rubber ring and a wire bail over the lid. If the bail of a clamp-top jar is loose it may be tightened by removing the top wire and bending it down at the center while holding it in at the sides; if it is too tight, the center of the bail should be bent upward.

# 3. Automatic or self-sealing type:

a. The automatic or self-sealing type may be classified as a screw top. The description is given under "c" of screw-top lids.

#### Packing and Sealing

- 1. Pack preheated hot vegetables into clean hot jars as quickly as possible (see directions under preparation of vegetables). Let jar stand in pan of hot water while packing.
- 2. Pack firmly but not tightly to allow for proper heat penetration. Corn, squash and other rather starchy and compact vegetables need a looser pack than the leafy ones. Product should move when jar is rotated.
- 3. Fill with liquid to within ½ inch of the top of jar (allow 1 inch for such vegetables as corn, peas, limas, squash).
- 4. If more liquid is needed to cover product than was used for precooking, add boiling water.
- 5. Add uniodized salt ( $\frac{1}{2}$  teaspoonful salt to each pint jar of food).
- 6. Insert knife into product several times to remove air bubbles after liquid has been added. Be careful not to crush or break product.
- 7. As each jar is filled, place it in the cooker without the lid on to keep it hot and to help exhaust the air.
  - 8. Exhaust air for 10 minutes by heating in cooker.
  - 9. Wipe sealing edge of jar and adjust lid.
  - 10. Process in pressure cooker.

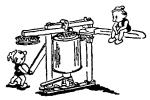
When using gold-lacquered caps with sealing composition, the band should be firmly tightened as soon as the jar is filled. For a clamp-top jar, put just one clamp in place. Composition-top lids are held in place with a clamp or screw band, but a seal is not completed until the jar has cooled. Completely seal tin cans before processing.

Jars which have gold-lacquered caps do not require rubber rings as they are self-sealing due to a gray composition material on the lid. As the jar cools a vacuum is formed in the jar and the seal is completed. The composition material acts as a cushion to take up any irregularities which may exist, and also prevents the entrance of air into the jar.

Because of the principle of sealing in this type of jar the bands should be tightened firmly as soon as the jar is filled. The bands require no further tightening at the end of the processing period, and may be removed after the jars are cold. Their purpose is merely to hold the lid in place during processing and while the jar is cooling.

Jar rubbers must be capable of standing a pulling strain. With the forefingers of both hands stretch out the rubber and twist to see if it is strong and elastic. When released the rubber should resume its original shape and size. A further test is to pinch the rubber to see if it will crack or break. It is poor economy to use poor or old rubbers. Such a practice may mean the loss of an otherwise perfect jar.

Tin cans are finding favor with many for home canning. Danger of breakage is avoided, and there is little loss of liquid or flavor from the food during processing since a tight seal is made at the beginning. Tin cans are handled more easily than glass jars and storage is simplified. The supply of tin cans during war time is limited. Some may still be secured.



A sealing machine is necessary with tin cans. These machines are easily operated and can be adjusted to fit various sizes of cans. With a reflanging attachment on the sealing machine tin cans may be used two or three times. New lids, however, are necessary for each can-

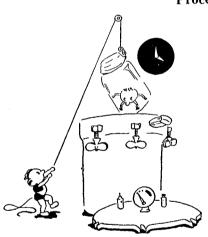
ning. Tin cans may be purchased plain, lacquered or enameled.

A special enamel-lined can (dull gold in appearance) which does not darken during processing, is provided for foods high in protein (as lima beans, corn, green peas). A bright gold-lined can with a sanitary enamel lining is recommended for foods

containing a certain red pigment (berries, cherries, plums, pumpkin and others.)

Rules for Opening and Saving Tin Cans.—1. Unless a sealer is available, open the can with a type of can-opener which will leave the rim on the can.

- 2. When the cans are opened, clean thoroughly, scald and dry immediately.
- 3. Place the cans, bottoms up, in a place where they will dry completely. The warming closet on the stove is an excellent place for drying cans.
- 4. Store the cans, bottoms up, in a place where they will not rust. Tin cans may be used as many as four times if proper care is given them. New lids, however, must be purchased each time the cans are used.



#### Processing

Processing.—This is the important step which sterilizes the product in the jar. Vegetables are processed to kill the micro-organisms. One of these, which causes botulism and which grows in non-acid foods where there is no air, is killed only at a very high temperature. This high temperature cannot be reached at the temperature of boiling water—it can be attained only by the use of a pressure cooker.

# Selection and Preparation of Vegetables

Table I.—Yield of Vegetables for Canning

Vegetable	Measure	Weight	Quarts
Asparagus		12 lb.	5
Cauliflower		18 lb.	5
Beans, green	½ bu.	12 lb.	7
Carrots (young only)	½ bu.	25 lb.	10
Beets	½ bu.	25 lb.	10
Corn	1 doz. good ears	<del></del>	1
Peas	1 bu.	32 lb.	7
Greens	1 bu.	12 lb.	5 - 6

a. Harvesting.—A fresh product is essential. The composition of vegetables such as peas, beans and corn undergoes a rapid change after picking. Some of the sugar changes to starch, making not only a less-sweet vegetable, but one in which enzymes and bacteria are at work. "An hour from garden to can" is a good slogan to keep in mind even though it cannot always be followed to the letter, but remember that all vegetables should be canned as quickly as possible after picking.

Pick vegetables while it is cool outdoors, spread, and keep them cool until beginning canning operations.

- b. Sorting and Washing.—Wash products thoroughly. Be sure that all particles of dirt are removed, since soil bacteria are among the hardest to kill. Discard over-ripe and unsound portions. Uniform products are desirable for canning.
- c. **Precooking.**—Precooking—the older idea of "cold pack" as a step in canning has been replaced for many products by the "hot pack" method. This means that the vegetable is prepared as it will be packed in the jars, then preheated. It is then packed hot in the jars. For most vegetables, the hotpack method is best since the product is wilted or shrunken and heated through so that danger of spoilage is lessened. Time and method vary with kind of vegetable. (See special directions for vegetables.)

Asparagus must be fresh and tender. Break off woody portion of stalk, discard any imperfect pieces, sort according to size, and wash thoroughly. Tie in uniform bundles, place in a saucepan, with boiling water over the tough portion only, cover tightly, and boil for 2 to 3 minutes. The asparagus may be cut in half-inch lengths. Add enough water to cover and boil for 2 minutes in an uncovered vessel.

Green Benns. — Only young, tender beans with underdeveloped seeds should be used. Pick over carefully, string, wash thoroughly, and cut into pieces of desired size. Add enough boiling water to cover and boil for 5 minutes in an uncovered vessel.

Lima Beans.—Only young and tender lima beans should be canned. The older ones may be dried successfully. For the young, tender ones use the method suggested for peas.

Baked Beans.—Prepare dried beans as for table use, soak and cook until nearly tender, then bake with seasonings, and if desired, with salt pork and

tomato sauce, until tender but not mushy. Use enough hot water with them to fill up the jar or can. Pack hot.

Baby Beets.—Only young tender beets should be canned. Wash thoroughly and scald in boiling water or steam for about 15 minutes until the skins slip easily. Leave on at least 1 inch of the stems and all of the roots during this cooking to prevent bleeding. Slip off the skins, dice, slice or leave whole, pack into containers.

Cabbage.—Only varieties of cabbage not successfully stored should be canned. Precook 5 minutes, then pack and process.

Carrots.—Should be stored rather than canned. Young tender ones, however, may be canned whole, sliced or diced. Precook 5 minutes then pack and process.

Cauliflower.—Soak for 1 hour in a cold brine (1 tablespoonful salt to 1 quart of water.) Drain, precook for 3 minutes, then pack and process.

Corn.—The garden varieties of corn are the best for canning. They should be gathered about 17 to 25 days after silking, the exact time depending upon variety and season. Shuck, silk and clean carefully. Cut from the cob putting the scrapings in separate bowls. Add half as much boiling water as corn by weight, heat to boiling, cook 15 minutes and fill boiling hot into hot containers. Scrapings, or corn with scrapings, are processed separately from whole-kernel corn.

Greens, Including Spinach.—Pick over the greens, discarding any imperfect leaves and tough fibrous stems. Wash carefully in running water, or



Wilted spinach packed into hot jars to be processed in pressure cooker.
(Note equipment used for canning non-acid vegetables.)

through a number of waters, lifting the greens out each time. Steam or heat the greens in a covered vessel until completely wilted, adding in the latter case just enough water to prevent burning. Pack boiling hot into the containers, taking care that the material is not packed too solidly and that there is sufficient liquid to cover, adding boiling water if necessary. Cut through with a knife to eliminate air bubbles.

Green Pens. Use only young tender peas. Shell, discard any imperfect peas, and wash. Add boiling water to cover and bring peas to boil.

Squash and Pumpkin.—Wash the vegetable, cut into sections, peel and cut into 1 to 1½ inch cubes. Add a small quantity of water and simmer until heated through, stirring occasionally. Pack hot into containers, add salt and cover with water in which it was cooked. Or if desired, cut pumpkin into sections and bake or steam until heated through. Remove from shell and fill containers while hot. Product may be sieved.

Soup Mixture.—Any vegetable suitable for soup may be prepared as desired. Hot-pack and process for the longest period of time required for any separate vegetable in the mixture. Salad vegetables may be prepared the same way. Avoid vegetables such as cabbage which processing might overcook. Be sure salad vegetables are cooked in open pan 15 minutes and chilled before using.

#### CARE AND HANDLING OF PRESSURE COOKER

Care of Pressure Cookers.—It becomes increasingly important in a war emergency when food preservation equipment receives maximum use that homemakers observe the following practices when using and handling a pressure cooker.

- 1. Understand the mechanism of the cooker (printed directions always accompany a new cooker).
- 2. Handle carefully. Avoid dropping or hitting cooker. Cool slowly.
- 3. Clean all parts thoroughly after each period of use and keep cooker clean. Never use harsh abrasives when cleaning.
  - a. A stained aluminum cooker may be brightened by heating 2 T. vinegar in 1 quart of water to 5 lb. pressure for 5 minutes.
  - b. Do not immerse gage in water.
  - c. Clean valve after each use. Ball and socket should be clean and shining. Soak in vinegar or kerosene if corroded.
  - d. Clean petcock with a fine brush or cloth.
  - 4. Store lid right side up.
  - 5. Test gage once or twice a year.
  - 6. If parts are worn or broken, place orders for parts immediately.

# Using a Pressure Cooker for Canning

- 1. Place the false bottom in the cooker.
- 2. Pour about 1 inch of water in the bottom.
- 3. Set the jars in the cooker carefully without crowding. Tin cans may be stacked.
- 4. Adjust the lid on the cooker. Different makes of cookers have indicating marks or arrows on both cover and base to be matched.
  - 5. Tighten lid of cooker carefully.
- 6. Leave the petcock open from 7 to 10 minutes after the steam begins to escape. This allows all the air to be driven out and creates a higher temperature than a mixture of air and steam.
  - 7. Close the petcock and watch the pressure gage carefully.
- 8. Begin counting the time when the pressure gage registers the desired temperature.

- 9. Keep the pressure uniform.
- 10. Process the desired length of time.
- 11. Allow the pressure to drop slowly to zero.
- 12. Open the petcock carefully.
- 13. Remove lid carefully.
- 14. Remove jars or cans immediately.
- 15. Cool according to directions.

Processing Table for Vegetables
\*See page 6 for altitude adjustments)

		*Process at 12 to 15 lb. in Pressure Cooker			
Product	Prepared and Packed Hot	Quart Glass Jars	No. 3 Cans and Pint Glass Jars	No. 2 Cans	
Asparagus	Whole stalks or cut	40 min.	35 min.	30 min.	
Green beans	Cut rather thin, break for uniform lengths	40 min.	35 min.	30 min.	
Lima beans	Can only tender green ones	60 min.	55 min.	50 min.	
Baked beans	Seasoned and baked, ready to serve	60 min.	55 min.	50 min.	
Baby beets1	If canned with water	40 min.	35 min.	30 min.	
Cabbage		40 min.	35 min.	30 min.	
Carrots	Can only young, tender ones	40 min.	35 min.	30 min.	
Cauliflower		40 min.	35 min.	30 min.	
Corn	Whole kernel style, loose pack	60 min.	55 min.	50 min.	
Corn	Scrapings, or cream style, dense pack	90 min.	85 min,	80 min.	
Greens	Avoid a too dense pack	65 min.	60 min.	55 min.	
Green peas	Can while young and tender	55 min.	50 min.	45 min.	
Pumpkin <sup>1</sup> or squash	Ready for pies	75 min.	70 min.	65 min.	
Soup mixture Salad mixture	Suitable combina- tions in season	1	time that any e requires	single	

<sup>&</sup>lt;sup>1</sup> If canning in tin, use with sanitary enamel or bright gold lining. For peas, lima beans and corn, C enamel or dull-gold-lined cans are recommended to prevent discoloration.

End of Processing Time.—At the end of the processing time, follow directions for opening the pressure cooker; remove jars and complete the sealing immediately unless they are entirely sealed before processing.

In the use of tin cans, release steam at once, but slowly, then remove cover. Take out cans and plunge into cold water. Test for leaks, label, and store.

The composition or self-sealing tops, sometimes called lacquer, should not be touched until the jars have cooled. An additional screwing or handling while they are hot may break the vacuum seal, upon which the success of this type of jar depends. The screw band is merely to hold the lid in place. For screw-top jars, tighten the lid completely. On the clamp-top jars put down the second clamp.

Cool jars quickly by allowing air to circulate freely around them. Avoid placing hot jars in a draft or on a cold surface. Test for leaks, wash, label and store.

#### Care of Canned Product

Jars should be kept under observation for about a week. Remove the band of the self-sealing jar when the jars are stored. If any signs of spoilage are apparent, examine the whole lot carefully. Causes of spoilage can be traced much more readily if this week of observation is allowed. If spoilage occurs, there is always a reason. A poor product, over-development of bacteria before processing, insufficient sterilizing time, or a faulty seal will always give trouble. Bulging lid or evidence of leaking may indicate spoilage in glass jars as do bulging ends of tin cans. Leakage in tin cans may be detected by placing cans in water. When air bubbles come to the surface, the can leaks.

Store in a cool dry place in temperatures from  $45^{\circ}$  to  $60^{\circ}$  Fahrenheit.

Number of Can	Approximate Cupfuls	Average Net Weight
⅓2	1	8 oz.
1	1 1/4	11 oz.
1 tall	2	16 oz.
2	2 1/2	20 oz.
$2\frac{1}{2}$	3 1/2	28 oz.
3	4	33 oz.
5	7	3½ lb.
10	13	6 lb. 10 oz.

Capacity of Tin Cans

# Judging Canned Foods

The following score is suggested for canned vegetables:

<del></del>		
Vendahla	60	<del></del>
Vegetable	60	
Condition of product chosen 20	i	
Uniformly well ripened, graded to	ŀ	
secure uniformity of size, not de-		~~~~ )\d
fective, all skin spots, etc., re-	ł	0 00-6-000 p-1 -
moved, not tough or too old,	1	
stringy, or woody. Suitable condi-	ł	=>
tion for canning.		) <del>/=</del>
Condition of finished product 40	1	Y 11 1
Natural, clear, bright color, not un-	1	ון יון א
duly blanched or darkened, no ar-		
tificial coloring matter. Not over-		3 (3)
cooked, shape well preserved.	1	
Pack	40	5
Neatness and uniformity 10	ł	7 93
Pieces of appropriate size to serve	1	
attractively arranged. Fancy pack	- 1	11 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -
not advisable.	i i	
Condition of liquid 10		
Liquid should be clear, not cloudy,		
no bubbles present, no sediment, or		
foreign matter present.	- 1	
Proportion of liquid to vegetable 10	i i	i i
Jar should be full of product but	i	
not crowded and the product should	1	
be well covered with liquid.	- 1	
Container 10		= 6
Of uniform or specified size, of		
clear white glass. All containers	i i	·
clean and attractive, plainly and		
neatly labeled according to direc-	1	
tion.		
TOTAL SCORE	100	
	1	1
		1
&		
V' roo		mes 1
run out		
July 1953 3		V P Co

## Some Defects Found in Canned Vegetables

Fault	Causes		
Loss of color	Storing in a light place Some varieties are more susceptible to loss of color		
Cloudiness	Insufficent pre-cooking Some mineral in water used Vegetables too mature Flat sour Salt which contains filler		
Poor texture	Over-processing Over-ripeness (product too mature)		
Loss of liquid	Jar too full Improper sealing <b>of</b> jar Uneven pressure in processing Releasing pressure too rapidly Leaving jars in cooker after pressure is reduced to zero		

## Causes of Canned Food Spoilage

- 1. Food allowed to stand too long before canning.
- 2. Poor food product selected.
- 3. Delay in sealing after food is packed.
- 4. A faulty pressure cooker.
- 5. Containers with faulty seal (either not tightened or food, grease or juices lodged between lid and jar or an imperfect sealing edge).
- 6. Food packed too tightly so that heat does not penetrate all the food and sterilize it.
  - 7. Jarring of containers so that seal is broken.
  - 8. Opening jars to refill with liquid.
  - 9. Pressure used too low.
  - 10. Length of processing period counted incorrectly.
  - 11. Cooling jars too slowly.
  - 12. Use of old rubbers.
  - 13. Storage of food at incorrect temperatures.

# Summary of Points to Be Remembered in Canning

- 1. Always use fresh, good quality products.
- 2. Be clean. Use clean utensils and a tested pressure cooker.
  - 3. Work rapidly.
  - 4. Know the method of preparing the food.

- 5. Use the correct methods for canning. Only canning by steam pressure is recommended for meats and non-acid vegetables.
- 6. Use only good containers. Even an old rubber may cause 25 cents worth of food to spoil. Test containers before using (i. e., jars, rubbers, lids—or tin cans if used).
  - 7. Know how to use the containers you select.
  - 8. Pack attractively and economically.
- 9. Process at correct pressure and for approved length of time.
  - 10. Cool according to approved methods.
  - 11. Label. A suggested form is as follows:

Spinach
July 17, 1943
Pressure Cooker Method
Mary Smith

- 12. Store in a cool, dark, dry place.
- 13. Follow directions when opening jar for use. Cover with liquid and boil vigorously in an open pan for 15 minutes before tasting.
  - 14. Serve attractively.



# Home Plan for Canning, Drying, Freezing and Storing Vegetables

	, 0500	~			
Kind of Food	Yearly Amount	Servings per person		How to Provide For One Person	
	Individual	Yearly	Weekly	_	
Vegetables— 4 to 6 servings daily 1. Potatoes and sweet		365	7	Store potatoes Plant 200 ft.	
potatoes Child—1 to 2 lb. weekly (once daily)	60 to 120 lb.				
Adult—2½ to 6 lb. weekly	210 to 300 lb.				
2. Tomatoes	65 lb.	260-300	5-6	Can 10-20 qt.	
3. Leafy green and yellow vegetables Child—2 to 2½ lb. weekly	100 to 130 lb.	350-365	6-7	Can, freeze, dry or brine 5 to 10 qt. Purchase 0 to	
Adult—3 lb. weekly	150 to 180 lb.			20 lb. Store 15 to 20 lb Grow: Asparagus 8 crowns Squash 4 plants Cabbage 36 plants Carrots 15 ft. Lettuce 9 ft. Peas 45 ft. Green beans 36 ft. Spinach 30 ft.	
4. Other vegetables Child—3 to 6 lb. weekly Adult—6 to 8 lb. weekly	100 to 200 lb. 200 to 300 lb.	208-365	4-7	Can, freeze, dry or brine 10 to 35 qt. Store 1 to 4 bu. Purchase 0 to 4 1b.	
				Grow: Beets 10 ft. Cauliflower 10 ft Celery 8 ft. Onions 20 ft. Parsnips 6 ft. Sweetcorn 100 ft Turnips 25 ft. Rhubarb 2 plant	
Dried beans—  Small child—none  Adult—1/10 to ¼ lb.  weekly or 1 to 3 servings a week	3 to 7 lb. 3 to 15 lb.	52-104	1-2	Store 3 to 15 lb beans and pea- Grow 100 ft.	