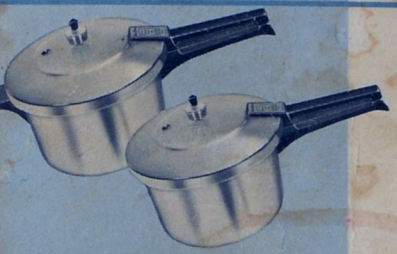


4-Qt. Model No. 620.46271
6-Qt. Model No. 620.46281
Stainless Steel . . . combining all of the famous Sears features with gleaming, lifetime Stainless Steel. Easy to clean, lifetime finish.



Sears Cast . . . cast from top quality stain-resistant aluminum alloy . . . in size to fit every family's needs. Model No. 620.46431 4-Qt., Model No. 620.46441 6-Qt.



Sears Stamped . . . pressed from extra-heavy, double strength finest quality aluminum. Popular 4-Qt. Model No. 620.46310.



Sears Cooker-Canners . . . Available in both 16 and 21 Qt. sizes. Cast from top quality, stain-resistant aluminum alloy. Model No. 620.46000, 16-Qt., large enough to meet the canning requirements of average families. Model No. 620.46010, 21-Qt., the giant capacity Canner . . . holds 18 standard pint jars or 7 standard quart jars for canning.

SEARS, ROEBUCK AND COMPANY

ALL NEW!

Sears

T. M. reg.

COOKER-CANNER



INSTRUCTIONS, TIME TABLES and RECIPES

SEARS, ROEBUCK AND COMPANY

Guarantee

We guarantee each Sears Pressure Cooker to be free from defects, and we further guarantee that it will operate in a satisfactory manner.

If, within ONE YEAR from date of purchase, this Pressure Cooker should fail to operate properly, due to defective materials or workmanship, return it to your nearest Sears retail store, catalog sales office, or mail order house. We will replace it without charge.

This guarantee does not cover damage due to abuse, misuse, negligence, or failure to follow operating instructions.

SEARS, ROEBUCK AND COMPANY

These Cookers Manufactured Under
U. S. Patents 2,218,188; 2,429,149; 2,633,867; Other Patents Pending.

28t water hat

MODERN GUIDE TO

PRESSURE CANNING AND COOKING

A complete manual
on the science of canning and cooking
under steam pressure

DIRECTIONS • TIME TABLES • RECIPES

Pressure Cookers are recommended by leading food authorities everywhere and are used as part of the standard equipment in Home Economics classes in colleges and universities throughout the United States. **The United States Department of Agriculture, Washington, D. C., recommends the Pressure Cooker as being the only safe method for canning non-acid foods—vegetables, meat, fowl and fish.**

SEARS COOKER-CANNERS are recommended by hundreds of thousands of housewives who use them throughout the United States.

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SEARS, ROEBUCK AND COMPANY

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Important . . . READ CAREFULLY

PLEASE DO NOT ATTEMPT TO USE A PRESSURE COOKER BEFORE READING THESE INSTRUCTIONS!

•

INSTRUCTIONS FOR THE USE AND CARE OF THE PRESSURE COOKER

(For additional canning instructions, see pictured demonstration on pages 10-15). (For further cooking instructions, see pages 49-65).

•

Always observe the following instructions and warnings and avoid all chance of injury to yourself and damage to your Cooker or other property.

1. Place water and food into Cooker. **When cooking a solid mass of food, such as soups, etc., do not fill the Cooker more than half full. If Cooker is too full the food may clog the vent pipe opening and prevent pressure control weight from operating properly.**
2. Place cover on Cooker and lock securely in place as directed on page 5. When cooking place pressure control weight (see page 7) on vent pipe and push down firmly. If pressure control weight is tilted on vent pipe and not down in position, Cooker will not operate properly.
3. Turn heat on high.
4. When **canning,** the steam is allowed to flow for seven to ten minutes before the pressure control weight is placed on the vent pipe.
5. When the required pressure is reached, lower heat so that the gauge continues to maintain desired pressure. Cooking time is counted from the moment the correct pressure is reached.
6. When the food has cooked the required time, some recipes suggest cooling the cooker immediately under the water faucet, by pouring water over it or by placing the cooker in a large pan of cold water until the indicator on the gauge returns to zero and the automatic air vent plunger has dropped. Do not cool Cooker rapidly when the recipe states, "Let pressure drop of its own accord." **(When canning** in glass jars, remove Cooker from heat and allow pressure to return to zero of its own accord.) Always remove pressure control weight from vent pipe before removing cover.
7. If in doubt about the steam being entirely exhausted, let the Cooker stand until cool before removing cover. **Never remove cover until pressure control weight is removed from the vent pipe, the gauge indicator is at zero and the automatic air vent has relaxed and metal plunger dropped.**
8. When removing cover from Cooker, be sure to tilt it toward you so that the steam will escape away from you.
9. Do not pour cold water into a dry, over-heated Cooker as it may cause cracking. **Never use a Cooker with the slightest sign of a crack. This would be dangerous.**

10. After the Cooker has been used, a pipe cleaner or small brush should be drawn through the vent pipe occasionally. The Cooker should be carefully washed, thoroughly dried and stored in a dry place.
11. The steam gauge must **never** be immersed in water and water must never be poured on it. This could cause the inside mechanism to rust.
12. Do not store the Cooker with the cover locked on. Place cover upside down on the body to save space, to allow for circulation of air to prevent odors from forming.
13. Do not strike rim of Cooker with any hard instrument that would cause nicks. Nicks in the sealing seat will allow steam to escape.
14. If the pressure gauge or any other part of the Cooker gets out of order, return it to the factory for adjustment or replacement. If Cooker has had considerable usage, a reasonable charge will be made for this service.
15. **Never** render lard under pressure! It may be rendered in the open Cooker. Lard contains glycerin which is unpredictable when subjected to high temperature. Cracklings may block vent pipe.
16. Be careful not to drop Cooker. This may cause Cooker to crack.
17. **Never** use the Cooker without having some liquid in the bottom to produce steam.
18. A little cooking fat or salad oil may be applied to the sealing ring occasionally, if cover becomes hard to close.
19. If cover seems to stick or is hard to turn, do not force it off. Sticking indicates that there is pressure inside the Cooker.

To Open Cooker-Canner . . .

Fig. 1



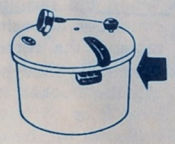
Grasp Cooker handles as shown in Fig. 1.

Fig. 2



Turn cover counter clockwise until cover hits stop and arrow points to "open" as in Fig. 2.

Fig. 3



Cover handles are beyond Cooker handle, shown in Fig. 3. Lift cover and remove.

WARNING: Under no circumstances should cover be turned to open Cooker-Canner until steam gauge registers "zero"; the pressure control weight is off the vent pipe, and the automatic air vent has relaxed and metal plunger has dropped, and no steam remains in Cooker-Canner.

To Close Cooker-Canner . . .

Fig. 4



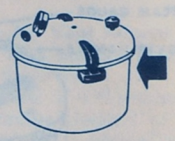
Place cover on Cooker-Canner and turn clockwise.

Fig. 5



Arrow should point to "closed" as shown in Fig. 5.

Fig. 6



Cover handles are directly above and between lines of Cooker handles, as in Fig. 6.

WARNING: Under no circumstances should pressure be built in Cooker-Canner until cover is in proper closed position. (Figures 4, 5 and 6.)

SEARS COOKER-CANNER CANNING CAPACITY**

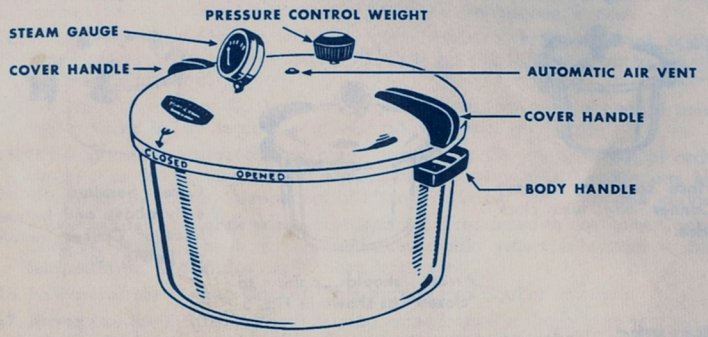
SIZE OF COOKER			GLASS JARS			TIN CANS		
MODEL	Inside Height Inches	Inside Diameter Inches	1 Pint	1 Quart	2 Quart	No. 2	No. 2½	No. 3
No. 620.46010	$10\frac{17}{32}$	12.540	18*	7	4 †	17	10	10
No. 620.46000	$7\frac{23}{32}$	12.540	9	7	0	13	8	5

*The No. 620.46010 has a capacity of 18 pint jars if they are double-decked inside the Cooker. It is not necessary to use a rack to separate the two layers of jars.

**Glass jar capacities as shown are for standard Mason jars. If using lightning or bail type jars, the number of pint jars which can be accommodated will be less, since these jars are both wider and taller than standard Mason jars.

†When canning fruit in half-gallon jars, add five minutes to the time given. If canning vegetables and meat, increase time twenty percent over the time given for quarts.

INTRODUCTION TO PARTS
KNOW YOUR COOKER-CANNER THOROUGHLY



The body of the Cooker is constructed of cast aluminum and the seal arrangement at the top must be handled carefully, for any nicks or cuts on the rim might spoil the steam-tight seal. The cover of the Cooker should also be handled carefully. While this equipment is sturdy and built for long life, precautions must be taken to protect the flanges forming the patented HOMEC SEAL. For it is this seal, formed by turning the flanges of the cover into similar notches in the body, bringing the two together against the sealing ring which makes a pressure-tight utensil possible. When cover is removed, place under side down on a flat surface so that moisture will not collect in gauge.

THE STEAM GAUGE

Tilted for convenience, the steam gauge has an open face dial which registers both temperature and pressure. The indicator or pointer moves across the dial at the rate in which pressure is developed or reduced within the Canner. Heat is increased or decreased to hold the indicator at the recommended canning or cooking pressure.



After each use, wipe the steam gauge clean and dry. The gauge should not be placed in water; nor should water be allowed to run on it as the inside mechanism will be damaged by rust and corrosion if it is allowed to come in contact with water.

THE AUTOMATIC AIR VENT

The Automatic Air Vent is located in the center of the cover.

When all the air has been exhausted from the Cooker by means of the vent pipe and Automatic Air Vent, the pressure control weight must be placed on the vent pipe and heat turned to high. The Automatic Air Vent and the metal plunger inserted in the aperture then rises, thus sealing the Cooker.

If, after placing the pressure control weight on the vent pipe, the Automatic Air Vent does not close in a few minutes, touch the metal plunger gently with a spoon or knife. It is possible that foreign material in the aperture may have delayed the plunger from sealing readily.

When pressure has reduced to zero, the Automatic Air Vent relaxes and the metal plunger drops. This is a visual indication it is safe to take the pressure control weight off the vent pipe and remove the cover.

The Automatic Air Vent is also an added safety device. It will automatically release excess steam in case the vent pipe becomes clogged so that pressure does not release normally. Pressure has returned to normal when the Automatic Air Vent has dropped and the indicator returns to zero.

In addition, the Automatic Air Vent acts as an anti-vacuum valve, thus preventing the loss of juices from jars when canning and loss of juices from food if left in Cooker after pressure is down to normal.

If the Automatic Air Vent should be forced out of it's aperture by excess pressure, it can easily be replaced by pushing it into the aperture, from the inside of the cover. It is recommended that the Automatic Air Vent be replaced if it should become hard or deformed.

PRESSURE CONTROL WEIGHT

The pressure control weight controls the amount of pressure that can be built up in the Cooker-Canner. Heat should be reduced to maintain 5 lbs. pressure for canning fruits and tomatoes; 10 lbs. for canning vegetables, meats, poultry and fish; 15 lbs. for all cooking. In case the heat is not reduced, the pressure control weight will begin to rock at 17 to 18 lbs. pressure thus releasing excess pressure. When, through oversight, the pressure goes above that desired and the pressure control weight begins to rock, lower heat or move the Cooker from the stove to allow pressure to drop to the desired pressure.

When canning in glass jars, do not remove, bump or jar the pressure control weight while pressure is in the Cooker or liquid will be lost from the jars.

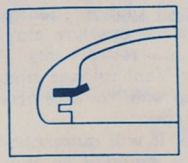
If small particles, seeds or food should accumulate or cake in the vent pipe, pressure control weight will not operate properly. Therefore, it is essential that the vent pipe opening be kept thoroughly clean; run a pipe cleaner or small brush through the opening occasionally. (Do not be concerned about a slight vapor or steam that may appear from the underneath part of this weight before the pressure reaches the required point. There will be some slight escape, but the weight is constructed in this manner to let gases or air escape from the Cooker during the cooking or processing period.

Do not remove pressure control weight from vent pipe until indicator on gauge returns to zero and plunger in automatic air vent has dropped. Always remove pressure control weight before opening cover.

In canning, the pressure control weight must be left off the vent pipe for 7 to 10 minutes to exhaust air from the Cooker and jars.

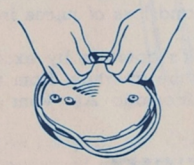
In cooking, the pressure control weight is placed on the vent pipe as soon as the cover is closed securely. Air is exhausted from the Cooker by the automatic air vent.

Information About *Sealing Rings*

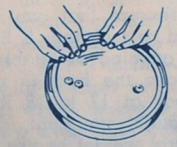


After the cooker-canner has been in use for a considerable period, the sealing ring may tip slightly upward in the position shown in the drawing. If there is an escape of steam due to this condition, the sealing ring should be replaced. Please follow instructions below.

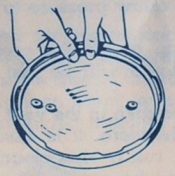
IMPORTANT: Wash sealing ring in warm soapy water, rinse and dry before installing.



1. Turn cover upside down and remove the old ring. Be sure the sealing ring groove is absolutely clean. Then lay the new ring loosely on the inside of the cover and insert a small section into the sealing ring groove.



2. As you pick up the next section of the ring, push it toward the portion just inserted, while at the same time pressing it firmly into the groove. The sealing ring must be squeezed together section by section as you insert it as it is made slightly oversized to compensate for normal shrinkage in use.



3. Work your fingers all the way around the inside edge of the sealing ring to be sure it is fully in place.

To make the cover go on the cooker-canner body with ease, apply a bit of unsalted cooking oil to bottom edge of the sealing ring and to the underside of the cover and body lugs.

SERVICE SUGGESTIONS

1. **Do not lay the cover of your cooker-canner on the stove or on a hot surface as the excessive heat will cause the sealing ring to deteriorate rapidly.**
2. **Be careful not to allow your cooker-canner to run dry as this produces an intense degree of dry heat which will cause the sealing ring to shrink and may possibly damage the body.**
3. **Whenever you replace the sealing ring, it is also a good idea to check the condition of the automatic air vent. If it has become hard or deformed, it should also be replaced.**
4. **It is wise to have an extra sealing ring and automatic air vent on hand at all times. Check Page 71 and order the parts by number.**

How to care for your Cooker-Canner

BEFORE USING YOUR COOKER

Before using your Cooker for the first time, remove sealing band, wash band and groove, and automatic air vent to remove manufacturing oils and grease. Scour Cooker carefully with a good non-alkali, aluminum cleaner or a steel wool cleaning pad. After the Cooker and basket have been washed and rinsed with warm water, the Cooker is ready for use.

CLEANING YOUR COOKER

This Cooker is manufactured from the best material suitable for the manufacture of pressure cookers, and with ordinary care will give many years of satisfactory service. However, there are various alloys in the metal upon which the physical properties of water and certain foods will react causing the inside of the Cooker to darken. This discoloration will not affect the Cooker or the food cooked in it in any way. Any time you prefer to remove this discoloration, you can do so by following the instructions below:

TO REMOVE DISCOLORATION FROM THE INSIDE OF THE COOKER

Place a quantity of water in the bottom of the Cooker up to the line of discoloration. Add one tablespoonful of cream of tartar to each quart of water used. Place cover on Cooker and raise pressure to 15 pounds. Remove Cooker from heat but do not release pressure. Allow the Cooker to stand as is for several hours. Then remove pressure control weight, empty contents and scour the inside of the Cooker with a steel wool cleaning pad. Do not use cleaners containing **lye, alkali or potash.**

CARE AND CLEANING OF PARTS

Care must be exercised in cleaning the steam gauge. Never put it in water nor let water run on it. Clean it occasionally by using a toothpick from underneath. This must be done carefully in order to avoid plugging the channel.

To clean the vent pipe, draw a clean piece of pipe cleaner through the opening.



Correct Storing Position

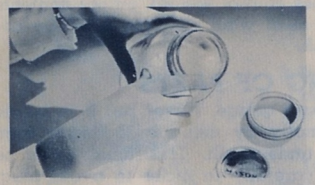
STORING THE COOKER

The proper way to store the Cooker when not in use is to place the cover carefully, upside down, on the body. This protects the valves and gauge from possible injury. This will also prevent odors in the Cooker. Be sure Cooker is thoroughly dry before it is put away and store in clean, dry place.

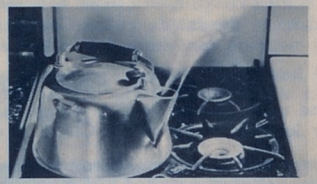
STEPS IN CANNING



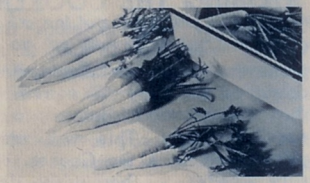
STEP NO. 1—First step in the actual job of canning is to assemble materials and equipment several days in advance. Be sure your Cooker-Canner is thoroughly clean and working properly. Before each canning season, have the Canner checked to see that the gauge registers accurate pressure and that the sealing band is steam tight.



STEP NO. 2—Check jars, rings and closures. Wash and rinse thoroughly. Only MASON jars are recommended for Pressure Canning.



STEP NO. 3—Have plenty of boiling water available.

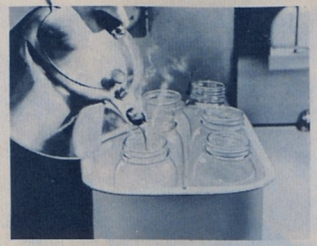


STEP NO. 4—Sort food for size and degree of ripeness.

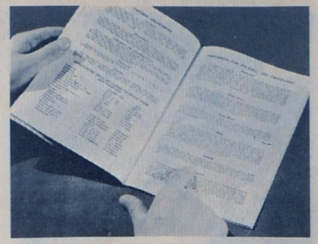


STEP NO. 5—Clean food thoroughly. Lift food from water.

2 Quarts



STEP NO. 6—Pour hot water into washed jars until needed.



STEP NO. 7—Follow specific directions in this book for best results.



STEP NO. 8—Cover food with boiling water and preheat or precook as per recipe.



STEP NO. 9—Place two quarts of boiling water in Cooker with basket in place. Set Cooker on low heat.



STEP NO. 10—Place clean, sterile rubber rings on jar or cover as directed, when closure requires separate ring. Return jars to hot water until ready to fill.



STEP NO. 11—Fill hot containers promptly with hot food according to directions given on page 17.

Allow ½ inch head space for fruits and all vegetables except peas, shelled beans and corn. These starchy vegetables and ALL meat require 1 inch head space due to expansion.



STEP NO. 12—Fill jar to proper level with boiling liquid when recipe requires.



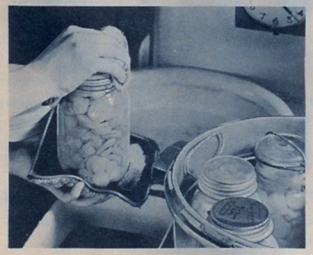
STEP NO. 13—Work out bubbles with clean knife or spatula. Wipe sealing edge with clean damp cloth.



STEP NO. 14—Dip jar closures in boiling water.



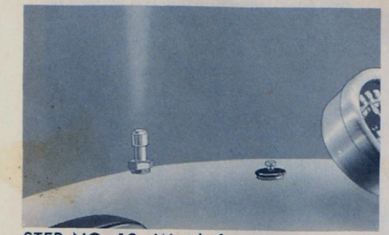
STEP NO. 15—Adjust closures on jars according to directions for type of closures used. See page 18.



STEP NO. 16—Place each hot jar upright into hot Cooker.



STEP NO. 17—Place cover on Cooker, and lock securely. Use maximum heat.



STEP NO. 18—Watch for steam to come from vent pipe.

STEP NO. 19—Reduce heat sufficiently to allow steam to flow freely at a moderate rate for seven to ten minutes to eliminate all air from Cooker and jars, then place pressure control weight on vent pipe. If, after placing the pressure control weight on vent pipe, the automatic air vent does not close in a few minutes, touch the metal plunger gently with a spoon or knife. It is possible that foreign material in the aperture may have delayed the plunger from sealing readily.



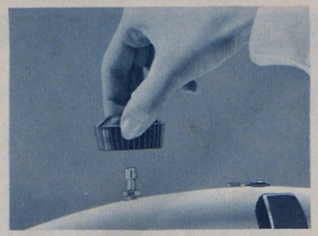
STEP NO. 20—Use maximum heat to raise pressure to required point—then lower heat. (On electric stoves, it is necessary to turn heat to "low" just before pressure reaches required point. On coal or wood stoves, Cooker must be moved to cooler place on stove when proper pressure is reached). Start counting processing time the moment required pressure is reached. Pressure should be kept at required point by raising or lowering heat as needed, to eliminate fluctuations in pressure.



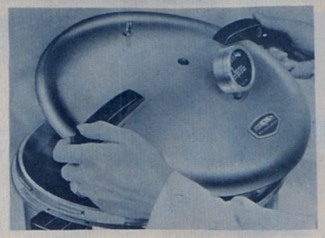
STEP NO. 21—Turn off heat at end of processing time, or—

Move Cooker from heat at end of processing time when using electric stove or any constant heat unit.





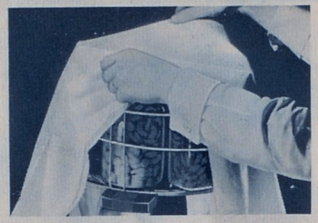
STEP NO. 22—When canning in glass jars, allow pressure to return to zero of its own accord. When indicator reaches zero and automatic air vent plunger has dropped, remove pressure control weight from vent pipe. Let Cooker cool for 1 or 2 minutes.



STEP NO. 23—Remove cover from Cooker. Lift cover toward you so as to keep steam away from you.



STEP NO. 24—Immediately toss dish towel over Cooker and containers. Let Cooker stand 1 or 2 minutes.



STEP NO. 25—Remove basket of jars from Cooker and place on board or towel, free from draft.



STEP NO. 26—Tighten closures while hot—except when using two piece metal caps. Never tighten two piece metal caps after processing.



STEP NO. 27—Set jars apart on board or cloth, for cooling, away from draft—to remain for twenty-four hours.



STEP NO. 28—Twenty-four hours later, test seals, according to directions on page 19, wipe jars clean, label and date, then store in cool, dry place.

USE OF COOKER WITH DIFFERENT TYPES OF FUEL

A Pressure Cooker may be used on any type of range or heating unit. It is desirable to have the heat high at the beginning of the processing or cooking period to form steam in the Cooker as quickly as possible.

After the desired pressure has been reached, it is important that it be held constant throughout the processing period. Very little heat is required to hold this pressure once it has been reached.

With a gas cooking range, this regulation is comparatively simple. The heat is merely turned down when desired pressure is reached. The same applies to kerosene stoves.

With an electric stove, the heat must be reduced BEFORE proper pressure is reached. On most electric stoves, the pressure may be maintained at the proper level with the heat turned on "low".

In using a Pressure Cooker with constant heat stoves, heated by coal or wood, it is necessary to move the Cooker itself to a cooler portion of the stove when desired pressure is reached.

Regardless of the type of stove or fuel used, the important points to be considered are (1) bringing the pressure up as quickly as possible at the start of the cooking or processing time, and (2) maintaining the pressure at a constant level throughout cooking or processing period.

THE THEORY OF PRESSURE CANNING

The first step toward being successful in home canning is knowing what equipment is needed for the job. Next comes a knowledge of the basic functions of your equipment.

Most of the other equipment for home canning is used regularly in your kitchen and the functions remain the same, but your Pressure Cooker is a new item. Fundamentally, its purpose is to process foods by heating them above the boiling point of water. In most parts of the country, water boils at 212° F. (Exception: mountainous regions, where it boils at lower temperatures.) However, a temperature of 240° F. is required for non-acid food processing, so that food will keep safely until used.

In order to provide this heat, your Cooker utilizes steam under pressure. First, some of the water in bottom of Cooker is converted into steam, and all the air is forced out through the vent pipe and automatic air vent in cover. When air is exhausted, this outlet is closed, and the expanding steam creates pressure. There is an accompanying rise in temperature. This higher temperature is essential in destroying spoilage organisms in food.

PRINCIPLES OF FOOD PRESERVATION

Behind the manufacture of your Pressure Cooker lies a long history of scientific research. While the operation of your Cooker itself is simple, it serves a highly technical purpose.

For in addition to storing up food, successful canning must arrest or destroy the action of spoilage organisms.

To assist your Cooker in this function, it is important that you follow certain rules. Select food for canning that is **fresh,** very sound and very clean. And make sure that every precaution is taken to keep both food and Cooker just as clean as possible during processing.

Four specific agents produce food spoilage. They are enzymes, molds, yeasts and bacteria.

Three of them . . . enzymes, molds and yeasts are easily destroyed by heat during the processing. Bacteria, especially botulinus, can be destroyed only with temperatures above boiling. And their destruction is of paramount importance.

If enzymes are not destroyed, the quality of food is lowered. Unchecked mold may spread through the entire contents of a container of food. Yeast causes fermentation. Bacteria spoilage falls into four groups—(1) Fermentation, recognized by the formation of gas and acid, causing souring of the food, (2) Flat Sour, in which acid is produced, but no gas is formed, (3) Putrefaction, characterized by gas, bad odor and sometimes by darkening of food, (4) Toxins or poisonous substances which may show no visible signs of spoilage unless other spoilage organisms are also present.

All in all, the destruction of these enemies of good eating gives you a mighty good incentive for closely following directions for using your Cooker.

FOOD SELECTION

In order to produce canned food of high quality, it is necessary to start with the best possible raw products. Whenever possible, foods should be obtained from your own garden . . . or arrangements made to purchase food from a market where fresh foods can be ordered in advance.

Vegetables that are young and tender—fruits unblemished, firm, yet fully ripe when picked—are the best. Unripe fruit lacks full flavor. Overripe fruit is too soft to make good canning material. Fruits and vegetables that stand too long are overripe or blemished, and are likely to deteriorate from both enzymatic action and bacterial growth. They are, therefore, difficult to can properly.

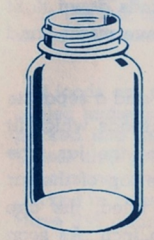
There are certain fruits and vegetables that are **not** well suited to home canning. These include the foods not ordinarily served cooked. Also, there are certain vegetables, such as cabbage and cauliflower that are not entirely satisfactory when canned. The necessary processing may cause discoloration and develop strong flavors.

Meat should be canned soon after slaughtering. When this is not possible . . . can it within a few days . . . keeping it refrigerated in the meantime. Although frozen meat may be canned, the finished product is not entirely satisfactory.

FILLING, SEALING AND TESTING GLASS JARS

(For additional information, consult literature issued by manufacturers of jars used.)

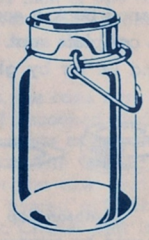
A wide variety of glass jars is available for home canning. While there are many styles and shapes on the market, most jars come in half pints, pints, quarts or half gallons. Only the pint and quart Mason jars are recommended for most home canning.



Mason Jar

Jars made for home canning divide into two types. The Mason jar has glass threads on which a closure may be screwed.

The second classification is the bail type jar, sometimes called a lightning jar, on which a wire bail, for use in holding a glass top in position, is attached to the jar. The jar has a shoulder near the top and a rubber ring fits between it and the glass top.



Bail Type

When filling both type of jars in canning, leave ½ inch head space for fruits and all vegetables except peas, shelled beans and corn. These starchy vegetables and all meat require a 1 inch head space due to expansion.

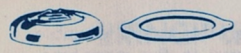
CLOSURES

There are four separate types of closures or tops for jars used in home canning.



Two-piece Cap

The two-piece metal cap consists of a flat metal lid held in place with a screw band or screw cap. A rubber compound on the underside of the metal lid takes the place of a separate rubber ring. When the jar is filled, this type of metal lid is put on with the rubber side down on the jar. This type of closure should be turned down firmly tight before processing. To test seal, 24 hours after processing, tap lid gently with spoon. Clear, ringing sound indicates proper seal. Screw bands may then be removed. Dull sound indicates no seal has been made.



Bail or Lightning Type Cap

A steel wire clamp on the bail or lightning-type jar holds the cap in place. This type utilizes a separate rubber ring. The rubber ring is first placed on the shoulder of the jar, then the glass top is placed in position. During processing, the short wire is left up and loose. After processing, the short wire is snapped down to tighten clamp.



Three-piece Cap

The three-piece cap consists of a metal screw band glass lid and separate rubber ring. It must be carefully adjusted. Before the jar is filled, the rubber is placed on the underside of the lid in the groove especially provided for it. After the jar is filled, the lid is placed in position and the metal band is screwed down tightly, then turned back a scant quarter turn. After processing, screw bands down tight to complete seal. To test seal, 24 hours after processing, remove metal band and lift jar by glass lid.



Mason Cap

Made of zinc with a porcelain lining and a separate rubber ring, the Mason jar cap has threads which fit over the glass threads on the top of the jar. The rubber ring goes on a ledge near the top of the jar before the jar is filled. When it is filled, the cap should be screwed down tightly, then turned back one-fourth inch. As soon as the food is processed, this type of cap should be screwed down tightly. When a proper seal has been made, the cap will be indented slightly on top after jar has cooled for 24 hours.

TIN CANS

The two types of tin cans used for home canning are plain tins and enameled tins. Plain tin cans are more generally used and are suitable for meats, fish, poultry and most fruits and vegetables. These cans are called "plain" tin cans because they are tinned on the inside just as they are on the outside.

When red-colored fruits and vegetables are heated in plain tin cans, there is a chemical reaction between the red coloring material and the tin which causes the color to fade. While this color change does not affect the food value or wholesomeness of food, it does make it less attractive. To prevent this color loss, some cans are coated inside with a bright-finished deep gold enamel. These enamel cans, called "R" (standard or sanitary) enamel cans, are recommended for such foods as berries, cherries, plums, tomatoes, beets, squash and pumpkin.

Another type of enamel can, called "C" enamel, is used primarily for canning corn. The light dull gold enamel lining of "C" enamel cans prevents corn from darkening as it does when canned in plain tin cans. Lima beans, red kidney beans and succotash are all successfully canned in "C" enamel cans.

The most suitable sizes of cans for home canning are the No. 2, No. 2½ and No. 3 cans. No. 2 cans hold 2½ cups of food, No. 2½ cans hold 3½ cups and No. 3 cans hold about 4 cups.

IF CANNING IN TIN FOLLOW THESE IMPORTANT INSTRUCTIONS

FILLING

Many recipes which call for filling the container to within ½ inch or one inch from the top, are meant for use with glass jars only. However, when canning in tin, fill cans with hot food and liquid to within ¼ inch from the top.

EXHAUSTING

If foods are precooked and packed piping hot in tin cans, the cans may be sealed immediately without further exhausting. However, if uncooked food is packed into tin cans, air in food must be removed before cans are sealed. Unless this is done, the food may discolor or lose its flavor. The method of exhausting air from raw packed food is as follows: After the raw food is packed in cans, these are put into the canning basket and placed in Cooker. Have 3½ quarts of boiling water in Cooker. Place cover on Cooker and lock into place. **Do not place pressure control weight on vent pipe throughout exhausting period.** Regulate heat so that a **mild** flow of steam issues from vent pipe. For raw fruits and tomatoes, exhaust steam for five minutes after a steady flow of steam has begun. For raw meats, exhaust steam for 50 minutes. Move Cooker from stove and allow to cool for a minute. Remove cover from Cooker.

Remove cans from Cooker. The meat should be steaming hot, and its center should have lost practically all of the color of raw meat. Add boiling water, if needed, to fill can with liquid to within ¼ inch from the top. Seal cans at once.

SEALING

Be sure food is steaming hot when cans are sealed, in order to insure a proper vacuum. Be sure your can sealer is adjusted properly to give a perfect seal. Process in your Cooker at once.

PROCESSING

Be sure to have at least 2 quarts of water in Cooker before processing. Allow steam to flow from vent pipe for 7 to 10 minutes. Process according to time tables given for tin cans. When canning fruits, follow the same times given for glass jars.

COOLING

When canning in tin cans, remove pressure control weight at the end of processing time and release all steam until the indicator on pressure gauge returns to "zero" and automatic air vent relaxes. Remove tin cans from Cooker and immediately plunge cans into cold water for cooling. This prevents over cooking of the contents of cans.

READ THESE PAGES CAREFULLY BEFORE USING YOUR PRESSURE COOKER-CANNER

Do your canning according to instructions and follow the directions given in this book for the most successful operation of your Cooker-Canner.

1. Always have sufficient liquid in the bottom of the Cooker to prevent it from boiling dry.
2. Jars may break if set directly on bottom of Cooker. Always use canning basket.
3. Place only the recommended number of jars in the basket for canning.
4. The cover must be securely locked in place, see directions page 5, before raising pressure in the Cooker.
5. Exhaust all air from the Cooker by allowing steam to flow from the vent pipe before placing pressure control weight on vent pipe and raising pressure.
6. Avoid fluctuations in pressure during the canning period. Abrupt changes in pressure tends to draw liquid from jars.
7. When canning in glass jars, the pressure control weight should not be touched or taken off the vent pipe during the processing period.
8. When canning in glass jars, remove pressure control weight from vent pipe when pressure drops to zero and automatic air vent has relaxed. When canning in tin cans, the pressure control weight should be taken off the vent pipe at the end of the processing period.

9. Attempting to speed the cooling of the Cooker by laying wet cloths on the cover, placing Cooker in water or setting Cooker in a draft or on a cold surface is not recommended. This reduces pressure in the Cooker more rapidly than in the jars and may cause the jars to burst.
10. Do not render lard under pressure. Lard contains glycerin which is unpredictable when subjected to high temperature. Cracklings may block the vent pipe. The open Cooker may be used to render lard.
11. The inside mechanism of the gauge will be damaged by rust and corrosion if gauge is immersed in water during washing, or if water is allowed to run over it.
12. Striking the rim of the Cooker with anything that will cause nicks may injure the sealing seat and allow steam to escape.
13. Dropping the Cooker on a hard surface may cause it to crack.
14. It is not advisable to use a Cooker with the slightest sign of a crack or deep pits.
15. If liquid is withdrawn from jars during processing, jars should not be opened to refill. The loss of liquid will not interfere with the keeping qualities of the food and opening of the jar will cause the food to spoil.
16. Before taking cover off the Cooker, be sure the pressure control weight is off the vent pipe, the gauge is at zero and the automatic air vent is relaxed to be sure there is no pressure remaining in the Cooker.
17. Direct dry heat, such as a warm burner or top of oven, will deteriorate sealing band and automatic air vent.
18. Process food as soon after harvesting as possible.
19. Begin to count processing time as soon as required pressure is reached.
20. Sterilize jars in which food spoilage has occured before next use. Under ordinary circumstances, it is not necessary to sterilize jars prior to packing when canning in a Pressure Canner. Processing of food and sterilizing is simultaneous.
21. Fill jars only to the recommended level. There should be at least one-half inch head space after filling with liquid. Some foods require more head space as expansion is greater. See page 17.
22. Discard defective jars and jar closures. Self-seal lids and rubber rings should be used only once.
23. If cover becomes hard to close, a little unsalted cooking fat or salad oil may be applied to the sealing ring occasionally.
24. Use only Mason jars that are specially heat-treated to withstand heat under pressure. Commercial product jars may not withstand pressure canning.
25. Pack peas, corn, spinach and meats loosely as these foods expand during processing and may break the jars.
26. If, after placing the pressure control weight on the vent pipe, the automatic air vent does not close in a few minutes, touch the metal plunger gently with a spoon or knife. It is possible that foreign material in the aperture may have delayed the plunger from sealing readily.
27. Read carefully and follow directions closely to obtain best canning results.

Canning Directions

FRUITS AND TOMATOES

Although fruit has better color, shape and flavor when it is canned with sugar, it may be canned unsweetened if desired. Sugar is used for flavor. It is not used in high enough concentration to act as a preservative. Jars should be filled to the shoulder with fruit, and then cover fruit with boiling liquid to within one-half inch of top of jar. The liquid may be syrup, fruit juice or plain water.

When no sugar is used, best results are obtained with varieties of fruits which yield enough juice to cover them in the container. Fruits that do not have sufficient juice must be covered with boiling water after they have been packed.

The amount of sugar desirable to use in preparing syrups will depend upon the tartness of the fruit and on family preferences for amount of sweetening. It should be remembered that fruit, when heated, releases some of its juice, which will dilute the syrup in proportion to the juiciness of the fruit.

Note: If preferred, fruit, except apples, cranberries, figs and strawberries may be **packed raw into containers and covered with boiling hot syrup.** When this is done, processing time need not be increased. When fruit is packed cold, it shrinks during processing, and the container is less full than when fruit is preheated in boiling syrup before packing.

TABLE OF SYRUPS FOR CANNING FRUITS

Kind of Syrup	Sugar	Liquid—Water or juice
Thin	1 cup	3 cups
Medium	1 cup	2 cups
Heavy	1 cup	1 cup

Heat sugar with liquid (water or juice) until sugar is dissolved. Bring to boiling. About three-fourths to one cup syrup is required to fill a quart jar, or No. 2½ can; about one-half cup is needed for pints.

White sugar is preferable to brown sugar for canning. Mild clover honey may be used to replace up to one-half the sugar called for in canning. Corn syrup may be used to replace up to one-third the amount of sugar in recipe. Never use saccharin as a substitute for sugar when canning.

Processing table for fruits page 26.

APPLES

Varieties of tart winter apples are best for canning. Wash, pare and cut in halves, quarters or slices. Place in a weak brine solution (1½ teaspoons salt to each quart water) until ready for use, to prevent darkening. Drain well. Precook by boiling apples in a thin syrup 1 to 2 minutes. Pack hot apples in clean, hot containers. Cover fruit with boiling syrup, in which it was precooked. Adjust lids. Process 8 minutes at 5 lbs.

APPLE SAUCE

Wind falls and green apples may be used. Wash. Remove spots and blemishes. Cut apples in quarters. To each 5 pounds of apples, add 2 cups water, and cook until tender. Press through food mill or sieve. Sweeten to taste. Reheat and pack hot in clean, hot containers. Adjust lids. Process 5 minutes at 5 lbs.

CRABAPPLES

Wash thoroughly, making sure stems and blossom ends are well cleaned . . . as crabapples are usually canned whole. Precook in boiling medium syrup for 5 minutes. Pack hot crabapples in clean, hot containers. Cover fruit with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

For pickled or spiced crabapples, use proportions for heavy syrup substituting vinegar for the liquid. To each cup of vinegar, add 1 teaspoon whole cloves, 1 teaspoon allspice and 1 teaspoon crushed stick cinnamon. Proceed as above.

APRICOTS

Select apricots that are well-ripened, yet firm. When soft they lose their shape; when green, they are bitter. Wash apricots. If peeled apricots are desired, dip them for a minute in boiling water; then plunge into cold water and peel. They may be halved or left whole. Precook 2 to 3 minutes in boiling medium syrup. Pack hot in clean, hot containers. Cover with boiling syrup, in which they were precooked. Adjust lids. Process 8 minutes at 5 lbs.

BERRIES (Except Red Raspberries and Strawberries)

Handle berries carefully to prevent crushing or bruising. Wash carefully and pick over; use only firm berries. (Soft berries may be crushed to help make syrup for those canned.) Remove caps and stems. For firm berries add ½ cup sugar to each quart berries. Cover pan and heat. Shake pan to keep berries from sticking. Pack hot in clean, hot containers. Cover with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

CHERRIES

Use freshly picked cherries. Wash and stem. If canning whole, it is best to prick each cherry with a fork. If desired, cherries may be pitted. In both cases, save juice to use as liquid. When canning sour cherries, add from ¼ to ½ cup sugar to each quart of cherries. Bring to a boil. Pack hot in clean, hot containers. Cover with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

For sweet cherries, bring cherries to a boil in thin syrup. Pack hot in clean, hot containers. Cover with boiling syrup. Adjust lids. Process as above.

CRANBERRIES

Use only sound cranberries. Wash and stem. Add ¾ to 1 cup sugar to each cup of cranberries. Heat to boiling. Pack hot in clean, hot containers. Cover with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

FIGS

Select tree-ripened figs. (Avoid underripe or overripe products for canning.) Wash. Place in hot water and bring to a boil. Let stand 3 or 4 minutes; then drain. Pack hot in clean, hot containers. Add 1 tablespoon lemon juice to each quart. Cover figs with boiling thin syrup. Adjust lids. Process 10 minutes at 5 lbs.

FRUIT COCKTAIL

25% pears—diced	15% green grapes
25% peaches—sliced	15% green gage plums
15% melon balls	5% Maraschino cherries

Prepare fruit for canning. Drop into thin to medium syrup, mix carefully and just heat through. Pack into hot jars. Cover with syrup. Adjust lids. Process 8 minutes at 5 lbs.

GRAPES

Select firm fruit. Wash and stem. Pack cold into clean containers. For juicy varieties, press until there is sufficient juice to cover grapes. For some varieties, no sugar or syrup is needed. For less juicy, sour varieties, use a boiling medium syrup to cover them. Adjust lids. Process 8 minutes at 5 lbs.

PEACHES

Select sound, fully-ripened but not soft fruit. Sort peaches according to size. Plunge them into boiling water for about one minute to loosen skins. Then dip in cold water. Remove skins. Clingstone peaches may be canned whole; freestone peaches may be halved or sliced as desired. It is best to place peeled peaches in a weak brine solution (1½ teaspoons salt to each quart water) to prevent darkening until ready to use. Drain well. Simmer 2 or 3 minutes in medium syrup. Some varieties may require less cooking, others more—but do not let the fruit become soft. Pack hot in clean, hot containers. Place cut side of peaches down to make a well-filled container. Cover with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

PEARS

Wash and pare. Cut large pears in half and core. Small pears may be canned whole, if desired. Place pears in a weak brine solution (1½ teaspoons salt to each quart water) to prevent darkening until ready to use. Drain well. Simmer 1 or 2 minutes in thin or medium syrup. Length of cooking time will depend on firmness of fruit. Pack hot in clean, hot containers. Place cut side down when pears are halved; if left whole, pack bottom layer with stem ends up, the next layer with stem ends down . . . and repeat until jar is filled. Cover with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

PERSIMMONS

Select ripe persimmons. Wash well. Dip into boiling water for several minutes, or until skins crack. Remove skins. Bring persimmons to boil in thin syrup. Pack hot in clean, hot jars. Cover with boiling syrup. Adjust lids. Process 10 minutes at 5 lbs.

PINEAPPLE

Select sound, ripe, juicy fruit. Wash. Remove stem and base. Cut into ½ to ¾ inch slices. Remove peel, eyes and core from each slice. Pineapple may be canned in slices, halves or smaller pieces. Precook in boiling medium syrup 2 to 3 minutes. Pack hot in clean, hot containers. Cover fruit with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

PLUMS OR FRESH PRUNES

Select firm, ripe fruit. Wash and stem. If fruit is to be canned whole, prick each piece of fruit with a fork. Skins may be removed, although usually they help hold fruit together better. Precook in boiling medium syrup 1 or 2 minutes. Pack hot in clean, hot containers. Cover with boiling syrup. Adjust lids. Process 8 minutes at 5 lbs.

QUINCES

Select ripe quinces. Wash, peel and core. Cut in halves or quarters. Precook 2 or 3 minutes in boiling heavy syrup. Pack hot in clean, hot containers. Cover with boiling syrup. Adjust lids. Process 12 minutes at 5 lbs.

RED RASPBERRIES

Select ripe but firm berries. Handle berries carefully to prevent crushing. Wash and drain. Pack raw in clean, hot containers, shaking down for a full pack. Cover with boiling thin syrup. Adjust lids. Process 8 minutes at 5 lbs.

RHUBARB

Select young, tender rhubarb—the strawberry variety, if possible. Wash thoroughly. Remove ends, and cut rhubarb into 1 inch lengths. Add ¼ to ½ cup sugar for each cup rhubarb and enough water to prevent sticking. Bring slowly to boiling point. Pack hot in clean, hot containers. Cover rhubarb with boiling syrup. Adjust lids. Process 5 minutes at 5 lbs.

STRAWBERRIES

Select ripe berries. Juicy varieties are best for canning. Wash, drain and hull. Add ½ cup sugar to each quart of berries. Bring slowly to a boil. Remove from stove. Let stand overnight. Pack in clean, hot containers. Cover with boiling syrup if necessary. Adjust lids. Process 5 minutes at 5 lbs.

TOMATOES — Whole

Wash medium, smooth, firm, ripe tomatoes. Scald in boiling water about ½ minute to loosen skins. Dip into cold water and drain. Peel and remove stem ends. Pack solidly into hot wide mouth jars, press down to release juice or cover with simmering tomato juice made of imperfect but sound, mashed strained tomatoes. Add 1 teaspoon salt to each quart if desired. Adjust lids. Process 10 minutes at 5 lbs.

TOMATOES — Quartered

Wash perfect, ripe tomatoes. Scald and remove stem ends, peel and quarter. Bring to boil or pack cold as above. Pack into hot jars. Adjust lids. Process 8 minutes at 5 lbs.

FRUIT JUICES

Any soft fruits such as grapes, plums, and berries or firm fruits as apricots and apples are excellent in juice. Wash fruit carefully. Crush or cut into small pieces. Heat to simmering for soft fruits or simmer until tender for firm fruits. Strain through a cloth bag. Add sugar if desired, about 1 to 2 tablespoons to each pint of juice. Heat again to simmering. Fill into hot jars allowing ¼ inch head space. Adjust lids. Process 5 minutes at 5 lbs.

GRAPEFRUIT JUICE

Wash grapefruit. Cut in half and extract juice so that rag, cell tissue and oil is not included. Strain out seeds and coarse pulp. Work rapidly to avoid exposure to air. Heat rapidly to simmering — do not boil. Pour into clean hot jars allowing ¼ inch head space. Adjust lids. Process 5 minutes at 5 lbs.

Orange juice or a combination of orange and grapefruit juice is canned by the same method.

TOMATO JUICE

Wash soft but perfect tomatoes. Remove stem ends; cut into pieces. Simmer until softened. Put through a fine sieve. Add ½ teaspoon salt per pint. Reheat at once just to boiling. Pour into hot jars, leaving ¼ inch head space. Adjust lids. Process 5 minutes at 5 lbs.

Processing Time Table

FRUITS AND TOMATOES

	Amount of Pressure Pounds	Glass Jars (Pints and Quarts) and Tin Cans Minutes
Apples	5	8
Applesauce	5	5
Crabapples	5	8
Apricots	5	8
Berries (Except Strawberries)	5	8
Cherries	5	8
Cranberries	5	8
Figs	5	10
Fruit Cocktail	5	8
Grapes	5	8
Peaches	5	8
Pears	5	8
Persimmons	5	10
Pineapple	5	8
Plums	5	8
Prunes	5	8
Quinces	5	12
Red Raspberries	5	8
Rhubarb	5	5
Strawberries	5	5
Tomatoes — Whole	5	10
Quartered	5	8
Fruit Juices	5	5
Grapefruit Juice (Orange)	5	5
Tomato Juice	5	5

Use 2 quarts water in Cooker for all processing.

Time and pressure given in this chart apply only to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

VEGETABLES

Young, tender, fresh vegetables, slightly immature, are better for canning than those which are overripe. As a rule, vegetables are best if canned immediately after picking, since flavor decreases upon standing and often unpleasant color changes take place. Avoid bruising vegetables because spoilage organisms grow more rapidly on bruised vegetables than on unblemished ones.

Most vegetables are precooked before they are canned. See page 33 for exceptions. When vegetables are precooked in boiling water, some of their nutrients dissolve in the water; so whenever possible, the precooking water should be used as liquid to cover the vegetables after packing in containers. However, there are a few vegetables, such as turnips, greens, kale and sometimes asparagus, which make the cooking water bitter. Do not use cooking water in these cases.

Leave one inch head space in Mason jars when canning starchy vegetables:- peas, shelled beans, or corn and sweet potatoes. One-half inch head space is sufficient for all other vegetables. It is best not to use free running salt containing starch, since it may make the liquid cloudy and product unattractive.

Processing times given in individual recipes are for pint and quart Mason jars. If canning in tin cans, refer to processing time table on page 32.

ASPARAGUS

Select young, tender asparagus. Sort according to size. Wash thoroughly giving special attention to scales which may hold grit or dirt from garden. Remove tough, lower end and large scales. Cut asparagus into 1 inch pieces. If desired, stalks of asparagus may be tied together with string and cooked standing upright with tips barely out of water. Precook 2 to 3 minutes in boiling water. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with fresh boiling water. Adjust lids. Process at 10 lbs. Pints - 25 minutes; quarts - 40 minutes.

BAKED BEANS

Bake beans according to favorite recipe but make sure they are not quite done and that there is plenty of liquid on them. The length of baking time will depend on length of time beans have been precooked. Pack hot beans and liquid loosely and uniformly mixed in clean, hot containers. Adjust lids. Process at 10 lbs. Pints - 80 minutes; quarts - 100 minutes.

LIMA BEANS

Use only young, tender lima beans. Shell and wash thoroughly. Cover with boiling water and bring to boiling point. Pack hot beans loosely in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling liquid in which beans have been cooked. Adjust lids. Process at 10 lbs. Pints - 40 minutes; quarts - 50 minutes.

SNAP BEANS

Select only young, tender snap beans. Wash thoroughly. Remove stem and blossom ends or any "strings." Cut beans into lengths of ½ or 1 inch. Precook 5 minutes in boiling water to cover. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling liquid in which beans have been cooked. Adjust lids. Process at 10 lbs. Pints - 20 minutes; quarts - 25 minutes.

BEETS

Select young, tender, sweet beets. Trim off tops, leaving 1 inch of stem. Leave stem and tap root to prevent bleeding and loss of color. Wash thoroughly. Cover with boiling water and cook 15 to 25 minutes, or until skins slip off easily. Remove skins, stems, and roots. Small beets may be left whole, while larger ones are best sliced. Pack in clean, hot containers. Add 1 teaspoon salt to each quart. Cover beets with boiling water. Adjust lids. Process at 10 lbs. Pints - 25 minutes; quarts - 45 minutes.

CARROTS

Select young, tender carrots. Sort according to size and color. Wash thoroughly; scrape. Carrots may be left whole, sliced or cubed. Cover with boiling water and bring to boil. Pack hot in clean hot containers. (Alternate top and stem ends of whole carrots in jar for firm pack.) Add 1 teaspoon salt to each quart. Cover with boiling liquid in which carrots were cooked. Adjust lids. Process at 10 lbs. Pints - 25 minutes; quarts - 30 minutes.

CORN, Whole Kernel

Young, tender corn, canned immediately after picking, makes the best canned product. Corn that has been standing overnight after picking is not recommended for canning. Husk and remove silk from corn. Cut corn from cob, but do not scrape cob. To each quart of corn, add 1 pint boiling water and ½ teaspoon salt. Heat to boiling. Pack hot corn loosely in containers. Cover with hot cooking liquid. Adjust lids. Process at 10 lbs. Pints - 55 minutes; quarts - 85 minutes.

CORN, Cream Style

Select sweet, tender, freshly picked corn. Husk and remove silk. Wash thoroughly. Cut corn from cob at about center of kernel. Scrape cobs to obtain all liquid but no part of cob. To each quart of corn add 1 pint boiling water. Heat to boiling. Pack hot in clean, hot containers. Add ½ teaspoon salt to each pint. Adjust lids. Process at 10 lbs. Pints - 85 minutes.

GREENS

Select young, tender, freshly picked greens. Sort thoroughly, discarding wilted, tougher leaves, stems and roots. Wash well several times under running water or in several pans of cold water. Place about 2½ pounds of greens in a cheese cloth bag and steam about 8 to 10 minutes or until well wilted. Pack loosely in clean, hot containers. Add 1 teaspoon salt to each quart. Add boiling liquid (precooking water if not bitter, or fresh boiling water) to cover. Adjust lids. Process at 10 lbs. Pints - 45 minutes; quarts - 70 minutes.

MUSHROOMS

Trim stems and discolored parts of mushrooms. Soak in cold water for 10 minutes to remove adhering soil. Wash in clean water. Leave small mushrooms whole; cut larger ones in halves or quarters. Steam 4 minutes or heat gently for 15 minutes without added liquid in a covered saucepan. Pack hot in clean hot containers. Add ½ teaspoon salt to each pint. For better color, add ⅛ teaspoon ascorbic acid to pints; 1/16 teaspoon to half pints. Cover with boiling water. Adjust lids. Process at 10 lbs. Half pints - 30 minutes; pints - 30 minutes.

OKRA

Select young, tender pods. Wash well and remove stem, without cutting into pods if okra is to be canned whole. If desired, okra may be sliced. Cover with boiling water and precook 1 to 3 minutes. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling water. Adjust lids. Process at 10 lbs. Pints - 25 minutes; quarts - 40 minutes.

OKRA AND TOMATOES

Select young, tender okra pods. Wash, remove stem and slice crosswise. Wash tomatoes and core. Cut into sections. Heat okra and tomatoes to boiling point. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Adjust lids. Process at 10 lbs. Pints - 25 minutes; quarts - 40 minutes.

PARSNIPS

Wash parsnips thoroughly. Scrape or pare to remove skins. Small, young parsnips maye be canned whole; if larger, they should be sliced or cubed. Cover with boiling water and bring to a boil. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with hot liquid, in which they were precooked. Adjust lids. Process at 10 lbs. Pints - 20 minutes; quarts - 25 minutes.

PEAS, Green

Select young, tender, green peas, freshly picked. Wash pods and shell. Wash peas. Cover with boiling water and bring to a boil. Pack loosely into clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling water in which they were cooked. Adjust lids. Process at 10 lbs. Pints - 40 minutes; quarts - 40 minutes.

PEAS, Black-eye

Shell and wash peas. Cover with boiling water and bring to a rolling boil. Pack loosely into clean, hot containers. Add 1 teaspoon salt to each quart. Cover with hot water in which they were precooked. Adjust lids. Process at 10 lbs. Pints - 35 minutes; quarts - 40 minutes.

PEPPER, Pimiento

Select ripe, unblemished pimientos. Place peppers into hot cooking oil for 2 or 3 minutes, or into boiling water for 12 to 15 minutes, or in a moderately hot oven (450°F.) 6 to 8 minutes. Remove skins, stems and seeds. Flatten peppers and pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. No additional liquid is needed. Adjust lids. Process at 10 lbs. Pints - 10 minutes; quarts - 15 minutes.

POTATOES, New - Whole

Use potatoes 1 to 2 inches in diameter. Wash, scrape and rinse freshly dug, new potatoes. Cover with boiling water and boil 10 minutes. Pack hot; add 1 teaspoon salt to each quart and cover with boiling water. Adjust lids. Process at 10 lbs. Pints - 30 minutes; quarts - 40 minutes.

PUMPKIN, Strained

Select firm, ripe pumpkin. Wash, peel and remove seeds. Cut into pieces suitable for cooking. Bake, steam or cook in boiling water until tender. Strain or mash to obtain right consistency. Pack hot in clean, hot containers. Adjust lids. Process at 10 lbs. Pints - 60 minutes; quarts - 80 minutes.

SQUASH, Summer

Select young, tender squash. Wash well especially around stem ends. (Summer Squash is not peeled.) Cut into inch cubes. Add a small quantity boiling water and bring to boiling point. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling liquid, in which squash was precooked. Adjust lids. Process at 10 lbs. Pints - 30 minutes; quarts - 40 minutes.

SQUASH, Winter

Select firm, ripe squash. Wash, peel and remove seeds. Cut squash into 1 inch cubes. Add enough boiling water to cover. Bring to a boil. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling water or water in which squash has been precooked. To can mashed, follow directions for Pumpkin. Adjust lids. Process at 10 lbs. Pints - 55 minutes; quarts - 90 minutes.

SUCCOTASH

Remove husks and silk from young, freshly-picked corn. Precook 5 minutes in water to cover. Cut kernels from cob. Combine with ½ to equal amount of washed green string or lima beans, which have been precooked 5 minutes in water to cover. Reheat to boiling. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with water in which vegetables have been precooked. Adjust lids. Process at 10 lbs. Pints - 55 minutes; quarts - 85 minutes.

SWEET POTATOES, Wet Pack

Wash sweet potatoes. Sort for size. Boil or steam just until skins slip easily. Skin and cut in pieces. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with boiling water. Adjust lids. Process at 10 lbs. Pints - 55 minutes; quarts - 90 minutes.

VEGETABLE MIXTURE

Select two or more of the following vegetables and prepare them according to directions for each in above recipe: tomato pulp, corn, lima beans, peas, okra, carrots, turnips, celery and onions. Cut vegetables in small and uniform pieces, usually cubes. If tomatoes are used, no water need be added. Otherwise heat vegetables in a small amount of hot water just to boiling point. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with hot liquid. Adjust lids. Process in Cooker, using processing time for vegetable that requires longest period, according to table on page 31.

Processing Time Table

VEGETABLES — HOT PACK METHOD

EXHAUSTING TIME — 7 to 10 MINUTES

	Amount of Pressure Pounds	No. 2 Tin Cans Minutes	No. 2½ or No. 3 Tin Cans Minutes	Glass Jars (Pints) Minutes	Glass Jars (Quarts) Minutes
Asparagus	10	20	20	25	40
Beans, Baked	10	95	115	80	100
Beans, Lima	10	40	40	40	50
Beans, Snap or Wax	10	25	30	20	25
Beets, Baby, Whole or Sliced	10	30	30	25	45
Carrots, Young	10	20	25	25	30
Corn, Whole Kernel	10	60	60	55	85
Corn, Cream Style	10	105	--	85	--
Greens, All Kinds	10	60	75	45	70
Hominy	10	60	70	60	70
Kohlrabi	10	30	35	35	40
Mushrooms	10	30	--	30	--
Okra	10	25	35	25	40
Okra and Tomatoes	10	25	35	25	40
Parsnips	10	20	25	20	25
Peas, Green	10	30	30	40	40
Peas, Black-eye	10	30	35	35	40
Peppers, Pimiento	10	10	10	10	15
Potatoes, New - Whole	10	35	40	30	40
Pumpkin, Strained	10	75	90	60	80
Rutabagas, Sliced or Diced	10	30	30	35	35
Squash, Summer, Crookneck and Zuczhini	10	20	20	30	40
Squash, Winter Hubbard, Cubed	10	50	75	55	90
Succotash	10	60	60	55	85
Sweet Potatoes, Wet Pack	10	70	90	55	90
Turnips, Cubed	10	20	25	20	25

Use 2 quarts water in Cooker for all processing.

Time and pressure given in this chart apply only to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

VEGETABLES — COLD PACK METHOD

The United States Department of Agriculture, after research and experimentation, has issued a bulletin which supplements previous canning information. The Department suggests that certain vegetables may be canned by the cold pack method. To date, only eight vegetables are suggested. **It is not recommended that any vegetable other than those given below may be canned by the cold pack method.** Following are the United States Department of Agriculture's directions for canning those vegetables by the cold pack method:

ASPARAGUS

Wash asparagus thoroughly and drain. Remove tough end and scales. Rinse. Cut into jar length or short pieces. Pack into clean containers. Add one teaspoon salt to each quart. Cover with fresh boiling water. Adjust lids. Process at 10 lbs. Pints - 25 minutes; quarts - 40 minutes.

BEANS, Fresh Lima

Can only young tender beans. Shell and wash. Pack raw beans into clean jars. For the small bean type, fill to 1 inch of top of jar for pints and 1½ inches for quarts; for large beans of the "baby potato" type, fill to ¾ inch of top for pints and 1¼ inches for quarts. Beans should be leveled before measuring head space, but should not be pressed or shaken down. Add ½ teaspoon salt to pints, 1 teaspoon to quarts. Fill jar to top with boiling water. Adjust jar lids. Process at 10 lbs. Pints - 40 minutes; quarts - 50 minutes.

BEANS, Snap

Wash beans. Trim ends; cut into 1 inch pieces. **In glass jars:** Pack raw beans tightly to ½ inch of top. Cover with boiling water, leaving ½ inch space at top of jar. Add ½ teaspoon salt to pints; 1 teaspoon to quarts. Adjust jar lids. Process at 10 lbs. Pints - 20 minutes; quarts - 25 minutes.

CARROTS

Wash and scrape carrots. Slice or dice. Pack raw carrots tightly into clean jars to 1 inch of top of jar. Add ½ teaspoon salt to pints and 1 teaspoon to quarts. Fill jar to top with boiling water. Do not work out bubbles because that would loosen pack and carrots would be more likely to float. Adjust jar lids. Process at 10 lbs. Pints - 25 minutes; quarts - 30 minutes.

CORN, WHOLE KERNEL

Select young, tender corn and can immediately after picking. Remove husks and silk. Cut corn from cob but do not scrape. Pack loosely into clean containers. Add ½ teaspoon salt to each pint. Cover with fresh boiling water. Adjust lids. Process at 10 lbs. Pints - 55 minutes; quarts - 85 minutes.

do Not use Wide Mouth Jar's

PEAS, Black-eye

Shell and wash black-eye peas. **In glass jars:** Pack raw peas to 1½ inch of top of pint jars and 2 inches of top of quart jars; do not shake or press peas down. Cover with boiling water, leaving ½ inch space at top of jars. Add ½ teaspoon salt to pints; 1 teaspoon to quarts. Adjust jar lids. Process at 10 lbs. Pints - 35 minutes; quarts - 40 minutes.

PEAS, GREEN

Wash, drain and shell young, tender peas. Rinse. Pack loosely into clean containers. Add 1 teaspoon salt to each quart. Cover with fresh boiling water. Adjust lids. Process at 10 lbs. Pints - 40 minutes; quarts - 40 minutes.

SQUASH, Summer

Wash but do not peel. Trim ends. Cut squash into ½ inch slices; halve or quarter to make pieces of uniform size. Pack raw squash tightly into clean jars to 1 inch of top of jar. Add ½ teaspoon salt to pints, 1 teaspoon to quarts. Fill jar to top with boiling water. Adjust jar lids. Process at 10 lbs. Pints - 25 minutes; quarts - 30 minutes.

Processing Time Table

VEGETABLES — COLD PACK

EXHAUSTING TIME — 7 to 10 MINUTES

	Amount of Pressure Pounds	Glass Jars (Pints) Minutes	Glass Jars (Quarts) Minutes
Asparagus	10	25	40
Beans, Fresh Lima	10	40	50
Beans, Snap	10	20	25
Carrots	10	25	30
Corn, Whole Kernel	10	55	85
Peas, Black-eye	10	35	40
Peas, Green	10	40	40
Squash, Summer	10	25	30

Use 2 quarts water in Cooker for all processing

Time and pressure given in this chart apply only to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

MEATS

When canning in tin cans, see specific directions on page 19.

Many farm families are able to can considerable quantities of meat at butchering time. Those who are near enough to the source of supply are able to buy meat at reasonable prices during seasons of plenty, and are able to can for seasons when supply is scarce or prices are high. Only meat from healthy animals should be used.

All meats should be handled carefully to avoid contamination from the time of slaughtering until the products are canned. Animals should be correctly slaughtered, canned promptly or kept under refrigeration until processed. All body heat should be out of the animal carcass before meat is canned.

If meat must be held longer, it should be frozen and kept at temperatures of 10°F. or lower until canning time. Then cut or saw the frozen meat into strips 1 or 2 inches thick. Or, if necessary to defrost, thaw the meat at temperatures of 45°F. or lower. Keep meat as cool as possible during preparation for canning, handle rapidly, and process as soon as packed.

Most meats need only be wiped with a damp cloth. Use lean meat for canning; remove most of the fat. Cut off gristle and remove large bones.

Cut into pieces convenient for canning, not more than 2 to 3 inches in diameter. Steaks can be cut about 1 inch thick. Other meats may be cut into cubes.

Precook meat until red color changes to light brown. It can be either boiled, fried or roasted.

To precook by boiling, make a concentrated broth from bones and meat scraps. Heat to boiling and precook meat in broth.

Meat should not be browned with flour nor should flour be used in the gravy of meat used for canning. It is desirable to use a little gravy or broth with hot packed meats. Make the broth from bones and scraps not used for canning. Use 1 teaspoon salt to each quart of meat. More may be used to suit individual taste or may be added at serving time.

Pack hot meat into containers, leaving 1 INCH HEAD SPACE at the top in glass Mason jars. Fill tin cans to top. Do not pack food too tightly.

An alternate to the above hot pack method is raw packing and precooking in the container. Place 1 teaspoon salt into clean empty quart containers. Pack containers with raw, lean meat leaving 1 inch head space in Mason jars, pack tin cans to top. Set open containers in basket in Canner or large kettle with warm water about 2 inches below rim of containers. Cover Canner or kettle and heat at slow boil until meat is steaming hot and medium done — about 50 minutes in tin cans; 75 minutes in glass jars. Press meat down in tin cans ½ inch below rims. Add boiling broth or water to fill to top. Remove containers and adjust lids. Process at once according to time table on page 38.

Processing times given in individual recipes are for pint and quart Mason jars. If canning in tin cans, refer to time table on page 38.

CHILI CON CARNE

10 lbs. ground beef
Water to cover
2 tbsp. chili powder
1 cup chopped onion
3 tbsp. fat
7 tsp. salt
Small clove garlic

Simmer beef in water to cover for 15 minutes. Add all other ingredients and mix well. Heat thoroughly. Pack hot in clean, hot containers. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

Kidney beans are omitted in the above recipe because they are usually dried or canned and can be easily stored in that state. Add cooked beans before serving.

CHOPPED MEAT

Add 1 teaspoon salt to each pound of meat. Mix well. Bake or fry meat until brown. Pack hot in clean, hot containers. Cover with pan gravy or broth. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

CORNED BEEF

Remove beef from brine. Soak 2 hours in fresh water, changing water once. Cover corned beef with cold water. Slowly bring to a boil. Simmer slowly 1 hour. Remove meat, cut into smaller pieces, and pack hot in clean, hot containers. Reheat liquid. Bay leaves and cloves may be added to liquid if desired. Cover meat with hot liquid. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

GOULASH

6 lbs. lean meat, cubed
6 tbsp. fat
6 onions, chopped
2 carrots, chopped
½ cup chopped celery
6 cups tomato juice
1 tbsp. paprika
½ tsp. pepper
¼ tsp. thyme
Salt

Brown cubed meat in hot fat. Add onions and simmer until a golden color. Add remaining ingredients and cook thoroughly for 10 minutes. Pack hot in clean, hot containers to within 1 inch of top. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

SPARERIBS

Cut spareribs into pieces that will fit easily in containers. Use wide mouth Mason jars. Brown ribs in hot fat, thoroughly heating each piece. Pack hot in clean hot containers, to within 1 inch of top. Cover with hot liquid; broth, barbecue sauce or stock. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

BEEF, PORK, LAMB and VEAL

Remove bones and gristle and most of the fat from meat. Cut meat into convenient sizes for packing. Precook in oven or boil until red or pink in meat disappears. If meat is roasted, add water to bones and let simmer for liquid. Add 1 teaspoon salt to each quart. Pack hot meat in clean, hot containers. Cover with pan gravy, broth or meat juice. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

HEART

Remove membrane. Simmer slowly in water for 45 minutes. Slice as desired. Pack hot in clean, hot containers. Add 1 teaspoon salt for each quart. Add boiling meat broth to within 1 inch from top. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

LIVER (Beef, Calf, Lamb or Pork)

Remove tough membrane. Slice or cube. Simmer 5 minutes in boiling water to cover or brown liver in hot fat. Pack hot in clean, hot containers. Add 1 teaspoon salt to each quart. Cover with cooking liquid. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

MEAT BALLS

6 lbs. chopped lean meat
½ lb. chopped fat meat
1 large onion, chopped
1 tbsp. salt
1 tsp. pepper
1 cup cracker crumbs
Water to cover

Mix all ingredients well and shape into balls of uniform size. Precook in boiling water 5 minutes. Pack hot in clean, hot containers. Cover with liquid in which meat balls were precooked. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

STEAKS OR CHOPS
(Beef, Lamb, Pork, Veal, Mutton and Venison)

Pork shoulder, ham or loin, beef loin, leg and rump, veal, mutton and lamb legs or loin may be cut into steaks or chops. If steaks and chops are cut thicker, they will be juicier than thinner cuts. Cut into pieces that will roll and fit into containers rather firmly. Steak may be precooked by arranging on large flat pans and browned in hot oven at 475°F., or by searing slowly to a golden brown. Pack hot in clean, hot containers. Add hot pan gravy to fill containers to within 1 inch from top. Add 1 teaspoon salt to each quart. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

BOILED TONGUE

Place cleaned tongue in Cooker with enough boiling water to cover. Exhaust Cooker and cook 20 minutes at 10 pounds pressure. Release steam slowly until indicator returns to zero. Cool tongue and remove skin. Slice as desired. Pack in clean, hot jars. Add 1 teaspoon salt to each quart. Cover with boiling water in which tongue was cooked. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

ROAST MEATS (Beef, Lamb, Pork, Veal, Mutton and Venison)

Pork loins, shoulders and hams, beef loins, rumps, rounds, lamb, mutton and veal loins are especially adapted to roasting. Cut roasts into convenient pieces which will fit into jar. Preferably precook in hot oven until a light brown. Pack hot in clean, hot containers. Add salt. Cover with hot meat broth made by adding water to drippings. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

STEW (Beef, Veal, Mutton, Lamb or Venison)

Cut meat into uniform size cubes. (If venison is used, soak for two hours in salted water to remove strong flavor.) Brown quickly in small amount of fat. Cover with boiling water and cook 5 minutes. Add seasonings.

OR: Cube raw meat and cover with boiling water. Precook 8 to 10 minutes. Pack hot meat in clean, hot containers. Cover with hot cooking liquid. Season. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

JELLIED PIGS' FEET

Scald and scrape pigs' feet. Clean thoroughly. Sprinkle with salt and let stand 3 to 5 hours. Wash thoroughly and place in Cooker with enough water to cover. Exhaust Cooker. Cook 30 minutes at 15 pounds pressure. Release steam slowly until indicator returns to zero. Remove large bones. Strain liquid, and add to it meat, salt, pepper and a small quantity of whole mixed spices. Reheat to boiling point and pack hot in clean, hot containers. Cover with boiling liquid. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

HEAD CHEESE

1 hog's head
6 lbs. chopped meat
Water to cover
3 tbsp. salt
4 tsp. pepper
1 clove garlic
1 tbsp. cloves
1 tbsp. red pepper
2½ tsp. allspice
1 quart broth in which meat was precooked

Trim ears, snout, eyes, brains, all skin and all fat off hog's head. Cut head in four pieces. Soak in salted water (½ cup salt to gallon water) for 3 to 5 hours. Drain and wash in fresh water. Tongues, hearts and other meat trimmings may be used in head cheese also. Place head with meat in Cooker and cover with water. Exhaust Cooker. Cook 20 minutes at 15 pounds pressure. Release steam slowly or allow indicator to return to zero. Remove meat from bones and chop fine. Strain liquid. Add salt, pepper, other seasonings and broth. Mix well. Simmer for 10 minutes. Pack hot in clean pint jars or No. 2 cans. Adjust lids. Process at 10 lbs. Pints - 75 minutes; quarts - 90 minutes.

Processing Time Table

MEATS

EXHAUSTING TIME — 7 to 10 MINUTES

	Amount of Pressure Pounds	No. 2 Tin Cans Minutes	No. 2½ or No. 3 Tin Cans Minutes	Glass Jars (Pints) Minutes	Glass Jars (Quarts) Minutes
Beef, Corned	10	65	90	75	90
Beef, Pork, Lamb or Veal	10	65	90	75	90
Beef Rolls	10	65	90	75	90
Chili Con Carne	10	65	90	75	90
Chopped Meat	10	65	90	75	90
Goulash	10	65	90	75	90
Head Cheese	10	65	--	75	--
Heart	10	65	90	75	90
Hot Tamales	10	65	90	75	90
Liver (Beef, Calf, Lamb or Pork) Plain or Fried	10	65	90	75	90
Meat Balls	10	65	90	75	90
Meat Loaf	10	65	90	75	90
Pigs' Feet, Jellied	10	65	90	75	90
Pork Tenderloin	10	65	90	75	90
Roast Meat (Beef, Lamb, Pork, Veal or Mutton)	10	65	90	75	90
Sausage, Bologna	10	65	90	75	90
Sausage, Pork	10	65	90	75	90
Spareribs	10	65	90	75	90
Steaks or Chops	10	65	90	75	90
Stew (Beef, Veal, Mutton, Lamb or Venison)	10	65	90	75	90
Tongue, Boiled	10	65	90	75	90
Tongue, Spiced	10	65	90	75	90

Use 2 quarts water in Cooker for all processing.

Time and pressure given in this chart apply to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

CHICKEN

In early autumn chickens are the lowest in price and in their best flesh condition. Spring roosters and hens have finer quality flesh. It is the best time to cull poor layers. Two-year old hens produce the best canned chicken. Time is saved if several chickens are canned at once. Use care in packing and accuracy in processing.

If bones are to be removed, lift out breast, remove skin and flesh in two large pieces.

Directions given for **chicken also** apply to other poultry, domestic rabbit and small game. Cut chicken into convenient pieces for packing and precook until medium done or until pieces, when cut, show almost no pink color at the bone. Precook by boiling in water or in a concentrated broth for more flavor. Make broth from bones and bony pieces, neck, back, and wing tips. Pack hot meat into clean hot containers leaving 1 inch headspace in glass Mason jars and ½ inch in tin cans. Do not pack food too tightly. Add 1 teaspoon salt to each quart. Cover with precooking liquid leaving 1 inch headspace in glass Mason jars; fill tin cans to top.

An alternate to the above hot pack method is raw packing and precooking in the container. Young chicken especially should be packed raw to retain better shape. Place 1 teaspoon salt into clean empty quart containers. Pack containers tightly with raw chicken leaving 1 inch headspace in Mason jars; pack tin cans to top. Set open containers in basket in canner or large kettle with warm water about 2 inches below rim of containers. Cover canner or kettle and heat at slow boil until meat is steaming hot and medium done, about 75 minutes in Mason jars; 50 minutes in tin cans. Remove containers and adjust lids. Process at once according to time table for raw pack method.

PROCESSING TIME TABLE

CHICKEN AND GAME

EXHAUSTING TIME — 7 to 10 MINUTES

	Amount of Pressure Pounds	No. 2 Tin Cans Minutes	No. 2½ or No. 3 Tin Cans Minutes	Glass Jars (Pints) Minutes	Glass Jars (Quarts) Minutes
Chicken—					
Hot Pack, With Bones	10	55	75	65	75
Hot Pack, Without Bones	10	65	90	75	90
Raw Pack, With Bones	10	55	75	65	75
Raw Pack, Without Bones	10	65	90	75	90
Wild Duck, Quail and Other Game Birds	10	65	90	75	90
Rabbit or Squirrel	10	65	90	75	90
Venison	10	65	90	75	90

Use 2 quarts water in Cooker for all processing.

Time and pressure given in this chart apply only to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

SOUP

Soup or soup stock is quickly and easily canned with maximum safe keeping qualities. Soup should always be cooked ready for serving, then poured hot into clean hot containers, allowing ½ inch head space. Generally, vegetable soups are more satisfactory if the stock and vegetable mixture is canned separately and combined at the time of serving. Add desired cereals, rice, noodles, spaghetti, and cook in stock before serving.

BEEF SOUP STOCK

Make a fairly concentrated stock by covering bones and scraps of beef or other meat with slightly salted, cold water. Cook 15 to 20 minutes at 15 pounds pressure or simmer until meat is tender. Do not fill Cooker over ⅔ full. Let indicator return to zero. Skin off fat, remove all pieces of bone. Retain bits of meat and sediment. Pour hot stock into clean, hot containers. Adjust lids. Process at 10 lbs. Pints - 20 minutes; quarts - 25 minutes.

CHICKEN SOUP STOCK

Make a concentrated stock by covering bony pieces of chicken with lightly salted, cold water. Cook 10 to 15 minutes at 15 lbs. pressure or simmer until meat is tender. Do not fill Cooker over ⅔ full. Let indicator return to zero. Skim off fat, remove all pieces of bone, but do not strain out meat and sediment. Pour hot stock into clean, hot containers. Adjust lids. Process at 10 lbs. Pints - 20 minutes; quarts - 25 minutes.

SPLIT PEA SOUP

Prepare according to directions in recipe book. Pour hot soup into clean, hot containers. Adjust lids. Process at 10 lbs. Pints - 60 minutes; quarts - 90 minutes.

VEGETABLE PUREE

Asparagus, carrot, green pea, lima bean, spinach, etc.

Canned purees are particularly convenient for infant feeding and for preparing quick cream soups and souffles. To make puree: Select fresh vegetables, wash and prepare for cooking. Cook until tender in small amount of water. Put through a food mill or press through a fine sieve. Add boiling water, if necessary, to make the puree about the consistency of thick cream. Add 1 teaspoon salt to each quart unless intended for infant feeding. Reheat at once to simmering. Pour into clean, hot containers. Adjust lids. Process at 10 lbs. For the length of time required see page 32.

PROCESSING TIME TABLE
SOUP
EXHAUSTING TIME — 7 to 10 MINUTES

	Amount of Pressure Pounds	No. 2 Tin Cans Minutes	No. 2½ or No. 3 Tin Cans Minutes	Glass Jars (Pints) Minutes	Glass Jars (Quarts) Minutes
Beef Soup Stock	10	20	25	20	25
Chicken Soup Stock	10	20	25	20	25
Scotch Broth	10	35	50	40	50
Split Pea Soup	10	50	90	60	90
Tomato Soup	5	10	15	10	15

Use 2 quarts water in Cooker for all processing.

Time and pressure given in this chart apply to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

FISH AND SEA FOOD

The home canning of fish should be considered only when a supply of suitable raw material may be obtained at low cost. Where fish is purchased for canning at average wholesale prices, the cost of the home canned fish is much higher than that of the commercially canned product. Only fresh fish should be canned and these should be bled and thoroughly cleaned of all viscera and membranes when caught, or as soon thereafter as practicable. Do not attempt to "save" a lot of fish from spoilage by canning some time after catching, as the canned product will be of inferior quality. Canning should be restricted to proven varieties where it is definitely known that a product of good quality may be obtained.

Since all fish are not canned the same way, it is advisable to write the United States Department of Interior, Fish and Wildlife Service for their Conservation Bulletin No. 28, "Home Canning of Fishery Products," for detailed information on processing fish.

CLAMS, Whole

Scrub clams and soak over night in 10% brine. Sprinkle few tablespoons cornmeal in brine, if desired. Open clams and wash in salted water using 1 tablespoon salt for each quart of water. Cover clam meats with boiling water to which has been added ⅛ teaspoon citric acid crystals to each quart of water. Allow to stand 1 minute. Pack loosely into clean, hot containers, leaving 1 inch head space. Cover with hot concentrated clam juice to ¼ inch from top. Adjust lids. Process at 10 lbs. Pints - 70 minutes.

CRAB

Place crabs in ice water 1 to 2 minutes. Separate claws from body, remove waste portions and wash thoroughly. Place bodies and claws in canning basket with 2 cups water in Cooker, and cook 10 minutes at 8 lbs. pressure. Remove meat from shells. Wash thoroughly in salted water using ½ cup salt to 2 quarts water. Drain and dip in solution of ½ cup vinegar to 2 quarts water. Drain and remove all excess moisture. Pack loosely into clean, hot containers leaving 1 inch head space. Add ½ teaspoon salt and cover with boiling water. Adjust lids. Process at 5 lbs. ½ pints - 90 minutes.

FISH - General Method

Mackerel, Herring, Lake Trout, Whitefish, Mullet. Clean fish thoroughly, fillet large fish or leave small pan fish whole. Cut into container length pieces and soak in brine, 1 cup salt to 1 gallon water, for 60 minutes. Drain. Pack, with skin side of fish to the outside of the container. Leave ½ inch head space. Then submerge open container in a kettle containing hot brine, ½ cup salt to 1 gallon of water, and boil 20 minutes. Remove containers, whether cans or jars, invert and drain thoroughly. Add a bay leaf and a slice of onion to each jar if desired. Adjust lids. Process at 10 lbs. Pints - 100 minutes.

LOBSTER

Plunge live lobsters in boiling, salted water, 2 tablespoons salt to 1 gallon water. Cook 15 to 30 minutes depending on size. Remove and dip in cold lightly salted water. Remove meat and wash quickly. Drain. Dip meat in solution of ½ cup vinegar to 2 quarts water. Drain and remove all excess moisture. Pack in clean, hot containers, fill containers to within ½ inch of top with hot brine, 1½ tablespoons salt to 2 quarts water. Adjust lids. Process at 10 lbs. ½ pints - 70 minutes.

OYSTERS

Wash oysters thoroughly in a weak brine solution. Place in canning basket with 2 cups water in Cooker and cook 5 minutes at 10 lbs. pressure. Shuck oysters and place in a weak brine to prevent discoloration. Wash meats carefully. Drain and pack loosely into clean, hot containers leaving 1 inch head space. Add ½ teaspoon salt. Cover with boiling water. Adjust lids. Process at 10 lbs. Pints - 50 minutes.

SALMON

Clean and wash fish thoroughly. Cut into container length pieces, leaving in backbone. Soak in brine, ½ lb. salt to 1 gallon water, for 60 minutes. Drain well. Pack solidly into containers leaving ½ inch head space. Adjust lids. Process at 10 lbs. Pints - 100 minutes.

SHRIMP - Wet Pack

Shrimp should be canned when absolutely fresh as they deteriorate quickly. Wash shrimp thoroughly, peel and wash again. Cover with cold brine, ½ cup salt to 1 quart water, for 20 to 30 minutes depending on size. Drain. Place in wire basket and cook 6 to 8 minutes in boiling brine, proportions as above. Dry and cool shrimp. Pack loosely into clean, hot containers leaving 1 inch head space. Fill containers with boiling brine, 1½ tablespoons salt to 1 quart water. Adjust lids. Process at 10 lbs. Pints - 35 minutes.

TUNA - Style Pack

Albacore, Tuna and Mackerel. Clean fish and wash thoroughly. Place in pans with perforated bottoms, stack and cook 2 hours at 10 lbs. pressure. Cool fish 4 to 8 hours. Remove skin and back bone. Cut meat in pieces ⅜ inch shorter than containers and pack solidly. Add ½ teaspoon salt and fill containers with hot salad oil. Adjust lids. Process at 15 lbs. ½ pints only - 80 minutes.

PROCESSING TIME TABLE

FISH AND SEA FOOD

EXHAUSTING TIME — 7 to 10 MINUTES

	Amount of Pressure Pounds	No. 2 Tin Cans Minutes	Glass Pint Jars Minutes
Clams, Whole	10	60	70
Crab	5	80 (No. 1 cans only)	90 (½ pints only)
Fish - General	10	90	100
Lobster	10	60 (No. 1 cans only)	70 (½ pints only)
Oysters	10	42	50
Salmon	10	90	100
Shrimp - Wet Pack	10	30	35
Tuna	15	70 (Half flat cans only)	80 (½ pints only)

Use 2 quarts water in Cooker for all processing.

Time and pressure given in this chart apply only to altitudes 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase processing time.

Questions and Answers

Q. If liquid is lost from a jar during processing, should the jar be opened when processing is complete to add more liquid?

A. No, this should never be done. The loss of liquid will not interfere with keeping qualities and to open the jar at the end of the processing will result in later spoilage of the food.

Q. Does soil affect the keeping qualities of food?

A. Since most bacteria found on products come from the soil, and during some seasons there are occasional outbreaks where fields are infested with an unusual type or a larger number of bacteria than ordinarily exists, it is inevitable that more bacteria would be present on the product than in normal seasons and would make the product harder to sterilize.

Q. What causes liquid to boil out of jars during processing?

A. (1) Packing jars too solidly with food when processing.
(2) Filling jars too full. Allow ½ inch head space for all fruits and vegetables except shelled beans, corn, peas, and sweet potatoes, which require a 1 inch head space. Meat also requires a 1 inch head space.
(3) Too high a temperature or too high pressure.
(4) Variation or sudden lowering of temperature in using the Pressure Cooker. When processing food in glass jars, pressure control weight should not be taken off the vent pipe and cover removed until indicator returns to zero of its own accord.
(5) Failure to adjust lids according to manufacturer's directions. See page 18.

Q. When should one start to count time of processing?

A. From minute the indicator on pressure gauge reaches required pressure.

Q. Should chemicals or preserving powders be used in canning?

A. Artificial preservatives should not be used.

Q. What products should be packed loosely and what products should be packed firmly? Why?

A. Such products as corn, peas, lima beans, greens and meats should be packed loosely because heat penetration in these products is difficult. Fruits, berries and tomatoes should be firmly and solidly packed because of shrinkage which takes place during processing and their texture does not retard heat penetration. A solid but not a tight pack should be made of all other products.

Q. If a jar does not seal and must be re-processed does it have to be processed the full length of time?

A. Just what shall be done with the unsealed jar will depend upon the cause. If cap or lid is at fault and product is a fruit, simply replace cap or lid with new one and process until product reaches boiling point. If it is a vegetable or meat, it should be reprocessed approximately one-fourth to one-third the regular processing period. If jar is defective, any product would require repacking. It is doubtful if this will be profitable since the reprocessing would need to be of approximately the same length as a normal period for that particular food. Few foods will stand up under such treatment.

Q. Should bubbles appear in the jar after it is taken out of Cooker to cool?

A. Bubbles often appear in the jar after it is removed from Cooker because food is still boiling in jar. Ordinarily bubbles do not appear once the product has been allowed to thoroughly cool, unless the jar is shaken. A very tight pack of food may show air bubbles.

Q. Why is a shorter period of processing used when canning in a Pressure Cooker?

A. Because a higher degree of temperature is obtained under pressure.

Q. Does the black deposit sometimes found on the underside of the lid indicate spoilage or make foods unwholesome?

A. No, if the jar is sealed, and if this deposit is caused by tannins in the food or hydrogen sulphide which is liberated from the food by the heat of processing. This does not make the food unwholesome.

Q. What causes peaches and pears to turn dark brown after they have been canned? How can this be prevented?

A. (1) Discoloration of fruits in the top of the jar is often due to enzyme activity or oxidation which means that the heat of cooking or processing was not applied long enough, or the temperature used was not high enough to render the enzyme inactive or expel the air from the jar. The remedy is to exhaust jars thoroughly. Increase processing time one or two minutes.
(2) Fruit exposed to air too long after being peeled and before being canned. This can be overcome by dropping peeled fruit into slightly salted or plain water until ready to put in jars.
Pears canned by cold pack method will retain original color better if a tablespoon of lemon juice is added to each quart jar.
(3) Fruits canned without sugar, after being opened and exposed to air, sometimes turn brown just as fresh fruit does when exposed to air.

Q. How may strawberries be canned to prevent floating and to retain their original color?

A. By precooking in syrup, then allowing the berries to stand in the syrup overnight before packing in jars and processing. After canning store jars in a dark place to retain color of berries.

Q. Why do berries, other fruits and tomatoes float from bottom of jar?

A. This may be caused by using foods that are overripe, processing too long, using too high temperature for processing, using too heavy syrup or packing too loosely. Fruits and tomatoes shrink when heated and should be packed firmly.

Q. Why should fruits be graded according to size and ripeness?

A. (1) Fruits should be uniform in size and firmness so that heat penetration will be equal, which would not be the case if large and small fruits were all canned in one jar.
(2) Partly ripe and fully ripe fruits should never be canned in the same jar. All partly ripe fruits should be canned together and all fully ripe fruits should be canned together.
(3) Overripe fruits should never be used for canning unless used in jams or butters.

Q. How high should fruit be packed in jar for hot or cold pack canning?
A. Jars should be filled within ½ inch of top with fruit and 1½ inches of top with syrup when fruit is packed cold, or ½ inch of top with syrup when fruit is packed hot.

Q. What causes jar breakage during processing?
A. (1) Packing jars too solidly or overfilling.
(2) Weakened, cracked jars.
(3) Jars touching bottom of Canner.
(4) Lids improperly tightened.
(5) Use of jars other than Mason jars.

Q. What causes corn to turn brown during processing?
A. This most often occurs when too high a temperature is used. The high temperature causes a caramelization of the sugar in the corn. It may also be caused by some chemical, such as iron, in the water used in canning.

Q. Why do beets turn white?
A. The loss of color from beets is usually due to the variety of beets used or to canning beets that are too old or that have been gathered too long. Some varieties are more susceptible to loss of color than others. If possible get the very dark red variety and make sure they are young, tender and as freshly gathered as possible. Precook beets with 2 inches of the stems and all of the root left on, as this helps to retain the juices.

Q. Should salt be used to season jars of vegetables before canning or added when served?
A. Salt may be added at the time of canning or omitted entirely and if desired added when served.

Q. Should canned vegetables be recooked before tasting or using?
A. If the Cooker is in perfect order and if every canning recommendation has been followed, there is no need for recooking. But as a safety precaution, before tasting, heat vegetables for 10 minutes at a boiling temperature. If food looks or smells spoils, destroy without tasting.

Q. What causes cloudiness in canned peas? How can it be prevented?
A. This may be caused by insufficient precooking, by some mineral in water that is used, by using peas that are too old for canning, or by peas bursting during processing. Proper precooking, use of soft or distilled water, and careful handling ordinarily eliminate cloudiness. It may also indicate flat sour.

Q. How high should vegetables be packed in jar when using hot pack method?
A. Pack vegetables to not more than ½ inch from top of jar. Allow 1 inch for lima beans, corn, peas and sweet potatoes.

Q. What vegetables expand instead of shrink during processing?
A. Corn, peas and lima beans.

Q. Can any vegetables or vegetable and meat mixtures be canned safely by the Open Kettle method?
A. No, all vegetables except tomatoes must be processed by the pressure canning method.

Q. Should all vegetables be blanched before canning?
A. All vegetables should be blanched or precooked according to recipe when using hot pack method.

Q. Does it injure vegetables to over-process them?
A. It is better to overprocess than to underprocess, as overprocessing will do little harm, but underprocessing may result in spoilage.

Q. How long should vegetables stand after gathering before being canned?
A. No longer than is necessary to prepare them for canning. "Two hours from garden to can," is a good rule.

Q. Why is it more difficult to can vegetables than it is to can fruit?
A. Because vegetables are non-acid products, in which heat-resisting bacteria are difficult to kill.

Q. How high should meat be packed in jars?
A. Jars should be packed loosely and filled to not more than one inch from top with meat.

Q. Must the liquid on canned meats be jellied?
A. No. The liquid on canned meats will not congeal unless it contains a good amount of gelatin from cartilage or connective tissue.

Q. Should canned meats be recooked before tasting or using?
A. If the Cooker is in perfect order and if every canning recommendation given has been accurately followed, there is no danger of botulism. But as a safety precaution, before tasting, boil 10 to 15 minutes before adding any other ingredients. If any meat looks or smells spoiled after this, destroy without tasting.

Q. Is it necessary to process poultry longer when bones are removed?
A. Yes—10 to 15 minutes longer.

Q. Should giblets and liver of fowl be canned in same jar with rest of chicken?
A. No. The flavor of liver or giblets will permeate other pieces of chicken in the jar.

Q. How should meat be processed to prevent liquid from boiling out of jar, adhering to sealing composition and preventing a seal?
A. By following directions for filling and processing as given in recipes, care being taken that jars are never too full and are not processed at a higher temperature than called for in recipes.

Q. What causes flat sour? How can it be prevented?
A. Flat sour is usually caused by canning overripe food or allowing precooked foods to stand in jar too long before processing or slow cooling of jars after processing. It may be prevented by using fresh products and properly processing, cooling and storing.

Q. Do all types of spoilage cause the seal on the jar to release?
A. No. Flat sour is an exception and ordinarly shows no indication of spoilage until jar is opened.

Q. What causes fruit to mold when jars are apparently sealed?
A. When fruit molds, the jars are not sealed, as mold can form only in the presence of air.

Q. What are the reasons for spoilage or jars not sealing?

A. (1) Incomplete sterilization. Failure to follow exact time tables and recipes.
(2) Failure to wipe sealing edge of jar clean before placing lid on jar.
(3) Food, seeds or grease lodged between lid and jar.
(4) If lightning or bail-type jar—clamps not properly adjusted.
(5) Jars which are nicked or cracked or have sharp sealing edges.
(6) If Mason jar and two-piece metal lid—band screwed down too loosely before processing.
(7) Turning jars upside down while jars are cooling and sealing.

Q. Is it necessary to sterilize jars and lids before canning?

A. No—when food is processed in the jar the jar does not require sterilizing but all jars should be thoroughly cleansed and rinsed in boiling water. Jar closures should also be dipped in boiling water. Follow manufacturer's directions.

Q. Should screw bands be screwed as tightly as possible before being placed in Cooker before processing?

A. The bands on two-piece metal caps should be screwed down tightly. The bands on three-piece glass caps are turned down, then loosened one-quarter turn. Zinc jar lids are loosened one-quarter inch.

Q. Should screw bands be removed from jar?

A. It is a good idea to remove the screw bands from the jars when the food is cold so the bands do not stick later on and so they may be reused. By doing so it can be determined whether the top is loose. If the cap has not sealed, reprocess the food before it has had a chance to spoil.

Q. Why are most foods packed hot?

A. Food that is packed hot and processed promptly is heated to the processing temperature more rapidly than when packed cold. Food also shrinks less when preheated.

Q. In adjusting closures, what is meant by "firmly tight"?

A. By "firmly tight" we mean as tight as the hand can conveniently screw the band without using any undue exertion or wrenches.

Q. Why it is safe to tighten two-piece metal caps before processing?

A. Two-piece metal caps seal by the cooling of the contents of the jar, not through pressure of the screw band on the lid. Therefore, although screw band is firmly tight, the jar is not sealed until cooled; during processing the flexible metal lid permits the jar to exhaust.

Q. In localities of high altitude, how much should processing time be increased?

A. Processing time in canning should NEVER be increased; pressure is increased instead. In regions of 2,000 feet or more altitude, increase pressure 1 pound every 2,000 feet. For instance: 10 pounds pressure is recommended up to 2,000 feet. For 4,000 feet altitude, increase pressure to 11 pounds; 6,000 feet altitude, increase pressure to 12 pounds, etc.

NOTE: When cooking in a Pressure Cooker, COOKING time may be increased 5% for every 1,000 feet increased over 2,000 feet altitude. NEVER INCREASE PROCESSING TIME WHILE CANNING FOODS.

Directions for Cooking
IN THE PRESSURE COOKER-CANNER

1. Prepare food according to directions in the specific recipe. Cooking of Apple Sauce, Cranberries, Rhubarb, Pearl Barley, Split Peas or Pea Soup is not recommended. These foods tend to foam, froth, and sputter, and may sometimes clog the vent pipe.
2. Quantities of individual recipes are designed to serve 10 to 12 average portions. However, recipe ingredients may be doubled and in some cases tripled to increase the number of servings; or recipe ingredients may be decreased by ½ if desired, to serve 5 to 6 portions. See beginning paragraphs of each recipe section for directions for increasing and decreasing quantities. NEVER FILL COOKER OVER ⅔ FULL. The length of cooking time is not increased when larger quantities than stated in the recipe are cooked provided foods, such as stew, swiss steak, etc., are in serving size pieces.
3. When cooking meat, heat Cooker without cover on high heat until the body half way between bottom and top rim "sizzles" to the touch of the moistened finger.
4. Then place 2 to 3 tablespoons fat in bottom of Cooker according to recipe.
5. Place meat in bottom of Cooker and sear until brown.
6. Use tongs or long fork to turn meat. Brown thoroughly on all sides. Season to taste.
7. Move Cooker from heat and allow to cool slightly before adding water to help prevent loss of moisture by evaporation. Add water or other liquid according to recipe.
8. Place cover on Cooker at once and close securely. If cover is difficult to lock on at this point, it is due to the expansion of the Cooker from heating. Let cover rest on body a minute or two until it will lock on with ease.
9. Use large burner and turn heat to high. Place pressure control weight on vent pipe as soon as cover is closed securely, unless otherwise stated in recipe. Air will be exhausted from the Cooker by the automatic air vent. If the automatic air vent does not close in a few minutes, touch the metal plunger gently with a spoon or knife. It is possible that foreign material in the aperture may have delayed the plunger from sealing readily.
10. When pressure gauge shows 15 pounds pressure, lower heat until pressure remains constant. When using a coal or wood range, move Cooker to cooler part of stove. When using kerosene or gas, turn flame down as low as possible. When using electricity, turn to low heat just before desired pressure is reached.
11. Food should be cooked for time recommended in recipe. Start to count time from the instant correct amount of pressure is reached. When cooking time is completed, turn off heat or remove Cooker from stove.
12. After required cooking time is completed, remove Cooker from heat and allow pressure to return to zero of its own accord, in all cases except when cooking meat and vegetable combinations. When cooking vegetable and meat combinations, quick cool Cooker immediately under the water faucet, by pouring water over it or by placing the Cooker in a large pan of cold water. Do not run water over automatic air vent as water may be drawn into the Cooker when pressure is completely reduced.
Be sure all steam has escaped before removing cover.

13. Remove cover from Cooker. Lift cover with gauge toward you so as to keep steam away from you.
14. Favorite recipes may be adjusted to pressure cooking by following the general directions for the particular type of food being cooked. Decrease the length of cooking time by two-thirds, since pressure cooking requires only one-third as much time as ordinary methods of cooking. Decrease the amount of liquid as there is no evaporation from the Cooker. Add only the amount of liquid desired in the finished product.
15. The time and pressure given in recipes and time tables apply to altitudes of 2,000 feet or less. If altitude is over 2,000 feet, add 1 pound pressure for each additional 2,000 feet. Do not increase cooking time.
16. An excess of juices may be drawn from meat if it is not properly seared before cooking. It must be remembered that Pressure Cooking is unlike oven roasting, as there is no evaporation through boiling. Meats therefore must be thoroughly seared until deep brown and crisp on all sides.
17. Meats tend to burn if liquid is lost during cooking. Liquid may be lost due to: (1) Leakage from worn sealing ring; (2) Cooking with pointer beyond 15 pounds, the pressure control weight will rock and allow excess pressure and moisture to escape; (3) Failure to close cover immediately after adding water; (4) Failure to add sufficient water.
18. Meats may stick to the bottom of the Pressure Cooker during searing, if the Cooker is not hot enough when fat is added. First, the Cooker without the cover should be heated until the body half way between the bottom and top rim "sizzles" when touched with a moistened finger, before fat is added. If the Cooker is sufficiently heated and enough fat is added, meat will not stick.
19. **In localities of high altitude,** cooking time should be increased 5% for every 1000 feet above the first two thousand. Following this rule, the time would be increased as follows:

3000..... 5%	5000.....15%	7000.....25%
4000.....10%	6000.....20%	8000.....30%

SOUPS

Soups are not expensive, but nourishing and wholesome and with your Cooker you have an efficient, economical method of preparing the very finest of soups.

When cooking soups, do not fill the Cooker more than one-half full.

Quantities given in the soup recipes on the following pages may be increased by doubling or tripling or decreased by one-half. If you wish, the quantity of water alone may be decreased and boiling water added after cooking. IN NO CASE SHOULD THE COOKER BE FILLED MORE THAN ONE-HALF FULL WHEN COOKING SOUP.

BROWN STOCK

1 tbsp. fat
1½ lbs. beef, cubed
3 quarts water
½ cup sliced onion
½ cup diced carrots
½ cup chopped celery leaves
½ cup diced turnips
2 sprigs parsley, minced
1 small bay leaf
1 tbsp. salt

Heat Cooker; add fat and brown beef in bottom of Cooker. Add remaining ingredients. Close cover securely and place pressure control weight on vent pipe. Cook 30 minutes at 15 pounds pressure. Let indicator return to zero. Strain stock. Store in refrigerator.

CHICKEN SOUP

1 chicken
2 quarts water
⅓ cup diced celery
1 small onion, minced
1 tsp. salt
½ cup rice

Cut chicken into serving pieces. Wash. Place all ingredients in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 20 minutes at 15 pounds pressure. Let indicator return to zero.

NAVY BEAN SOUP

2 cups navy beans
2 quarts water
2 lb. ham bone or shank
2 onions, chopped
4 carrots, sliced
4 ribs celery, sliced
¼ cup minced green pepper
1 cup tomato sauce
2 cloves
Salt and pepper

Wash beans, cover with water and soak overnight. Drain. Place beans, water and all remaining ingredients in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 30 minutes at 15 pounds pressure. Let indicator return to zero.

SOUP STOCK

3 lbs. soup bone
3 quarts water
2 tsp. salt

Cut meat into pieces. Large bones should be sawed to fully extract gelatin and fat. Place all ingredients in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 30 minutes at 15 pounds pressure. Let indicator return to zero. Strain through fine sieve. Let cool. Remove fat from top and, if necessary, clarify with egg.

GREEN SPLIT PEA SOUP

2 cups dried split peas
2 quarts water
2 lbs. ham shank
Salt and pepper
3 bay leaves
2 onions, chopped
2 cups milk
¼ cup flour

Wash peas and soak overnight in water to cover. Place ham shank in Cooker. Add peas, water, and water in which they were soaked, salt, pepper, bay leaf and onion. Close cover securely and place pressure control weight on vent pipe. Cook 15 minutes at 15 pounds pressure. Let indicator return to zero. Moisten flour with ¼ cup milk; add remaining milk. Heat soup to boiling and thicken with flour paste. Omit milk and flour if desired.

VEGETABLE SOUP

2½ lb. soup bone or
2 lbs. soup meat
2 quarts water
3 carrots, diced
3 potatoes, diced
1 cup canned lima beans
2 cups canned or fresh tomatoes
1 small bunch celery, diced
2 onions, sliced
2 tbsp. barley
1½ tsp. salt

Place all ingredients in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 20 minutes at 15 pounds pressure. Let indicator return to zero.

COOKING TIME TABLE

SOUPS

	Cooking time at 15 pounds pressure Minutes
Brown Stock	30
Chicken Soup	20
Clam Chowder	5
Clear Consomme	25
Corn Chowder	5
Creole Gumbo	15
Fish Chowder	5
French Onion Soup	5
Hamburg Vegetable Soup	15
Julienne Soup	3
Lentil Soup	15
Lima Bean Soup	15
Navy Bean Soup	30
Okra Chowder	10
Oyster Chowder	5
Potato Soup	5
Ruby Consomme	3
Soup Stock	30
Split Pea Soup	15
Tomato Bouillon	5
Tomato-Rice Soup	10
Turkey Soup	15
Vegetable Soup	20
White Stock	30

Always make sure Cooker has water or some liquid in the bottom to form necessary steam.

MEATS

In most meals, meat forms the basic item around which other foods are planned to make up the day's menu. Meat also contributes largely to our daily requirement of protein. For these two reasons alone, meat cookery is considered to be important as well as essential to good cooking.

Many factors help to determine the length of cooking time for meats. It depends on the amount and distribution of fat on the bone, toughness, size and thickness of cut, grade and cut of meat and the manner in which the meat fits into the Cooker. Rolled roasts require a longer cooking time per pound than roasts with the bone in them. Short, chunky roasts take longer to cook than long, flat roasts. Because of the difference in thickness, a small, thick roast requires a longer cooking time per pound than a heavier, flat roast. Consequently, it is possible to give only general rules for required cooking time of meats. Average cooking times are about as follows:

Cooking Time per Pound for Roast Cuts of Meat

Beef: 8 to 10 minutes - rare (choice grade)
10 to 12 minutes - medium (good grade)
12 to 15 minutes - well done (utility grade)
Pork: 15 minutes - well done (Pork should always be well done)
17 minutes for very fat pork
Veal: 17 minutes - well done

For best results in cooking fresh meats, heat your Cooker well before adding the fat. Any kind of cooking fat may be used for browning meat, and about two tablespoons are sufficient. Brown meat well on all sides. Cool Cooker slightly and add water or liquid as directed. Close cover securely. If the cover does not lock on the Cooker easily, leave it in position on the Cooker for a minute or two and it will then lock on without difficulty. This is due to the expansion of the metal from the heat.

Quantities given in the meat recipes on the following pages may be increased by doubling or tripling or decreased by one-half. Generally the amount of water is decreased proportionately when the liquid affects the consistency or flavor of the food. However, when a small amount of water is used to only furnish moisture for steam, use the amount specified, even though a smaller amount of meat is cooked. THE COOKER MUST NEVER BE MORE THAN TWO-THIRDS FULL.

It is not necessary to completely thaw frozen meat before cooking in the Pressure Cooker. It is advisable, however, to leave frozen meat at room temperature for an hour or two before cooking so that the meat will have complete contact with the Cooker for adequate browning. Beef and veal which is solidly frozen will require approximately 25 minutes cooking time per pound. Pork which is solidly frozen will require about 30 minutes cooking time per pound. Frozen meat which has been completely thawed is cooked as fresh (unfrozen) meat.

Usually two small, 3 to 4 lb., roast cuts of meat, cooked at one time in the Pressure Cooker produce a more satisfactory product than one large, 6 to 8 lb., roast cut of meat.

Cured meats, such as tongue and corned beef require more water than fresh meats—at least 1 quart of water should be used. These meats are cooked with the lean side down and in the water.

BEEF

BEEF HEART—STUFFED

- 1 beef heart
- Dressing
- Salt
- Pepper
- 2 tbsp. fat
- 2 cups boiling water

Remove veins and tissue from heart. Wash well. If desired, cut pocket in heart and stuff with bread dressing. Season. Heat Cooker. Add fat and brown heart. Add water. Close cover securely and place pressure control weight on vent pipe. Cook 50 minutes at 15 pounds pressure. Let indicator return to zero.

BRAISED BEEF

- 3 slices fat salt pork
- 3 lbs. boned round or rump
- Salt
- Pepper
- Flour
- 2 cups water
- ½ cup diced turnips
- ½ cup diced carrots
- 2 onions, chopped
- ½ cup chopped celery

Heat Cooker. Fry out pork in bottom of Cooker. Season meat with salt and pepper; dredge in flour. Brown meat well in hot fat in Cooker. Add water and vegetables. Close cover securely and place pressure control weight on vent pipe. Cook 40 minutes at 15 pounds pressure. Let indicator return to zero.

BEEF STEW

- 3 tbsp. fat
- 3 lbs. beef, cubed
- 2 cups water
- 2½ cups diced carrots
- 2 cups diced potatoes
- 2 cups diced turnips
- 2 large onions, sliced
- 1 tbsp. salt

Heat Cooker; add fat and brown meat in bottom of Cooker. Add remaining ingredients. Close cover securely and place pressure control weight on vent pipe. Cook 15 minutes at 15 pounds pressure. Let indicator return to zero.

CORNED BEEF AND CABBAGE

- 3 to 4 lbs. corned beef
- 1 large cabbage, quartered
- 1 quart water

Place meat with water in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 45 to 55 minutes at 15 pounds pressure. Let indicator return to zero; then remove pressure control weight from vent pipe. Add cabbage. Close cover securely and place pressure control weight on vent pipe. Cook 3 to 4 minutes at 15 pounds pressure. Let indicator return to zero.

CORNED BEEF

- 4 lbs. corned beef
- 1 quart water
- 1 clove garlic
- 1 bay leaf

Cover corned beef with cold water and let soak for one hour. Cut garlic clove in small pieces and insert in beef with a sharp knife. Place meat and water in Cooker. Add bay leaf. Close cover securely and place pressure control weight on vent pipe. Cook 40 to 50 minutes at 15 pounds pressure. Let indicator return to zero.

OXTAILS WITH HERBS

- 3 to 4 oxtails
- 3 tbsp. fat
- 1 large onion, thinly sliced
- Salt and pepper
- ½ tsp. marjoram
- ½ tsp. basil
- 1 tsp. thyme
- 1 cup tomato juice or water

Have oxtails cut into serving pieces. Heat Cooker and add fat. Brown oxtails on all sides, add onion and cook lightly. Combine salt, pepper, marjoram, basil, thyme and tomato juice and pour over oxtails. Close cover securely and place pressure control weight on vent pipe. Cook 40 minutes at 15 pounds pressure. Let indicator return to zero.

POT ROAST

- 3 to 4 lbs. beef shoulder or rump
- Salt
- Pepper
- Flour
- 4 tbsp. fat
- 1 medium onion, sliced
- 1 cup water

Season meat with salt and pepper. Dredge with flour. Heat Cooker; add fat and brown meat well in bottom of Cooker. Add onion and water. Close cover securely and place pressure control weight on vent pipe. Cook 45 minutes at 15 pounds pressure. Let indicator return to zero.

SHORT RIBS OF BEEF

- 6 to 8 lbs. beef ribs
- 3 tbsp. fat
- 2 onions, chopped
- ½ green pepper, chopped
- 1 cup chopped celery
- 1 cup tomatoes
- 1 tbsp. salt
- ½ tsp. pepper
- ½ cup water

Heat Cooker; add fat and brown ribs in bottom of Cooker. Add remaining ingredients. Close cover securely and place pressure control weight on vent pipe. Cook 40 minutes at 15 pounds pressure. Let indicator return to zero.

SWISS STEAK

- 4 or 5 lbs. round steak, 1 inch thick
- ½ cup flour
- Salt and pepper
- 2 tbsp. fat
- 1 large onion, sliced
- ½ green pepper, chopped
- 1½ cups tomato juice

Season flour with salt and pepper; pound flour into meat. Heat Cooker; add fat and brown meat in bottom of Cooker. Add remaining ingredients. Close cover securely and place pressure control weight on vent pipe. Cook 15 minutes at 15 pounds pressure. Let indicator return to zero.

FRESH TONGUE

- 1 or 2 tongues
- 1 onion, quartered
- 1 tbsp. salt
- ¾ tsp. pepper
- 2 bay leaves
- 6 whole cloves
- 1 quart boiling water

Scrape tongue and wash well. Scald in boiling water. Place tongue and other ingredients in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 60 minutes at 15 pounds pressure. Let indicator return to zero. Remove skin and roots while tongue is hot.

VEAL

ROAST OF VEAL

3 or 4 lbs. veal roast
Salt
Pepper
Flour
2 tbsp. fat
1 bay leaf
1 cup water

Season meat; dredge with flour. Heat Cooker; add fat and brown meat well in bottom of Cooker. Add bay leaf and water. Close cover securely and place pressure control weight on vent pipe. Cook 45 minutes at 15 pounds pressure. Let indicator return to zero.

BRAISED VEAL

3 or 4 lbs. veal roast
1 tbsp. salt
3 tbsp. flour
2 slices salt pork, diced
½ onion, minced
Dash of savory, thyme or basil
1 cup water

Season meat with salt; dredge in flour. Heat Cooker; add salt pork and brown in bottom of Cooker. Add meat and brown on all sides. Add onion, seasonings and water. Close cover securely and place pressure control weight on vent pipe. Cook 45 minutes at 15 pounds pressure. Let indicator return to zero.

PORK

LOIN OF PORK

3 to 4 lbs. loin roast
2 tbsp. fat
Salt and pepper
1 medium onion, sliced
1 cup water

Heat Cooker and add fat. Brown meat well on all sides. Season with salt, pepper and sliced onion; add water. Close cover securely and place pressure control weight on vent pipe. Cook 50 to 60 minutes at 15 pounds pressure. Let indicator return to zero.

SPARERIBS—BARBECUED

5 to 6 lbs. spareribs
Salt and pepper
Paprika
2 tbsp. shortening
2 large onions, sliced
1 cup catsup
½ cup vinegar
1 tbsp. Worcestershire sauce
½ tsp. chili powder
1 tsp. celery seed

Cut ribs into serving pieces. Season with salt, pepper and paprika. Heat Cooker and add fat. Brown ribs on all sides. Add onion. Combine catsup, vinegar, Worcestershire sauce, chili powder and celery seed; pour over meat in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 15 minutes at 15 pounds pressure. Let indicator return to zero.

HAM

HAM—BOILED

10 lbs. ham
1 clove garlic
1 quart water

If ham has hard skin, soak at least 1 hour in water to cover. Tenderized ham does not require soaking. Place ham with garlic and water in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 60 minutes at 15 pounds pressure. Let indicator return to zero.

HAM SLICES

2 tbsp. fat
2 slices ham, 1½ inches thick
Cloves
1 cup water

Heat Cooker; add fat and brown ham in bottom of Cooker. Add cloves and water. Close cover securely and place pressure control weight on vent pipe. Cook 15 minutes at 15 pounds pressure. Let indicator return to zero.

VIRGINIA HAM

6 to 8 lbs. ham
2 cups water
¾ cup brown sugar
Cloves

Soak ham if necessary. Place in Cooker with water, with lean part under water. Close cover securely and place pressure control weight on vent pipe. Cook 50 minutes at 15 pounds pressure. Let indicator return to zero. Remove ham. Sprinkle with sugar and dot with cloves. Brown in a hot oven. If it is to be served cold, allow to cool in cooking liquid in a large bowl.

LAMB OR MUTTON

LEG OF LAMB

5 to 6 lb. leg of lamb
Salt
2 tbsp. fat
1 cup water

Season meat. Heat Cooker; add fat and brown lamb on all sides. Add water. Close cover securely and place pressure control weight on vent pipe Cook 50 minutes at 15 pounds pressure. Let indicator return to zero.

LAMB STEW

3 lbs. breast of lamb, cut in 1 inch cubes
3 tbsp. fat
Salt and pepper
2 medium green peppers, diced
3 large onions, diced
2 tbsp. Worcestershire sauce
6 carrots, cut in half
2 cups hot water

Heat Cooker. Add fat. Sear lamb golden brown in hot fat. Season with salt and pepper. Add green pepper, onion, Worcestershire sauce, carrots and water. Close cover securely and place pressure control weight on vent pipe. Cook 8 minutes at 15 pounds pressure. Let indicator return to zero.

Cooking Time Table

MEATS

	Cooking time at 15 pounds Pressure Minutes
BEEF	
Beef Brisket, Cubed	20 minutes complete
Beef Heart Stuffed	12 to 15 minutes per pound
Beef Kidney Stew, cubed or sliced thin	15 minutes complete
Beef Stew, cubed	15 minutes complete
Braised Beef	12 to 15 minutes per pound
Corned Beef	10 to 14 minutes per pound
English Brown Stew, cubed	18 minutes complete
Flank Steak Supreme	8 to 10 minutes per pound
Meat Loaf	30 minutes complete
Oxtails with Herbs, serving size	40 minutes complete
Pot Roast (thin)	8 to 10 minutes per pound
Pot Roast (thick)	12 to 15 minutes per pound
Short Ribs of Beef, serving size	40 minutes complete
Swiss Steak, 1 inch thick	15 minutes complete
Swiss Steak—Deluxe, 1 inch thick	15 minutes complete
Tongue, Fresh	15 to 18 minutes per pound
VEAL	
Braised Veal	10 to 15 minutes per pound
Braised Veal with Fetterlane Sausage	10 to 15 minutes per pound
Roast Veal	12 to 15 minutes per pound
Shoulder of Veal with Apricot Stuffing	12 to 15 minutes per pound
Veal Country Style, 1 inch thick	15 minutes complete
PORK	
Corn Stuffed Pork Shoulder	12 to 15 minutes per pound
Loin of Pork	15 to 17 minutes per pound
Spareribs with Sauerkraut, serving size	15 minutes complete
Spareribs Barbecued, serving size	15 minutes complete
Spareribs Stuffed	8 to 10 minutes per pound
HAM	
Ham Boiled	6 to 8 minutes per pound
Ham Cooked in Cider	6 to 8 minutes per pound
Ham Slices, 1½ to 2 inches thick	15 minutes complete
Virginia Ham	6 to 8 minutes per pound
LAMB OR MUTTON	
Lamb Stew, 2 inch cubes	15 minutes complete
Lamb Stew—With Dumplings	8 minutes complete
Leg of Lamb	8 to 10 minutes per pound
Mutton, Spanish	15 minutes complete
Mutton Stew with Corn Meal Dumplings	15 minutes complete

Always make sure Cooker has water or some liquid in the bottom to form necessary steam.

COMBINATION DISHES

Try these suggested combination dishes first. Then you can experiment with combination dishes of your own. Always remember to select foods that cook in the same time.

Quantities given in the recipes on the following pages may be increased by doubling or tripling or decreased by one-half. IN NO CASE SHOULD THE COOKER BE FILLED MORE THAN TWO-THIRDS FULL WHEN COOKING COMBINATION DISHES.

BOSTON BAKED BEANS

4 cups dried beans
1 lb. salt pork or bacon, diced
6 tbsp. brown sugar
2 tsp. salt
1 tsp. mustard
6 tbsp. molasses
½ cup catsup
2 onions, diced
Water to cover

Soak beans overnight. Drain. Heat Cooker and sear salt pork or bacon. Add beans and remaining ingredients. Add enough water to cover. Close cover securely and place pressure control weight on vent pipe. Cook 45 minutes at 15 pounds pressure. Let indicator return to zero.

LIMA BEAN POT

4 cups dried lima beans
1 lb. pork sausages, ½ inch pieces
2 onions, chopped
1 green pepper, diced
1 cup chopped celery
2½ cups tomato juice
¼ cup brown sugar
2 tsp. salt
2 tsp. chili powder
⅛ tsp. cayenne pepper

Soak lima beans overnight in water to cover. Drain. Heat Cooker and brown sausage. Remove. Pour off drippings in excess of two tablespoons. Saute' onions, green pepper and celery. Add lima beans and sausage. Add combined tomato juice, brown sugar, salt, chili powder and cayenne pepper. Mix well. Close cover securely and place pressure control weight on vent pipe. Cook 25 minutes at 15 pounds pressure. Let indicator return to zero.

CHILI CON CARNE

3 tbsp. fat
2 lbs. ground beef
3 to 4 medium onions, minced
1 green pepper, shredded
2 cloves garlic, minced
2 No. 2 cans tomatoes
2 No. 2 cans kidney beans, including liquid
1 tbsp. salt
Dash of cayenne pepper
2 to 3 tsp. chili powder

Heat Cooker; add fat and brown beef, breaking it apart to assure even browning. Add onions, green pepper and garlic and brown lightly. Add remaining ingredients. Close cover securely and place pressure control weight on vent pipe. Cook 15 minutes at 15 pounds pressure. Let indicator return to zero.

CHOP SUEY

- 2 tbsp. fat
- 2 lbs. round steak, cubed
- 1 lb. lean pork, cubed
- 1 lb. lean veal, cubed
- Salt
- Pepper
- 2 or 3 large onions, minced
- ¼ cup chop suey sauce
- 1 small bunch celery, diced
- 2 cans Chinese vegetables
- 2 cans bean sprouts

Heat Cooker; add fat and brown meat in bottom of Cooker. Season with salt and pepper. Add onions, chop suey sauce, celery and liquid drained from vegetables. Close cover securely and place pressure control weight on vent pipe. Cook 10 minutes at 15 pounds pressure. Let indicator return to zero. Add vegetables to meat. Heat in open Cooker. Serve with steamed rice.

HAM WITH ESCALLOPED POTATOES

- 2½ tbsp. butter
- 2 tbsp. flour
- 3 cups milk
- 1 tsp. salt
- Pepper
- 1 onion, grated
- 2 tbsp. fat
- 2 lbs. ham slice, cut in cubes
- 6 large potatoes, peeled and sliced

Make a white sauce of first six ingredients as follows. Melt butter, blend in flour, add milk stirring constantly. Cook until smooth. Add salt, pepper and onion. Heat Cooker and add fat. Brown ham until golden brown and remove from Cooker. Place potatoes and ham in layers in Cooker and cover with white sauce. Close cover securely and place pressure control weight on vent pipe. Cook 12 minutes at 15 pounds pressure. Cool Cooker at once.

NEW ENGLAND BOILED DINNER

- 3 to 3½ lbs. ham shank
- 4 cups water
- 6 potatoes, halved
- 6 onions, halved
- 1 medium rutabaga or turnip, sliced
- 6 carrots, halved
- 1 cabbage, quartered
- ⅛ tsp. pepper

Place ham and water in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 20 minutes at 15 pounds pressure. Let indicator return to zero. Open Cooker, add vegetables and pepper. Do not fill Cooker over ⅔ full. Return Cooker to stove. Close cover securely and place pressure control weight on vent pipe. Cook 5 to 8 minutes, depending on size of vegetables, at 15 pounds pressure. Cool Cooker at once.

PORK HOCKS WITH SAUERKRAUT AND POTATOES

- 4 to 5 lbs. pork hocks
- 3 cups water
- 2 tsp. salt
- ¼ tsp. pepper
- 1 No. 2½ can sauerkraut
- 2 onions, chopped
- 6 medium potatoes, halved lengthwise

Place hocks, water, salt and pepper in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 45 minutes at 15 pounds pressure. Let indicator return to zero. Add sauerkraut, onion and potatoes. Close cover securely and place pressure control weight on vent pipe. Cook 10 minutes at 15 pounds pressure. Cool Cooker at once.

SPAGHETTI MEAT SAUCE

- 4 tbsp. salad oil
- 3 lbs. ground beef
- 2 large onions, chopped
- 2 cloves garlic, minced
- 1 cup chopped celery
- 1 large green pepper, diced
- 1 tbsp. salt
- 2 6 oz. cans tomato paste
- 2 cups tomato juice
- 2 to 3 tsp. chili powder
- ¼ tsp. cayenne pepper
- ½ tsp. curry powder
- 1 3 oz. package Parmesan Cheese

Heat Cooker and add salad oil. Brown beef. Add onion, garlic, celery, pepper and salt. Add combined tomato paste, tomato juice, chili powder, cayenne pepper and curry powder. Close cover securely and place pressure control weight on vent pipe. Cook 10 minutes at 15 pounds pressure. Let indicator return to zero. Serve sauce over spaghetti. Sprinkle with Parmesan Cheese.

Cooking Time Table

COMBINATION DISHES	Cooking time at 15 pounds pressure Minutes
Black Beans or Frijoles	35
Boston Baked Beans	45
Butter Beans	25
Dry Lima Beans with Bacon	25
Lima Bean Pot	25
Barley Stew with Vegetables	20
Chili Con Carne	15
Chop Suey, American	5 to 6
Chop Suey	10
Ham Loaf, Favorite	15
Ham and Escalloped Potatoes	12
Hungarian Goulash	15
New England Boiled Dinner	25 to 28
Pork Hocks with Sauerkraut and Potatoes	55
Pork Chops with Rice	12
Spaghetti Meat Sauce	10

Always make sure Cooker has water or some liquid in the bottom to form necessary steam.

POULTRY AND GAME

The best way to determine cooking times in your Pressure Cooker for chicken and wild game is to use this simple weight time table as a guide:

Young birds, 3 to 4 pounds—20 to 25 minutes complete.
Young birds, 5 to 7 pounds—30 to 35 minutes complete.
Hens—45 minutes complete.

The large capacity of your Cooker provides ample space for cooking two whole chickens at one time, and two or more when cut in serving pieces. DO NOT FILL COOKER OVER ⅔ FULL.

BRAISED WHOLE CHICKEN

Chicken
1 tbsp. fat
Salt and pepper
1 cup water

Prepare chicken in usual manner. Stuff, if desired. Remove neck bone, folding down skin neatly on breast and skewer it in position. Fasten legs and wings close to side of body. Heat Cooker; add fat and brown to a golden brown on all sides in bottom of Cooker. Add seasonings and water. Close cover securely and place pressure control weight on vent pipe. Cook at 15 pounds pressure for specific time as directed above. Let indicator return to zero.

CHICKEN AND DUMPLINGS

4 lbs. chicken
1 tbsp. salt
4 cups water
Dumplings (Recipe below)

Cut chicken into serving pieces. Place chicken, salt and water in bottom of Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 20 to 25 minutes at 15 pounds pressure. (The exact time will depend upon age and weight of chicken.) Let indicator return to zero. With teaspoon, drop dumplings in Cooker. Cover Cooker but do not seal. Steam 15 minutes with vent pipe open. Thicken broth and serve.

DUMPLINGS

1 cup flour
½ tsp. salt
1½ tsp. baking powder
1 egg
⅓ cup milk
2 tbsp. melted shortening

Sift flour, salt and baking powder. Beat egg; add milk and shortening. Combine liquid and dry ingredients. Drop from teaspoon into hot chicken broth. Steam 15 minutes with vent pipe open. Reduce heat for moderate flow of steam.

FRIED SPRING CHICKEN

1 or more spring chickens
Salt
Pepper
Flour
2 tbsp. fat
1 cup water

Cut chicken into serving pieces. Wash well. Season with salt and pepper. Dredge in flour. Heat Cooker; add fat and brown each piece well in bottom of Cooker. Add water. Close cover securely and place pressure control weight on vent pipe. Cook 12 to 15 minutes at 15 pounds pressure. Let indicator return to zero.

STEWED CHICKEN

5 lbs. stewing chicken
Water to cover
1 tbsp. salt
1 clove garlic, chopped
1 medium onion, chipped
1 stalk celery, chopped
1 cup cream
2 tbsp. flour
¼ cup cold water
1 sprig parsley, minced

Cut chicken into serving pieces. Place in Cooker with salt, garlic, onion, water and celery. Close cover securely and place pressure control weight on vent pipe. Cook 20 minutes at 15 pounds pressure. Let indicator return to zero. Add cream and heat. Mix flour and ¼ cup water to smooth consistency and add to hot mixture, stirring constantly. Sprinkle with parsley and serve.

COOKING TIME TABLE

POULTRY AND GAME	Cooking time at 15 pounds pressure Minutes
Barbecued Chicken	15
Braised Whole Chicken	20 to 45
Chicken Curry	18 to 25
Chicken and Dumplings	20 to 25
Chicken Pimiento	18 to 25
Chicken Paprika	20
Fricassee of Chicken	18 to 25
Fried Spring Chicken	12 to 15
Savory Chicken	15
Stewed Chicken	20
Pressed Chicken Slices	20
Braised Gosling	8 to 10 per lb.
Fillet of Turkey	15
Hunters Turkey	20 to 25
Turkey with Mushrooms	20 to 25
Pheasant	15
Squab	10
Squirrel	20
Venison	35
Hasen Pfeffer	20
Wild Duck	25

Always make sure Cooker has water or some liquid in the bottom to form necessary steam.

STEAMED BREADS AND DESSERTS

Your Pressure Cooker offers a shortened method for preparing steamed breads and desserts. Actually the cooking time can be counted in minutes instead of hours. You will find, too, that your Pressure Cooker is easier to handle than the ordinary steamer because its gauge acts as a means of heat measurement to assure constant heat to produce uniform even textured products.

Best results are obtained when 1 to 1½ quart molds are used. Any type of mold is satisfactory (metal, glass, earthenware). However, baking powder, coffee cans or No. 2 tin cans may be used. Be sure to remember to never fill molds over two-thirds full; this extra top-space is to allow ample space for rising. If molds used do not have a cover, aluminum foil or several thicknesses of wax paper should be tied securely over the top to prevent condensed moisture from falling into mold. Because the first part of the cooking period is steaming time, which permits foods to rise, at least two quarts boiling water should be poured into the bottom of Pressure Cooker to allow for evaporation.

Adjust heat to allow a **moderate** flow of steam from the vent pipe.

Quantities given in the recipes on the following pages may be increased by doubling, if desired.

BROWN BREAD

- 1 cup graham flour
- 1 cup corn meal
- 1 cup rye meal
- 1 tsp. salt
- 1 tsp. soda
- ¾ cup light molasses
- 2 cups milk, sweet or sour
- 1 cup raisins
- 2 quarts water in Cooker with basket

Mix all dry ingredients. Add molasses, milk and raisins. Beat well. Pour into 2 buttered molds (pint size). Cover with wax paper; tie securely. Place in basket with water in Cooker. Close cover securely. Allow steam to flow from vent pipe 20 minutes. Place pressure control weight on vent pipe. Cook 25 minutes at 10 pounds pressure. Let indicator return to zero.

BREAD PUDDING

- 2 cups cubed dry bread
- ¼ tsp. salt
- ½ cup brown sugar
- ½ tsp. cinnamon
- 1 tbsp. butter
- 2 cups milk
- 2 eggs
- ½ tsp. vanilla
- 2 quarts water in Cooker with basket

Scald milk. Add salt, brown sugar, cinnamon and butter. Pour milk mixture over slightly beaten eggs. Add vanilla. Combine with bread and mix well. Place in buttered bowl. Cover with wax paper; tie securely. Place in basket with water in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 8 minutes at 15 pounds pressure. Let indicator return to zero.

ENGLISH PLUM PUDDING

- 1 cup sifted all purpose flour
- 1 tsp. baking powder
- ½ tsp. salt
- ½ tsp. allspice
- ½ tsp. cinnamon
- ½ tsp. nutmeg
- ¼ tsp. cloves
- ½ cup raisins
- ½ cup currants
- ½ cup chopped nuts
- 1 egg
- ½ cup sugar
- ½ cup ground suet
- ⅓ cup milk
- 2 quarts water in Cooker with basket

Sift flour with baking powder, salt and all spices. Add fruits and nuts. Beat egg; add sugar, suet and milk. Combine liquid and dry ingredients, and mix well. Pour into buttered 1 quart mold. Cover with wax paper; tie securely. Place in basket with water in Cooker. Close cover securely. Allow steam to flow from vent pipe 20 minutes. Place pressure control weight on vent pipe. Cook 50 minutes at 10 pounds pressure. Let indicator return to zero.

BROWN BETTY

- 1 cup dry bread crumbs
- ¼ cup sugar
- ½ tsp. cinnamon
- Juice and rind of 1 lemon
- 3 medium apples, sliced
- ¼ cup melted butter
- 2 quarts water in Cooker with basket

Combine crumbs, sugar, cinnamon, lemon juice and grated rind. Place alternate layers of apples and crumb mixture in buttered bowl. Pour butter over top. Cover with wax paper; tie securely. Place in basket with water in Cooker. Close cover securely and place pressure control weight on vent pipe. Cook 10 minutes at 15 pounds pressure. Let indicator return to zero.

WHITE FRUIT CAKE

- 1¼ cups canned pineapple tidbits
- ⅔ cup chopped citron
- ⅔ cup shredded lemon peel
- ½ cup chopped candied cherries
- ¾ cup chopped dates
- ⅔ cup shredded orange peel
- 1 cup chopped dried appricots
- ½ cup chopped figs
- 1½ cups white raisins
- ½ cup shredded cocoanut
- 2 cups chopped walnuts
- ½ cup flour
- 1 cup shortening
- 1 cup sugar
- 5 eggs
- 1½ cups sifted all purpose flour
- 1 tsp. salt
- 1½ tsp. baking powder
- ¼ cup pineapple juice
- 2 quarts water in Cooker with basket

Drain pineapple, saving juice. Dredge fruits and nuts with ½ cup flour. Cream shortening and sugar. Add eggs, one at a time, beating mixture well after each addition. Sift flour, salt and baking powder. Add alternately with pineapple juice. Pour over floured fruit and nuts; mix until well blended. Grease 5 No. 2 tin cans. Pour batter in cans and cover with wax paper; tie securely. Place in basket with water in Cooker. Close cover securely. Allow steam to flow from vent pipe 20 minutes. Place pressure control weight on vent pipe. Cook 60 minutes at 10 pounds pressure. Let indicator return to zero.

Cooking Time Table

STEAMED BREADS AND DESSERTS

	Steaming time with petcock open Minutes	Cooking time Minutes	Pounds Pressure
STEAMED BREADS			
Brown Bread	20	25	10
Date and Nut Bread	20	50	5
Molasses Nut Bread	20	50	10
DESSERTS			
Bread Pudding		10	15
Brown Betty		15	15
Dark Fruit Cake	20	60	10
White Fruit Cake	20	60	10
English Plum Pudding	20	50	10
Plum Pudding	20	50	10

Always make sure Cooker has water or some liquid in the bottom to form necessary steam.

Other Pressure Cooker Uses

FOR SCHOOL LUNCHES

If your children come home at noon for lunch, greet them with a hot meal from the Cooker. Wholesome, simple dishes children like cook quickly with little effort and expense. Pressure Cooking cooks food to a digestable state and completely sterilizes it.

If the children stay at school for lunch, we suggest the school invest in a Cooker. Mothers can put up good lunches for the children but hot foods should accompany them. Hot soups, cocoa, cereals, or vegetables can be prepared at school with little time or effort. Other dishes that are very good are: chop suey, beef stew, vegetable soup, beans and most combination dishes.

CHURCH OR CLUB AFFAIRS

For luncheons, dinners, bazaars and spreads, use the Pressure Cooker. It makes your cooking easy and eliminates long days of work in a hot, steaming kitchen. Less expensive meats may be cooked with all the excellent flavor and tenderness of more expensive cuts, thus reducing food costs and increasing profit for the group or organization.

The Pressure Cooker soon pays for itself. Its easy operation encourages more of these profit-making ventures. In addition to cooking meals, canning can be done by various members and the cans or jars of fruits, meats and vegetables sold for profit.

THE PRESSURE COOKER AS A STERILIZER

TO SAFEGUARD BABY'S HEALTH

Wash everything used in preparing or serving the baby's food separate from other household utensils. Rinse well and completely sterilize in your Pressure Cooker. The Pressure Cooker is ideal for sterilizing bottles used daily for baby's milk, water, orange or tomato juice. Use one quart of water in Cooker for sterilizing. Place canning basket in bottom of Cooker. Place in basket baby bottles, closed Mason jar containing nipples or rubber caps; jar containing applicator swabs; funnel for filling bottles and spoons used to stir milk. Close cover securely. Allow steam to flow from vent pipe 5 to 7 minutes. Place pressure control weight on vent pipe. When pressure reaches 15 pounds, reduce heat and sterilize for 15 minutes. Remove Pressure Cooker from heat. Let indicator return to zero. When indicator returns to zero, remove pressure control weight and let Pressure Cooker cool 2 to 3 minutes. Remove cover. Pour prepared hot milk into the sterilized bottles. Cap both filled and unfilled bottles. When cool, place bottles in refrigerator for use during the day. Store extra nipples in closed jar until ready for use.

FOR FIRST AID AT HOME

In order to sterilize instruments to be used in case of accident or emergency, use the same method given above. To sterilize gauze dressings or roll bandages, place items in covered glass jar and increase processing time to 35 minutes. Fifteen pounds pressure is used for all sterilizing.

ON THE FARM

Animals are as susceptible to infection as humans. Before you use instruments on them, follow the same procedure for sterilizing as above. Operate and care for flesh wounds only under sterile conditions. To sterilize rubber gloves, wash and dry gloves thoroughly. Powder well on both sides. Place gloves in closed glass jar and process for 15 minutes. Sterilize milk tubes each time before using. Orphan animals should be fed with sterilized bottles and nipples.

TERMINAL STERILIZATION OF BABIES' FORMULA

It is practical to cook babies' formula and sterilize nursing bottles in one operation. Use bottles which allow the nipple to be placed downward into the neck of the bottle, with a cap covering the top.

All formulas are not adaptable to this procedure and, not knowing your baby's formula, we suggest consulting the baby's pediatrician on this matter, since he is familiar with the baby and the prescribed formula.

Method: Fill bottles with required number of ounces of formula. Screw cap down firmly, then loosen by giving one-half turn back. Place upright in canning basket (if bottles tend to tip, place a flat metal cover into the canning basket) with 2 quarts water in Cooker. Close cover securely. Place pressure control weight on vent pipe. Cook 10 minutes at 5 lbs. pressure.

Reduce pressure normally 5 minutes; then cool Cooker at once. Remove bottles and run tepid water over them, gradually allowing water to become cooler until all bottles are cooled. Tighten caps snugly on each bottle and store in refrigerator.

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SUGGESTIONS THAT WILL HELP YOU TO OBTAIN THE BEST SERVICE FROM YOUR COOKER

Many times Cookers are sent to our Service Department when there is actually no need for returning them. Some of the minor operational problems which may develop and which can be easily corrected by the customer are given below.

A slight amount of steam escaping around the automatic air vent when cooking first begins is a normal operating condition since the plug acts as a valve and is designed to seal completely only after the pressure within the Cooker has reached a certain point. Continued leakage, however, may mean that foreign matter has collected around the edges of the automatic air vent. This condition may be corrected by removing the plug, and carefully cleaning it and the aperture in which it fits with a soft cloth and warm suds. To replace the automatic air vent, push it into the aperture from the underside of the cover. The slightly rounded side of the plug must face upward in the cover aperture. It is recommended that the automatic air vent be replaced whenever it becomes hard or deformed.

If there is excessive leakage under the pressure regulator, it is usually due to the fact that there is too much pressure within the Cooker. Or it may be due to the fact that the mouth of the vent pipe has become damaged in some manner. If the mouth of the vent pipe is nicked or damaged, the vent pipe should be replaced. This can be done with a crescent wrench. Care should be exercised not to damage the threads in the vent pipe hole in the cover.

If, during cooking, there is a continuous escape of steam around the cover, it would indicate that the sealing ring should be replaced.

CAUTION: Always remove the Cooker from the heat, if excessive leakage develops. Allow it to cool until the pressure has receded and then examine the part or place at which the steam is escaping so that steps can be taken to correct the trouble.

HOW TO OBTAIN
Prompt Repair Service
FOR YOUR SEARS COOKER-CANNER

Sears, Roebuck and Company retail stores stock service parts such as sealing rings, steam gauges, automatic air vents, and other standard items for the purpose of providing quick service on replacement parts.

If any part of your Cooker-Canner needs replacement and you cannot obtain it from one of our retail stores, you may order the part direct from the Sears, Roebuck mail order plant nearest to you. These plants are located in Memphis, Chicago, Philadelphia, Boston, Minneapolis, Atlanta, Kansas City, Dallas, Los Angeles, Seattle and Greensboro. Order the part you want **by number,** as listed on page 71. **BE SURE TO PRINT YOUR NAME AND ADDRESS CLEARLY.**

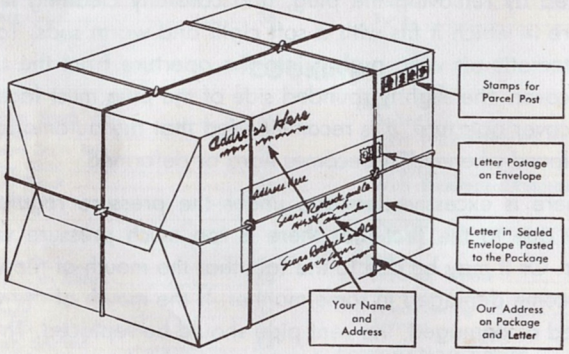


Illustration showing Cooker-Canner wrapped and addressed for mailing.

In the few cases when it is necessary to return a part for repair, or to return a complete cooker-canner, be sure to pack, wrap, and tie securely. Paste a letter on the outside of the package, telling our service department of the difficulty you have experienced. (Check illustration.) Shipping costs must be prepaid by you and the cooker or repaired part will be returned to you, shipping charges C. O. D. Please refer to page 71 for repair parts.

6-15-69

16 qt.

PARTS FOR SEARS PRESSURE COOKER-CANNERS MODELS 620.46000 AND 620.46010

When ordering parts, please be sure to specify part number, name of part and model number of cooker. See Page 70 for instructions on ordering.



99628 STEAM GAUGE



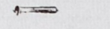
1509
AUTOMATIC AIR VENT



194
COVER HANDLE



1075 SEALING RING



1486 ROUND HEAD SCREW 7/8"
(1 Req. for 194)



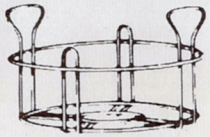
99629
PRESSURE REGULATOR



193
BODY HANDLE



1058 VENT PIPE



1490 WIRE BASKET FOR MODEL 620.46000
1500 WIRE BASKET FOR MODEL 620.46010

1485 ROUND HEAD SCREW 5/8"
(1 Req. for 194, 2 Req. for 193)

PART NO.	DESCRIPTION
193	Body handle
194	Cover handle
920	Body complete for Model 620.46000 (not shown)
922	Body complete for Model 620.46010 (not shown)
1058	Vent pipe
1075	Sealing ring for Model 620.46000 & 620.46010
1485	10/24 x 5/8" Round head handle screw
1486	10/24 x 7/8" Round head handle screw
1490	Wire basket for Model 620.46000
1500	Wire basket for Model 620.46010
1509	Automatic air vent
49647	Recipe book (not shown)
97209	Cover complete for Model 620.46010 (not shown)
97210	Cover complete for Model 620.46000 (not shown)
99628	Steam gauge
99629	Pressure regulator

Form 49-647D

Printed in U.S.A.

Place Lid on Inner

place arrow ~~towards~~

Oven 69 –

Turn Clock Dial