BRINGS SUMMER FRESHNESS TO WINTER NEEDS
This present edition of the *Ball Blue Book* brings to you the latest and most approved methods and directions for Home Canning and Preserving available at the present time. The best of our former recipes, like old friends, have been retained and many delightful new ones have been added. It is with sincere good wishes for your success in Home Canning and Preserving that we publish this revised edition of the *Ball Blue Book*.

**BALL BROTHERS COMPANY**  
MUNCIE, INDIANA

**PRACTICAL USES FOR FRUIT JARS**

**HOME PURPOSES**

Home canning of fruits, vegetables, soups, meats, sea-food and wild game.
- Packing and storage of jams, conserves, preserves, marmalades, pickles, syrups, honey and fruit juices.
- For storage of salted and brined products.
- For storage of salt, sugar, spices, starches, flours, cereals, coffee, tea, bread crumbs, nuts, etc.
- Packing lard, butter, salad-dressing and chocolate.
- As a container for carrying beverages for school lunches, etc.
- For cider, vinegar and all beverages.
- Cream whipper. Clothes sprinkler.
- Packing and storage of cheese.
- Storage of dried fruits, dried vegetables, dried meats, sea-food and wild game.
- For storing lemons — (pack raw, cover with cold water and seal).

**EDUCATIONAL PURPOSES**

Storage, exhibit and classification of all kinds of seeds and grains. Preserving plant exhibits.

For soil exhibits, classifications of soils for laboratory work.
- For storage of laboratory cultures, studies and specimens.
- For chemical, zoological and technical exhibits to be used at county, state and national exhibitions.
- For educational exhibits showing samples of industrial exhibits, such as wool, linen, silk, cotton — showing development from the raw material to the finished product.
- For stone and jewel exhibits.

**INDUSTRIAL PURPOSES**

For use as containers in exhibiting samples of groceries — cereals, coffees, teas, vegetables and nuts in grocery stores, jobbing houses and wholesale departments.
- For exhibition of nails, tacks, staples, screws, nuts, bolts and many other small articles in hardware stores.
- As drinking fountains for poultry.
- Handy containers for measuring oil for automobiles in gasoline filling stations.
- Hand sprayer for garden.
- Covers for growing plants.
They shall rise up and call her blessed—this woman, who—loving and thoughtful of future joy and health—secures the goodness of Nature at her best, and cans against the barren sameness of the Winter months. Well does she look to the ways of her household.
HE housekeeper of today has a bigger responsibility than her predecessor of a generation or two ago. Upon her shoulders rests the burden of keeping her family in good health through the right choice and preparation of food. In past years she was content to furnish quantities of dishes of delightful flavor and to see her family eat their fill. If illness came she sent for the doctor and did her part by devoted nursing.

Today the housewife must maintain not only the reputation of being a good cook, but she must also take the responsibility of selecting food which will provide proper materials for the growth of the children and promote the health of each member of her family. Doctors and health specialists tell us that the tired feeling, the so-called “spring fever” at the end of winter, is often due to lack of fruits and vegetables in the winter diet. Our newer knowledge of nutrition has caused us to realize more clearly the body’s need for iron, phosphorus, lime, cellulose and vitamins. These essential substances are probably more generally distributed in fruits and vegetables than in any other class of food.

Home Canning is the best means of providing a sufficient supply of these foods during the winter months in localities where fruit and vegetable markets are not easily accessible or the price of fresh products is prohibitive to the family income. The summer vegetable garden can be easily transformed into a “winter garden” by planting for a surplus of vegetables to be canned for the months when the garden does not produce. For those who do not have gardens and orchards the farmers’ road-side stands and home markets afford excellent opportunity to buy fresh fruit and vegetables, in season, at surprisingly low cost. Canning “in season” saves money, labor, time and energy “out of season.”

Home Canning is simplified and made easier since the introduction of Jar Cooked (Hot and Cold Pack) Methods of canning and the Steam Pressure Cooker for obtaining temperatures higher than can be reached in boiling water. The United States Department of Agriculture and all canning authorities recommend the Steam Pressure Cooker method for canning all non-acid vegetables and meats. By careful planning and by following the instructions given in each individual recipe as well as a thorough reading of pages 4 to 8 you can, with minimum effort, have on your pantry shelves a generous supply of delicious home canned fruits, vegetables, meats, fruit juices, preserves and pickles in sufficient variety to insure well-balanced, steaming hot, home cooked meals at a few moments’ notice.

Better health, better work, better sleep, better play can result only from having wholesome, simple, well-balanced meals, with at least one vegetable and one fruit for each member of the family for each day on the housekeeping calendar.
SUCCESSFUL Home Canning depends largely upon the efficiency and type of equipment used as well as following the correct methods. Before starting canning see Methods of Canning and Important Rules on pages 6 to 8. Canning equipment need not be elaborate or expensive. It should be easy to handle, of convenient size, serviceable, light in weight and easy to clean.

TYPES OF CANNERS

The type of Canner used depends upon the product to be canned. A large preserving kettle can be used for preserves, conserves, marmalades and jams since these require cooking in an open kettle. For fruits, vegetables and meats, which are canned by the Jar-Cooked (Hot or Cold Pack) method in which the product is cooked inside of the jar, another type of Canner is necessary.

HOT-WATER BATH

This may consist of any container which can be fitted with a suitable rack for holding jars and which allows a free circulation of boiling water under and around the jars. It should be equipped with a tight-fitting lid and the container should be deep enough to permit one inch of water to cover the jars. A tin lard-pail or wash-boiler can be easily converted into a Water-Bath Canner. The Commercial Water-Bath Canner is fitted with a wire rack, equipped with handles for lifting the jars in and out of boiling water. It is inexpensive and serviceable.

In a Hot-Water Bath Canner the product is processed at boiling temperature.

STEAM PRESSURE COOKER

(Recommended for processing non-acid vegetables and meats)

The Steam Pressure Cooker is a vessel especially designed for obtaining temperatures higher than can be reached in hot water bath. It consists of an iron or aluminum vessel with a tight fitting cover, equipped with a pet-cock, safety valve and a pressure gauge for determining the steam pressure inside the cooker. The reading of the pressure gauge is affected by the altitude. The pressure and time for processing specified in the table apply from sea level to 2000 feet. See table, page 11, for higher altitudes.

STEAM COOKER

While the Steam Cooker or “Steamer” is primarily intended for cooking purposes, many housewives have found it is economically and readily used for canning and preserving.

It is equipped with a tank in which boiling water generates steam which circulates throughout the Cooker. The temperature of the Steamer may never reach that of boiling water; therefore the manufacturers of Cookers generally recommend a slightly longer time for processing than required in the Hot-

CAN FOR ECONOMY AND HEALTH
Oven Canning

Oven canning is used satisfactorily by many housewives for fruits and tomatoes. Directions must be carefully followed and correct temperature used. The temperatures most often recommended for Oven Canning range from 250° to 275° F. However, the temperature of the contents of the jars is relatively low. Oven Canning requires as much or more time than the Hot-Water Bath Method of processing and there is liable to be a greater loss of liquid from the jars that are processed in an oven. The oven must be equipped with a heat regulator which is properly adjusted.

Small Canning Equipment

Results can be made more certain and the work greatly lessened by having at hand an ample supply of the smaller less-expensive canning equipment. For efficient canning, sharp knives are necessary. A stainless steel or silver knife is best for paring fruit. A long-handled spoon makes stirring easier. A flat wooden spatula or paddle helps in packing. A fine-mesh wire basket or colander simplifies the blanching process. A jar-lifter helps to prevent burns. A wide-mouthed funnel and ladle will save time and product when filling jars. A quart measure, small measuring cups, scales, a confectioner’s thermometer and bowls of various sizes help to obtain a perfect product. Enamel or aluminum utensils are preferable.

Rubber Jar Rings

Success in keeping products canned in Glass Jars depends greatly upon the Jar Ring. The purpose of the Jar Ring is to make an air-tight seal between the lid and the jar. To insure a perfect seal always use NEW, CLEAN, RELIABLE Rubber Rings. BALL “Perfect Seal” Rings are of the best quality and fully meet the necessary requirements for ALL KINDS of canning. They are packed with all Ball Jars.

Glass Jars

Recent inventions and improved methods in the manufacture of Glass Jars now make it possible for the Home-maker to select the jar she likes best from a variety of sizes, shapes and types, all of which are designed and tested to meet her special needs for Home Canning. BALL Fruit Jars are made in both round and square shape and in two colors, green glass and white (flint) glass. Color does not indicate the strength of the glass jar; color is merely a matter of choice. Flint glass is preferable for some products when canning for sale or for exhibit purposes. Green cucumber pickles, peas, green beans and greens show to better advantage when canned in green glass jars. Green jars are widely used, due to the theory that green glass protects and preserves the delicate color of various fruits. The size of the family should determine the size of the jar.

Half-pint jars are recommended for jams, conserves, preserves and marmalades, in place of jelly glasses which are not designed to insure an airtight seal.

Ball “Perfect Mason” and “Special” Jars

The “Perfect Mason” Jar, which is best known to the average home canner, is made in both green and flint glass and in round and square shapes. It is equipped with Metal Screw Cap (preferably zinc) containing a Porcelain Liner which fits into the top of the Cap. This prevents the product inside the Jar coming in contact with the metal part of the Cap. This Jar is also furnished with Glass Top Seal, consisting of Glass Lid, Rubber and Metal Screw Band.

The “Special” (wide mouth) Jar is made in flint glass, round and square shapes, and is equipped with either Zinc Porcelain Lined Cap or the Glass Top Seal.

Ball “Ideal” and “Eclipse” Glass-Top Jars

The Glass-top or Clamp-top Jar is made entirely of glass with the exception of the wire bail or clamp which fastens the Glass Lid into position. “Ideal” Jars are made in both green and flint glass and in round and square shapes.

The “Eclipse” (wide mouth) Jar is made in round, flint glass and is equipped with the same type wire fastenings and lid as the “Ideal” Jar.

Tightening Wires of “Ideal” and “Eclipse” Jars

After continued use the upper wire clamps on these Jars may need to be tightened. To do this slip upper wire (the one that goes over Lid of Jar) out of wire loops. Grasp wire as shown in illustration, bend center of wire down slightly so it will hold Glass Lid more tightly. If in making this bend the ends of the wire are separated too far apart bend them towards each other so they may be sprung to place in the loops.
METHODOF CANNING

IT has been said that no single discovery has contributed more to the general welfare of mankind than the art of preserving food. This is now possible in every home through the use of BALL Jars, Caps, Rubbers and Jelly Glasses. Practically all foods may be canned and stored indefinitely without losing their flavor or food value; thus home canning as an applied household science has become a well established, successful, easy and economical home practice. For successful canning we must observe two principles: proper heating and correct sealing. The degree of heat usually employed in canning lies between that at which water boils and 250°F., which corresponds to a steam pressure of 15 pounds. Fruits, vegetables and meats vary in composition and experience has proven that they require different methods of processing. The Steam Pressure Cooker Method is recommended for non-acid vegetables and meats, because it is the best means of securing temperatures high enough to destroy all harmful organisms.

OPEN-KETTLE METHOD

The Open-Kettle Method is that in which the food is cooked in an open kettle. It is used for fruits, conserves, jams, marmalades, preserves and tomatoes.

Careful attention should be given to each step in the process.

- Use firm, clean, fresh, sound products.
- Boil for required length of time.
- While fruit is boiling, wash jars, caps and lids and completely submerge in pan of hot water. Boil jars and caps for 15 minutes. Scald rubbers and Vacu-Seat Lids. Keep in hot water until ready to use. Place wet rubber on the hot jar. See that the rubber rests flat on the sealing shoulder. Fill jar to overflowing. Have shoulder of the jar and cap or lid as well as the rubber wet when seal is made.
- Fill Jars to overflowing quickly with boiling product or tomatoes. Do not wipe off the top or sealing shoulder of the Jars. Fully seal the Jars as soon as filled. (With Mason Jar screw Cap or Band down tight as possible. With Ideal Jar place upper clamp in position over Glass Lid and pull down tight as possible. With Ideal Jar place upper clamp.)

Cool as quickly as possible to room temperature. When cool, test for leaks. (See instructions for Jar-Cooked Method). Do not attempt to tighten Mason Caps after Jars are cold — this may break the seal.

Store in cool, dry place.

(Hot and Cold Pack (Jar-Cooked) Method)

The Cold Pack Method consists of packing food cold into jars and then processing. This method is still used for some products which need to be “blanched” in hot water and “dipped” into cold water to shrink the product and loosen the skins. These products are Peaches, Apricots, Tomatoes, Beets and Carrots. This has been gradually replaced by the Hot-Pack Method which calls for a short pre-cooking period. The fruit or vegetable is heated in a small quantity of liquid until it boils. Meat is seared in a pan or oven. Thus the products are thoroughly shrunken so as to facilitate packing, and any air is driven out. The hot food is packed into jars, partly sealed and processed immediately.

General Directions for Jar-Cooked (Hot and Cold Pack) Method of Canning

1. Wash, then boil for 5 minutes Jars, Caps and Lids. Scald Rubbers and Vacu-Seat Lids. Let them stand in hot water until ready to use.
2. Carefully examine old Jars and Caps and see that the sealing edges of Caps or Lids are not dented or chipped.
3. Select Firm, Sound, Fresh Products. Reject any bruised and spoiled fruits, vegetables and meats. Sort and grade for size and ripeness. Uniformity helps to secure an even distribution of heat throughout the Jar and improves the appearance of the pack.
5. Place new Wet Rubber in position on Jar or Lid. See that it rests flat on the sealing shoulder.
6. Pre-Cook (Boil) for time given in Time Table. Blanch (Scald), then cold dip Peaches, Apricots, Tomatoes, Beets and Carrots to loosen skins.
7. Pack product into Jars loosely enough to allow for proper heat circulation; vegetables loosely enough so they will retain their shape.
8. For Fruits, pack the prepared fruit into clean hot BALL Jars. Do not crush. Fill with boiling syrup to within one-half inch of top of Jar to allow for expansion of air and to prevent boiling over.
9. For Vegetables, Pre-Cook (Boil). (See Time Table.) Pack prepared vegetables into clean hot BALL Jars; add one level teaspoon pure salt to each quart. Fill jar with the boiling water in which the vegetable was cooked, to within one-half inch of top of Jar. If not enough cooking water add boiling water.
10. For Meats bleed well and cool thoroughly before using. Pack meat uncooked (raw) or cooked into clean hot BALL Jars. If canning raw meat add two level teaspoons pure salt to each jar. If canning seared meat after searing season with salt and pepper and add a little of the fat in which the meat was seared. Do not add water.
11. Partly seal by screwing down the Cap on the Perfect Mason or BALL Special Jars firmly tight.
and turn back 3/4 inch. If using Mason Type Jar with Glass Top Seal or Vacu- Seal Lids, after placing Lid with Rubber attached on the Jar, screw on Metal Band firmly tight and turn back 1 inch to break seal. On Ideal and Eclipse Jar place Glass Lid and Wet Rubber into position, click top bail into position, but leave lower bail up.

12. METHODS OF PROCESSING

PROCESSING is the application of heat to canned foods to such a degree that they remain fit for consumption. Successful processing should result in canned food that will keep when stored under proper conditions. Processing either hot-packed or cold-packed foods may be done in any of the following ways, depending upon the products to be canned. BALL Jars are adapted to all methods of processing.

HOT WATER BATH METHOD

(Boiling Temperature)

This method is recommended for fruits and acid vegetables, such as tomatoes, rhubarb, pickled beets and ripe pimientos because temperatures higher than boiling tend to injure the delicate color and texture of most fruits.

Heat water in canner hot. Place jars in slowly. Cover and keep at least one inch of water over top of jars. Begin counting time when the water is in a hard boil. Keep boiling steadily during the entire processing period. When processing time is over remove jars from canner and seal immediately.

STEAM PRESSURE COOKER METHOD

(Higher than boiling temperature)

All canning authorities recommend this method for processing all non-acid vegetables and meats as the only means of furnishing temperatures high enough to make sure that all organisms causing spoilage are destroyed.

Place one inch of water in the Pressure Cooker. Place the partly sealed, filled jars on the rack. Fasten the Cooker cover securely on Cooker. Leave pet-cocck open. When live steam has escaped for 3 minutes, close pet-cocck. Begin counting time when the steam gauge shows the required pressure. If in altitudes above 2000 feet, add one extra pound of pressure for each additional 2000 feet elevation. Regulate fire to hold an even temperature. Two pounds variation may draw liquid out of jars. At the end of the processing period remove Cooker from fire, allow pressure to return to zero. Open pet-cocck slowly. Never allow steam to rush out suddenly as this causes liquid to be drawn from the jars. Remove cover from Cooker tilting cover toward you to protect the face from any escaping steam. Remove jars carefully, lifting them by the sides or the shoulder so as to not disturb the rubber. Seal immediately.

If no steam pressure cooker is available it is recommended that a slightly longer time for processing be used than is required in the Hot-Water Bath. Remove jars at the end of processing period and seal immediately.

STEAM COOKER METHOD

Fill the reservoir with water and keep filled with boiling water during the processing period. Place jars on shelves. Begin counting time after the water has boiled about 5 minutes. This will fill the cooking compartment with steam. The temperature of the steamer may never reach that of boiling water, therefore it is recommended that a slightly longer time for processing be used than is required in the Hot-Water Bath. Remove jars at the end of processing period and seal immediately.

OVEN METHOD

Place the jars two inches apart in a shallow pan in a pre-heated oven. Do not put water in pan.

Place the pan so as to bring Jars as near the center of the oven as possible. When using an Electric Oven, do not use top heating element. Begin counting time when proper temperature is reached. Remove the Jars at end of processing period one at a time and seal immediately.

CAREFUL HANDLING AND CORRECT SEALING

Processing correctly is but half the work of successful canning. It is just as essential that we keep unsterile air from entering the jar after the processing period as it is that we process the jar of food.

Do not lift jars by the lids when removing them from the cooker. The weight of the jar is often great enough to pull the rubber from the jar, allowing air to enter. No air must reach the sterilized product if it is to keep indefinitely. Seal jars immediately.

SEALING JARS

At the end of the processing period, remove jars from canner one at a time and seal immediately. To seal BALL Perfect Mason and BALL Special Jars, screw cap down on rubber as tightly as possible. To seal Mason Jars with Glass Top Seal or Vacu-Seal Lids, screw band down as tightly as possible. To seal BALL Ideal and Eclipse Jars, pull down lower clamp. Do not attempt to tighten Mason Caps after jars are cold. This may break the seal.

TESTING JARS

Allow Jars to stand "top-up" until perfectly cold — do not attempt to tighten Mason Caps after the Jars are cold, this may break the seal.

After the Jars are cold, invert them for a few minutes to examine for leaks. If leak is found, remove the Top, look for cause of leak. If new lid is needed, replace with good one and reprocess for one-third original time and seal again or contents can be used immediately. Do not invert Mason Jars if filled with salt or vinegar solution.

It will be well to examine the Jars four or five days after sealing to make sure they are perfectly sealed.

If using BALL Vacu-Seal Lids, when Jars are cold remove band, wipe Band and Lid dry. If Lid is held tight on Jar, the seal is perfect. Replace Band to protect seal. If Lid can be lifted from Jar, seal is not perfect, in which event use regular BALL Mason Caps and Rubbers. Reprocess one-third original time.
OPENING JARS
On the Mason and Ideal type Jars, pull Rubber from beneath the Cap with fingers or pliers; if it sticks too tightly immerse the Top in hot water; if hot water is not available, press thin, sharp pointed knife between the jar and rubber admitting air to break the seal. (Do not place knife blade between Cap and Rubber — this may dent the sealing edge of the Cap.) With Glass Top Seal Jars, invert Jars in hot water from 3 to 5 minutes. Insert thin, sharp pointed knife blade between Jar and Rubber to admit air. If using Jars with Vacu-Seal Lid, remove Band and puncture Lid.

CANNED VEGETABLES AND MEATS SHOULD BE BOILED 10 MINUTES BEFORE TASTING EVEN IF THEY ARE TO BE SERVED COLD.

SELECTION OF PRODUCTS
Select fresh, sound, firm products for canning. Spoiled or decayed products should never be used. For making jams and jellies, imperfectly shaped or hard fruit may be used. Bruised or specked fruit may also be used if the bruises and specks are carefully removed and only the sound portions of the fruit are reserved for the preserving kettle.

IMPORTANT RULES FOR SUCCESSFUL CANNING

1. BEGIN COUNTING TIME in the Hot-Water Bath after the water is boiling. Keep the water boiling vigorously during the entire processing period.

2. PREVENT LOSS OF LIQUID in Hot-Water Bath by:
   - Only filling Jars to within ¾ inch of top. Having and keeping water 1 inch over tops of Jars. Keeping the water boiling steadily during entire processing period.

3. LOSS OF LIQUID IN STEAM PRESSURE COOKER can be prevented by:
   - Only filling Jars to within ¾ inch of top. Maintaining an even pressure throughout the entire processing period. Allowing the indicator on pressure gauge to return to o° before opening pet-cock to release the remaining steam. Opening pet-cock gradually.

4. NEVER OPEN JARS to refill with liquid. Loss of liquid does not affect the keeping quality if the Jar is sealed. If the Jar Ring has “blown out” the Ring must be replaced IMMEDIATELY with a new one, seal and process the product again for one-third original time.

5. SATISFACTORY RESULTS in CANNING VEGETABLES will be assured by:
   - Using fresh, sound, firm products. Canning the product while it is still fresh. Putting each Jar into processing vessel as soon as packed.
   - Processing by method recommended for time specified.
   - Completely sealing the Jar as soon as taken from the processing vessel.

6. CORN, BEANS, AND LIMA BEANS EXPAND during the processing period. Pack loosely to within 1 inch of top of Jar to allow for this expansion. Other products shrink and the Jar can be filled to within ¾ inch of top of Jar in Jar-Cooked canning. Filling the Jar with product and liquid to within ½ inch of top insures a quicker heating of contents than if filled to overflowing.

7. CLOUDINESS IN PEAS can be prevented by:
   - Using young unbruised peas.
   - Grading for uniformity. Small peas will cook to pieces before larger ones are thoroughly processed.
   - Use soft water for blanching and pre-cooking if possible. Hard water contains various mineral elements which may affect the color of certain vegetables.

8. SUGARLESS CANNING is not economical. The addition of sugar during the cooking helps to develop the flavor of the fruit. The increased cost per Jar of fruit because of any increase in price of sugar is very slight, only a fraction of a cent. The price of sugar should therefore not determine whether to put up fruit or not.

9. CANNING COMPOUNDS, or other chemical preservatives may be injurious to health. Directions and recipes for canning in the BALL Blue Book do not require the use of canning compounds.

10. IT IS UNWISE TO SUBJECT JARS TO SUDDEN TEMPERATURE CHANGES. In taking Jars from cool basement clean them first in warm water then in boiling water. Jars should not be placed in a cool draught after filling, or upon removing from canner. Do not place hot Jars directly on a marble or metal-top table, as they may break. Place cloth or paper under them.

11. GLASS JARS are more economical than tin cans and can be used year after year. A clean Glass Jar is the last word in sanitation.

IMPORTANT RULES
BLANCHING
Blanching consists of plunging products, such as Peaches, Apricots, Tomatoes, Beets and Carrots into boiling water for a short time. The purpose is to shrink the product and loosen the skins.

COLD DIP
Blanching is usually followed by the Cold Dip. This consists of plunging the blanched product into cold or running water for 5 or 10 seconds. The purpose of the Cold Dip is to make easier handling.

PRE-COOKING
Pre-cooking consists of cooking the product by boiling, steaming, or searing. It is recommended for most vegetables, as it improves the texture and flavor; shrinks the product and insures a better pack; reduces the time required for heat to penetrate throughout the contents of the Jars. Meat should be seared quickly — not pre-cooked.

STORAGE
Store Jars in a cool, dry place where there is no danger from freezing or over-heating.
CANNING TIME TABLE FOR STANDARD FRUITS

<table>
<thead>
<tr>
<th>Product</th>
<th>Method of Treatment before Canning</th>
<th>Hot-Water (minutes)</th>
<th>Oven 275°F. (minutes)</th>
<th>Syrup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Wash — quarter or half — place in salt bath — rinse — boil 1 minute — pack — cover with boiling syrup. Or — Boil whole in syrup until tender or bake as for serving, and cover with syrup — pack hot. Or — Pack hot in form of apple sauce.</td>
<td>15</td>
<td>35</td>
<td>Thin</td>
</tr>
<tr>
<td>Apricots</td>
<td>Wipe with damp cloth — peel if desired — blanch — halve and pit — pack — cover with boiling syrup.</td>
<td>20</td>
<td>35</td>
<td>Medium</td>
</tr>
<tr>
<td>Berries (Except Strawberries)</td>
<td>Wash — stem — pack in jars — cover with boiling syrup. Or pre-cook and pack hot.</td>
<td>20</td>
<td>35</td>
<td>Medium</td>
</tr>
<tr>
<td>Cherries</td>
<td>Wash — stem — pit — pack — cover with boiling syrup. Or remove pits, add sugar as desired, bring to boil and pack.</td>
<td>20</td>
<td>30</td>
<td>Medium</td>
</tr>
<tr>
<td>Currants</td>
<td>Wash — stem — pack in jars — cover with boiling syrup. Or pre-cook and pack hot.</td>
<td>20</td>
<td>30</td>
<td>Medium</td>
</tr>
<tr>
<td>Figs</td>
<td>Wash — place in soda bath — drain — rinse — cover with boiling syrup.</td>
<td>20</td>
<td>35</td>
<td>Thick</td>
</tr>
<tr>
<td>Gooseberries</td>
<td>Same as other berries.</td>
<td>20</td>
<td>30</td>
<td>Thick</td>
</tr>
<tr>
<td>Grapes</td>
<td>Same as berries.</td>
<td>20</td>
<td>30</td>
<td>Medium</td>
</tr>
<tr>
<td>Peaches</td>
<td>Select firm, ripe peaches — blanch — cold-dip — peel — pack — cover with boiling syrup.</td>
<td>20</td>
<td>35</td>
<td>Medium</td>
</tr>
<tr>
<td>Pears</td>
<td>Select firm, ripe pears — pare — quarter — place in cold salt bath — rinse — boil in syrup — pack — cover with boiling syrup.</td>
<td>20</td>
<td>35</td>
<td>Medium</td>
</tr>
<tr>
<td>Pineapple</td>
<td>Peel — remove eyes — cut, slice or shred — pack cold — cover with boiling syrup.</td>
<td>30</td>
<td>45</td>
<td>Thin</td>
</tr>
<tr>
<td>Plums</td>
<td>Wash — prick skins — pack cold — cover with boiling syrup. Or bring to boil, using sugar as desired — pack hot into jars.</td>
<td>20</td>
<td>45</td>
<td>Medium</td>
</tr>
<tr>
<td>Rhubarb</td>
<td>Wash — cut into small pieces — pack — cover with boiling syrup. Or pre-cook and pack hot.</td>
<td>20</td>
<td>30</td>
<td>Thick</td>
</tr>
<tr>
<td>Strawberries</td>
<td>Wash — stem — add sugar — let stand 2 hours. Boil gently 3 minutes — let stand over night — pack. Or if reheated on second day — pack.</td>
<td>10</td>
<td>35</td>
<td>Medium</td>
</tr>
<tr>
<td>Fruit Juices</td>
<td>Crush fruit — heat slowly — strain — fill jars to overflowing.</td>
<td>30</td>
<td>(180°F.)</td>
<td></td>
</tr>
</tbody>
</table>

Note: — If canning fruit in Steam Pressure Cooker, process at 5 pounds pressure for 10 minutes if packed cold; for 5 minutes if packed hot with the following exceptions — process Apricots, Figs and Peaches 10 minutes; Pears 8 minutes; Pineapple 25 minutes. See notes on Time Table Page 10 & 11.

SYRUP TABLE FOR FRUITS

<table>
<thead>
<tr>
<th>Syrup</th>
<th>Proportions Sugar and Water</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thin Syrup</td>
<td>1 part sugar to 3 parts water</td>
<td>Boil sugar and water together until sugar is dissolved.</td>
</tr>
<tr>
<td>Medium Syrup</td>
<td>1 part sugar to 2 parts water</td>
<td>Fruit juice may be used in place of water.</td>
</tr>
<tr>
<td>Thick Syrup</td>
<td>1 part sugar to 1 part water</td>
<td></td>
</tr>
</tbody>
</table>

The syrup specified in the above time table is recommended by the United States Department of Agriculture. Many housewives prefer a sweeter and somewhat thicker syrup. Those who do will find the syrups shown in the individual recipes satisfactory.
# Canning Time Table for Standard Vegetables

(Consult Individual Recipe for Unusual Vegetables and Combinations)

This table is for altitudes of 2,000 feet or less. See altitude table for higher elevations. The Steam Pressure Cooker is recommended by the U. S. Department of Agriculture and Extension Service for processing non-acid vegetables.

Boil 10 minutes all canned vegetables before serving or tasting.

<table>
<thead>
<tr>
<th>Product</th>
<th>Preparation Before Canning</th>
<th>Steam Pressure Cooker</th>
<th>Hot-Water Bath Boiling</th>
<th>Oven (225° F.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus</td>
<td>Wash — grade — keep tips above water — boil 3 minutes — pack</td>
<td>10 lbs. for 40 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Beans — Green or Wax</td>
<td>Wash — string — boil 5 minutes — pack</td>
<td>10 lbs. for 40 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Beans — Lima</td>
<td>Shell — grade — boil 5 to 10 minutes — pack loosely</td>
<td>10 lbs. for 55 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Beets</td>
<td>Wash — retain 1 inch stems — boil 15 minutes — slip skins — pack</td>
<td>10 lbs. for 40 hours</td>
<td>2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Brussels Sprouts — Cabbage</td>
<td>Wash — boil 10 minutes — add salt — pack</td>
<td>10 lbs. for 40 hours</td>
<td>1 1/2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Soak in cold brine — boil 3 minutes — pack</td>
<td>10 lbs. for 40 hours</td>
<td>1 1/2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Carrots</td>
<td>Wash — scrape — boil 5 minutes — pack</td>
<td>10 lbs. for 40 hours</td>
<td>2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Corn (on cob)</td>
<td>Boil on cob 5 minutes — pack</td>
<td>10 lbs. for 70 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Corn</td>
<td>Boil on cob 5 minutes — cut from cob — loosely pack</td>
<td>10 lbs. for 70 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Corn and Lima Beans (Succotash)</td>
<td>Boil each product 5 minutes — combine corn and beans — loosely pack</td>
<td>10 lbs. for 70 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Eggplant</td>
<td>Peel — cut into 1/2 to 3/4 inch slices — boil 3 minutes — pack — do not add salt</td>
<td>10 lbs. for 60 hours</td>
<td>2 1/2</td>
<td>3</td>
</tr>
<tr>
<td>Greens (Including Spinach)</td>
<td>Steam in covered vessel for 15 minutes or until wilted — use smallest possible amount of water — loosely pack</td>
<td>10 lbs. for 65 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Kohlrabi and Turnips</td>
<td>Wash — boil 15 minutes — slice — pack</td>
<td>10 lbs. for 45 hours</td>
<td>2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>Wash — skin if necessary — boil 3 minutes — pack</td>
<td>10 lbs. for 40 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Okra</td>
<td>Wash — remove cap — boil 3 minutes — pack</td>
<td>10 lbs. for 40 hours</td>
<td>2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Parsnips</td>
<td>Wash — scrub — boil 15 minutes — pack</td>
<td>10 lbs. for 45 hours</td>
<td>2</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Peas</td>
<td>Shell — grade — boil 3 to 5 minutes — loosely pack</td>
<td>10 lbs. for 60 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Peppers, Bell</td>
<td>Wash — remove seed-pod — boil 5 minutes — flatten — pack</td>
<td>10 lbs. for 15 hours</td>
<td>3/4</td>
<td>1/4</td>
</tr>
<tr>
<td>Peppers, Pimiento</td>
<td>Wash — place in moderately hot oven until skins blister or crack — slip skins — remove seed-pod — pack dry</td>
<td>10 lbs. for 15 hours</td>
<td>3/4</td>
<td>1/4</td>
</tr>
<tr>
<td>Pumpkin or Squash</td>
<td>Wash — cut into pieces — cook until tender — mash — pack</td>
<td>15 lbs. for 75 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sauerkraut</td>
<td>Pack — add no water or salt</td>
<td>10 lbs. for 40 hours</td>
<td>1</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Sweet Potato</td>
<td>Wash — boil or steam 15 minutes — peel — pack</td>
<td>10 lbs. for 120 hours</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Scald and peel — pack whole or cut into pieces — pack</td>
<td>5 lbs. for 15 hours</td>
<td>1/2</td>
<td>1/4</td>
</tr>
</tbody>
</table>

10 GLASS JARS LAST A LONG TIME
## CANNING TIME TABLE FOR MEATS, POULTRY, FISH

<table>
<thead>
<tr>
<th>Product</th>
<th>Method of Treatment before Canning</th>
<th>Steam Pressure Cooker</th>
<th>Hot-Water Bath Boiling One-Period (hours)</th>
<th>Oven 275°F. (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamb</td>
<td>Bleed well — thoroughly cool — sear or pack raw — include small bones — process</td>
<td>60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Beef</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pork</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken</td>
<td>Bleed well — thoroughly cool — sear or pack raw — include small bones — process</td>
<td>60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Duck</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wild Game</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deer</td>
<td>Bleed well — thoroughly cool — soak in brine 30 minutes — sear or pack raw — process</td>
<td>60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Rabbit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wild Birds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duck</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>Use only fresh fish — bleed well — soak in brine — sear or pack raw — process (For shell fish see individual recipes)</td>
<td>10 lbs. for 100</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Fresh Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## CANNING TIME TABLE FOR SOUPS

<table>
<thead>
<tr>
<th>Product</th>
<th>Method of Treatment before Canning</th>
<th>Steam Pressure Cooker</th>
<th>Hot-Water Bath Boiling One-Period (hours)</th>
<th>Oven 275°F. (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus Puree</td>
<td>Use tough ends — boil until soft — press through sieve — add seasoning — pack hot — process</td>
<td>10 lbs. for 60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Clam Broth</td>
<td>Use fresh clams — boil 10 minutes — add seasoning — pack hot — process</td>
<td>10 lbs. for 100</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Clam Chowder</td>
<td>Boil mixture 10 minutes — pack hot — process</td>
<td>10 lbs. for 100</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Fish Chowder</td>
<td>Boil mixture 20 minutes — pack hot — process</td>
<td>10 lbs. for 100</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Green Pea Puree</td>
<td>Boil peas 1 hour — press through sieve — add salt — pack hot — process</td>
<td>10 lbs. for 60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Soup Stock</td>
<td>Cover meat with cold water — simmer 6 hours — add seasoning — cool — re-heat — pack hot — process</td>
<td>15 lbs. for 60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Vegetable Soup Mixture</td>
<td>Boil vegetables — pack hot — add salt — process</td>
<td>15 lbs. for 60</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>Tomato Pulp</td>
<td>Blanch tomatoes — cook 30 minutes — pack hot — add salt — process</td>
<td>5 lbs. for 10</td>
<td>1/2</td>
<td>3 1/4</td>
</tr>
</tbody>
</table>

## NOTES ON TIME TABLES FOR FRUITS, VEGETABLES, MEATS AND SOUPS

These times periods are based on the use of QUART GLASS Jars. For Half Pints and Pints reduce processing time specified in Time Tables 5%. For Half Gallons add 20% to processing time.

BALL BLUE BOOKS recipes call for LEVEL measurements.

## ALTITUDE CORRECTIONS TO TIME TABLES

<table>
<thead>
<tr>
<th>Elevation Above Sea Level</th>
<th>Extra Pounds Pressure Added to Pressure Cooker Time Table</th>
<th>Percentage To Be Added to Time Specified in Hot Water Bath Time Table</th>
<th>Temperature of Steam: (Provided air has been driven from cooker.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 feet</td>
<td>0 pound</td>
<td>20%</td>
<td>5 pounds steam pressure 228°F.</td>
</tr>
<tr>
<td>3,000 feet</td>
<td>1</td>
<td>40%</td>
<td>10 pounds steam pressure 240°F.</td>
</tr>
<tr>
<td>4,000 feet</td>
<td>1</td>
<td>60%</td>
<td>15 pounds steam pressure 250°F.</td>
</tr>
<tr>
<td>5,000 feet</td>
<td>2</td>
<td>80%</td>
<td>20 pounds steam pressure 259°F.</td>
</tr>
<tr>
<td>6,000 feet</td>
<td>2</td>
<td>100%</td>
<td>25 pounds steam pressure 267°F.</td>
</tr>
<tr>
<td>7,000 feet</td>
<td>3</td>
<td>120%</td>
<td>30 pounds steam pressure 276°F.</td>
</tr>
</tbody>
</table>

Residents of Mountain States may use the processing time given in Hot-Water Bath time table by adding the quantity of salt shown in the table below to each gallon of processing water.

Residents of Southern States who use Intermittent Processing for non-acid vegetables should check the time given in instructions on Page 3 with their Extension Service. Climatic conditions may make it advisable to shorten or lengthen the time shown.

Temperature of Steam: (Provided air has been driven from cooker.)

- 5 pounds steam pressure 228°F.
- 10 pounds steam pressure 240°F.
- 15 pounds steam pressure 250°F.
- 20 pounds steam pressure 259°F.
- 25 pounds steam pressure 267°F.

Read Important Rules on Page 8
### APPROXIMATE YIELD OF VEGETABLES—FROM 50-FOOT ROW

<table>
<thead>
<tr>
<th>Product</th>
<th>Amount</th>
<th>Product</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus</td>
<td>40 pounds</td>
<td>Dandelions</td>
<td>1-2 bushels</td>
</tr>
<tr>
<td>Beans</td>
<td>½ bushel</td>
<td>Lettuce</td>
<td>50 plants</td>
</tr>
<tr>
<td>String</td>
<td>½ bushel</td>
<td>Leaf</td>
<td>30 plants</td>
</tr>
<tr>
<td>Lima</td>
<td>½ bushel (not shelled)</td>
<td>Onions</td>
<td>1-2 bushels</td>
</tr>
<tr>
<td>Beets</td>
<td>½ bushel</td>
<td>Parsnips</td>
<td>1 bushel</td>
</tr>
<tr>
<td>For beet tops</td>
<td>½ bushel</td>
<td>Peas</td>
<td>1 bushel</td>
</tr>
<tr>
<td>For baby beets</td>
<td>½ bushel</td>
<td>Potatoes</td>
<td>1 bushel</td>
</tr>
<tr>
<td>For storing</td>
<td>1 bushel</td>
<td>Rhubarb</td>
<td>30-50 pounds</td>
</tr>
<tr>
<td>Cabbage</td>
<td>60-70 pounds</td>
<td>Rutabagas</td>
<td>1-1½ bushels</td>
</tr>
<tr>
<td>Carrots</td>
<td>1 bushel</td>
<td>Spinach</td>
<td>1 bushel</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>10-15 heads</td>
<td>New Zealand</td>
<td>1-2 bushels</td>
</tr>
<tr>
<td>Celery</td>
<td>100 plants</td>
<td>Squash</td>
<td>10-30 pounds</td>
</tr>
<tr>
<td>Chard</td>
<td>25-50 pounds</td>
<td>Hubbard</td>
<td>20 pounds</td>
</tr>
<tr>
<td>Corn</td>
<td>6 dozen</td>
<td>Summer</td>
<td>2-3 bushels</td>
</tr>
<tr>
<td>Golden Bantam</td>
<td>6 dozen</td>
<td>Tomatoes</td>
<td></td>
</tr>
<tr>
<td>Country Gentleman</td>
<td>6 dozen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ESTIMATED AMOUNT OF FOOD AND NUMBER OF JARS NEEDED

Perhaps more than any other question, except about processing, women want to know how much to buy or pick to make a certain number of jars of finished product. Of course, this will vary a good deal, depending on method of canning, and percentage of syrup or liquid in each jar. In general, however, the following table will be helpful in estimating your needs:

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Measure</th>
<th>Weight</th>
<th>Qt. Jars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>1 bushel</td>
<td>47 to 50 pounds</td>
<td>20</td>
</tr>
<tr>
<td>Apricots</td>
<td>4 basket crate</td>
<td>20 pounds net</td>
<td>12</td>
</tr>
<tr>
<td>Berries</td>
<td>1 bushel</td>
<td>48 pounds</td>
<td>24</td>
</tr>
<tr>
<td>Blackberries</td>
<td>16 qt. crate</td>
<td>22 pounds net</td>
<td>12</td>
</tr>
<tr>
<td>Berries, Red Raspberries</td>
<td>1¾ quart</td>
<td>16 pounds net</td>
<td>1</td>
</tr>
<tr>
<td>Berries, Strawberries</td>
<td>16 qt. crate</td>
<td>22 pounds net</td>
<td>12</td>
</tr>
<tr>
<td>Cherries</td>
<td>16 qt. crate</td>
<td>22 pounds net</td>
<td>25</td>
</tr>
<tr>
<td>Peaches</td>
<td>1 bushel</td>
<td>48 to 50 pounds</td>
<td>30</td>
</tr>
<tr>
<td>Peaches, whole</td>
<td>about 15 medium</td>
<td>2½ pounds</td>
<td>30</td>
</tr>
<tr>
<td>Pears</td>
<td>1 bushel</td>
<td>50 to 58 pounds</td>
<td>14</td>
</tr>
<tr>
<td>Pears</td>
<td>1 peck</td>
<td>14 pounds</td>
<td>6</td>
</tr>
<tr>
<td>Pineapples</td>
<td>1 crate, diced</td>
<td>30 Pineapples</td>
<td>16</td>
</tr>
</tbody>
</table>

In general, the following amounts of vegetables will produce the given number and kind of jars of finished product:

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Measure</th>
<th>Weight</th>
<th>No. of Jars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, String</td>
<td>1 peck</td>
<td>6 pounds</td>
<td>6-8 pints</td>
</tr>
<tr>
<td>Beans, String</td>
<td>1 bushel</td>
<td>24 pounds</td>
<td>24 pints</td>
</tr>
<tr>
<td>Carrots</td>
<td>1 bushel</td>
<td>50 pounds</td>
<td>40 pints</td>
</tr>
<tr>
<td>Corn</td>
<td>1 bushel</td>
<td>70 pounds</td>
<td>16 pints</td>
</tr>
<tr>
<td>Dandelion</td>
<td>1 bushel</td>
<td>12 pounds</td>
<td>13 pints</td>
</tr>
<tr>
<td>Mustard Greens</td>
<td>1 bushel</td>
<td>12 pounds</td>
<td>13 pints</td>
</tr>
<tr>
<td>Peas</td>
<td>2 qts. in pod</td>
<td></td>
<td>1 pint</td>
</tr>
<tr>
<td>Peas</td>
<td>1 bushel in pod</td>
<td></td>
<td>14 pints</td>
</tr>
<tr>
<td>Peas</td>
<td>1 bushel shelled</td>
<td></td>
<td>45 pints</td>
</tr>
<tr>
<td>Spinach</td>
<td>1 bushel</td>
<td>12 pounds</td>
<td>10 pints</td>
</tr>
<tr>
<td>Swiss Chard</td>
<td>1 bushel</td>
<td>12 pounds</td>
<td>10 pints</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>1 peck</td>
<td>14 pounds</td>
<td>7-9 pints</td>
</tr>
</tbody>
</table>
Fruits, with their delicious flavor, their rich color, tartness and their seasonal distribution, offer a greater variety of uses than any product which we can or preserve. Jellies, jams, marmalades and fruit juices, as well as canned fruit, add a pleasing variety to the monotony of the winter diet.

From these, delicious fruit cocktails can be made which make such an appetizing course with which to start a dinner or luncheon. These fruits may also be used for various desserts such as pies, puddings, ices, ice creams and gelatines. With such additions a simple meal is made most complete and satisfying.

Fruit can be canned for those suffering from diabetes by using Jar Cooked recipes, substituting hot water or fruit juice for syrup. If desired, sweeten with saccharine when serving.

Apples (Jar-Cooked)

The late fall and winter varieties are best for canning as they are more tart and retain their flavor better than do the sweet varieties.

Select firm, sound, tart varieties, slightly underripe. Wash, pare and core; cut into quarters, or leave whole as desired; drop immediately into a salt bath made in proportion of 1 tablespoon salt to 1 quart water to prevent discoloring. Rinse to remove

salt. Boil in syrup for 1 minute to shrink; pack tight into hot BALL Jars, fill with hot syrup, made with 1 part sugar to 1 part water, partly seal and process in a Hot-Water Bath for 15 minutes. Remove from canner and seal immediately.

Apples (Open-Kettle)

Wash, peel, quarter and core the apples. Drop the quarters into boiling syrup made with 1 part sugar
to 1 part water and boil until tender. Add the grated yellow rind of 1 lemon for each 2 quarts of apples. Boil the apples a few minutes longer. Pack into hot BALL Jars, fill to overflowing with boiling syrup and seal immediately.

**APPLE SAUCE**

*(Jar-Cooked)*

Wash, pare, core and remove discolored portions. Cut into small pieces, sweeten if desired, cook until tender, stirring with a wooden spoon to prevent sticking. A metal spoon will darken the sauce. Pack while hot into hot BALL Jars, partly seal and process in Hot-Water Bath for 15 minutes. Remove from canner and seal immediately.

**CANNED BAKED APPLE**

Wash and core sound, tart, baking apples. Fill the cavities with sugar to which a little cinnamon has been added. Place in a baking dish containing a little water. Bake in a hot oven until tender. Pack quickly into hot BALL Jars and cover with a hot syrup made with 1 part sugar to 1 part water. Partly seal, and Process in a Hot-Water Bath for 20 minutes.

**APRICOTS**

*(Jar-Cooked)*

APRICOTS may be canned peeled or unpeeled. If canned without peeling, clean by wiping with damp cloth. Blanch >2 minute. Halve and pit. Pack closely into hot BALL Jars, fill with hot syrup made with 1 part sugar to 1 part water. Partly seal, and Process in a Hot-Water Bath for 20 minutes. Remove from canner and seal immediately.

**APRICOTS**

*(Open-Kettle)*

*(Same as Peaches)*

**BERRIES**

Blackberries, Blueberries, Dewberries, Huckleberries, Loganberries, Mulberries, Raspberries

Berries contain more water in proportion than large fruits and vegetables. For this reason, in Jar-Cooked canning, berries, when heated, will rise to the top of the jar, while syrup, being heavier, remains at the bottom. This can be remedied somewhat by pre-cooking the berries.

To each pint of berries add one cup sugar. Place in kettle, stir gently and boil for five minutes. Pack boiling hot into BALL Jars and process five minutes in a Hot-Water Bath.

**BERIES**

*(Jar-Cooked)*

Wash and stem; pack closely in hot BALL Jars; fill with hot syrup made with 3 parts sugar to 2 parts water; partly seal and process in a Hot-Water Bath for 20 minutes. Remove from canner and seal immediately.

**STRAWBERRIES**

Jar-Cooked, (Open-Kettle)

Work with a small amount of berries not more than 3 quarts. Wash, stem and measure. To each quart of berries add 1 cup sugar. Place berries and sugar in alternate layers in a shallow pan. Let stand 2 hours. Enough juice will be drawn from the berries so that they may be cooked in their own juice. Boil gently 2-3 minutes without stirring. Let stand over night.

This gives the berries a chance to “plump” (absorb some of the syrup).

Next morning fill clean hot BALL Jars with plumped berries, partly seal and process in Hot-Water Bath for 10 minutes; or, reheat, pack hot and process for 5 minutes in Hot-Water Bath.

If canning by open kettle method prepare berries as directed above.

After standing over night boil gently for 5 minutes. Fill hot BALL Jars to overflowing and seal at once.

**CHERRIES**

*(Jar-Cooked)*

Cherries may be canned whole or pitted. For sour cherries, make a syrup, using 2 parts sugar to 1 part water; for sweet cherries, use a syrup made with 1 part sugar to 1 part water.

Wash, stem and pack cold into hot BALL Jars; fill with hot syrup, partly seal and process in a Hot-Water Bath for 20 minutes. Remove from canner and seal at once.

**CHERRIES**

*(Open-Kettle)*

Wash and seed the cherries, place them in a preserving kettle with enough sugar to sweeten them
(but without water). Heat slowly until the boiling point is almost reached. Fill hot BALL Jars to overflowing and seal immediately.

**CRANBERRY SAUCE**

*(Open-Kettle)*

Wash 4 cups of cranberries. Boil 2 cups of sugar and 2 cups of water together for 5 minutes. Then add the cranberries. Boil without stirring (5 minutes is usually sufficient) until the skins pop open. Fill hot BALL Jars to overflowing and seal immediately.

**CURRANTS**

*(Open-Kettle)*

Wash, stem and pick over carefully. Use 3/4 to 1 cup of sugar to each quart of currants. Put sugar and fruit in a preserving kettle and let it heat. Shake occasionally to prevent burning. Boil for 5 minutes. Fill hot BALL Jars to overflowing and seal immediately.

**ELDERBERRIES**

*(Jar-Cooked)*

Wash, stem and pack cold into hot BALL Jars. Fill with syrup made with one part of sugar to three parts of water. Partly seal and process in Hot-Water Bath for 16 minutes. Remove from canner and seal immediately. Since Elderberries lack acidity, lemon juice, sour apples or rhubarb are generally used with them when using for pies or sauce.

**ELDERBERRIES**

*(Open-Kettle)*

Wash and place the berries in preserving kettle. Cover with syrup made in the proportion of one cup sugar to three cups of water. Bring to boiling point. Fill hot BALL Jars to overflowing and seal immediately.

**FIGS**

*(Jar-Cooked)*

Figs for canning should be sound and firm. Sprinkle 1 cup of soda over 6 quarts of figs and add 4 quarts of boiling water. Allow figs to remain in soda bath for 5 minutes. Drain and rinse thoroughly. Place the figs into 2 quarts of syrup made with 3 parts sugar to 2 parts water and boil gently for 1 hour. Pack the figs carefully into hot BALL Jars and fill with syrup. Partly seal and process for 20 minutes in a Hot-Water Bath. Remove from canner and seal immediately.

**FIGS**

*(Fresh)*

*(Open-Kettle)*

Use figs slightly under-ripe. Slit them on one side and soak in mild salt brine for 3 or 4 hours. Then wash thoroughly in cold water. Make a syrup of 2 cups sugar and 2 cups water to each pound (about one pint) of fruit. Place syrup in a kettle and when boiling, drop in figs and cook until done. Fill hot BALL Jars to overflowing and seal at once.

**FRUIT MACEDOINE**

*(Jar-Cooked)*

A combination of light colored fruits makes an attractive pack and it is a convenient product to have at hand, since it is ready to serve as fruit cocktail, salad or dessert. For fancy packs the fruit may be packed in alternate layers, or arranged in other attractive designs.

Pleasing combinations:
1. Green gage plums, pears, white grapes.
2. Peaches, pears, blue plums.
3. Pineapples, kumquats, figs.

Pack cold into hot BALL Jars; cover with syrup made with 3 parts sugar to 2 parts water; partly seal and process for 20 minutes in a Hot-Water Bath. Seal immediately.

**GOOSEBERRIES**

*(Jar-Cooked)*

Wash the berries, pack into hot BALL Jars, cover with a syrup made with 3 parts sugar to 2 parts water. Partly seal and process 20 minutes in a Hot-Water Bath. Remove from canner and seal at once.

**GOOSEBERRIES**

*(Open-Kettle)*

Wash berries. Use same recipe as for Canned Cherries, page 14.

**GRAPES**

*(Jar-Cooked)*

Wash and stem, using only sound, firm grapes. Pack tight without crushing, into hot BALL Jars. Fill with syrup made with 3 parts sugar to 2 parts water. Partly seal and process for 20 minutes in a Hot-Water Bath. Remove from canner and seal immediately.

**GRAPES**

*(Open-Kettle)*

Wash, stem and put in preserving kettle with thick syrup made with 2 parts sugar to 1 part water. Let come to boil. Fill hot BALL Jars to overflowing and seal at once.

**GRAPEFRUIT**

*(Jar-Cooked)*

Select sound, ripe grapefruit. Wash and wipe dry. Cut a circular slice from each end, then remove the peel by cutting it in uniform sections through to the fruit. Tear the peel with all the white section away from the fruit. With a sharp pointed knife open each section separately and remove the fruit in as large pieces as possible, clean of all membrane and seed. Pack as solidly as possible, without breaking or crushing, into hot BALL Jars. Add two tablespoons...
sugar to each Quart Jar. Partly seal and process for 35 minutes at 180° F. (simmering) in Hot-Water Bath. Remove from canner and seal immediately.

Note: — Another recipe which is preferred by some has no sugar added in the canning process. Prepare the grapefruit as given above. When the jars are half filled with fruit, add 1/2 teaspoon salt to each quart. No water or syrup is added. Process as specified above.

KUMQUATS AND LOQUATS

Boil fruit 5 minutes then cold dip. Pack into hot BALL Jars, cover with syrup made of one part sugar to two parts water. Partly seal and process for 20 minutes in Hot-Water Bath. Remove from canner and seal immediately.

NECTARINES

(Jar-Cooked)

A SMOOTH-SKINNED variety of peach which may be canned peeled or unpeeled, the same as apricots.

Select slightly under-ripe fruit and wash carefully. Pack as tight as possible into clean, hot BALL Jars. Cover with boiling hot syrup made in the proportions of 3 cups sugar to 2 cups water. Partly seal jars and process in Hot-Water Bath for 20 minutes. Remove from canner and seal immediately.

NECTARINES

(Open-Kettle)

(Same as Peaches)

PEACHES

(Jar-Cooked)

SELECT peaches which are ripe but not soft. Those which are over-ripe may be used for jam or peach butter. Blanch (scald) quickly to loosen skins; cold dip for one minute. Remove skins and pack (halves or whole), without crushing, into hot BALL Jars. Fill with syrup made of 3 parts sugar to 2 parts water, partly seal and process in Hot-Water Bath for 20 minutes. Remove from canner and seal immediately. Addition of one cracked peach seed for one quart of syrup is desirable. Remove seed after boiling in the syrup for 5 minutes.

Note: — If canning a bushel or more of peaches or apricots at one time they may be peeled with the use of lye. Put 4 level tablespoons of granulated lye in agateware or iron kettle, add 2 gallons of water, heat to boiling. Put fruit in wire basket and immerse in boiling lye water until skin is loosened (30 to 60 seconds). Remove the fruit, wash at once (in running water if possible) until skins and lye are removed. Rinse the peeled fruit thoroughly.

PEACHES

(Open-Kettle)

Because of their rich flavor, peaches canned by the Open-Kettle method are preferred by some home makers to peaches canned by the Jar Cooked method.

Make a syrup using 2 cups of sugar to 1 cup of water. Let the syrup come to a boil, then drop in the peaches, which have been peeled and halved,
Peas

Peas should be ripe but firm. The rich, juicy Bartlett pear is most desirable for canning. However, the Keifer and Sand pears are very satisfactory if pre-cooked in plain, boiling water until tender. If pre-cooked in syrup the fruit tends to become tough. Use cooking water to make syrup.

Pears (Jar-Cooked)

Pare, core, half or quarter pears; drop immediately into a cold salt-water bath made in proportion of 1 tablespoon salt to 1 quart water, to keep them from discoloring. Rinse to remove salt. Boil gently from 4 to 8 minutes in a syrup made with 3 parts sugar to 2 parts water, pack hot into BALL Jars, cover with syrup in which pears were boiled. Partly seal and process for 20 minutes in a Hot-Water Bath. Remove from canner and seal immediately.

Pears (Open-Kettle)

Proceed the same as with peaches, only use a lighter syrup, 1 cup of sugar to 1 cup of water, for pears are usually less tart than peaches. If stems of pears are in good condition they should be left on, as they add to the appearance of the product.

Pears (Creme-De-Menthe)

Make a syrup of 3 cups of sugar and 2 cups of water. Add coloring to make it emerald green, using the plain green coloring such as used for coloring icings. Flavor with creme-de-menthe flavoring. Drop whole pared pears into the syrup. Cook until tender and transparent and tinted an emerald green. Pack fruit boiling hot into hot BALL Jars. Fill to overflowing with the boiling syrup and seal immediately.

Pear & Cantaloupe Balls

Cut 2 pears and one melon into small balls. Make a thin syrup. Add fruit and melon balls and heat to boiling. Pack in sterilized BALL Jars alternating layers of pear and melon and seal. Cover with
boiling syrup and seal. If preferred, pack Jars as directed. Fill with boiling syrup. Partly seal and process for 10 minutes in Hot-Water Bath. Seal immediately.

PERSIMMONS (Jar-Cooked)
BLANCH (scald) in boiling water until the skins crack. Boil 4 minutes. Remove skin. Pack in hot BALL Jars and fill with syrup made of 1 cup of sugar to 3 cups of water. Partly fill and process in Hot-Water Bath for 20 minutes. Remove from canner and seal immediately.

PINEAPPLE (Jar-Cooked)
ALTHOUGH the pineapple is not a native fruit in most parts of this country, there are times in the year when it sells for such a reasonable price that the housewife is justified in buying it for canning purposes.

Peel the pineapple and remove the eyes. When the flesh is firm cut into small cubes or remove the core and slice. If the texture is too soft, shred from the core, using a silver fork rather than a knife. Pack cold into hot BALL Jars, fill with a syrup made with 1 part sugar to 1 part water. Partly seal and process for 30 minutes in a Hot-Water Bath. Remove from canner and seal immediately.

PINEAPPLE (Open-Kettle)
PREPARE Pineapple same as for Cold-Pack canning. Make a syrup using 1 part sugar to 1 part water. Drop the prepared fruit into the boiling syrup, boil gently until pineapple is clear (about 25 minutes.) Pack into hot BALL Jars. Fill to overflowing with boiling syrup and seal immediately.

PLUMS (Jar-Cooked)
Plums for canning should not be too ripe. Pack tightly without crushing, and cover with boiling syrup, made with 2 parts sugar to 1 part water for tart plums and a syrup made with 1 part sugar to 1 part water for sweet varieties. Partly seal and process in a Hot-Water Bath for 20 minutes. Remove from canner and seal at once.

PLUMS (Open-Kettle)
Make a syrup out of 2 cups sugar and 2 cups water for each quart of plums. Wash the plums, and drop them whole into the boiling syrup. Cook until soft. Pack in hot BALL Jars. Fill to overflowing with the boiling syrup, and seal immediately.

QUINES (Jar-Cooked)
PEEL, quarter and core the quinces. Boil for 1 1/2 minutes to shrink. Pack into hot BALL Jars. Fill Jars with hot syrup using 3 parts sugar to 2 parts water. Partly seal and process in Hot-Water Bath for 20 minutes. Remove from canner and seal immediately.

QUINES (Open-Kettle)
QUINES should be well ripened for canning. Wipe with a damp cloth to remove the “fuzz.” Peel and cut into pieces of convenient size, boil gently in a syrup made with 1 part sugar to 1 part water until fruit is tender. Pack the fruit into hot BALL Jars so that the proportion of syrup to fruit is greater than for pears or peaches. Seal immediately.

RHUBARB (Jar-Cooked)
WASH stalks and cut in pieces of uniform length. Make a syrup in the proportion of 1 cup of water to 1 cup sugar. Use shallow pan with cover. Drop rhubarb into hot syrup. Cover and heat to boiling. Remove from fire and let stand 15 minutes. Pack into hot BALL Jars, cover with syrup used in pre-cooking. Partly seal and process for 5 minutes in Hot-Water Bath. Remove from canner and seal immediately. Rhubarb canned by this method retains its color and there is less shrinkage.

RHUBARB (Cold-Water Method)
BECAUSE rhubarb contains so much acid it can be canned, if handled carefully, by what is known as the Cold-Water Method. Rhubarb canned by this method is used chiefly for pie fillings.

Wash thoroughly and cut into pieces of convenient size, pack into BALL Jars, fill to overflowing with pure, cold water, fully seal and store in a cool, dry place.

CANNED BAKED RHUBARB (Open-Kettle)
WASH rhubarb and cut stalks, without removing the skin, into 1/4-inch lengths. Add 1 cup sugar to each quart of rhubarb. Bake in a covered baking dish until stalks are tender. Pack while hot into clean, hot BALL Jars and seal at once. This may be cooked on top of stove. In that case make syrup as directed in jar-cooked recipe.
OME-MADE Juices add a delightful touch to the winter diet and juices from grapes, black and red currants, blackberries, raspberries, elderberries, cranberries and tomatoes, make delicious, wholesome drinks for hot days in summer-time.

For use in gelatin desserts, puddings, sauces, ice cream, sherbets, etc., they cannot be excelled. If canned without sugar they are ready for the last stages in jelly making.

Home Canned Juices should hold an important place in the Canning Budget.

Following are directions given for making Juices from cooked and uncooked fruits, including early and late varieties. Berry juices are the most popular of the early fruits and grape, apple and tomato of the later varieties.

FROM COOKED FRUIT (Jar-Cooked)

The flavor of fruit juices is finer if pressed from cooked fruit and processed in a Hot-Water Bath at a temperature below boiling point (180°-185° F.).

Select sound, ripe fruit, crush and heat slowly to simmering point (about 185° F.). Strain through several layers of cheese-cloth. Let stand a few hours in a cool place to allow the sediment to settle to the bottom. Carefully pour off (or siphon) the juice from the dregs. Pour juice into clean, hot BALL Jars, partly seal, as for canning, and process for 30 minutes in a Water Bath at simmering temperature (about 180° F.) a little lower than the temperature (185° F.) at which the fruit was cooked. Remove from the canner, seal immediately.

FROM UNCOOKED FRUIT (Jar-Cooked)

Press out the juice of uncooked fruit in a cider-press, fruit-press, or home-made press. Warm the juice in an enamel kettle to 110° F. Pour while warm, into hot, clean BALL Jars, partly seal, as for canning, and process for 30 minutes in a Water Bath with temperature at 180° F. (30° F. below boiling). Remove from the Water Bath and seal immediately.

Juices from sour cherries, peaches and apples handled in this manner are less likely to "flatten in taste." Use this recipe for making Apple Cider.

FRUIT JUICES (Open-Kettle)

Prepare juices from uncooked or cooked fruit as directed under Jar-Cooked recipes. Place the poured off juice in a preserving kettle, add 1 cup of sugar for each gallon of juice. Heat thoroughly but do not let boil. Fill hot BALL Jars to overflowing and seal immediately.

NOTES ON FRUIT JUICES

The addition of sugar to fruit juices gives a finer flavor. One cup sugar to one gallon juice makes a desirable proportion.
FRUIT JUICES

Do not add sugar if juices are to be used for making jellies. A confectioner's thermometer for determining temperatures is an essential part of fruit juice equipment. To obtain perfect results it does not pay to "guess" at temperature.

Water in canner for fruit juices should come to within two inches of the top of the jar.

GRAPE JUICE develops a richer flavor if made from juice of cooked fruit.

SPECIAL RECIPES

BLACKBERRY CORDIAL

Boil together for 15 minutes 1 quart blackberry juice, 1 pint white sugar and 1 tablespoon each of cloves, allspice, cinnamon, and nutmeg. Fill clean, hot BALL Jars to overflowing with boiling liquid and seal at once.

CRANBERRY JUICE

Delicious to be used before a hearty dinner. It may be used in combination with orange and lemon for a summer drink or for water ice. Boil 4 cups cranberries in 4 cups water until skins burst (about 5 minutes). Strain juice through cheesecloth bag. Do not squeeze bag. Put juice in kettle, bring to boiling point, add 1/2 cup granulated sugar and boil for 2 minutes. Fill hot BALL Jars to overflowing and seal immediately.

GRAPE JUICE (Cooked)

Use clean well ripened but not over-ripe grapes. Pick over and wash grapes. Place in kettle, barely cover with water and boil until seeds are free. Strain through cheesecloth bag without squeezing. Measure the juice and replace on fire and bring to boiling point. Add one-half cup sugar to each quart of juice and let the mixture boil 5 minutes. Fill hot BALL Jars to overflowing and seal immediately.

GRAPE JUICE (Uncooked)

Wash and stem firm, ripe grapes. Measure and place 1 cup grapes into clean, hot quart BALL jar. Add 1 cup sugar. Fill jar to overflowing with boiling water and seal immediately. Invert jar for a few hours before storing. Will be ready for use in about 6 weeks.

This recipe for grape juice is easy to make and is delicious.

PINEAPPLE JUICE

An excellent juice for fruit drinks, ices or sauces, may be made from the cores, eyes and skins of pineapples, which are often discarded.

Cover cores and skins with cold water and cook slowly in a covered kettle for 30 to 40 minutes. Strain the mixture through a jelly-bag. Measure the juice, heat it and add 1/3 as much sugar as juice. Boil rapidly 10 minutes. Fill clean, hot BALL Jars to overflowing and seal.

This juice may be used in equal proportions with tart apple juice for jelly; 1/3 as much sugar as juice should be allowed.

PINEAPPLE LEMONADE

Make a thin syrup, using 2 cups water to 1 cup sugar and boil for 10 minutes. To this add 1 pint jar of crushed pineapple and the juice of 3 lemons. Fill clean, hot BALL Jars to overflowing and seal.

When serving, pour into ice-filled glasses and float half of a maraschino cherry or a thinly cut slice of lemon in each glass.

POMONA PUNCH

Make a very thin syrup, using 4 cups water to 1 cup sugar and boil for 20 minutes. Add 1 quart canned apple cider, the juice of 2 lemons and 2 oranges. Fill clean, hot BALL Jars to overflowing and seal. Note: A thin slice of lemon in each glass adds much to its appearance when serving. Pomona Punch is also delicious frozen to frappe consistency.

FRUIT VINEGARS OR "SHRUBS"

Dissolve 2 cups sugar in 1 cup vinegar, heat to boiling, and pour over 2 quarts ripe berries — strawberries, raspberries, or blackberries. Let stand 1 hour or more, stirring at intervals. Allow the juice to drip through a jelly bag, bring to boil, and pour into clean, hot BALL Jars and process 10 minutes in a Hot-Water Bath Canner. Remove from canner and seal. Serve on cracked ice with an equal amount of carbonated water.

STRAWBERRY JUICE

Strawberry juice makes an excellent jelly when combined with three times its measure of apple juice. Small, inferior berries that are not suitable for canning or preserving may be used for juice.

Cover the berries with sufficient cold water to allow them to float. Simmer until they are soft and have begun to lose their color. Strain through a jelly-bag and drain off the juice. Measure the juice, bring to boil, and add 1/4 as much sugar as juice. Bring the juice again to boiling, fill clean, hot BALL Jars to overflowing and seal.

Omit sugar if canning for jelly.

TOMATO JUICE

To make tomato juice some housewives prefer to use tomatoes canned by either of the recipes shown on page 24. When juice is wanted merely press the tomatoes through fine sieve to remove seeds and season juice to taste.

TOMATO JUICE (Jar-Cooked)

Use firm, ripe tomatoes. Wash and remove stem end, discard any that show signs of decay. Chop and heat in a covered vessel until the juice flows freely. Strain the juice while hot into hot BALL Jars, add one teaspoon salt, completely seal and process for 20 minutes in a Hot-Water Bath.

If it is to be used for infant feeding, salt should be omitted. If a thicker juice is desired return the strained juice to the stove and boil it until it is reduced to one-half the original volume, and process as directed above.

TOMATO JUICE (Open-Kettle)

Use firm ripe tomatoes. Wash, remove stem end and any soft spots. Chop and heat in covered pan until juice flows freely. Strain the juice while hot through a fine sieve, pressing small amount of red pulp through sieve also. Add salt and sugar to taste (about one teaspoon each to a quart of juice). Return the juice to kettle, simmer for 5 minutes and pour into hot, sterilized BALL Jars filling to overflowing. Seal immediately.
A CLOSET of home canned vegetables is a splendid asset during the winter months. From these a nourishing soup may be quickly made or an appetizing salad can be added to an otherwise inadequate meal. A housewife, who has such vegetables from which to draw at a moment's notice, need never worry over the arrival of unexpected guests, for she is always prepared.

Vegetables can be canned successfully at home when care is taken to use fresh, sound products, and details as specified in the individual recipes and time tables for canning are carefully observed.

The mineral and vitamin content of canned vegetables (important items in the family diet) is approximately equal to that of fresh vegetables.

The Steam Pressure Cooker method using temperatures of 240° to 250° F. is the recommended method for all non-acid vegetables because it destroys all organisms causing spoilage.

If no Pressure Cooker is available the Hot-Water Bath Method may be used in the northern states and the Intermittent Method in the southern states.

Boil 10 minutes all canned non-acid vegetables before serving or even tasting.

Before starting to can vegetables read over carefully instructions on the Jar Cooked Method, pages 6, 7 and 8.

Never open jars after processing to refill with liquid.

ASPARAGUS

Wash, remove loose scales. Grade for uniformity. Place asparagus in wire basket or square of thin cloth, hold in boiling water which reaches just below tips, for 3 minutes. This prevents overcooking the tips. Pack upright in hot BALL Jars. Cover with cooking water, add 1 teaspoon salt to each quart, partly seal and process for 40 minutes in a steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

BEANS (Lima)

Sort and grade for size and age. Boil young beans for 5 minutes and older beans for 10 minutes. Then proceed as for peas.

BEANS (Green or Wax)

Wash and remove strings, break into small pieces. Cover with boiling water and boil 5 minutes. Pack hot into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, fill with boiling water in which beans were cooked, partly seal and process for 40 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

BAKED BEANS

1 quart dry beans.
1 medium onion.
1 pound salt pork, part fat, part lean.
1 tablespoon salt.
1 teaspoon dry mustard.
1/3 cup molasses.

Soak beans in cold water over night. In the morning, drain. Add two quarts fresh water and simmer gently until skins begin to burst, being careful they do not cook long enough for the beans to break. Scald pork, cut through rind in one-half inch strips, bury in beans leaving rind exposed. Mix mustard, salt and molasses with one cup boiling water and pour over beans. Add enough more water to cover them. Bake for two hours, then pack into clean, hot BALL Jars, partly seal and process for 90 minutes in Steam Pressure Cooker at 10 pounds or for 3 hours in Hot-Water Bath.

BEETS

BEETS should be canned before they grow too large. Small beets should be canned whole. Leave on 1 inch of stem and all of the root while blanching. This will prevent loss of color. Wash and boil 15 minutes until skin loosens. Slip skin. Pack into hot BALL Jars, add 1 level teaspoon salt to each quart, fill with boiling water, partly seal and process for 40 minutes in a Steam Pressure Cooker at 10 pounds or for 2 hours in Hot-Water Bath. Remove from canner and seal immediately.
BRUSSELS SPROUTS & CABBAGE
Wash and boil for 10 minutes in an open kettle. Add salt to cooking water in proportion of 1 level teaspoon salt to 1 quart water. Pack hot into clean BALL Jars, fill with cooking water, partly seal, and process for 40 minutes in a Steam Pressure Cooker at 10 pounds or for 1 1/2 hours in a Hot-Water Bath. Remove from canner and seal at once.

CARROTS
Sort and grade for uniformity. Wash and scrape. Boil for 5 minutes. Slice or pack whole into hot BALL Jars. Add 1 level teaspoon salt to each quart, fill with cooking water, partly seal and process for 40 minutes in a Steam Pressure Cooker at 10 pounds or for 2 hours in Hot-Water Bath. Remove from canner and seal immediately.

CAULIFLOWER AND BROCCOLI
Soak for 1 hour in a cold brine made in the proportion of 1 tablespoon salt to 1 quart water. This will remove any lurking insects and help to prevent discoloring later in the cooking process. Boil for 3 minutes, pack quickly into hot BALL Jars, add 1 teaspoon salt to each quart, fill with cooking water, partly seal and process for 40 minutes in a Steam Pressure Cooker at 10 pounds or for 1 1/2 hours in a Hot-Water Bath. Remove from canner and seal at once.

CORN
Corn for canning must be young and tender and canned immediately after picking. Remove husks and silk. Leave 1 inch space in jar for expansion.

WHOLE GRAIN CORN
Cut corn from cob. (Scrapings may be used for cream style.) Add 1 teaspoon salt and 2 cups boiling water to each quart. Boil 5 minutes, pack into hot BALL Jars, partly seal and process for 70 minutes in Steam Pressure Cooker at 10 pounds or for 3 hours in Hot-Water Bath. Remove from canner and seal immediately.

CREAM STYLE CORN
Cut tip ends from the grain, scrape out pulp and mix with the tips. Add 1 teaspoon salt, and 2 cups
boiling water to each quart of corn. Boil 5 minutes. Parly seal and process for 90 minutes in a Steam Pressure Cooker at 10 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**CORN ON COB**

Remove husks and silk, boil on cob for 5 minutes. Pack into hot BALL Jars. Add 1 level teaspoon salt to each quart and fill with cooking water. Parly seal and process for 70 minutes in a Steam Pressure Cooker at 10 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

Note: When using 2-quart jars process for 4 hours in a Hot-Water Bath, or for 2 hours in a Steam Pressure Cooker at 10 pounds. One 2-quart jar will hold 7 or 8 ears.

**EGGPLANT**

Peel, cut into ½ to 1¼-inch slices. Boil for 3 minutes, pack into hot BALL Jars, fill with cooking water and process for 60 minutes in a Steam Pressure Cooker at 10 pounds or for 2½ hours in a Hot-Water Bath. Remove from canner and seal immediately.

Do not add salt as this causes eggplant to turn dark.

**GREENS**

(Including Kale, Spinach, Swiss Chard and Turnip Greens)

Wash thoroughly, steam or heat in a covered kettle for 15 minutes or until completely wilted, using just enough water to prevent burning. Pack quickly and loosely into hot BALL Jars, fill with cooking water, partly seal and process for 65 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath.

**HOMINY**

Select a sweet white corn with flat grain. Shell, wash thoroughly and soak in lukewarm water for an hour. Dissolve 2 tablespoons lye in 1 gallon of boiling water. Add the soaked corn and boil for 30 minutes, or long enough to loosen the hulls and kernels near the germ, or use a barrel churn for 5 or 10 minutes for this purpose. Let stand in fresh boiling water for 2 or 3 hours, changing water six or seven times until all lye is removed. Cover with fresh water and boil until tender. Pack while hot into hot BALL Jars. Add 1 level teaspoon salt to each quart (if not seasoned during pre-cooking). Fill Jars with hot water, partly seal and process for 60 minutes in Steam Pressure Cooker at 15 pounds or for 3 hours in Hot-Water Bath, remove from canner and seal immediately.

**KOHLRABI, SALSIFY AND TURNIPS**

Sort and grade for uniform size. Wash and scrub with a stiff vegetable brush. Scrape, if kohlrabi and turnips are old. Boil for 15 minutes. Slice or pack whole into hot BALL Jars. Add 1 level teaspoon salt to each quart, fill with cooking water, partly seal and process for 45 minutes in a Steam Pressure Cooker at 10 pounds, or for 4 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**MUSHROOMS**

Neither all mushrooms are edible. If the wild or uncultivated varieties are picked for table use and canning be sure that they belong to an edible variety.

Wash thoroughly, skin if necessary. Boil for 3 minutes in boiling water or in a steamer. Pack closely, being careful not to crush, into hot BALL Jars; add 1 level teaspoon salt to each quart, fill with cooking water and process for 40 minutes, in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**OKRA**

Use young and tender pods of uniform size. Wash, remove cap without cutting into pod. Boil young okra from 1 to 3 minutes; more mature pod 6 to 8 minutes. Pack into hot BALL Jars, add 1 teaspoon salt to each quart, fill Jar with Cooking water, partly seal and process in a Steam Pressure Cooker for 40 minutes, or for 2 hours in a Steam Pressure Cooker at 10 pounds, or for 2 hours in a Hot-Water Bath.

If okra is to be used for soup, it should be sliced after boiling as it is hard to cut when canned.

**PARSNIPS**

Sort and grade for uniform size. Wash and scrub with a stiff vegetable brush. Scrape if parsnips are old. Boil for 15 minutes. Slice or pack whole into hot BALL Jars. Add 1 level teaspoon salt to each quart, fill with cooking water, partly seal and process for 45 minutes in a Steam Pressure Cooker at 10 pounds, or for 4 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**PEAS**

Select fresh young peas. Wash pod thoroughly before shelling. Do not wash the peas. Sort, keeping those of the same size together. Cover with boiling water and boil young tender peas for 3 minutes; more mature for 5 minutes. Pack loosely into hot BALL Jars. Add 1 teaspoon salt to each quart, fill with cooking water, partly seal and process for 40 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath.

Note: Grading and sorting are necessary because the boiling period varies with the age and size of the pea. Do not attempt to can peas which have begun to lose their color.

**PEPPERS**

**BELL PEPPERS**

Canned the sweet bell pepper with the skin on. Remove the seed-pod. Boil 5 minutes, flatten and pack tight in hot BALL Jars, add 1 level teaspoon salt to each quart, fill with cooking water and process for 15 minutes in a Steam Pressure Cooker at 10 pounds, or for 45 minutes in a Hot-Water Bath. Remove from canner and seal immediately.

**PIMENTO PEPPERS**

The best sweet peppers for canning are the Spanish variety known as Pimientos. The pod is thick and fleshy, covered with a thick, tough skin which must be removed before canning.

Wash, place in pan with no water, put in moderately hot oven for 6 to 10 minutes (be careful that no discoloration takes place) or until the skin blisters and cracks. Remove from oven and slip off skins. Carefully remove the seed-pod so that the flesh of the pimiento is not broken. Flatten pimento; pack dry into hot BALL Jars, partly seal and process for 15 minutes in a Steam Pressure Cooker at 10 pounds, or for 45 minutes in a Hot-Water Bath. Remove from canner and seal immediately.

**POTATOES**

Scrape new potatoes, boil 10 minutes if small, 15 minutes if large. Pack while hot into clean, hot BALL Jars. Add 1 level teaspoon salt for each quart. Fill Jars with cooking water, partly seal and process for 45 minutes in Steam Pressure Cooker at
VEGETABLES

PUMPKIN

Wash, cut into slices and cook until tender. Mash and stir the pulp until smooth and pack immediately into hot BALL Jars. Partly seal and process for 75 minutes in a Steam-Pressure Cooker at 15 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

SAUERKRAUT

Quarter sound, fresh, mature heads of cabbage and shred. Discard outside leaves and core. Use the proportion of 4 oz. (3/4 cup) of salt to 10 lbs. of cabbage. Mix thoroughly and pack closely in a stone jar. Cover with heavy plate or clean hard-wood board and place weight on cover. (Do not use limestone rock.) Keep the kraut at a temperature of 85° F. Remove scum each day. Kraut cures in from one to three weeks, depending upon the temperature at which it is kept. When cured pack in hot BALL Jars and cover with kraut juice. If there is not enough of this use 1 oz. of salt dissolved in 1 qt. of water. Partly seal and process for 5 minutes in a Steam Pressure Cooker at 10 pounds or for 20 minutes in the Hot-Water Bath. Remove from canner and seal immediately.

TO make sauerkraut in Jars, proceed as follows: Shred the cabbage as usual, pack tightly into BALL Jars (Glass Top preferred) to within one inch of top. Add 3 scant teaspoons of pure salt to a quart. Partly seal. If packed well, the liquid will come nearly to the top of the Jar. Will be ready for use in six weeks. After fermentation ceases the Jars should be tightly sealed.

SUCO TASH

Cut fresh corn from cob. Boil 5 minutes, add to the corn an equal quantity of young, tender shelled beans, which have been boiled for 5 minutes. Pack quickly and loosely, into hot BALL Jars, add 1 teaspoon salt to each quart, and pack tight into clean, hot BALL Jars and seal immediately.

SQUASH

Wash thoroughly and cut into small pieces. If tender, do not peel. Cook until tender, drain off water, mash, pack hot into hot BALL Jars, add 1 teaspoon salt to each quart. Add no water. Partly seal and process for 75 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath.

SWEET POTATOES

Sweet potatoes should be canned as soon as they are dug. This is necessary because sometimes in digging the skin of the potato is bruised or broken, and if allowed to stand, these places turn dark and may start to decay.

For canning whole, select firm, small potatoes of uniform size and color. Wash thoroughly and boil, or steam, for 15 minutes. Peel quickly. It is advisable not to stick potatoes with a fork, as this may cause them to discolor. Pack into hot BALL Jars. Do not add water. Partly seal and process for 120 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

TOMATOES

Use fresh, firm, ripe tomatoes. Scald and remove the skins, cores and all hard green spots. Cut into halves or quarters and pack tight into clean, hot BALL Jars. Add 1 teaspoon salt to each quart, add no water, partly seal and process for 15 minutes in Steam Pressure Cooker at 5 pounds or for 30 minutes in Hot-Water Bath. Remove from canner and seal immediately.

TOMATOES (Open-Kettle)

Scald, peel and core, cut into pieces, add salt to taste, boil for 20 minutes, pack into clean, hot BALL Jars and seal immediately.

TOMATOES AND CORN

Cut corn from cob. Boil 5 minutes. Scald tomatoes until skins loosen, peel and corn, cut into small pieces. Mix thoroughly 2 parts tomatoes to 1 part corn. Heat mixture to boiling, pack into clean, hot BALL Jars, add 1 teaspoon salt to each quart, partly seal, and process for 60 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath.

TOMATO CREOLE SAUCE

A combination of 1/2 tomato and 1/2 okra makes an excellent soup, which can be served directly from the jar, or it may serve as a base for the much renowned southern gumbo.

Cut the okra into thin slices and cook gently with the tomatoes until tender. Pack immediately into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, partly seal and process for 45 minutes in a Steam Pressure Cooker at 10 pounds, or for 1 hour in a Hot Water Bath. Remove from canner and seal immediately.

TOMATOES AND OKRA

For dressing ordinary steak or decorating plain boiled rice, besides adding a distinctive flavor, tomato creole is one of the favorite sauces.

Mix together 1 quart sliced white onions and 12 finely chopped green peppers; simmer until soft. Add about twice this bulk in tomatoes and cook together over a low fire until tender. Season to taste. Pack into clean, hot BALL Jars and seal immediately.

TOMATOES SAUCE

Cook small and broken tomatoes until they are soft. Press through a sieve to remove skins, seeds and cores, add 1 level teaspoon salt to each quart of pulp, then cook quickly until it begins to thicken. Pack immediately into clean, hot BALL Jars, partly seal and process for 45 minutes in a Hot-Water Bath, or for 10 minutes in a Steam Pressure Cooker at 5 pounds. Remove from canner and seal immediately. This may be used as a foundation for soups, sauces or relishes.

TOMATOES (Whole)

Select firm, smooth, medium sized tomatoes of uniform size. Scald until skins loosen, cold-dip, peel and remove stem end. Pack closely without crushing, into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, fill with finely strained tomato juice, partly seal and process for 30 minutes in a Hot Water Bath, or for 10 minutes in a Steam Pressure Cooker at 5 pounds. Remove from canner and seal at once.
THE canning of Meat and Poultry has become an established part of the year-round canning program.

There is real economy in canning Meat and Poultry. It saves feed. There is very little additional work and fuel required, so it is much cheaper to cook enough meat for thirty meals at one time than to cook meat thirty different times.

MEAT CANNED IN GLASS JARS WITH STEAM PRESSURE COOKER

Meat canned in Glass Jars has a much better flavor and is more wholesome and palatable than meat canned in containers that are completely sealed before processing.

The Glass Jars are only partly sealed before processing, permitting easy escape of the expanded air and gases from the jars. Place one inch of boiling water in the cooker; place rack or basket in the cooker; place filled jars on the rack; place top on the cooker and fasten securely; place cooker on fire, leaving pet-cock open.

When a steady stream of steam has escaped for three minutes, close the pet-cock and bring the pressure up to fifteen pounds. Maintain this pressure as nearly as possible for the time specified in the Time Table.

Begin counting processing time when required pressure is reached at the end of processing period; remove the cooker from the fire and allow pressure gauge to return to zero; open the pet-cock slowly until all steam has escaped; remove cover of the cooker, tilting lid toward you to protect the face from any remaining steam; remove jars one at a time and seal immediately.

The Steam Pressure Cooker using temperatures of 240° and 250° F. is the recommended method for meat, poultry, fish and game.

If no Steam Pressure Cooker is available the Hot-Water Bath method may be used in the northern states and the intermittent process in the southern states.

Boil all canned meats for 10 minutes or subject to similar amount of heat before tasting or serving.

SEARED MEATS AND POULTRY

If a browned appearance and flavor is desired, the meat should be quickly seared in deep fat, in the broiler or in a hot oven. No attempt should be made to pre-cook the meat. The object is to quickly seal the juices in the meat and obtain a browned surface.

Do not cover meat with beaten egg, flour, cornmeal and fine cracker or bread crumbs as this delays heat penetration into the meat. Any meat juices or liquid obtained from the searing process may be poured over the meat after it has been packed into the jar, or the “dry-pack,” in which no liquid is added, may be used. It is not essential that the jar be filled with liquid. Salt and pepper to taste must be added after searing. (To add salt before searing will cause juices to be extracted.)
Bones may be retained in canning as they aid in securing quicker heat penetration as well as adding flavor to the meat.

Do not attempt to cut time in the sterilization period for seared meats.

**GENERAL PRINCIPLES AND DIRECTIONS**

For canning Beef, Veal, Pork, Lamb, Mutton, Poultry and Wild Game

Whether meat is seared or remains uncooked (raw) when it is packed into the jar for canning, the following general principles and directions should be observed as meat, due to its composition, offers a medium for the growth and development of some of the more active and resistant spore-forming bacteria.

These principles and directions apply to canning beef, veal, pork, lamb, mutton, poultry and wild game, including rabbit, moose, bear, caribou, pigeons and wild birds.

**PREPARATION**

1.—Bleed well and cool meat thoroughly before using. (Approximately 24 hours is required for animal heat to leave body.)
2.—Do not soak meat in water. This extracts the meat juices and renders meat stringy and tough.
3.—Wipe meat with damp cloth, do not wash, but clean meat and clean utensils should be used.
4.—Cut meat into convenient size for packing after trimming free of excess fat and heavy connective tissue.

**PACKING**

1.—Pack loosely into clean, hot BALL Jars. Arrange the pieces to allow for proper heat penetration. This applies to seared as well as to raw meat.
2.—Add 2 level teaspoons salt to each quart raw meat. If packing seared meat, after searing, season with salt and pepper. Add enough pan grease to make gravy. It is not necessary to have the meat covered with liquid.
3.—Do not add water to meat which has been packed raw. Adding water to meat when canning renders it stringy, detracts from the flavor, and reduces the number of its uses to practically soup, stews and hash. Add water for soup and stew.
4.—Seared meat should not be seasoned before searing, frying or roasting.
5.—Bones, if small, may be packed in the jar with the meat, as they add to the flavor and aid in heat penetration.

**PROCESSING AND STORING**

1.—Partly seal and process for 60 minutes at 15 pounds pressure or 3 hours in a Hot-Water Bath Canner.
2.—Remove from canner and seal immediately.
3.—Store in a cool dry place.
4.—Reheat all canned meats thoroughly, before using.

**SPECIAL RECIPES**

**BEEFSTEAK**

A sirloin of beef is skinned and cut into large pieces to retain the flavor. Sear thick large pieces quickly in deep hot fat or suet in a frying pan. Season with salt and pepper to taste. Pack while hot into hot BALL Jars. Add two to four tablespoons pan grease to each Jar. Partly seal and process in Steam Pressure Cooker for 60 minutes at 15 pounds pressure or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**BEEF STEW**

Cut meat into cubes, brown slightly in frying pan. After browning put meat into stew pan, season with salt and pepper, cover with water, bring to boiling point and cook for ten minutes. Add diced vegetables (potatoes, carrots, onions, tomatoes) and cook until vegetables are thoroughly heated. Pack the mixture into hot, sterilized BALL Jars. Partly seal and process for 60 minutes in Steam Pressure Cooker at 15 pounds or for 3 hours in Hot-Water Bath. Remove from canner and seal immediately.

**BRAINS**

Brains should be soaked in several changes of cold water to draw out the blood. Remove the membranes. Sear or fry and sprinkle with salt and pepper. Pack into hot BALL Jars. Add the fat in which the brains were fried, thinned with a little hot water. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**GROUND MEAT**

For Sandwiches, Meat-Loaf, Baked Hash

Grind meat, turn into hot skilet and stir until seared but not browned. Add 1 cup boiling water or meat stock and 1 teaspoon salt to each quart. Pack into hot BALL Jars and process for 60 minutes in Steam Pressure Cooker at 15 pounds or for 3 hours in Hot-Water Bath. Remove from canner and seal immediately.

*Note: Tomato puree may be substituted for the liquid if desired.*

**GOULASH**

The cheaper cuts of meat or meat scraps may be used in making goulash. If the different ingredients of the following recipe are not at hand, a good goulash can be made by using meat, fat, onions, tomatoes, flour, salt and pepper and leaving out the other ingredients.

2 pounds meat (beef, veal or heart of pork may be used) • 1 pint tomatoes (canned or fresh tomatoes) • 1 to 2 bay leaves • 6 whole cloves • 2 peppercorns • 1 blade mace • 1 pinch thyme • 1 tablespoon finely chopped parsley • Salt and pepper to taste

Paprika to taste

Cut meat into small pieces, add other ingredients and heat thoroughly. Pack hot into BALL Jars; partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

**HEART**

Remove the tough membrane and wash out blood clots. Soak for 30 minutes in cold water to which salt has been added, 1 teaspoon to each quart water. Cut in pieces, pack raw or pre-cooked into
hot sterilized BALL Jars, partly seal and process in Steam Pressure Cooker for 60 minutes at 15 pounds or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

KIDNEYS
Split kidneys and remove inside sack; then soak kidneys in several changes of cold salt water made in proportion of 1 level teaspoon salt to 1 quart water. Cut kidneys into slices about ¼ to ½ inch thick, sear in hot fat, sprinkle with salt and pepper and fry to a brown color. Pack kidneys while hot into clean, hot BALL Jars and add the fat in which kidneys were fried. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds pressure or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

LIVER
Cut calf, beef, lamb or hog liver into thick slices. Remove skin and blood vessels. Soak in cold water for 45 minutes. Remove from water and drop into boiling water for five minutes or brown quickly in a little hot fat. Pack while hot into hot BALL Jars. Add one teaspoon salt to each quart and process for 60 minutes in Steam Pressure Cooker at 15 pounds pressure or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

PORK SAUSAGE
(If sage is added, use sparingly to prevent a bitter taste.) Form seasoned sausage meat into cakes (chill if possible), or stuff into casings. Cook until slightly brown. If packed in casings, prick before precooking. Pack into hot BALL Jars, partly seal and process in Steam Pressure Cooker for 60 minutes at 15 pounds pressure or in Hot-Water Bath for 3 hours. Remove from canner and seal immediately.

ROAST MEAT
The large pieces which are cut from the shoulder and loin make good roast pieces. Cut in sizes that will fit the Jar when seared. Some housewives prefer to slice after searing. If so, cut in ⅛ inch slices across the grain. Sear in deep fat, in a hot oven or under the broiler flame. Do not prick with a fork as this will allow the juices to escape and the result will be a dry roast lacking in flavor. Searing should not require longer than 5 minutes. The object is to produce a brown color and seal the juices in the meat. Make no attempt to pre-cook meat as it would be over-cooked at the end of the processing period. After searing, season with salt and pepper. Pack into hot, clean BALL Jars. Add 2 tablespoons fat in which the meat was seared. Partly seal and process in Steam Pressure Cooker for 60 minutes at 15 pounds pressure or for 3 hours in Hot-Water Bath. Remove from canner and seal immediately.

STEAKS AND CHOPS
Bone steaks and larger chops (pork, veal or lamb). They should be cut thick, quickly seared in deep fat, then packed into hot BALL Jars. Add two teaspoons salt to each quart. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds, or for 3 hours in Hot-Water Bath. Remove from canner and seal immediately.

SPARERIB ROLLS
Crack ribs evenly. Steam, boil or sear under broiler flame, making no attempt to thoroughly cook meat. With a sharp knife cut the inside of each rib and remove the bones. Season with salt and pepper. Roll the strips of boned meat and pack into hot BALL Jars. Add a small amount of fat. Partly seal and process in Steam Pressure Cooker for 60 minutes or for 3 hours in Hot-Water Bath. Remove from canner and seal immediately. When heating for serving a dressing may be placed in the roll.

SWEETBREADS
Clean sweetbreads and soak in cold water for 2 hours, change water several times, drain well and place them into salted, boiling water for 5 minutes (1 teaspoon salt to 2 quarts water). Remove and drain thoroughly. Pack into clean, hot BALL Jars, add 2 teaspoons salt to each quart, and fill with boiling water. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

TONGUE
The tongues (beef, veal, pork, lamb) should be cleaned, salted, boiled, skinned and packed into clean, hot BALL Jars with a little soup stock or meat jelly added. Add 2 teaspoons salt to each quart. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

CORNED BEEF
Place the corned beef in a kettle and cover with cold water. Bring slowly to boiling point and simmer for 1 hour. Remove meat and cut into pieces of convenient size. Pack meat into clean, hot BALL Jars. Heat liquid in which meat was boiled and season with bay leaves, cloves and nutmeg to suit taste. Fill jars with the seasoned liquid to which some gelatine dissolved in cold water has been added. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

PICKLED PIGS FEET
Clean pigs feet. Place in stone jar, cover with brine made by dissolving 2 pounds pure salt in 1 gallon water. Let stand 10 days. Remove from brine and soak in cold water 3 or 4 hours. Drop feet into hot water and cook slowly until tender (not until bones separate from flesh). Pack into hot BALL Jars and cover with boiling spiced vinegar.

To make spiced vinegar—use ½ gallon vinegar, 2 tablespoons grated horseradish, 1 bay leaf, 1 small red pepper pod, 1 teaspoon black peppercorns, 1 teaspoon whole all-spice.

POULTRY PREPARATION

1. Confine for 12 to 24 hours. Give plenty of water but no feed.
2. Kill at least 6 hours before canning. Avoid bruising.
3. Bleed well, pluck, singe, wash thoroughly.
5. Slip knife under ends of shoulder and cut up to wings.
6. Pull back and breast apart. Remove entrails. Save gizzard and liver. (Can together.) Save feet for broth.
7. Rinse, dry (do not salt). Chill from 6 to 12 hours.

PACKING THE CHICKEN
1. First place in a drumstick.
2. Place a thigh next to drumstick.
3. Place two wings next to the thigh.
4. Place the neck portion in center of jar, with rib-end down.
5. Cover the neck-piece with back.
6. Spread white meat on top of back.
7. Fit in remaining pieces completely to fill jar.
8. Can liver and other giblets separately. If packed with other meat, the liver causes the chicken to taste old and discolors the white meat.

CHICKEN
After preparing as instructed above, pack into clean hot Ball Jars. Add 2 level teaspoons salt to each quart. Partly seal and process in Steam Pressure Cooker for 60 minutes at 15 pounds pressure or for 3 hours in Hot Water Bath. Remove from canner and seal immediately. Chicken may then be used as a stew or the pieces may be rolled in flour and fried when ready to serve.

BONED CHICKEN (and other fowl)
Steam or boil fowl until thoroughly heated (do not cook until tender). Remove skin and bones. Keep the meat in large pieces. This is easy when fowl is cut as directed above. Season with salt and pepper. Pack hot pieces upright into hot Ball Jars. Add 3 or 4 tablespoons boiling hot broth. Partly seal and process for 60 minutes in Steam Pressure Cooker at 15 pounds or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

FRIED CHICKEN
Prepare the chicken, season and brown in hot fat. Do not dip in flour or crumbs. Pack while hot into hot sterilized BALL Jars. Omit giblets. (Pour into the Jar the hot grease from the frying pan.) Partly seal and process for 60 minutes in Steam Pressure Cooker at 15 pounds pressure, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

ROAST FOWL
Chicken, Duck, Turkey, Goose or Guinea Fowl may be used. Prepare, season and brown in oven. Cut meat from bones. Pack in hot sterilized BALL Jars. Omit giblets. Skin excess grease from gravy and pour gravy over meat in Jar. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

RABBIT
RABBITS are delicious when canned. Use same directions as for chicken.

PIGEONS
DRESS and wash well. Can the same as chicken.

FISH
FISH, for canning, should be absolutely fresh. As soon as fish are caught it is well to kill them with a knife and let the blood run out. In scaling fish it is easier to remove the scales if the fish is dipped into boiling water. If skin is very tough remove skin and wash the fish clean. Remove entrails and the dark membrane that in some fish covers the abdominal cavity. For small fish the backbone may be left in. For larger fish remove the backbone and use it with what meat adheres to it, for making fish chowder. For the softer fleshed fish such as mackerel, trout, whitefish, mullet, etc., split the clean fish. Do not remove back bone. Cut fish into Jar-length pieces and soak in brine (1 cup salt to 1 gallon water). Drain fish. Pack into hot pint BALL Jars, alternating heads and tail ends. The skin side should be next to the glass. The fish should reach to the top of the jar. Submerge the open jar into a kettle of hot brine (15 minutes). Boil 15 minutes. Remove Jar and invert to drain 5 minutes. Partly seal and process for 100 minutes in Steam Pressure Cooker at 10 pounds or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

SALMON, SHAD and other firm-fleshed fish.
Scale fish, wash, cut open, remove entrails, thoroughly wash, wipe dry and cut into Jar length
pieces. Soak in brine (1/2 pound salt to 1 gallon cold water), 60 minutes. Drain 10 minutes. Pack raw into clean, hot pint BALL Jars. Add 1 level teaspoon salt. Do not add water. Partly seal and process for 100 minutes in Steam Pressure Cooker or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

FRID FISH

Clean fish and remove entrails. For large fish, split along the back and remove backbone. For small fish, bones may be retained. Place in a salt-water bath, using 1/2 cup salt to 1 quart water. Allow fish to remain in this brine, according to thickness of the meat, from 10 minutes to 1 hour, in order to draw out the blood and harden the meat. Drain, wash, dry, and cut into pieces which can be conveniently packed into the jars. Brown in deep fat. Drain well and place the pieces on coarse paper to absorb excess fat. Pack into hot, clean BALL Jars. Do not add any liquid. Partly seal and process for 100 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

CLAMS AND OYSTERS

Use only fresh clams and oysters. If clams are muddy, wash before opening. After opening, discard all discolored clams. In canning oysters, be sure they are absolutely fresh, have not soured and contain no oysters that are spoiled. It is therefore best to open them by hand and absolutely refuse any which have the shell partly open. Pack into hot clean BALL Jars. Fill Jar to within 1/2 inch from top with the clam or oyster liquid. If not enough, fill with hot brine made in the proportion 1 teaspoon salt to 1 quart water. Partly seal and process for 60 minutes in Steam Pressure Cooker at 15 pounds or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

LOBSTERS

Plunge live lobsters into boiling salted water (1 tablespoon to each quart of water). Boil rapidly for 4 minutes, then simmer 15 minutes. Remove and dip lobsters into cold water, drain, remove meat from shell. Blanch meat 1 minute in water to which lemon juice has been added (3 tablespoons lemon juice to 1 quart water). This makes the meat firm and prevents discoloration. Pack meat into clean, hot Ball Jars. Add 2 or 3 tablespoons salt brine made by dissolving 1/2 cup salt in 1 quart water. Process for 80 minutes in Steam Pressure Cooker at 10 pounds or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

FROG LEGS

Both bull-frogs and the small green marsh frogs are edible, but the latter are more delicate and more tender. Only the hind legs are eaten and they are generally considered to be at their best from June to October. Cut off the legs, loosen the outer skin and turn downward and pull off. Then cut off the skin and toes. Wash the legs in cold water, to which has been added 2 tablespoons vinegar, or lemon juice, and 1 tablespoon salt for each quart of water. Drain and wipe dry. The frog legs can now be prepared in different ways. They can be seared in deep fat until nicely browned. The meat can be cut off the bones, or the bones left in. Pack into hot, clean BALL Jars. Liquid from frying may be added if desired. Partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds, or for 3 hours in a Hot-Water Bath.

Or pack frog legs, uncooked, into jars, add 2 teaspoons salt to each quart, partly seal and process for 60 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

CRAB MEAT

Place live crabs into a large kettle of rapidly boiling water. Boil for 5 minutes. Remove crabs and wash them in cold water. Crack shell and pick out the meat, being careful to remove all particles of shell. Wash crab meat in a cold brine made in proportion of 1 teaspoon salt to 1 quart water. Drain and pack into clean, hot BALL Jars, partly seal and process for 80 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

Note:—Quick cooling is necessary in order to prevent discoloration of crab meat.

SHRIMP

Shrimp should be canned when absolutely fresh. Wash in 2 or 3 clear cold waters. Drain. To each gallon water, add 1 cup salt and when boiling, drop in washed shrimp. Boil 10 minutes. When cold, remove shell by tearing open on the upper side beginning at the head. Pack into clean, hot Pint Ball Jars. Add 1/2 teaspoon salt. Boiling water may be added if desired or the dry pack in which no water is added may be used. Partly seal and process for 60 minutes in the Steam Pressure Cooker at 15 pounds or for 3 hours in the Hot Water Bath. Remove from canner and seal immediately. Remove intestinal canal which runs the entire length of the back by scraping with point of paring knife before serving.
SOUPS

SOUPS are very nourishing and should be served each day if possible. They are easy
to make, also economical because they can be made from the tougher cuts of meat and
from specked (not spoiled) vegetables.

Vegetable soup should be made “in season” while the home garden is producing and
the prices of vegetables purchased in the home market are relatively low. For those who
butcher or pack their own meats, butchering time becomes soup canning time as well. The
bones and “trimmings” are then made into a nourishing soup stock for future use.

During poultry culling season when the thrifty home-maker is canning her “culls,” she
reserves the bony parts and the chicken feet for soup stock. The feet should be used, as they
contain a large per cent of gelatin, and if properly prepared by cleaning, scalding and
skinning, they make a very fine base for chicken soup stock.

The Steam Pressure Cooker using temperatures of 240° and 250° F. is the recommended
method for processing soups.

Boil all soups except Tomato 10 minutes before tasting or serving.

Read over General Directions, pages 6 to 8, before canning any products.

ASPARAGUS PUREE

In canning asparagus, the large tough butts may be
used for soup instead of being wasted.

Cut into pieces, and cook in enough water to
cover until soft enough to press through sieve. Pack
into hot BALL Jars, add 1 level teaspoon salt to each
quart, and 1 teaspoon grated onion, if desired. Partly
seal and process for 60 minutes in a Steam Pressure
Cooker at 10 pounds or for 3 hours in a Hot-Water
Bath. Remove from canner and seal immediately.

When opened, milk may be added to make cream
of asparagus soup.

CHICKEN GUMBO

1 large frying size chicken,
cut as for frying
1/2 pound smoked ham—
chopped
6 large ripe tomatoes—
skinned and chopped
1 large onion, chopped
2 pints okra, sliced

Heat the fat in a soup kettle, add ham, chicken
and okra. Brown well but do not scorch. Add other
ingredients and cook slowly until the mixture is
well flavored and is as thick as desired. Pack while
hot into hot BALL Jars, partly seal and process for
60 minutes in Steam Pressure Cooker at 15 pounds
pressure or for 3 hours in a Hot-Water Bath. Remove
from canner and seal immediately.

CHICKEN SOUP

Cook in a quart of water the bony pieces of medium
sized chicken. When tender remove meat from bones
and chop into small pieces. To each cup of chopped
meat add the following—

1 tablespoon rice
1/2 cup celery, chopped
1 or 2 tablespoons chopped
onion

Bring to boiling point. Pack while hot into hot
BALL Jars. Partly seal and process for 80 minutes
in a Steam Pressure Cooker at 10 pounds, or for 3
hours in a Hot-Water Bath. Remove from canner
and seal immediately.

The carcass of turkey may be used in making soup
by scraping meat from the bones, break bones and
cover with cold water. Simmer 3 hours, strain and
proceed as above.

CHILI CON CARNE

3 lbs. ground meat
4/5 cup fat
1 1/2 tablespoon garlic
(chopped)
3/5 cup chili powder
1/2 tablespoon salt
4 quarts water

If desired comino seed, or cumin seed.

Melt suet and fry onions and garlic until yellow.
Add meat and stir until white then add salt, chili
powder or pepper pulp and water. Cook until proper
thickness for serving. Pack into hot, clean BALL
Jars, partly seal and process for 60 minutes in Steam
Pressure Cooker at 15 pounds or for 3 hours in Hot-
Water Bath. Remove from canner and seal imme-
diately.

CLAM BROTH

Open fresh clams and place them with their liquid
in a kettle. Add enough cold water to cover clams.
Add a few stalks of celery, cut fine. Boil for 10
minutes. Season with salt and pepper to taste, and
add 1 level tablespoon butter for each 50 or 60
clams. Strain and pour while hot into clean, hot
BALL Jars. Partly seal and process for 60 minutes in Steam
Pressure Cooker at 10 pounds or for 3
hours in a Hot-Water Bath. Remove from canner
and seal immediately.

COVER JARS WITH ONE INCH OF WATER IN A HOT-WATER BATH
CLAM CHOWDER
24 clams, chopped fine
2 quarts hot water
2 medium, white onions, sliced
2 stalks celery, finely chopped
2 leeks, cut fine
2 slices pork or bacon, cut into small pieces
3 large potatoes, peeled and diced
1 to 2 teaspoons salt (to taste)
1/2 teaspoon pepper
3 large tomatoes, peeled and cut fine
1/2 teaspoon thyme
1 teaspoon finely chopped parsley

(Leeks, celery and tomatoes, any one or all, may be omitted if preferred.)

Heat the pork or bacon and fry the onions, celery and leeks in the fat; add the liquid from the clams, water and potatoes, boil 10 minutes, add clams, tomatoes, salt, pepper and thyme (Worcestershire sauce according to taste may be added). Boil mixture 10 minutes, add the parsley and while hot pour into clean, hot BALL Jars. Partly seal and process for 100 minutes in a Steam Pressure Cooker at 10 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

When serving, equal amounts of butter and flour may be creamed together and added as thickening to the heated chowder.

FISH CHOWDER
5 pounds potatoes
5 pounds fish (without bones)
3/4 pound salt pork
1/2 pound onion
2 quarts fish broth (made from heads and bones)
2 tablespoons salt
1/2 teaspoon black pepper
1/4 pound hot red pepper

Cut the pork and potatoes in small cubes; chop the onion; cut fish in 1 inch pieces. Heat the pork until deep yellow; add onions and cook until tender but not brown. Add fish, broth, potatoes, salt and pepper; boil five minutes and pour into hot Ball Jars, partly seal and process for 100 minutes in Steam Pressure Cooker at 10 pounds or for 3 hours in Hot Water Bath. Remove from canner and seal immediately.

GREEN PEA PUREE
Cook the peas 1 hour in enough water to cover, press through a sieve, pack into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, partly seal and process for 60 minutes in a Steam Pressure Cooker at 10 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

SOUP STOCK
Cut meat and fat from bones, crack bones and place into kettle. Add pieces of lean meat too small for other uses. Cover with cold water and simmer (not boil) for 6 hours. Seasoning, such as onion and celery leaf, may be added. Remove from fire and strain through colander. Cool and skim off all grease. Reheat and when boiling pour into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, partly seal, process for 60 minutes in a Steam Pressure Cooker at 15 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal at once.

Above method may be used in making any poultry or meat stock.

BRUNSWICK STEW (VIRGINIA)
1 gallon hot water
1 large, or 2 small chickens (cut up as for a stew)
1 pint tomatoes, chopped
2 slices bacon
2 large onions
1/2 pound red pepper

Place the onions, chopped fine, tomatoes skinned and cut into small pieces, the bacon and chicken into a large soup pot. Pour on the water and let mixture simmer until tender. Remove the chicken from the liquor. When cool enough to handle cut the meat from bone, discarding tough skin and gristle. Chop fine and return to soup kettle, adding corn. Boil mixture 20 minutes, add melted fat, bread crumbs, salt and pepper. If mixture is too thick add an extra pint of boiling water. Pack into clean, hot BALL Jars, partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal.

TOMATO PULP
Take any amount of tomatoes desired. Blanch until skins loosen, cold-dip, remove skins and hard cores. Cook 30 minutes, press through a sieve, pack into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, partly seal and process 45 minutes in a Hot-Water Bath, or 10 minutes in a Steam Pressure Cooker at 5 pounds. Remove from canner and seal immediately.

TOMATO AND CORN SOUP
Prepare tomatoes and corn as for canning. Chop tomatoes into medium size pieces, or heat to simmering point and put through sieve. Mix thoroughly two parts tomatoes and three parts corn. Pack into clean, hot BALL Jars. Add one teaspoon salt to each quart, partly seal and process for 60 minutes in Steam Pressure Cooker at 15 pounds, or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.

VEGETABLE SOUP MIXTURE
Use vegetables which suit the family taste. An excellent mixture is made with tomatoes, corn, carrots, celery and beans.

Prepare each vegetable as for canning, boil together vegetables which do not require peeling, for 5 minutes, pack immediately into clean, hot BALL Jars, add 1 level teaspoon salt to each quart, partly seal and process for 60 minutes in a Steam Pressure Cooker at 15 pounds or for 3 hours in a Hot-Water Bath. Remove from canner and seal immediately.
Jelly Making has a special place of its own on the Housekeeping Calendar. Jelly is easy to make if certain rules are followed. It can be made from the fresh fruit juices in late summer and early fall, or from canned fruit juices in wintertime.

Jelly is the product obtained by combining the juice or combination of juices of certain fruits with the right proportion of sugar and cooking the mixture until it becomes a clear, tender, sparkling, transparent, quivering mold.

All fruit juices do not make perfect jelly. To make a good jelly it is essential that the fruit juice contain acid and a natural jelly-making substance called pectin, in proper proportions.

Some fruits contain proper proportions of acid and pectin to make perfect jelly. Other fruits are deficient in either pectin or acid. Juices from these fruits may be combined with fruit juices which contain sufficient pectin or acid to form a good jelly. Sugar is just as necessary as pectin and acid. Sugar is added but acid must be present in the fruit juice. Either cane or beet sugar may be used in making jelly. If acid is lacking, add 1 tablespoon lemon juice to 1 cup fruit juice.

**Making the Jelly**

*(Preparation)*

Select and wash fruit. Remove hulls, stems and blossom ends. Cut hard fruits into pieces without peeling or coring.

**Extraction of Juices**

For soft fruits, use just enough water to prevent them from sticking, or about one cup water to four quarts fruit. Heat gradually, mash while heating, and cook until the color begins to fade out of pulp.

For hard fruits, cook with just enough water to cover, until the fruit is soft. Do not mash if you wish to have clear jelly. Strain juice through a wet double cheesecloth or cotton flannel bag, or well sterilized salt sack.

Do not squeeze bag. Clear jelly can be obtained only when juice is extracted by dripping.

A second extraction of juice may be made from the fruit. Return the pulp to kettle, add one cup water to each cup pulp, cook slowly for fifteen minutes, let stand for ten minutes. Strain through one thickness of cheesecloth, squeeze out all juice possible.
By combining the first and second extractions of juice and straining through four thicknesses of cheesecloth a very satisfactory jelly will be obtained. It may be less clear than if the jelly is made exclusively from the first extraction of juice. The homemaker often marks the jelly made from the first extraction of juice for use on special occasions.

**COOKING**

To obtain best results in jelly making, it is advisable to work with a small quantity of juice. Two quarts of juice is a sufficiently large quantity to handle at one time. Measure juice, bring to vigorous boil, skim, and add sugar in proportion given in special recipes. Stir until sugar is dissolved. Cook rapidly for ten to fifteen minutes or until test shows jelly is done. Skim just before pouring into glasses.

**JELLY TEST**

To test the jelly, dip a spoon into the juice, cool slightly and allow to drop from the side of the spoon. If it sheets and tears off from the spoon in a distinct piece the jelly is done and should be removed from the fire immediately.

**SEALING AND STORING**

Pour juice while hot into clean hot BALL Jelly Glasses. Fill the Glasses full as jelly shrinks as it cools. Cover at once with hot paraffin. When cold another layer of paraffin may be added if necessary. A small teapot or pitcher with a spout is handy for pouring paraffin. When jelly is cold cover Jelly Glasses with Tin Lids.

The preceding general directions for making jelly can be used for making all jellies. For combinations of fruits and sugar proportions consult table at end of this section.

**CURRANT JELLY**

Select currants that are not over-ripe. Remove all leaves and imperfect fruit, wash and drain the currants without removing stems, mash in a porcelain preserving kettle with spoon or wooden potato masher. Add one-half cup water to each two quarts of fruit. Boil mashed fruit slowly for eight to ten minutes, stirring frequently to prevent burning and to break up cells. Put the fruit into jelly bag and drain off the juice. Be careful not to press the fruit if clear jelly is desired. The draining may be hastened, however, by occasionally shaking the bag gently. After the juice is drained, measure it and to each cup of juice add cup of sugar. Reheat slowly and as soon as it begins to boil test for jelly (see jelly test on this page). When the "two drops hang together," remove from fire and pour into BALL Jelly Glasses or Half Pint Jars. A second and third extraction of juice may be made as instructed in paragraph "Extraction of Juices."

**CURRANT and RED RASPBERRY**

Follow directions for Currant Jelly, using equal parts of currants and berries, with a cup of sugar for each cup of juice.

**APPLE OR CRAB-APPLE JELLY**

Take sour fruit. Do not core or pare, merely wash, wipe, and cut out blemishes. Cut up, pour over sufficient water to cover, and simmer until soft, then drain through a cheesecloth or cotton flannel bag, letting drip four or five hours. Measure the juice, bring to vigorous boil, skim and add ¾ cup sugar for each cup of juice. Stir until sugar is dissolved. The jelly will form in about twenty minutes. Rose geranium, mint, or other leaves may be used for flavoring, or orange blossoms preserved.

**GUAVA JELLY**

3 quarts red guavas
Juice of 2 lemons
3 quarts red guavas, cover with cold water, bring to boil, then simmer gently for 2 hours. Strain through jelly bag. When cold, measure juice and to each two cups of juice, add one and one-half cups sugar and one tablespoon lemon juice. Boil gently to jelly stage (about 1 ½ hours). Test for jelly. When done pour while hot into BALL Jelly Glasses, cover with paraffin.

**CRANBERRY JELLY**

1 quart cranberries
½ cups sugar
Wash cranberries. Place cranberries and water in preserving kettle. Cook for five minutes after they begin to boil. Drain through a single thickness, good quality, cheesecloth bag. Squeeze out juice and pulp. Add sugar and cook for fifteen minutes. Test for jelly. When the "two drops hang together" remove from fire and pour into BALL Jelly Glasses. Cover with paraffin.

**GRAPE JELLY**

Wash the bunches thoroughly, remove the fruit from the stems, put the grapes into preserving kettle, add ½ cup water to 2 quarts of grapes. Then follow the same directions as for Currant Jelly.

**MINT JELLY**

Wash mint and chop fine. To each cup of chopped mint add ¼ cup sugar and ¼ cup water, and let stand for several hours, or over-night. Bring to boiling point, then strain. Combine sugar and apple juice, using ½ cup sugar to 1 cup apple juice. Cook and test for jelly, and when the jellying point is obtained, add green vegetable coloring and 1 or 2 tablespoons of prepared mint juice for each quart of apple juice.

Mint jelly is a favorite accompaniment for Roast Lamb.

**QUINCE JELLY**

Quinces have too little acid and too much pectin to make a desirable jelly when the juice alone is used. An equal amount or twice as much tart apple improves the flavor. Equal parts of cranberry, quince and apple juice give a jelly of rich, red color and delicious flavor.

Cut the quinces into small pieces, do not pare, but remove the core and seeds, as they prevent the jelly from forming correctly. Add sufficient water to cover and cook until tender. Quinces require long cooking to become tender and to bring out their flavor and deep, rich color. Drain off juice. Use ¾ as much sugar as fruit juice. Follow general directions for making jelly.

The pulp may be used for making conserve or butter.

**BAR-LE-DUC**

2 cups large Currants
1/3 cups sugar
Add sugar to currants which have been washed and stemmed and let boil slowly for 5 minutes. Pour into hot, clean BALL Jelly Glasses, cover and keep in a dry, cool place.
# Jelly Table

Approximate Proportions of Sugar and Fruit Juice for Jelly
(Showing fruit juices and approximate proportions of each which will combine to make good jelly.)

<table>
<thead>
<tr>
<th>Fruit Juice</th>
<th>Combine in Following Proportions</th>
<th>Fruit Juice Cups</th>
<th>Sugar Cups</th>
<th>Predominant Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple *</td>
<td>1</td>
<td>3/4</td>
<td>Light</td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>Blackberry *</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>Blueberry *</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>Black Raspberry *</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Blueberry</td>
<td>3/4</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>Rhubarb</td>
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<td>Quince</td>
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<tr>
<td>Apple</td>
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<td>1</td>
<td>Light</td>
<td></td>
</tr>
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<td>Light</td>
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<td></td>
</tr>
<tr>
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</tr>
<tr>
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<td>1</td>
<td>Light</td>
<td></td>
</tr>
<tr>
<td>Crab-Apple *</td>
<td>3/4</td>
<td>1</td>
<td>Light</td>
<td></td>
</tr>
<tr>
<td>Currant *</td>
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<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>Gooseberry *</td>
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<td>1</td>
<td>Light</td>
<td></td>
</tr>
<tr>
<td>(Green)</td>
<td>3/4</td>
<td>1</td>
<td>Light</td>
<td></td>
</tr>
<tr>
<td>Grape *</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
<tr>
<td>(Under-ripe)</td>
<td>3/4</td>
<td>1</td>
<td>Dark</td>
<td></td>
</tr>
</tbody>
</table>

* Predominant flavor.

## Pectin Test

To 1 tablespoon fruit juice add 1 teaspoon of grain or denatured alcohol (poisonous) 95% strength, gently shake. If a solid mass results a large amount of pectin is present. If only a slight coagulation takes place a small amount of pectin is present. Juice high in pectin content should be combined with sugar in the following ratio. To 1 cup use from 3/4 to 1 cup of sugar. If low in pectin use only 1/2 to 3/4 cup to each cup of juice.

Epsom Salts may be substituted for alcohol. Proportions: 2 tablespoons of juice, 2 tablespoons of sugar, 1 tablespoon of Epsom Salts. Stir mixture thoroughly until salts and sugar dissolve and let stand 20 minutes. Judge results and plan proportions of sugar and juice as directed in alcohol test.

## Jelly Fruits

The juices from the following fruits will readily convert into jelly:
- Green Apple, Crab-Apple, Unripe Grapes, Blackberries, Currants, Gooseberries, Raspberries (slightly under-ripe), Cranberries, Huckleberries, Quinces, Plums.
- Juices from Strawberries, Peaches, Pineapples, Cherries, Rhubarb, Pears and Sweet Apples lack either Pectin or Acid and must be combined with other juices to make good jelly. Consult Jelly Table for juice combinations.

## Commercial Pectins

Commercially made pectins of standard quality can be purchased in practically all leading grocery and drug stores.

Directions for using are usually specified on each bottle or package, or are supplied in additional booklet or circular form at the time of purchase.
FRUIT BUTTER is the product resulting from cooking fruit pulp with sugar (with or without spices) to the consistency of thick paste, suitable for spreading. Less sugar is used for butters than for jams and marmalades. Butters require slow cooking and frequent stirring to prevent burning when cooked on top of the stove. If cooked in the oven, they require only occasional stirring.

BLUEBERRY AND APPLE BUTTER
Use tart apples. Remove stems but do not pare apples. Cook in sufficient water to cover, until soft, and press through a strainer. Use equal parts of berries and apple pulp and \( \frac{1}{2} \) as much sugar as fruit. Cook the butter until it is thick and clear and seal immediately in hot, clean BALL Jars.

CIDER APPLE BUTTER
Use sweet cider of good quality, and apples that cook easily. Boil the cider down one-half. Wash, peel, quarter and core the apples. Then boil together rapidly equal amounts of apples and boiled-down cider. If the boiling is slow the apples at once sink to the bottom and are liable to scorch. After the first two hours, constant and vigorous stirring is necessary to prevent burning. If the butter becomes too thick before it is perfectly smooth, add a little more cider and continue the boiling and stirring. Add sugar at any time after the stirring begins if the butter is not sweet enough. Spice the butter to suit the taste and seal it in BALL Jars. Apple butter is usually considered better if not highly spiced.

CRAB-APPLE BUTTER
Wash and cut apples into quarters, without paring or coring. Place them in a preserving kettle with just enough water to cover, and cook slowly until tender. Press through a colander or sieve. Measure the strained pulp. Add \( \frac{1}{2} \) as much sugar as pulp to the...
juice in which the apples were cooked. Bring to boil, add pulp and cook until mixture is thick and smooth, stirring to prevent burning. Spices may be added, if desired. Pack into clean, hot BALL Jars. Seal immediately.

**SPICED GRAPE BUTTER**

Wash grapes, remove stems, separate the pulp from the skins, and let stand overnight. Heat pulp to boiling point and drain through a colander. Add the skins to pulp and to each 5 pints of fruit add 5 cups brown sugar and ½ tablespoon of cloves and 1 of cinnamon. Boil the mixture 1 hour, add 1 cup cider vinegar and continue boiling until mixture is thick. Stir constantly to prevent burning. Pack butter into clean, hot BALL Jars and seal immediately.

**GRAPE AND APPLE BUTTER**

1 quart grape pulp
1 quart apple pulp
4 cups sugar

Prepare the fruit pulp in the usual way by cooking the fruit and pressing it through a sieve. Combine the ingredients and cook mixture until it is thick (about 20 minutes). Seal in hot, clean BALL Jars.

**PLUM BUTTER**

Cook plums in sufficient cold water to cover them. Drain and reserve the juice for jelly. Press plums through a colander, measure pulp and add ½ as much sugar as pulp. Cook mixture slowly until it is thick and clear, stirring to prevent burning. Seal in clean, hot BALL Jars.

When plums are not plentiful, apple pulp may be substituted for ½ the measure of plum pulp.

**CONSERVES**

A Conserve is a mixture of several fruits and is made like jam. It may contain nuts or raisins or both, or it may be made without nuts or raisins.

**BLUEBERRY AND APPLE CONSERVE**

1 quart blueberries, fresh
6 cups sugar
or canned
1 quart tart apple, diced
Grated rind of 1 lemon

Combine ingredients and cook mixture until thick and clear, stirring to prevent burning. Pour immediately into clean, hot BALL Jars and seal at once.

**PEAR BUTTER**

Wash pears, cut into quarters and without peeling boil them until they fall to pieces. Press through a colander to remove cores, seeds and stems. Measure pulp and add one cup sugar to each quart pulp. The addition of one-half teaspoon vanilla or juice of one-half lemon to each quart gives a pleasing flavor. Add spices to suit taste. Cook mixture slowly until it becomes smooth and thick, stirring frequently to prevent burning. Pack hot butter into clean, hot BALL Jars. Seal immediately.

**MUSKMELON BUTTER**

Select ripe muskmelons. Cut in halves, remove rinds, seeds and soft parts. Place the melons in a preserving kettle with as little water as possible and boil until tender. Press through a colander and measure the pulp. To each quart of pulp add ½ cup sugar, juice of ½ lemon and a little cinnamon if desired. Continue boiling until mixture is thick enough to spread. Stir constantly to prevent burning. Pack hot butter into clean, hot BALL Jars. Seal immediately.

**CHERRY, PINEAPPLE AND APPLE CONSERVE**

2 quarts pitted sour cherries
1 pound ground pineapple
1 pound raisins, chopped fine

Mix ingredients and simmer until mixture is clear, stirring to prevent burning. Pack into clean, hot BALL Jars and seal at once.

**TEA BUTTER**

Wash gooseberries and place in the bottom of a preserving kettle. Arrange fruit and sugar in alternate layers and let stand overnight. Cook mixture slowly until it thickens. Pour into clean, hot BALL Jars and seal at once. Nuts may be omitted, if desired.

**SOUR CHERRY AND CURRANT CONSERVE**

2 quarts pitted sour cherries
1 to 3 quarts currants
2 cups sugar for each quart fruit

Wash and pick over the currants. Crush cherries and place in the bottom of a preserving kettle. Arrange fruit and sugar in alternate layers and let stand overnight. Cook mixture slowly until it thickens. Pour into clean, hot BALL Jars and seal at once.

This recipe makes a tart conserve which is excellent to serve with meat.

**PEACH BUTTER**

Peel and stone peaches. Cook in as small amount of water as possible until they are reduced to a pulp. Add ½ as much sugar as pulp and cook mixture until it is thick and clear, stirring frequently to prevent burning. Spices may be added, if desired. Pack into clean, hot BALL Jars, and seal at once.

**GOOSEBERRY CONSERVE**

3 quarts gooseberries
1 pound raisins, chopped fine
1 pound ground pineapple
2 cups English walnuts
8 cups sugar

Wash gooseberries and boil them until they burst. Add sugar, ground pineapple and finely chopped...
raisins. Boil mixture slowly until it is thick and add 2 cups chopped English walnuts. Pack conserve into clean, hot BALL Jars and seal immediately.

**GOOSEBERRY CONSERVE**

*Old English Recipe*

6 pints gooseberries (large) 6 cups sugar
8 cups sugar 3 cups seedless raisins
Mix ingredients and boil until thick (about 45 minutes). Pack hot conserve into clean, hot BALL Jars and seal immediately.

**GRAPE CONSERVE**

4 pints seeded grapes 2 cups English walnuts
6 cups sugar (broken into small pieces)
Cook grapes and sugar together as for jam. The juice of 1 orange and the peel of ½ orange, cut in small pieces, may be added for variation. Add nut meats 5 minutes before removing from the fire. Seal in clean, hot BALL Jars.

**PEACH CONSERVE**

3 pints peach-pulp 4 ½ cups sugar
3 lemons — juice and grated rind

**PEACH AND APPLE CONSERVE**

Use equal parts of peaches and apples (diced). If apple skins are of good color do not peel apples. Add ¾ as much sugar as fruit. Cook mixture slowly until it is thick and clear. Seal in clean, hot BALL Jars.

**PEACH AND CANTALOUPE CONSERVE**

1 quart diced peaches 1 ½ cups English walnuts, blanched and chopped fine
1 quart diced cantaloupe 4 lemons, juice and grated rind
COMBINE ingredients with exception of the nuts. Cook mixture until it is thick and clear, add nuts and pour into clean, hot BALL Jars. Seal at once.

**PEACH AND PINEAPPLE CONSERVE**

4 cups diced peaches 2 oranges, juice and grated rind
2 cups cooked pineapple 2 lemons, juice and grated rind
5 cups sugar
COMBINE ingredients and cook until mixture is thick and clear, stirring to prevent burning. Pour into clean, hot BALL Jars. Seal immediately.

**PEAR AND APPLE CONSERVE**

1 quart diced pears 2 cups seedless raisins
1 quart diced tart apple 1 cup English walnuts
2 lemons, juice and grated rind 7 cups sugar
WASH raisins and add to other ingredients except nut meats. Cook until mixture is thick and clear. Add nut meats 5 minutes before removing from fire. Pack in clean, hot BALL Jars, and seal at once.

A small amount of preserved ginger may be substituted for the nuts.

**PINEAPPLE AND APPLE CONSERVE**

1 quart pineapple, diced or shredded 2 oranges, juice and grated rind
1 quart diced tart apple 6 cups sugar
1 ½ cups shredded coconut
Cook the pineapple in water until tender. Add the apple, orange juice and rind, and the sugar. Cook mixture until it is clear and transparent. Add cocoa-nut and pack conserve into clean, hot BALL Jars. Seal at once.

**PLUM CONSERVE**

3 pints plum pulp (use Damson plums) 1 ½ oranges, juice and grated rind
4 ½ cups sugar 3 cups seedless raisins
1 ½ lemons, juice and grated rind 1 ½ cups nut meats (if desired)
WASH plums, seed if desired, and weigh. Mix ingredients, except nut meats, and cook mixture until thick and clear. Add nut meats. Pack into clean, hot BALL Jars and seal at once.

**QUINCE, APPLE AND CRANBERRY CONSERVE**

4 cups quince pulp 2 oranges, juice and grated rind
4 cups cranberry pulp 4 cups apple pulp
1 ½ cups English walnuts 8 cups sugar
COMBINE ingredients, except nuts, and boil mixture rapidly until thick. Pack into clean, hot BALL Jars and seal at once.

**RHUBARB CONSERVE**

4 cups rhubarb, cut fine 2 lemons, juice and grated rind
4 cups sugar 4 cups sugar
2 oranges, juice and grated rind 1 cup blanched nuts, cut rind
COMBINE ingredients, except nuts, and heat mixture until sugar is dissolved. Boil rapidly until it is thick and clear. Add nuts; pour into clean, hot BALL Jars and seal at once.

**RHUBARB AND APPLE CONSERVE**

6 cups sugar 3 cups apple, sliced
2 cups water 2 cups English walnuts, chopped
6 cups rhubarb, cut in small pieces
Make a syrup of sugar and water and when boiling add fruit and simmer until mixture is thick and clear. Add nuts and pack conserve into clean, hot BALL Jars and seal at once.

**STRAWBERRY AND RHUBARB CONSERVE**

2 quarts strawberries 2 quarts rhubarb
12 cups sugar
Cut rhubarb into ⅛-inch pieces, being careful not to peel. Mix together strawberries, rhubarb and sugar, and cook mixture slowly until it is thick and clear. Pour into clean, hot BALL Jars and seal at once.

**TOMATO CONSERVE**

2 quarts tomatoes, fresh or canned (drain off juice) 2 lemons, cut in small pieces
8 cups sugar
1 cup English walnuts
WASH raisins. Blanch, peel and core fresh tomatoes. Mix ingredients, except nuts, and cook mixture until it is thick and clear. Add nuts, chopped fine, and pour mixture into clean, hot BALL Jars, and seal at once.
TOMATO AND APPLE CONSERVE

1 quart tomato, fresh or canned (drain off juice)  1 quart apple, diced  2 lemons, cut in small pieces  6 cups sugar

BLANCH, peel and core fresh tomatoes. Combine ingredients and cook mixture until it is thick and clear. Pour into clean, hot BALL Jars. Seal at once.

MINCEMEAT

2 pounds lean beef  1 pound chopped suet  4 pounds tart apples  6 cups sugar  3 pounds currants  2 pounds raisins  1 nutmeg  1/2 teaspoon ground mace  2 oranges  2 lemons  1/2 pound citron  1 tablespoon salt

STEW beef in as little water as possible until quite tender; cool and chop into fine pieces. Add beef suet, chopped fine, and apples pared, cored and chopped, sugar, currants, raisins, spices, orange and lemon juice, grated rind of the oranges and of 1 lemon, chopped citron and salt. Mix thoroughly and cook 1 hour. Pack in clean BALL Jars. Seal immediately and store in a cool place.

MOCK MINCEMEAT (Green Tomato)

1 peck green tomatoes  2 teaspoons ground cinnamon  3 pounds apples chopped  1 teaspoon ground cloves  2 pounds raisins  2 teaspoons nutmeg  1 cup suet  Grated rind of 1 orange  2 tablespoons salt  3 lemons (pulp and juice only)  1/2 cup water

CHOP or slice tomatoes, sprinkle salt over them and allow to stand for 1 hour. Drain and discard juice. Cover with cold water. Place over fire and boil for 3 minutes. Drain off liquid, add suet and 1/2 cup water, return to fire and simmer 20 minutes. Stir in sugar and boil until dissolved. Add other ingredients and boil rapidly until thick (about 20 minutes). Pack into clean Hot BALL Jars and seal immediately.

JAMS

A JAM is a variation of a preserve. The product is cooked to a thick mass and the proportion of sugar used is less than the amount used for preserves. For Jam use 1/2 to 3/4 pound sugar to 1 pound fruit. Jams need constant stirring to prevent burning.

BLACKBERRY JAM

Mash berries, cook them in their own juice until thoroughly heated, then press through a sieve to remove seeds. Measure the pulp and liquid, and for every pint of pulp add 1 cup of sugar. Cook rapidly until thick, stirring to prevent burning. Pack into clean, hot BALL Jars and seal immediately.

BLUEBERRY AND CRAB-APPLE JAM

Equal measures of canned blueberries and crab-apples may be used, or as much berries as crab-apples. Remove cores from crab-apples, but do not pare them. Grind in food chopper. Add just enough water to cover apples, and cook for 10 minutes. Add blueberries and sugar, using 1/2 as much sugar as fruit, by measure. Cook mixture until thick, and pack immediately into clean, hot BALL Jars and seal at once.

KUMQUAT JAM

SLICE kumquats. Cook until tender in just enough water to keep from burning. Measure and add equal parts of sugar with a little lemon juice. Cook mixture until thick, stirring to prevent burning. Pack hot jam into clean, hot BALL Jars. Seal immediately.

PEACH JAM

3 pints peach pulp  4 cups sugar  1/2 teaspoon allspice  3 peach pits  3/4 cup peach juice or water  1 1/2 teaspoons cloves  1 1/2 in. ginger root  3 teaspoons cinnamon bark

BLANCH peaches in boiling water, cold-dip and remove skins and seeds. Mash pulp. Add sugar and
spices (tied in a bag). Cook until mixture is thick and clear. Remove spice bag. Pack into clean, hot BALL Jars and seal immediately.

Note: Spices may be omitted. Apple pulp may be substituted for part of peach pulp. Instead of spices, juice of 1 lemon and 12 peach pits may be added.

**PLUM JAM**

3 pints plums (Damson plums are best)

4 cups sugar

Wash plums and remove seeds, if desired. The flavor of the seeds is sometimes preferred. Add sugar, and cook until mixture is thick and clear (about 218°F.). Pack immediately into hot, clean BALL Jars and seal at once.

**PLUM JAM (Green Gage)**

Wash plums, remove seeds, but not skins, and place plums in a preserving kettle containing enough water to cover bottom of kettle. Cook until soft. Measure mixture and add 3/4 as much sugar as mixture. Boil until thick, stirring to prevent burning. Pack while hot into clean, hot BALL Jars. Seal immediately.

**RASPBERRY JAM**

Wash raspberries, crush and measure them. If berries are sour add equal measurement of sugar, if sweet use three-fourths amount of sugar. Cook in own juice until thickened, stirring to prevent burning. Boil rapidly because long cooking tends to darken it. Pack while boiling hot in hot BALL Jars, seal immediately.

**STRAWBERRY JAM**

Pick over berries and remove hulls. Measure berries, and for every quart of fruit allow 3 cups of sugar. Place berries in a preserving kettle and mash fruit as it heats. Bring fruit to boiling point, stirring frequently and crushing any berries which still remain whole. Add sugar to the fruit and boil together until thick (not over 20 minutes), stirring to prevent burning. Pack into clean, hot BALL Jars and seal immediately.

**MARMALADES**

Marmalades are usually made from citrous fruits, oranges being the most common fruit used, but other fruits may also be used.

**CARROT MARMALADE**

4 cups chopped carrots

2 tablespoons lemon juice

4 cups sugar

3 oranges

1 cup water

Cut peeling from oranges into fine strips. Cover with water and boil until tender. Add 1 cup water to the carrots and cook until tender. Add orange pulp, sugar, lemon juice and orange peel to the carrots and cook until thick and clear. Pour into Hot BALL Jars and seal immediately.

**CHERRY AND PINEAPPLE MARMALADE**

Wash, drain, seed the cherries and run them through a meat grinder. Peel and grind or shred the pine-

apple. Mix pineapple with cherries using 1/4 as much pineapple as cherries. To the mixture add 3/4 as much sugar as there is fruit and juice. Cook this mixture until it is clear and thick, stirring to prevent burning. Pour hot marmalade into clean, hot BALL Jars. Seal immediately.

**CITRUS MARMALADE**

1 grapefruit

1 orange

1 lemon

3 1/2 quarts cold water

5 pounds sugar

1 teaspoon salt

Cut fruit in thin slices, discard seed. Cover with cold water and let stand overnight. Then cook until tender. Let stand several hours. Add sugar and cook until the syrup gives jelly test. Pour into Hot BALL Jars and seal immediately.

**FIG MARMALADE**

Wash figs and place in a little water and bring to a boil, measure fruit, add same amount of sugar as fruit and cook 1 hour, stirring to prevent burning. Pack hot marmalade into clean hot BALL Jars and seal immediately.

**GOOSEBERRY MARMALADE**

STEM and wash berries. Place berries in preserving kettle containing enough water to cover bottom of kettle. Cook slowly until berries are soft. Measure mixture and add same quantity of sugar as pulp. Boil until mixture is thick (about 20 minutes). Stir constantly to prevent burning. Pack hot marmalade into clean, hot BALL Jars and seal immediately.

**GRAPE MARMALADE**

USE well ripened or over-ripe guavas. Slice. Place with a little cold water in a kettle. Cook until soft, and press through a coarse sieve. Measure pulp and allow 3/4 as much sugar as pulp. Cook mixture until skins are tender (about 20 minutes), and seal at once in clean hot BALL Jars.

**GRAPEFRUIT MARMALADE**

Follow same recipe as Orange Marmalade (page 40) except omit the lemons.

**LEMON MARMALADE**

Make same as Orange Marmalade (page 40) reversing the quantities of lemons and oranges.

**GUAVA MARMALADE**

Use well ripened or over-ripe guavas. Slice. Place with a little cold water in a kettle. Cook until soft, and press through a coarse sieve. Measure pulp and add 3/4 as much sugar as pulp. Add juice of 1 lemon to each pint of pulp. Cook mixture until thick. Pack hot marmalade into clean, hot BALL Jars. Seal immediately.
**ORANGE MARMALADE**

12 thin skinned oranges  
3 quarts of water  
3 lemons

Wash and slice the oranges and lemons as thin as possible. Add the water and let stand over night. The next day, cook the mixture slowly until tender (2 to 2 1/2 hours). When tender measure and add equal parts of sugar and cook until it jells from the spoon. Pack into hot BALL Jars and seal immediately.

**PEACH AND ORANGE MARMALADE**

24 large peaches  
6 oranges  
Juice of one lemon

Peel peaches and oranges. Cut into small pieces the peel from three oranges, cover with water and boil until tender. Drain and run through meat grinder. Cut peaches and oranges into small pieces. Add lemon juice. For each pound of fruit add three-fourths pound of granulated sugar. Place in kettle and boil until transparent (one to one and one-half hours). Pour while hot into hot BALL Jars and seal immediately.

**QUINCE MARMALADE**

Cut and quarter unpeeled quinces. Put in kettle and just cover with water. Let cook until tender. Press through a sieve, measure and add 3/4 as much sugar as pulp. Cook this slowly until quite stiff, stirring frequently to avoid burning. Pack into clean, hot BALL Jars. Seal immediately.

**QUINCE AND APPLE MARMALADE**

Wash quinces and remove blossom end. Cut fruit into small pieces. Place in just enough water to cover and cook until soft. Press through a sieve and combine pulp with an equal measure of tart apple pulp. Add 3/4 as much sugar as pulp. Cook mixture until it is thick and clear (about 25 minutes). Pack into clean, hot BALL Jars and seal immediately.

**BLACK OR RED RASPBERRY MARMALADE**

Wash and drain berries, mash thoroughly, place them in a preserving kettle with as little water as possible and bring quickly to boil. Press mixture through a fine-mesh sieve to remove seeds. Measure mixture and add 3/4 as much sugar as there is pulp and juice. Boil gently for 10 minutes. Pour hot marmalade into clean, hot BALL Jars. Seal immediately.

**RASPBERRY AND CURRANT MARMALADE**

4 quarts red raspberries  
1 quart red currants

Wash berries and currants and place in a preserving kettle. Mash fruit thoroughly, add 3/4 as much sugar as fruit and boil mixture for 10 minutes or until it jells when cooled. Stir constantly to prevent burning. Pack hot marmalade into clean, hot BALL Jars. Seal immediately.

**RHUBARB MARMALADE**

Cut young stalks of rhubarb into 1-inch lengths. Do not peel. Weigh rhubarb and add 3/4 pound sugar to each pound rhubarb. Place rhubarb and sugar in a preserving kettle, heat slowly and boil mixture until thick and clear. Pack into clean, hot BALL Jars. Seal immediately.

**RHUBARB AND PINEAPPLE MARMALADE**

3 pints strawberry rhubarb  
1 cup pineapple, cut in pieces  
4 cups sugar  
2 lemons, juice and grated rind

Combine ingredients and boil mixture slowly until it is thick and clear. Pack into hot BALL Jars and seal immediately.

**TOMATO MARMALADE**

2 quarts ripe tomatoes  
1 cup cider vinegar  
2 teaspoons salt  
2 teaspoons mixed spices

Combine ingredients. Cook mixture slowly until it is thick, stirring to prevent burning. Pack into clean, hot BALL Jars. Seal immediately.
GOOD preserve is one in which the fruit or pieces of fruit remain whole, tender, clear and plump, in a thick, transparent syrup. The approximate proportion of sugar to fruit in preserves is three-fourths of a pound of sugar to one pound of fruit.

**APRICOT AND PINEAPPLE PRESERVES**

4 quarts fresh, ripe apricots  
1 quart shredded pineapple  
4 cups sugar

Wash apricots, do not peel. Shred fresh pineapple and add to apricots. Place in a medium thin, boiling syrup made with 1 part sugar to 1 part water. Cook slowly until mixture is tender (about 30 minutes). Add almonds, if desired. Pack hot into clean, hot BALL Jars. Seal immediately.

**BLACKBERRY PRESERVES**

Follow the direction for preserved Strawberries (see page 43).

**BARRIER CHERRIES**

Wash and seed cherries, drain thoroughly in colander, place in earthen jar and cover with vinegar. Let stand 12 hours. Measure cherries and liquid and add an equal amount of sugar. Let stand for 10 days, stirring each morning. Then pack into clean, hot Ball Jars and seal. Delicious with meats or salads.

**MARASCHINO CHERRIES**

Wash, remove stems and pits from cherries. Save juice, pits and cherries. Place cherries in a shallow pan and cover with a medium thick syrup made with 3 parts sugar to 2 parts cherry juice or water. Boil gently for 10 minutes; remove from heat and let stand in a covered kettle from 6 to 12 hours. Drain off juice from cherries and pack cherries into clean, hot BALL Jars. Crush the cherry pits (using 1/2 cup crushed pits to 1 quart syrup), tie in cheesecloth and place in kettle containing syrup and bring quickly to boiling point. Remove cherry pits and fill the jars with boiling syrup. Seal at once.

Note: Maraschino is a cordial distilled from fermented cherries and flavored with bruised pits. Large and small sized bottles of Maraschino can be purchased in stores carrying "fancy groceries."

When using the Commercial Maraschino use 1 part syrup to 1 part Maraschino. Bring quickly to boiling point in covered kettle to prevent evaporation of the volatile liquor. Fill jars and seal immediately.

**CHERRY PRESERVES**

Wash, remove stems and pits from cherries. Save the juice. Place cherries in a shallow pan and cover with a medium thick syrup made with 3 parts sugar to 2 parts cherry juice or water. Boil gently for 10 minutes; remove from heat and let stand in a covered kettle from 6 to 12 hours. Drain off the juice from cherries and pack cherries into clean, hot BALL Jars. Heat the remaining syrup and fill the jars with the boiling syrup. Seal at once.
**currant preserves**

Wash and stem currants. Place in a boiling syrup using 3 parts sugar to 1 part water. Boil gently for 15 minutes and pour immediately into clean, hot BALL Jars. Seal at once.

**Citron Melon Preserves**

- 5 melons
- 5 cups sugar
- 2 lemons

Peel melons, cut into slices and boil until tender, in a syrup made in proportion of 5 cups sugar to 1 cup water. Add the juice of 2 lemons with grated rind of 1 lemon to the boiling mixture. A little ginger root may be added if desired. Cook for 20 minutes, and pack hot into clean, hot BALL Jars. Seal immediately.

**Crab-Apple Preserves**

Select perfect, well colored crab-apples, wash thoroughly, remove blossom ends, leaving stems in skins. Cook in water until tender, using the water in which they are cooked for making syrup. Make syrup in proportion of 3 parts sugar to 1 part water. Add crab-apples, bring to boiling point and pack hot into clean, hot BALL Jars and seal immediately. Crab-apple preserves are superior in color, shape and flavor to other preserves.

**Fig Preserves**

- 2 pounds firm ripe figs
- 4 cups sugar
- 1 pint water
- 1 lemon

Wash figs carefully but do not remove stems. Combine sugar and water and cook until sugar dissolves. Add lemon juice and figs and cook until clear. Remove the figs and boil the syrup until clear as honey. Add figs, cover and let stand 12 hours. Pack into hot BALL Jars and seal immediately.

**Ginger Preserves**

Wash ginger roots and boil gently until tender. Soak in cold water, changing water frequently. Make a syrup using 2 parts sugar to 1 part water. Pour syrup over ginger roots and let stand for 5 days. Pack into clean, hot BALL Jars and fill jars with boiling syrup which has been boiled down until thick. Seal immediately. Add spices if desired.

**Kumquat Preserves**

Clean kumquats and puncture. Drop into slightly salted water and soak over night. Next day pour off salted water, cover with fresh water and bring to boil. Drain and repeat this process twice, cooking until tender last time. To each pint of fruit add ¾ pint sugar, ¼ pint honey, 1 pint water or orange juice. Drop kumquats in boiling syrup and simmer until clear and syrup is slightly thickened. Cover tight while still boiling and remove from fire. Let stand in same vessel over night. Bring to boil and cook until syrup is heavy. Pack while hot into hot BALL Jars and seal immediately.

**Mixed Fruit Preserves**

- 1 pint quinces
- 1 pint sweet apples
- 1 pint pears
- 3 lemons
- 6 cups sugar

Do not remove skins. Slice the fruit. Cook apples, peaches, pears, and quinces separately until tender. Drain off the juice from each, and add it to the sugar. Boil the mixture until it becomes a medium thick syrup. Add the fruit, juice of 2 lemons and 1 lemon sliced thin. Cook mixture until it is thick and seal at once in clean, hot BALL Jars.

**Muskmelon (Cantaloupe) Preserves**

Partially green melons make delicious preserves, but they should be soaked in stronger salt-water than that used for watermelons.

Proceed same as for Watermelon Rind Preserves, see recipe page 43.

**Peach Preserves**

- 4 quarts peaches
- 4 cups sugar
- 2 cups hot water

Blanch, remove skins and cut peaches into halves. Add sugar and water to peaches, cover and let stand 2 hours. Heat slowly until sugar is dissolved and syrup boiling. Boil rapidly until peaches are tender and clear. Let stand overnight to 'plump.' Bring to boiling point and pack into clean, hot BALL Jars and seal immediately.

*Note:*—If syrup is thin drain it off and cook down until consistency of honey. Add peaches, bring to boiling point and pack.

**Pear Preserves**

- 4 pounds pears
- 4 cups sugar
- 2 lemons, sliced thin

The fruit may be preserved whole, halved or quartered.

Boil 2 cups sugar and 2 cups water together for 15 minutes. Add pears and sliced lemon and cook 15 minutes. Add remaining sugar and water and cook until pears are clear and transparent, and the syrup is thick. Pack into clean, hot BALL Jars and seal at once.

If hard pears, such as Keifers, are used, cook them until tender, using the water in which they are cooked for making the syrup.

A few cloves or a stick of cinnamon may be added for flavor. Using pineapple juice instead of water for making the syrup gives a delicious flavor.

**Pineapple Preserves**

Pare the pineapple and remove the eyes. Shred with a silver fork or cut into small pieces, discarding the core. Place pineapple in a preserving kettle and add ¾ as much sugar as pineapple. Allow mixture to stand until a syrup is formed. Cook the mixture slowly until the pineapple becomes transparent. Transfer to hot BALL Jars, fill with boiling syrup and seal immediately.

**Plum Preserves**

- 6 pints plums
- 9 cups sugar
- 1 cup water

Select plums and be sure they are sound and not over-ripe. Remove stems, wash and cover with sugar and add water. Cover and let stand in a cool place overnight. Drain plums and boil the juice for 5 minutes. Add plums and cook for a few minutes until clear. Care should be taken not to over-cook, as the syrup thickens or jellies after standing. Pack into hot, clean BALL Jars and seal immediately.
QUINCE AND APPLE PRESERVES

Quinces may be preserved whole, quartered or sliced across in rings. Cook the quinces until tender in as little water as will keep them from burning. When tender put in syrup made of two parts sugar and one part water and cook until clear. Fill hot BALL Jars with alternate layers of apple and quinces. Fill Jars to overflowing with syrup and seal immediately. If short of syrup add more sugar and water to the kettle in the proportion of two parts sugar to one part of water.

RASPBERRY PRESERVES

Mix thoroughly equal parts of raspberries and sugar. Cook slowly and stir until mixture boils. Boil immediately. If short of syrup add more sugar and water to the kettle in the proportion of two parts sugar to one part of water.

RHUBARB PRESERVES

2 quarts rhubarb, cut in small pieces
8 cups sugar
2 cups water

Boil sugar and water together until the syrup becomes brittle when dropped into cold water. Drop rhubarb into the boiling syrup and cook mixture until it is thick and clear. Pour into clean, hot BALL Jars and seal at once.

RHUBARB AND FIG PRESERVES

3½ quarts rhubarb
1 pint chopped figs
8 cups sugar
1 lemon

Cut rhubarb into small pieces, add sugar and let mixture stand overnight. In the morning boil until thick and add 1 pint of chopped figs and the juice and rind of 1 lemon. Cook rapidly until mixture is thick and clear. Pack while hot, into clean, hot BALL Jars. Seal immediately.

STRAWBERRY PRESERVES

Use firm, ripe strawberries. Take two quarts (do not increase quantity) and scald them, leaving them in the boiling water 2 minutes, then drain. Add four cups of sugar and boil two minutes, counting the time after the entire contents of the pan is bubbling. Remove from fire and after bubbling has stopped add two more cups of sugar and boil for five minutes. Count time as specified, after which pour into shallow pans so the preserves will not stand over one and one-half to two inches deep in the pan. Let stand over night, next morning pack the cold preserves in sterilized BALL Jars and seal with Caps and Rubbers in the usual way. This method of scalding keeps the berries plump and retains the color.

PUMPKIN PRESERVES

5 pints pumpkin
3 lemons
8 cups sugar
1 teaspoon salt

Cut pumpkin into slices ¼ inch thick and from 1 to 2 inches long. Add the sugar and let stand overnight. Drain and boil the liquid until it threads. Add the pumpkin, thinly sliced lemons and salt. Cook mixture until it is thick and clear. Seal while hot, in clean, hot BALL Jars.

WASH and dry tomatoes, cut thin slice from blossom end and press out seeds. Put tomatoes into preserving kettle, sprinkle sugar and salt over top, simmer until sugar is dissolved, then boil slowly for 40 minutes. Wash and cut the lemon into wafer thin slices, removing seeds. Add lemon and ginger (cut in small pieces), boil 10 minutes more. Pack while boiling hot into hot BALL Jars and seal immediately.

Water cloudy keeps the berries plump and retains the color.

GLASS IS THE LAST WORD IN SANITATION
THE tang of crisp spiced pickles or relish adds interest and palatability to any meal and used in moderation, they play an important part in the dietary because they stimulate the flow of saliva and gastric juices, thus aiding digestion.

Success in “making pickles” is determined largely by the kind of vinegar used. Best results will be secured if a high grade cider vinegar diluted one half with water is used.

SWEET PICKLES may be made from many fruits, fresh, canned or dried, as well as from a few vegetables. Green or slightly under-ripe fruits and vegetables make firmer, crisper pickles than those which have fully matured. A spicy syrup is used as the foundation for any variety.

SPICES should be bought fresh for each year’s pickling. A mixture of spices commonly known as “pickling spice” may be obtained loose or in packages, or they may be blended at home. They should include whole cloves, peppercorns, stick cinnamon, mace, tiny red peppers, mustard seed, allspice, bay leaves and root ginger. Spices are usually tied in a square of cheesecloth and cooked with the pickles. Glass Top Jars are better containers for pickles or other products that have a strong acid, vinegar or salt solution. If metal top jars are used they should never be inverted to test for seals.

More satisfactory results can be obtained if the housewife understands what causes some of the troubles sometimes encountered in pickling.

1. Tough, shriveled pickles are the result of too much salt or sugar, or too strong a vinegar.
2. Soft pickles are the result of too strong a vinegar or being put in too weak a brine.
3. Hollow pickles are due to imperfect cucumbers or else too great a lapse of time between pickling and pickling.
4. Slippery pickles are the result of letting the cucumbers stand above the brine. This will also cause them to be soft.
5. Off color is the result of using the wrong kind of vinegar or cooking in a copper kettle.
6. Vinegar — Use high grade cider vinegar or pure grain vinegar 40 to 60% strength, 4 to 6% Acetic Acid.
7. Avoid water having excess of minerals.

HAVE SYRUP BOILING BEFORE FILLING JARS
BRINE AND PICKLE SOLUTIONS

BRINING CUCUMBERS

Some housewives during the busy season prefer to brine their cucumbers and make pickles in a less busy season. Brined cucumbers will make pickles of higher quality. Perfect brining or curing requires from 6 to 8 weeks. Brine for pickles is made by adding 1 pint of clean coarse salt to 9 pints water (soft preferred, rain water can be used if boiled and cooled). This is a 10% solution and should barely float a new laid egg. Do not wash cucumbers unless necessary. If washed, dry. Put cucumbers in brine using round board or plate with weight to keep cucumbers below surface. On the following day put scant pint of salt on cover. At the end of each succeeding week for 5 weeks, put 1/2 cup salt on cover. Skim off scum as it forms. Before making pickles, cucumbers must be freshened by soaking in from three to five changes of fresh water as most of the salt must be removed.

The cucumbers are now ready for pickling as specified in the individual recipes, but omit the brining and salting specified in the recipes when using cucumbers prepared as above.

PICKLING VINEGARS

Frequently pickles are spoiled by the use of inferior vinegar. Select a good, clear vinegar of 40 to 60 grain strength (4 to 6 per cent of acetic acid). If fruit vinegar is used it should be filtered to remove sediment. (If filter paper is not available, fairly satisfactory results may be had by filtering through doubled flannel.)

HONEY VINEGAR

Mix together 1 quart of strained honey and 8 quarts warm water. Allow mixture to stand in a warm place until fermentation ceases. Seal in clean BALL Jars. The resulting vinegar is white and of excellent quality.

SPICED VINEGAR

1 quart vinegar 1 tablespoon white mustard seed
2 cups sugar 2 sticks cinnamon
1 tablespoon cinnamon 1 teaspoon cloves
1 teaspoon allspice 1 teaspoon salt

Mix ingredients, bring to boil, pour over pickles.

CIDER VINEGAR

Select ripe, sound apples, wash thoroughly and extract juice in a clean cider-press. Place juice in a large receptacle and allow to stand for a few days. Then drain, leaving sediment in bottom undisturbed. Wash out barrels or kgs in which it is to be placed as thoroughly as possible with boiling water. Fill them 3/4 full with the juice. Leave bung out but place in a loose plug of cotton to prevent dirt from falling in. For each five gallons in barrel add one cake compressed yeast dissolved in lukewarm water. Keep barrels at a temperature of from 75 to 85°F if possible. As soon as the alcoholic fermentation ceases (which will take several months), drain out clear liquid, rinse barrels and put the clear liquid back again, filling the barrels 3/4 full. Add from 2 to 4 quarts vinegar containing more or less “mother” for each 5 gallons liquid. Store barrels in as warm a place as possible until vinegar is made; this usually requires from 6 to 12 months. Then fill barrels full and bung them tight.

PICKLING SYRUP (For Fruits)

Cook until thickened—
3 quarts white or brown sugar 2 quarts cider vinegar
Bag of pickling spices containing 1 tablespoon each whole cloves and allspice and 1/4 pound stick cinnamon

This syrup can be used for pickling fruits but do not use on cucumbers as it will cause them to shrivel.

GREEN PICKLES

SOUR CUCUMBER PICKLES

6 quarts cucumbers 1/2 ounce whole cloves
1 gallon vinegar 2 sticks cinnamon
2 cups sugar 1 blade mace
1/2 ounce whole allspice 1 small pod red pepper

SCRUB cucumbers, put in stone jar or bowl, cover with scalding hot brine (proportion 9 pints water to 1 pint salt). Let cucumbers stand overnight in brine. In morning rinse and drain them. (If using brined cucumbers, soak overnight to remove excess salt. Change the water once or twice in the morning. Drain.) Tie the spices in a cheesecloth bag; steep for 2 or 3 weeks; then pack into hot BALL Jars, cover with fresh, cool, spiced vinegar and seal immediately. About 2 quarts of the spiced vinegar will be sufficient for the packing.

SWEET CUCUMBER PICKLES

6 quarts cucumbers 1 blade mace
1 gallon vinegar 2 tablespoons white mustard seed
1 ounce all spice 5 cups sugar
2 sticks cinnamon

Prepare fresh or brined cucumbers as directed under sour cucumber pickles. After draining cucumbers; dissolve 2 cups sugar in 3 quarts vinegar; add the spices; simmer 15 minutes; add cucumbers, a few at a time and boil 1 minute. Place in stone jar; add hot spiced vinegar and let stand over night. Next day, drain off vinegar; combine with remaining vinegar and sugar, bring to a boil and pour over the pickles. Let stand a week or more. Remove spices, pack into hot BALL Jars and seal.

DILL PICKLES (Quick Method)

MAKE a brine by adding half a cup salt to each four quarts of water; in this soak a hundred medium-sized cucumbers overnight. In the morning drain, wipe dry and pack tightly in layers in BALL Jars.
On each layer of cucumbers place a thin layer of dill, using stalks, leaves and seed balls, and cherry or grape leaves. Add small piece of red pepper and piece of alum the size of bean to each jar. Fill the jars with cold brine made as follows: Boil together ten quarts water, one quart vinegar and two cups salt. Let this brine stand overnight. A cup of mustard seed and cup of horseradish shaved fine may be added to the brine, if desired. Do not seal Jars tightly until fermentation has taken place which requires from three to four weeks.

**DILL PICKLES**

<table>
<thead>
<tr>
<th>40 to 50 cucumbers</th>
<th>1 pint vinegar</th>
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<tbody>
<tr>
<td>2 ounces mixed pickle</td>
<td>1 pound salt</td>
</tr>
<tr>
<td>spices</td>
<td>1/2 cup sugar (if desired)</td>
</tr>
<tr>
<td>Dill (fresh or dried)</td>
<td>2 gallons water</td>
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Wash and dry freshly picked cucumbers. Place a thin layer of dill in the bottom of a 5 gallon jar. Put cucumbers on top of dill. Dissolve the sugar and salt in the water, add vinegar and spices, pour over the cucumbers. Place a layer of dill on top and cover with a heavy plate and weight it down to hold the cucumbers under the brine. Keep in an even room temperature (70 to 85 degrees F.). Skim the scum from the pickles each day. Pickles will be ready for canning when they are crisp, well flavored with dill and clear throughout.

**CUCUMBER OIL PICKLES**

200 cucumbers
6 small onions
1/2 cup celery seed
1/2 cup black pepper
2 cups sugar

Wash cucumbers and slice thin. Slice onions. Soak overnight in brine strong enough to float an egg, made of eight quarts water to one quart salt. Drain and wash. Boil vinegar, sugar and spices together, pour over cucumbers. Add olive oil and cook near boiling point until pickles change color. Fill hot BALL Jars to overflowing and seal immediately. If not enough liquid add more vinegar.

**CUCUMBER MUSTARD PICKLES**

(Semf-Gurken)

<table>
<thead>
<tr>
<th>8 large ripe cucumbers</th>
<th>2 tablespoons mustard seed</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 cups vinegar</td>
<td>1 tablespoon mixed whole</td>
</tr>
<tr>
<td>2 cups sugar</td>
<td>spice</td>
</tr>
</tbody>
</table>

Peel cucumbers, remove seeds and cut into long strips. Salt lightly and let stand 24 hours. Drain well. Mix vinegar, sugar, mustard seed and spice and pour over the cucumbers. Cook until soft. Pack into clean, hot BALL Jars and seal at once.

**SPICED CUCUMBERS**

<table>
<thead>
<tr>
<th>12 ripe cucumbers</th>
<th>1 tablespoon allspice, whole</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 cup sugar</td>
<td>2 tablespoons cinnamon bark</td>
</tr>
<tr>
<td>2 cups vinegar</td>
<td>1 tablespoon white mustard seed</td>
</tr>
<tr>
<td>1 teaspoon salt</td>
<td>1 tablespoon white mustard seed</td>
</tr>
</tbody>
</table>

Cut cucumbers into slices 1 inch thick or in length-wise strips. Place in a bowl and sprinkle with 1/4 cup salt. Let stand overnight. Drain and wash in cold water. Mix the sugar, vinegar and spices and boil for 5 minutes. Add cucumbers and cook mixture slowly until tender. When done the cucumbers should be clear in appearance, and the liquid should be the consistency of a medium thick syrup. Pack into clean, hot BALL Jars and seal immediately.

**PICKLES**

**BREAD AND BUTTER PICKLES**

<table>
<thead>
<tr>
<th>6 quarts sliced medium cucumbers</th>
<th>6 onions sliced medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2 quarts vinegar</td>
<td>1 cup salt</td>
</tr>
</tbody>
</table>

Combine and allow to stand 3 hours. Drain.

**GREEN TOMATO PICKLES**

<table>
<thead>
<tr>
<th>1 peck of green tomatoes, sliced</th>
<th>1/4 pound ground mustard, sliced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2 ounces of black pepper</td>
<td>1 ounce of whole allspice</td>
</tr>
<tr>
<td>1 ounce of whole cloves</td>
<td>1 ounce of mustard seed</td>
</tr>
</tbody>
</table>

Mix tomatoes with 1/2 cup salt and onions with 1/4 cup salt. Let stand overnight, drain. Tie spices in bag and place into a kettle with the vinegar and sugar, heat to the boiling point, add tomatoes and onions and let simmer slowly for 20 minutes. Pack into clean, hot BALL Jars and seal immediately.

**SPICED GREEN TOMATOES**

<table>
<thead>
<tr>
<th>5 pounds sliced green tomatoes</th>
<th>1 teaspoon whole cloves</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 tablespoon white allspice</td>
<td>1 tablespoon white mustard seed</td>
</tr>
</tbody>
</table>

Wash tomatoes but do not peel. Combine sugar, vinegar, spices and tomatoes. Cook gently until tomatoes are clear and let stand in syrup overnight. Pack in clean hot BALL Jars and seal immediately.

**GOVERNOR’S MIXTURE**

Slice 1 peck green tomatoes, sprinkle 3/4 cup salt through them. Let stand overnight. In the morning pour off liquid and put tomatoes in kettle with enough vinegar to cover. Add 6 green peppers, 4 large onions chopped fine, 1 cup brown sugar, 1 cup grated horseradish, 1 tablespoon ground cloves, 1 tablespoon allspice, 1 teaspoon each cayenne and white pepper. Let simmer until soft. Pack into hot sterilized BALL Jars and seal immediately.

**ASSORTED PICKLES**

<table>
<thead>
<tr>
<th>2 cauliflowers</th>
<th>3 1/2 quarts vinegar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 quarts green tomatoes</td>
<td>1 cup sugar</td>
</tr>
<tr>
<td>6 green peppers</td>
<td>1/4 pound mustard</td>
</tr>
<tr>
<td>1 quart very small onions</td>
<td>1/4 ounce turmeric</td>
</tr>
<tr>
<td>24 small cucumbers</td>
<td>1/4 cup flour</td>
</tr>
</tbody>
</table>

Break cauliflower into small pieces, chop tomatoes and green peppers and add the onions and cucum-
bers without cutting. Cover with brine (using 1 cup salt to 1 quart water) and let stand overnight. Scald mixture and drain thoroughly. Heat vinegar with the sugar and add mustard, turmeric and flour which have been blended to a smooth paste with a little vinegar. Cook for 20 minutes, stirring constantly, add prepared vegetables and when cool place in clean BALL Jars and seal immediately.

The amount of mustard may be increased or decreased, to suit taste.

**MIXED PICKLES**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 quart small cucumbers</td>
<td>1 pint celery, cut in 2-inch lengths</td>
</tr>
<tr>
<td>1 pint cauliflower</td>
<td>4 tablespoons white mustard seed</td>
</tr>
<tr>
<td>1 pint pickling onions</td>
<td>1 1/2 cups sugar</td>
</tr>
<tr>
<td>1 pint sliced muskmelon</td>
<td>2 tablespoons celery seed</td>
</tr>
<tr>
<td>1 pint small carrots</td>
<td>5 cups cider vinegar</td>
</tr>
<tr>
<td>2 red peppers, seeds removed</td>
<td>5 tablespoons salt</td>
</tr>
</tbody>
</table>

Soak onions and cucumbers separately for 24 hours, in a brine made in the proportion of 1 cup salt to 1 gallon water. Remove from brine, soak in cold water for 2 hours and drain. Add spices, sugar and vinegar and let stand overnight in a covered vessel. Drain off vinegar, heat it, add vegetables and allow mixture to simmer for 15 minutes. Seal immediately in clean, hot BALL Jars. Any combination of vegetables available may be used.

**PICKLED BEETS**

Cook small beets until tender. Cold-dip and slip skins. Make a pickling syrup of 2 cups sugar, 2 cups water, 2 cups vinegar, + lemon, sliced thin, + tablespoon cinnamon, + 2 teaspoon cloves and 2 teaspoon allspice. Cover beets with mixture and simmer for 15 minutes. Seal in clean, hot BALL Jars. Golden wax beans, stems of Swiss chard or small carrots may be pickled in the same way.

**EMERGENCY PICKLES**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pint carrots, cooked and cut into strips</td>
<td>1 cup cooked string beans</td>
</tr>
<tr>
<td>1 green pepper</td>
<td>3/4 cup sugar</td>
</tr>
<tr>
<td>1 red pepper or 2 pimientos, chopped</td>
<td>1 cup vinegar</td>
</tr>
<tr>
<td>3 medium-sized onions, sliced</td>
<td>1/2 teaspoon paprika</td>
</tr>
<tr>
<td>1 tablespoon turmeric</td>
<td>1/2 teaspoon cloves</td>
</tr>
</tbody>
</table>

Combine ingredients and cook slowly until mixture is clear. Seal in clean, hot BALL Jars.

**PICKLED WALNUTS**

Pick young walnuts while they are soft enough to be pierced with a needle. Soak in a strong brine for three days, drain, soak in cold water for six hours, drain and place them in a stone crock. To a gallon of vinegar add a cupful of sugar, two tablespoonfuls each of whole peppers and cloves, a tablespoon of allspice, and eight blades of mace; boil the mixture for ten minutes, pour it over the walnuts while it is scalding hot, and let stand for three days. Then drain off the vinegar, put the nuts into BALL Jars, bring the vinegar to a boil, pour it over the nuts, seal the jars, and store in a cool place. The nuts must stand at least six weeks before they are ready for use.

**SWEET PICKLED ONIONS**

- 4 quarts small white onions
- 2 quarts vinegar
- 1 cup salt
- 1 1/2 cups mixed pickle spices

Cover onions with boiling water, let stand two minutes, drain, cover with cold water and peel. Let stand in salt water overnight. Place in colander, pour over cold water and drain. Tie spices in bag and boil with sugar and vinegar, remove spices, put in onions, bring to boil and pack while hot into hot BALL Jars and seal immediately.

**PEPPER MANGOES**

- 1 dozen red peppers
- 1 dozen green peppers
- 2 heads cabbage (about 1 quart chopped)
- 1 tablespoon salt
- 1 teaspoon ground cinnamon
- 1 teaspoon ground allspice
- 1 cup vinegar
- 2 tablespoons white mustard seed
- Cold vinegar

Cut tops from the red and green peppers. Remove seeds and midribs and save the tops. Stand peppers upright in a pan, soak 24 hours with a salt solution made of 1/4 cup salt to each 2 quarts water. Drain before using peppers.

Cut the cabbage on a cabbage cutter and measure 1 quart of it. To this amount add the other ingredients and mix well. Fill the peppers with it, put on tops and tie tightly. Stand upright in hot BALL Jars, and cover with the cold vinegar. Put half red and half green peppers in each Jar. Ready for use in three weeks.

**PICKLED SWEET RED PEPPERS**

Wash outside of peppers and wipe them dry. Cut slice from stem end and remove seeds. Cut into thin strips with scissors, or into long ribbons, working around and around the pepper. Scald well, then drop into ice water to crisp. Drain. Put the peppers into clean hot BALL Jars, fill to overflowing with hot syrup made in the proportion of 1 cup sugar to 2 cups vinegar, seal immediately.

**RELISHES**

**CELERY RELISH**

- 1 quart celery, chopped
- 1 cup white onion, chopped
- 2 large red peppers
- 2 large green peppers

LARGE, coarse stalks of celery may be used for celery relish. Chop the celery and onion. Cook separately in salted water (2 teaspoons salt to each quart water) until tender. Drain and add chopped peppers from which the seeds have been removed. Add other ingredients and cook the mixture until tender. Seal immediately in clean, hot BALL Jars.
CHOW-COWH

2 quarts green tomatoes
12 small cucumbers
4 green peppers
1 small head cabbage
6 onions
1 cup salt
1 tablespoon cloves
1 tablespoon curry powder
1 tablespoon cumin powder
1 tablespoon mustard powder
1 tablespoon pepper
1 tablespoon allspice

Chop together tomatoes, cucumbers, peppers, cabbage, onions, and string beans. Let the mixture stand in a covered enamel pan overnight. Place mixture in pan with alternate layers of salt, using vinegar together for 10 minutes. Add berries which have been washed and well drained and simmer for 10 minutes. Seal in hot, clean BALL Jars. Quantity 12 pints.

CHILI SAUCE

4 quarts chopped and peeled tomatoes
2 cups chopped onions
1 cup chopped sweet red pepper
1 cup chopped green pepper
1 small hot, red pepper

Combine the vegetables, salt and sugar, and cook until the mixture begins to thicken, then add the vinegar and whole spices in bag, and cook until the mixture becomes a thick sauce. Pour while hot into hot BALL Jars and seal immediately. Drain juice from vegetables before adding vinegar. This will shorten the cooking period.

CORN RELISH

12 ears of corn
5 large red peppers
5 large green peppers
2 stalks or bunch celery
2 medium size onions

Remove seeds from peppers and chop them fine. Chop celery and onions also. Combine with seasonings, vinegar and water and cook 15 minutes. Cut corn from cob and add to mixture cook 10 minutes more. Seal at once in sterilized BALL Jars. Quantity 12 pints.

PICCALILLI

1 peck green tomatoes
5 pounds cabbage

Chop and mix tomatoes, cabbage, onions and peppers. Add salt and let stand over night.

3 pints vinegar
1 1/2 pint sugar
2 tablespoons celery seed
1 tablespoon ground horseradish
1 tablespoon mustard seed

Boil vinegar and seasonings and add the other ingredients. Heat but do not boil and pack hot into BALL Jars. Seal at once. Quantity 12 pints.

PEPPER RELISH

12 red peppers
12 green peppers
6 onions

Chop peppers and onions. Cover with boiling water and let stand for 5 minutes, and drain. Add vinegar, sugar and salt and boil mixture 5 minutes. Pour into clean, hot BALL Jars and seal immediately.

SWEET RED PEPPER RELISH

12 large sweet red peppers
1 pint vinegar
1 tablespoon salt
3 cups sugar

Remove seed from peppers and put peppers through food chopper. Sprinkle with salt. Let stand or 4 hours. Add sugar and vinegar and cook until thick. Pour while hot into hot BALL Jars and seal immediately.

SWEET FRUIT PICKLES

PICKLED PEACHES, APPLES, Pears and Crabapples

SWEET RED PEPPER RELISH

PICKLED PEACHES

8 pounds peaches
2 cups granulated sugar
1 tablespoon cinnamon
3 cups vinegar
1 tablespoon whole cloves

Select firm ripe peaches, preferably clingstones. Wash and peel with sharp knife. Combine vinegar, sugar and spices and boil 5 minutes. Add peaches and cook gently until tender, but not broken; let stand in syrup overnight. Drain the syrup from peaches. Boil syrup until almost as thick as honey; pack in hot BALL Jars, cover with hot syrup and seal immediately.

Note: This recipe may be used for apples, pears and crab apples. The apples have both skins and stems left on.

PICKLED BARBERRIES

Soak nice, large bunches of barberries in salt and water for 3 hours. Remove from the water and pour scalding vinegar over them. Spice them if preferred. Place in BALL Jars and cover with hot vinegar. These will keep their color and are handsome for garnish.

SPICED BLUEBERRIES

5 pounds blueberries
6 cups sugar
2 cups weak vinegar
1 tablespoon cinnamon
1 tablespoon cloves
1 tablespoon allspice

Tie spices in cheesecloth. Boil sugar, spices and vinegar together for 10 minutes. Add berries which have been washed and well drained and simmer for 10 minutes. Seal in hot, clean BALL Jars.

If cooked too long the berries will have a shriveled appearance.

PICKLED CRANBERRIES

5 pounds cranberries
2 cups vinegar
3 1/2 pounds light brown sugar
1 tablespoon ground cloves
2 tablespoons ground cinnamon
2 tablespoons ground allspice

Bring all ingredients except the cranberries to a boil in a preserving kettle. Then add cranberries and cook gently for 2 hours. Pour, while boiling hot, into hot BALL Jars and seal immediately.
SPICED CURRANTS

6 cups sugar 1 teaspoon salt
2 cups vinegar ½ teaspoon cloves
3 quarts currants ½ teaspoon allspice
1 pound seeded raisins ¼ teaspoon nutmeg

Make a syrup of 6 cups sugar and 2 cups vinegar. Add 3 quarts currants and 1 pound seeded raisins, chopped fine. Boil mixture 30 minutes, add salt and cloves, allspice and nutmeg. Pour the spiced currants into hot, clean BALL Jars and seal at once.

If BALL Jelly Glasses are used, cover them with melted paraffin.

PICKLED FIGS

Make a strong soda solution with boiling water and pour this over just enough figs to cover the bottom of a preserving kettle. Let them remain in this solution five minutes and then drain them thoroughly. Take one quart of vinegar to three pounds of sugar and when dissolved add the figs and cook slowly for one hour. Seal in BALL Jars. If you have some syrup left, more figs may be cooked in it. A spice bag filled with whole cloves, cinnamon and allspice may be boiled with the vinegar syrup if desired. Some persons, instead of using a soda solution, prefer to soak in rather weak salt water for about six hours, rinse, and then boil as above.

PICKLED GRAPES

Select bunches of grapes of uniform size and ripeness. They should not be over-ripe. Wash, and without removing the grapes from stems, pack the bunches closely into clean BALL Jars, being careful not to crush the fruit. Make a syrup in the proportion of 1½ cups white sugar to 1 cup white vinegar and boil for 5 minutes. Fill jar with hot syrup and seal.

Purple, white, and red grapes may be pickled in this way. They keep their shape and color and are excellent to serve as a relish or garnish.

SPICED GRAPES

7 pounds grapes
8 cups sugar
2 cups vinegar
1 nutmeg, grated
½ tablespoon ground cinnamon
1 teaspoon ground cloves

Wash, and slip skins from grapes. Place in preserving kettle and simmer until soft. Press pulp through a fine sieve to remove seeds. Add to pulp the grapes, sugar, vinegar, nutmeg, cinnamon and cloves. Cook gently for 20 minutes. Pack while boiling hot into hot BALL Jars and seal immediately.

PIMIENTO SWEET PICKLES

24 bright-red sweet peppers
1 tablespoon whole cloves
1 blade mace
3 inches stick cinnamon
1 tablespoon allspice
1 small piece root ginger
1 tablespoon whole mustard seed
4 cups vinegar
7 cups granulated sugar

Wash peppers, remove seeds and white connecting fibre and allow them to soak overnight in cold brine made in proportion 1 tablespoon salt to 1 quart water. Drain and chop peppers. Heat together the spices, tied in cheesecloth, the vinegar, and sugar. Add the peppers, simmer ½ hour and strain. Pack peppers into clean, hot BALL Jars. Boil down the pickle syrup until thick and pour over peppers until jar is filled. Seal immediately.

This pickle forms a delightful addition to plain salads, salad dressings and jellied meat or chicken.

GINGER Pears

12 pears
8 cups granulated sugar
4 lemons — juice
2 lemons — grated yellow rind
2 ounces preserved ginger (cut fine)
4 cups water

Wash, peel and cut pears into small pieces. Mix remaining ingredients together and bring to boil. Add pears and boil slowly until mixture is thick. Pack into hot, clean BALL Jars and seal immediately.

SPICED PLUMS

4 quarts plums
2 cups vinegar
6 cups sugar
1 tablespoon cloves
1 tablespoon cinnamon
1 tablespoon allspice

Wash and dry plums. Place them in a stone jar or bowl. Boil vinegar, sugar and spices together for 10 minutes and pour over plums. Cover and let stand overnight. Drain off the liquid and bring to boil, add to plums and cook until plums are clear but not broken. Pack in clean, hot BALL Jars, fill with pickling syrup and seal immediately.

The plums should retain their color and should be firm and plump in appearance.

PICKLED QUINCES

1 cup vinegar
½ cup water
¼ cup sugar
½ teaspoon cinnamon
1 tablespoon allspice

Make syrup of the above ingredients, putting the spices into a muslin bag. Wipe the quinces with a damp cloth to remove the fuzz. Peel and cut into pieces of convenient size. Cook gently for 20 minutes. Pack while boiling hot into hot BALL Jars and seal immediately.

CANTALOUPE PICKLES

Select under-ripe cantaloupe. Cut into sections and remove rind. Soak for 3 hours in salt solution (4 tablespoons salt to 1 quart water). Drain off brine and add the well-drained rind to a pickling syrup made from the following ingredients:

4 cups water
4 cups sugar
1 cup vinegar
1 small piece root ginger
1 tablespoon whole mustard seed
1 tablespoon whole cloves
1 tablespoon whole cloves

Boil the rind rapidly in this syrup for 10 minutes. Let stand overnight. Drain the syrup from cantaloupe and boil until it coats a spoon. Add cantaloupe and cook until clear (about 1 hour). Seal immediately in clean, hot BALL Jars.
**Pickled (Salted) Corn**

Boil corn on cob until tender (about 5 minutes). Cut from cob and add 1 pint salt to each 3 pints of corn. Stir to mix thoroughly and when cold, pack in clean BALL Jars. When ready to use, freshen by placing 3 quarts water to each quart of corn in large kettle. Bring to boil, and repeat the process three times. Pour through colander. Heat corn, seasoning with 1 tablespoon sugar, 1 tablespoon flour, ½ cup cream and butter size of walnut.

**Pickled Eggs and Fish**

**Pickled Eggs**

Carefully shell hard cooked eggs. Place them in hot sterilized BALL Jars and cover with the following boiling liquid:

- 3 cups vinegar
- 1 cup water
- 1 teaspoon salt
- Pickling spices if desired

Seal immediately. It is recommended that mustard be avoided on account of its color. It is also recommended that white instead of cider vinegar be used on account of its color.

Some prefer to pickle eggs with beet vinegar. To do this drain the liquid from Jars of Pickled Beets (page 47) and use instead of the vinegar and water specified above.

**Pickled Fish**

Boil the vinegar, water, salt, peppercorns, spices and onions ½ hour. Add the lemon slices and cook for 5 minutes more then remove them from the liquor. Have the fish that are used scaled and cleaned, simmer in the liquor until tender enough so that a fin can be pulled out. Cook only a few pieces at a time.

Pack the fish when cooked into clean BALL Jars with sliced onions between the layers. Pour the boiling hot liquid and seasoning over the fish. Do not seal the Jars, but cover them with the caps of the Jars. The liquid will form a jelly on the fish. The liquid given is sufficient for ½ gallon of fish. This will keep several weeks.

**Gooseberry Chutney**

- 1 quart of nearly ripe gooseberries
- 3/4 pound raisins
- 3 small onions
- 1 cup brown sugar
- 2 tablespoons mustard

(mix this in a little vinegar)

CHOP the onion, mix all ingredients together until smooth and thick, and seal in hot BALL Jars.

**Peach Chutney**

- 4 quarts peaches
- 5 cups vinegar
- 1/4 cup chopped onion
- ½ cup sugar
- 1/4 pound raisins
- 1 ounce red peppers
- 1 ounce garlic

PEEL peaches and remove stones. Add 2 cups vinegar to each 4 quarts peaches and cook until soft. Add another cup of vinegar, ½ cup chopped onion, ½ cup sugar, ½ pound raisins, ¼ pound white mustard seed, 2 ounces scraped ginger root, 1 ounce red peppers and 1 ounce garlic. Mix ingredients well and add 2 cups vinegar. Boil mixture 15 minutes. Pack into clean, hot BALL Jars and seal at once. Peach chutney may be used as ketchup.
KETCHUPS

**TOMATO KETCHUP**

- 1/2 peck tomatoes
- 3 red peppers
- 2 medium-sized onions, cut fine
- 2 tablespoons salt
- 1 1/2 cups sugar
- 2 cups vinegar
- 2 teaspoons celery salt
- 2 teaspoons ground mustard
- 1 tablespoon whole allspice
- 1 tablespoon cloves
- 1 tablespoon cinnamon
- 1 teaspoon paprika

Cook tomatoes, peppers and onions together without adding water. Press mixture through strainer, and measure pulp. To pulp (4 quarts) add the salt, sugar and spices. Place whole spices in a bag during the cooking and remove bag before pouring the ketchup into jars. Ground spices, except paprika, will darken ketchup. Long, slow cooking also gives a dark color. Cook ingredients together, except vinegar, rapidly for 1 hour, add vinegar and cook mixture until it is thick. Seal in clean, hot BALL Jars. It should be bright-red in color.

**CUCUMBER KETCHUP**

- 1 quart ripe cucumbers, large
- 1 cup white onions
- 2 green peppers, medium-sized
- 2 cups vinegar
- 1 cup sugar

Pare cucumbers, cut into quarters and remove seeds. Chop cucumbers, onions and peppers or put through a food chopper. Add a small amount of water to prevent sticking and boil mixture until cucumbers are tender. Add sugar and seasoning to vinegar, and heat. Add mixture and cook until it is thick and clear. Seal immediately in clean, hot BALL Jars.

**GRAPE KETCHUP**

- 4 pounds grapes
- 1 pound tart apples
- 4 cups white sugar
- 1 1/2 cups vinegar
- 1/2 teaspoon salt
- 2 tablespoons cinnamon
- 2 tablespoons allspice
- 2 teaspoons cloves

Wash grapes and remove stems. Place in a pan, do not add any water, steam them until soft. Cook apples until tender. Press the fruit through a sieve, add remaining ingredients and simmer the mixture for 20 minutes. Seal in clean, hot BALL Jars. The spices should be whole and tied in a cheesecloth while cooking and be removed before the ketchup is sealed. Ground spices may be used but they give the product a darker color.

**CRANBERRY KETCHUP**

Mix 4 pounds cranberries with 1 1/2 cups vinegar. Heat slowly to the boiling point and cook until berries burst. Rub the mixture through a coarse sieve. Add 2 pounds brown sugar, 1 teaspoon each ground cloves, salt and paprika and 2 teaspoons ground cinnamon. Simmer half hour, or until thickened, then seal in small hot sterilized BALL Jars.

HOT SAUCES

**BARBECUE SAUCE FOR MEATS**

- 4 cups tomato ketchup
- 4 cups gravy or meat stock
- 1 cup Worcestershire Sauce
- 1/2 cup vinegar
- 1 teaspoon paprika
- 4 teaspoons salt

Mix ingredients and bring to boiling point. Pack into clean hot BALL Jars, partly seal and process for 3 hours in Hot-Water Bath or for 90 minutes in Steam Pressure Cooker at 10 pounds pressure.

**SACCHARINE PICKLES FOR DIABETICS**

**CUCUMBER PICKLES WITH SACCHARINE**

- 1 gallon vinegar
- 1 1/2 quarts water
- 1/2 cup salt
- 1/2 cup ground mustard
- 1 teaspoon powdered alum
- 2 tablespoons mixed pickling spices

Wash and dry cucumbers, pack them into clean BALL Jars. Pour the above cold mixture over them and seal.

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- 1/2 cup salt
- 1/2 cup ground mustard
- 1 teaspoon powdered alum
- 2 tablespoons mixed pickling spices

Wash and dry cucumbers, pack them into clean BALL Jars. Pour the above cold mixture over them and seal.

**SPANISH SAUCE FOR CHILI**

- 20 red peppers, seeds and veins removed
- 2 onions, minced
- 2 cloves garlic, minced
- 1 teaspoon majoram

Boil peppers until soft in enough water to cover. Mash or press through colander, add other ingredients. Pack into clean hot BALL Jars, partly seal and process in Hot-Water Bath for 20 minutes. Remove from canner and seal immediately.

**NUTS**

Various nut meats such as pecans, walnuts, hickory nuts, etc., can be canned and kept in perfect condition for several months.

Use large unbroken halves which are in perfect condition. Pack into hot BALL Jars which have been thoroughly sterilized, add no liquor, partly seal Jars and process for 10 minutes in Steam Pressure Cooker at 5 pounds pressure. Remove from canner and seal immediately.

Or: — After packing, place Caps loosely on the Jars and set in pan of hot water. Heat for 10 minutes. This is to exhaust the air and prevent the nut meats from becoming rancid. Remove from pan and seal immediately. Then process for 10 minutes in Steam Pressure Cooker at 5 lbs. pressure or for 20 minutes in the Hot-Water Bath.
FOR more than forty years housewives the world over have depended very largely on BALL Jars and their accessories to preserve foods. The principal reason for such wide-spread preference is the distinctive feature of all BALL Jars—an absolutely smooth and perfect shoulder for the rubber ring insuring positive air-tight seal. Today more than three-fourths of all jars in use are branded “BALL.” BALL Jars, Caps and Jelly Glasses are scientifically designed and produced by highly trained and experienced workmen. Every Jar, Cap, Jelly Glass and Rubber is individually inspected; this insures perfect goods for your use. BALL Jars are manufactured in sizes and styles to meet every need of the housewife for canning all kinds of fruits, meats and vegetables.

“Perfect Mason” and “Special” (Wide Mouth) Jars with Genuine Zinc Porcelain Lined Caps and High Grade “Perfect Seal” Lipped Red Rubbers.

“Perfect Mason” and “Special” (Wide Mouth) Jars with Glass Top Seal. Contents do not come in contact with any metal. 100% Sanitary.

Ball Round “Perfect Mason”

Ball Round “Special” Wide Mouth

Ball Square “Perfect Mason”

Ball Square “Special” Wide Mouth

Ball Square “Perfect Mason”

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Glass top seal

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"Ideal" and "Eclipse" (Wide-Mouth) All Glass — self-sealing jars are Easier to Seal and Easier to Open than any other jar. Seal by vacuum and lever pressure — doubly secure.

**Ball JAR RUBBERS**

Use BALL Brand Extra thick — extra quality Rubbers on BALL "Eclipse" and "Special" Jars (with Mason Zinc Caps or Glass Top Seal).

"PERFECT SEAL"

Are the best, most durable and highest grade Fruit Jar Rings made. They have been packed with Ball Jars for many years, so housewives are familiar with their superior quality.

Ball "Vacu-Seal" closures. Consists of White Enamel Lid with pure white vulcanized Rubber attached, thus permitting partial sealing of Jars while processing. Band of pure zinc — will not stick to Jar.

Ball Tall Round-Bottom Jelly Glass with tin cap — well known standard Jelly. Made in ½ and ¾-pint sizes.

Ball Jelly Mould with tin cap. Moulds the jelly in attractive shape that will not topple over. ½ and ¾-pint sizes.

Ball Tumbler - shape Jelly Glass. Can be used for drinking glass. Made in ½ and ¾-pint sizes.

**Ball JELLY GLASSES, GENUINE ZINC CAPS, GLASS LIDS, METAL BANDS**

Genuine Zinc Caps — made for both Ball Mason and Special Wide-Mouth Jars.

Glass Lids for Glass Top Seal Jars—for both BALL Perfect Mason and Special (Wide-Mouth) Jars.

Metal Bands and Rubbers for Glass Top Seal Jars—for both "BALL" Perfect Mason and Wide-Mouth Jars.

Glass Lids made for both Ideal and Eclipse Jars.

Ball "Ideal" with Glass Top and Rubber

Ball "Eclipse" with Glass Top and Rubber

Ball Round "Ideal" with Glass Top and Rubber

Ball Square "Ideal" with Glass Top and Rubber

Ball Wide-Mouth "Eclipse" with Glass Top and Rubber

Ball Tall Round Jelly Glass. Can be used for drinking glass. Made in ½ and ¾-pint sizes.

Ball Square Jelly Glass. Can be used for drinking glass. Made in ½ and ¾-pint sizes.

Ball Round Jelly Glass. Can be used for drinking glass. Made in ½ and ¾-pint sizes.

Ball "Vacu-Seal" Jelly Glass with tin cap. Moulds the jelly in attractive shape that will not topple over. ½ and ¾-pint sizes.
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THE BALL BLUE BOOK

INSURE SUCCESS IN CANNING; USE BALL JARS

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