HOMEMADE

- Jam
- Jelly
- Preserves
- Fruit Butters
- Marmalade
- Conserves

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE
AGRICULTURAL EXTENSION SERVICE
CIRCULAR 672 Columbia, Missouri MARCH 1957

HOMEMADE

- Jam . . . . . .
- Jelly . . . . . .
- Preserves . . . . . .
- Fruit Butters . . . .
- Marmalade . . . . .
- Conserves . . . . . .

Everyone likes thick tasty jams, clear sparkling jelly, and other colorful sweet spreads. They add appetite appeal, interest, and energy value to a meal. A bit of preserves or marmalade will often furnish just the needed accent of color and flavor to meat or cereal, to ice cream or a pudding.

Make Anytime

by

FLORA CARL

and

JOSEPHINE FLORY

Today's jam and jelly making knows no season. Once, all the year's supply of jams and jellies had to be made in a few short weeks. Now with canned, frozen, and dried fruits and juices, you can make the family's favorite spreads whenever you are in the mood or your stock of preserves is low. Commercial preserving companies use frozen fruits for half or more of their products.

However, when fruits are in season, they have their best flavor and color and it is then that they are the cheapest. So check your calendar and watch your newspapers, food papers, and magazines for the pick of the crop.

Fruit spreads are luxury products. Two to ten pints a year for each member of the family should be an ample amount.

Try for Unusual Flavors

Wild grapes, wild blackberries, or strawberries will add a tangy flavor to your row of preserves. Rhubarb, watermelon, cantaloups, and pears make luscious preserves and conserves. Try pomegranates for jelly and persimmons for jam. Mint, rose geranium, and lemon verbena will change a plain apple jelly to a glamorous spread. Limes, tangerines, and kumquats, as well as orange and grapefruit, are excellent for marmalades.

How Heat and Sugar Affect Fruit

Heating fruit too long destroys both its bright color and fresh flavor.

Colors Become Dull

Red and blue colored fruits tend to become dull brown when overcooked. Tannins, present in most fruits in varying amounts, break down during cooking and discolor the spreads made of light colored fruits. Apple butter is an example.

Good Flavor Escapes

The substances that give fruits their flavor are broken down by long cooking and cause flavor changes. Some of the fruit flavors escape with the steam. The more the fruit is heated, the greater the loss of flavor. Overcooking may carmalize some of the sugar and bring about undesirable changes in color and flavor, too.

Some Heating Necessary

In order to soften the fruit, change the form of the sugar, concentrate the syrup, and give a desirable form to the jam, jelly, or other sweet, some heating is necessary.

When sugar is added to a fruit without heat, the fruit shrinks and becomes slightly tough, and little, if any, sugar is absorbed by the raw fruit.

But if the fruit is heated, the cell walls of the fruit are softened so some of the sugar can be absorbed by the fruit without causing it to shrink. This is a slow process and the heated fruit and sugar often need to stand an hour or longer "to plump."

Too Much Sugar Shrinks Fruit

If too much sugar is added at once, the fruit loses its shape too rapidly, becomes tough, and will not regain its shape on standing in the sirup.

In making jam, the fruit is broken up at the beginning of the process anyway, so the sugar can be added all at once.

But in making a spread such as preserves, it is important that the sugar be added gradually, so that the fruit will retain its shape and be tender.

What Makes Fruit Juices Jell?

Pectin is necessary to make fruit juices jell. It is a carbohydrate, found in all fruits chiefly near the skin, in the core, and around the seeds. Pectin is most abundant in slightly underripe fruit and is diluted in fruit in a rainy season.

Heat is necessary to release the pectin from the fruit tissue, but over-cooking will destroy it—especially in very acid fruit. Sugar tends to prevent the extraction of pectin.

Commercial fruit pectin, a concentrate made from apples or citrus fruit, is a modern aid to successful jam and jelly making. Two types are on the market—the liquid and the powdered.

With its use, you can use all fully ripe fruit, full of natural flavor, instead of having to use a portion of underripe fruit for its pectin content. Too, the length of cooking time is much shorter when commercial pectin is used.

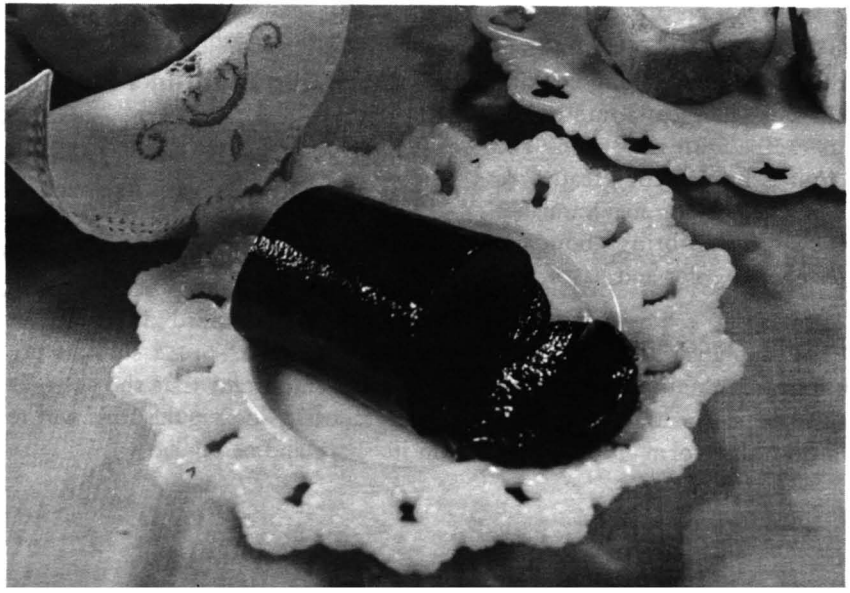
Acids are found in all fruits and vary in kind and amounts in different fruits. As with pectin, the acid content changes during growth and ripening. The fully ripe fruit has less acid and pectin than the slightly underripe. Acid is necessary for the formation of jelly. An increase of acid, within limits, decreases the amount of sugar needed.

Mineral salts, also found in all fruits, affect the acidity of the juice and influence the ease with which the pectin is released.

Sugar is needed to jell fruit juice. Too little sugar gives a tough jelly, but too much makes it sirupy. Whether the sugar is cane or beet is unimportant as they are the same in chemical composition.

Grapes are one fruit that contain enough pectin, acid and mineral salts for good jam and jelly making. For others see page 9.

Grape Jam



Jams are made from crushed fruits cooked with sugar until the mixture is more or less homogeneous and thick. Berries and soft fleshed fruits like apricots, peaches, and plums make good jams.

Make jam in small quantities in order to secure a delicate product. It is preferable to choose some ripe and some underripe fruit for ripe fruit gives a good flavor and color and the underripe fruit supplies the pectin and acid which enable the mixture to jell. Soft broken fruit may be used for jam.

Usually allow three-fourths pound sugar for each pound of fruit. The amount varies with the acidity of the fruit. Usually if the fruit is mashed, no water will need to be added.

General Cooking Directions

Add sugar to the fruit and then cook rapidly. Stir from the bottom, almost constantly at the last to prevent burning. Adding a little butter or margarine (½ teaspoon per quart jar) will help prevent foaming and so lessen skimming, Most jam should be done in twenty to thirty minutes.

When done, the hot pulp will break off in sheets from the spoon, it will thicken if a little is dropped off on a cold dish, and the temperature will be between 220 and 226° F. Pour the boiling hot jam into hot jars, seal, label, and store.

Note: Some fruits tend to rise to the top when jams made with commercial pectin are canned. To prevent this, let the jar cool about twenty-five minutes, then gently shake to distribute the fruit throughout the sirup and lay jars on their sides for several days, turning one or more times a day.

RHUBARB STRAWBERRY JAM

2 cups rhubarb, cut in 1/2-inch pieces (1 pound)
3 cups sugar
1 quart strawberries
1/8 teaspoon salt

Cut rhubarb on a board or with scissors. Mix with half of the sugar and let stand while you wash, stem, drain, and crush the quart of strawberries. There will be 2 cups of crushed berries. Place the crushed berries in a shallow, flat-bottomed sauce pan. Add the other half of the sugar, the salt, and the sweetened rhubarb to the berries. Stir well. Cook rapidly with frequent stirring until the jam gives the sheet test, or about 30 min-

utes. Pour into hot one-half pint jars and seal. Makes 3 half-pints.

BERRY JAM

4 cups crushed berries (about 3 pint boxes)
3 cups sugar

Use 3 cups fully ripe and 1 cup slightly unripe berries. Prepare the berries as for table use. Mash, heat to boiling, add sugar, and stir until dissolved. Boil rapidly until mixture gives the sheeting test (in general cooking directions.) Pour into jars, seal, label, and store. Makes 3 half-pints.

PEACH OR APRICOT JAM

4 cups crushed fruit (about 12 medium-sized peaches or 18 apricots)
3 cups sugar
4 tablespoons lemon juice

Prepare the fruit as for table use and cut in small pieces or put through food grinder. Add the lemon juice and sugar, and heat slowly stirring continuously until sugar is dissolved. Increase heat and boil rapidly until thick. Pour into hot jars, seal, label, and store. Makes about 3 half-pints.

GARFIELD JAM

2 pounds plums (about 5 cups)
2 pounds peaches (about 5 cups)
4 pounds or 8 cups sugar
1 lemon (thinly sliced)

Peel and pit peaches; pit plums. Cut into small pieces. Add sugar and lemon and cook to desired consistency. Pour into hot jars, seal, label, and store. Makes about 10 half-pints.

PINEAPPLE JAM

8 cups pineapple, chopped
1 medium-sized orange or 1 large lemon
6 cups sugar
1/3 teaspoon salt

Wash, rinse, drain, pare, chop, and measure pineapple. Wash and rinse orange or lemon. Extract and save juice. Remove fruit membrane and chop the peel in very fine pieces. Combine pineapple, fruit juice, and peeling with other ingredients and boil until thick. Pour boiling hot into hot jars. Seal, label, and store. Makes 5 half-pints.

STRAWBERRY JAM

Using Frozen Berries

3 ten-ounce boxes sliced frozen strawberries
3 cups sugar
3 tablespoons water
4 tablespoons powdered pectin

Thaw the strawberries. Measure sugar into a bowl and set aside. Combine berries, water, and pectin. Place over high heat and stir until mixture comes to a full boil. Then stir in the sugar all at once. Bring to a full boil. Boil 1 minute, stirring constantly. Remove from the heat. Stir and skim off foam. To prevent floating fruit, ladle into hot jars. Seal and store.

Recipe Variations

For peach jam, use three ten-ounce boxes of sliced peaches instead of the berries.

For raspberry jam, use three ten-ounce boxes of raspberries instead of the strawberries.

UNCOOKED JAM

Strawberries, raspberries, blackberries, blueberries, and peaches can be used with commercial fruit pectin for making uncooked jam. Use fully ripe but sound fruit for finest color and flavor. The jam tastes like fresh fruit, although many people prefer the flavor of cooked fruit in jam and preserves.

General Mixing Directions

This type of jam is very easy to make. A pectin solution is stirred into sweetened crushed fruit and then the mixture is poured into containers to stand until "set" before sealing and storing in the refrigerator or freezer. If frozen fruit is used, reduce the sugar according to the amount added when the fruit was frozen—usually omit 1 cup for 3 cups friut.

Uncooked jam will keep in the refrigerator a few weeks or in the freezer for months, but because it is uncooked, it will not keep on the kitchen shelf.

To have the jam at its best, use it soon after opening the container. If the jam is too firm when opened for serving, stirring will soften it. In most jams that contain much extra pectin, the crushed fruit floats to the top. If it tends to separate, stirring will blend it again.

UNCOOKED BLACKBERRY JAM

4 cups blackberries
1 box dry pectin
1 cup water
5 1/2 cups sugar

Use 3 cups fully ripe and 1 cup slightly underripe berries. Put berries through a food grinder. Combine pectin and water in a saucepan and boil 1 minute, stirring constantly. Add the sugar and 3 ½ cups fruit pulp to the hot pectin. Stir 5 minutes to completely dissolve sugar. Pour into glasses or freezer containers, cool, and let jell. Put in refrigerator for use in a week or two, or freeze. To serve the frozen jam, let thaw 30 minutes, then turn out. Refrigerate any unused part. Makes 3 pints.

UNCOOKED STRAWBERRY JAM

Using Frozen Berries

1 twelve-oz. box or 1 1/4 cups sliced frozen strawberries
2 teaspoons lemon juice
1 1/2 cups sugar
1/4 cup powdered pectin (about 1/2 package)
7 tablespoons water (1/2 cup minus 1 tbsp.)

Warm berries to room temperature and then add the lemon juice and sugar. Mix and let set 20 minutes stirring occasionally to make sure all the sugar is dissolved. Mix water and pectin and boil one minute stirring constantly. Slowly pour the hot pectin into the berries, stirring all the while and continue to stir for 2 to 3 minutes. Pour into jelly glasses, jars, or freezer containers. Cover and allow to remain at room temperature until jelled. This may take a few minutes or it may require several hours—it varies with different varieties of berries. Store jam in refrigerator for use in one or two weeks, or freeze. Makes 1 ⅓ pints.

Good Jelly

- is tender, but holds its shape when turned out onto a plate and when cut.
- has a bright clear color—is not cloudy.
- has the distinct, characteristic flavor of the fruit.

Equipment Needed

- A large flat bottomed pan which will permit rapid evaporation of excess liquid.
- Scales or measuring cups.
- A long handled metal spoon.
- A jelly bag made of flannel (nap side in), or two or three thicknesses of good quality cheese cloth.
- Low broad jelly glasses fitted with friction top lids, or shoulderless, slightly, tapering jars, so that jelly will have an attractive shape when served.
- Paraffin or regular canning lids (needed to seal jelly.)

APPROXIMATE AMOUNTS OF WATER, SUGAR, AND BOILING TIME FOR JELLY MAKING

Fruit	Cups of water for each qt. of prepared fruit	Cups of sugar for each cup of fruit juice	Minutes to boil fruit
Apples	1 cup	1 cup	20 min.
Crab Apples	1 cup	1 cup	20 min.
Cranberries	3 cups	1 cup	5 - 10 min.
Blackberries	0 - 1/4 cup	3/4 - 1 cup	5 - 10 min.
Currants	1/4 cup	1 cup	5 - 10 min.
Gooseberries	1/4 cup	3/4 - 1 cup	10 min.
Grapes - Concord	1/4 cup	3/4 - 1 cup	5 - 10 min.
Grapes - Wild	1 cup	1 cup	5 - 10 min.
Quince	2 cups	3/4 cup	25 min.
Raspberries	0	3/4 cup	5 - 10 min.
Plums	1/2 cup	3/4 cup	15 - 20 min.

Steps in Jelly Making

1. Preparing the fruit

Select firm ripe fruit or about equal parts of fully ripe and just underripe fruit. Wash and prepare fruit as for cooking, but retain skin and cores. Cut large fruits into small pieces. Crush juicy fruits such as berries.

2. Extracting the juice

Cook fruits with just enough water to cover. (See table) Use a broad, flat bottomed pan with well fitting lid. Cook soft fruits 5 to 10 minutes, and hard fruits 20 to 25 minutes.

3. Straining the fruit

As soon as the fruit is mushy, strain, using a wet flannel jelly bag, or 3 or more layers of wet cheese cloth. Allow to drip, but do not squeeze. One pound of fruit yields about 1 cup juice. Note: To make jelly very clear, restrain through fresh jelly bag.

4. For extra juice

Second and third extractions can be made from fruits rich in pectin, acid, and mineral salts. Set first extraction aside, and add just enough water to cover pulp again. Heat slowly to boiling, stirring well. Then strain through a fresh flannel bag. Repeat process for third extraction.

Note: The juice of grapes requires special treatment to prevent the formation of cream of tartar crystals. These crystals are harmless but give the jelly an objectionable, gritty texture. If the grape juice stands overnight, most of the crystals will settle to the bottom and the juice can be siphoned or carefully dipped out. When grape juice is combined with other fruit juices, fewer crystals will form.

5. Testing the juice

So far, science has developed no home process for determining with accuracy how much pectin there is in a given quantity of fruit juice. Alcohol or certain metallic salts—as epsom salts—are often added to the juice to precipitate the pectin, but other materials may also be precipitated.

A jell meter is a little more accurate. It is a glass tube with a given opening devised to measure the relative viscosity of a fruit juice. The rate of flow of juice through the tube is considered a rough measure of the jellying power of the juice. A table which accompanies the tube gives the quantity of sugar to be used with that juice.

The following fruits, at the proper stage of maturity, have enough pectin, acid and mineral salts for making good jelly.

Tart apples (as winesaps), blackberries, raspberries, crab apples, cranberries, currants, gooseberries, grapes (wild and concord), sour plums (wild and wild goose types), quinces, lemon and orange rinds.

Ripe apples, most plums and grapes of the European type contain pectin but not enough acid. Apricots, blueberries, cherries, elderberries, peaches, pears, and strawberries, do not contain enough pectin for making good jelly.

For the fruits low in pectin, add a commercial pectin or combine with a fruit juice rich in pectin. The following com-

binations are good: ripe plum and crab apple, orange and rhubarb, apple and mint, elderberry and green grape or green apple, apple and cranberry.

If the juice is too low in acid to make jelly, add either strained lemon juice or powdered citric acid—one tablespoon of the lemon juice for each cup of the fruit juice will give sufficient acidity.

6. Adding sugar.

Use either cane or beet sugar as they are the same, chemically. The fact that one is finer than the other is not important in jelly making. For most juices use three-fourths as much sugar as juice. A few fruits as gooseberries and currants require equal amounts of sugar and juice. Too much sugar for the pectin gives a large volume of soft sirupy jelly while too little sugar gives a tough gummy product.

7. Cooking the juice

Use a large flat bottomed pan with a capacity of at least four times the juice. Do not make more than 6 to 8 glasses in one kettle as the jelly is likely to be darker and less delicate in flavor.

Consult table for the amount of sugar needed for each cup of fruit juice. Stir the sugar into the fruit juice and heat quickly to boiling. Stir until all the sugar is dissolved, but no longer. Boil rapidly and skim if necessary. Adding a bit of fat will lessen the amount of foam.

8. Testing when done

Sheet test—Dip a dry, cold metal spoon in the boiling jelly and then let the jelly drip from the sides of the spoon. When two distinct, reluctant drops come together and fall as one drop or sheet, the jelly is done.

Plate test—Put a few drops on a cold plate and if the jelly sets, it is done.

Thermometer test—The temperature varies from 219° to 223° F depending on the fruit and sugar proportions.

9. Filling and sealing

Remove jelly from heat as soon as it is done and pour into hot jelly glasses, or shoulderless, slightly tapering jars. If jars are used, seal with regular canning lids immediately. Otherwise let the jelly cool. The jelly will shrink as it cools making space for paraffin.

Seal cold, firm jelly by pouring over top a layer of hot, melted paraffin. If the paraffin is poured on a teaspoon held over the jelly, there will be less chance of the paraffin forming bubbles or holes in the jelly.

While the paraffin is still hot, tip glasses slightly, turning to form a complete seal around the inside edge of the glass.

Note: Some prefer to pour on a thin layer of paraffin while the jelly is still hot, and then add another layer when jelly is cold. For ease in removing the paraffin, place a string across the glass before adding the last layer.

10. Storing your jelly

Label jars, giving name of product and the date. You will be glad you have labels, for many of the red jellies look exactly alike.

Store jelly in cool dry place. Mold or fermentation often result in glasses of jelly stored in warm or damp places. The best paraffin seal is not adequate protection unless the jelly is kept cool and dry. If the jelly must be stored in a moist or warm atmosphere, use jars with regular canning lids, rather than jelly glasses.

Jelly Troubles

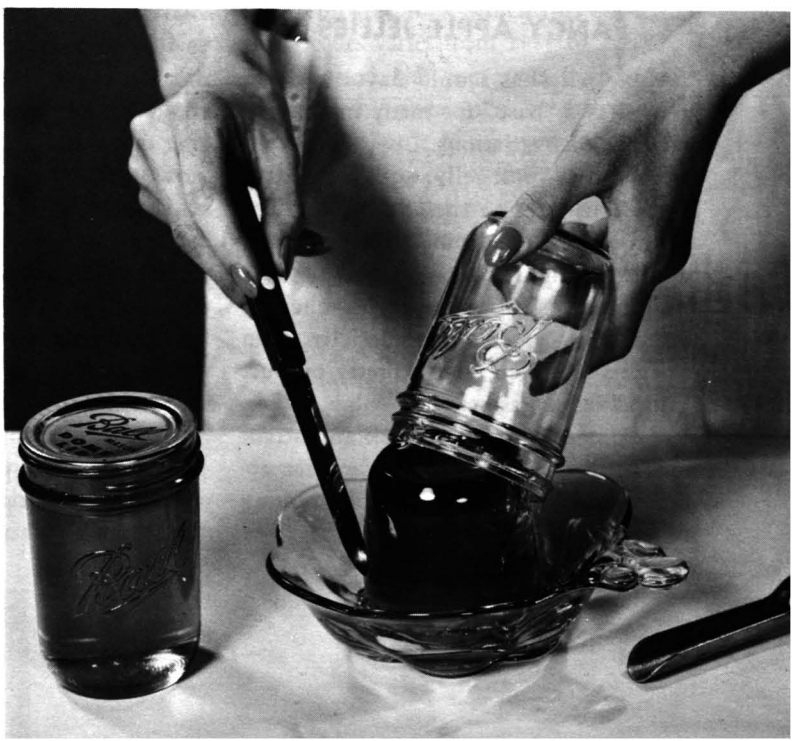
As each lot of fruit presents its own special problems, anyone may have jelly troubles. Crystals may form in the jelly, the body may be weak, tough, or cloudy, or the juice may fail to form the characteristic jellying texture. Many jellies grow firmer after they are made so do not judge texture too soon. If you have runny jelly, it's usually smart not to try to cook it over. It makes good eating on waffles and pancakes, a good topping for ice cream, and a good sweetener for summer fruit drinks and punches.

Cloudy jelly may be due to (a) too green fruit, (b) cooking fruit too long, (c) squeezing the jelly bag, or (d) using too open a cloth for straining the juice.

Crystals or glass-like particles in jelly may be due to (a) too much sugar, (b) too long slow cooking, (c) not enough acid, (d) too great a delay in sealing. Tartaric acid crystals occur in grape juice if not allowed to settle out before using the juice for jelly.

Weeping usually occurs in jellies from berries, currants, and other fruits that are high in acid. Weeping is thought to be caused by a contraction of the jelly mass which squeezes out liquid similar to the separation of whey from curd in sour milk. It may be hurried by storing the jelly in a warm damp place. If the jelly was jostled or the sides of the glass were not clean, the wax may not have made a perfect seal, causing "weeping" to occur.

Mold or fermentation may result from a poor seal and storage in a warm damp place. Vapor will collect beneath the paraffin and break the seal. If the jelly is properly sealed with regular canning jar lids, this spoilage will not occur.



Good jelly holds its shape when turned out onto the serving dish.

Soft or sirupy jelly is caused by improper balance of pectin, sugar, acid, and mineral salts. The fruit may have lacked sufficient pectin or acid or both. Overcooking may have destroyed so much of the pectin that only a gummy mass was formed. Insufficient cooking may not have released all the pectin. Too much water used in extracting the juice would make the proportion of sugar too much for the pectin and the long cooking needed to evaporate the water would likely destroy the pectin.

Rubbery jelly is usually due to overcooking or to using underripe fruit. It is easy to overcook when adding dry or liquid pectin to the fruit juices.

APPLE JELLY

Select tart, firm, not fully ripe apples. Wash, remove blemishes and blossom end. Do not peel or core. Cut in thin slices. Complete according to general directions for jelly making.

FANCY APPLE JELLIES

Apple jelly has a mild flavor and can be used as a "base" for many interesting and delicious variations.

For a rose-pink jelly, add strawberry and lemon juice to the apple juice. For a crimson jelly, add pineapple juice, and for a clear bright red, orange juice.

Thin slices of maraschino cherries dropped into a glass of apple jelly when it begins to stiffen, give a pretty product and a different taste.

For green mint jelly, cook and strain mint leaves, and add to apple juice according to taste. Green vegetable coloring may be added.

BLACKBERRY JELLY

Use berries ¾ black ripe and ¼ red ripe. Pick over, wash, and crush. Add water, about ¼ cup to 1 quart berries. Heat until soft, 5 to 10 minutes. Pour into wet jelly bag and let drip. For each cup of juice, measure ¾ cup sugar. Complete according to general directions for jelly making.

UNCOOKED JELLY

Using Frozen Orange Juice

7 tablespoons powdered fruit pectin (2 1/2 ounce package)
2 cups lukewarm water
1 can frozen orange-juice concentrate (6 oz.)
1/4 cup lemon juice
4 1/2 cups sugar

Add the pectin to the water and stir 2 or 3 minutes. Allow to stand 45 minutes, stirring (not beating) occasionally. Thaw concentrate. Pour concentrate into a quart sauce pan, add lemon juice and 2¼ cups sugar. Mix well and heat just to lukewarm (100° F), stirring to help dissolve sugar. Remove from heat and let stand until pectin solution is ready, stirring occasionally. Add remainder of sugar slowly to dissolved pectin and stir until all sugar dissolves.

Add juice-sugar mixture to pectin-sugar mixture. Stir 2 or 3 minutes until all sugar dissolves. Pour into jelly glasses or small plastic freezer containers. Let stand at room temperature until jelly sets (several hours or overnight.) Seal glasses with paraffin for refrigerator or put plastic covers on plastic containers. Store in refrigerator for prompt use, or in freezer for later use.

Preserves

A fruit preserve is a product consisting of whole small fruits or pieces of large fruits cooked in a sirup until translucent and the juice is jellied. A good preserve should be bright in color and have the flavor of the fresh cooked fruit. The fruit should be tender yet retain its shape.

The problem in making preserves is to get the fruit to absorb the sirup gradually enough to prevent shrinkage. The kind of fruit used for making preserves makes a difference in the way the sirup and fruit are handled.

Hard fruits such as pears, apples, and quinces, need to be cooked in water or steamed until partially tender before they are preserved.

Juicy fruits fall into two classes: (1) very tender fruits, like strawberries, which are likely to go to pieces during cooking, and (2) plums and other fruits with firm skins. Cooking of these firm skinned fruits may begin in a heavy sirup since the sirup is thinned down rapidly by the fruit juices that come out during the cooking.

But with the very tender fruits like strawberries or ripe peaches, it is better to allow them to stand overnight in sugar. If cooked immediately, the fruit will lose juice and shrink a little. Standing in sugar will firm the fruit and it is not as likely to cook to pieces.

No water needs to be added to juicy fruits as the fruit juice supplies enough liquid to prevent the sugar from scorching and the cooking time is short because there is little liquid to be evaporated.

The standard proportion of sugar varies from ¾'s to 1 pound of sugar to 1 pound of prepared fruit. The weight of a quart of fruit varies considerably with the kind, with the way it is packed, and also with the shape and size of the pieces. So it is preferable to weigh rather than measure fruits. Do not use more than 6 or 8 pounds of fruit for one pan of preserves.

General Cooking Directions

Preserves should be cooked until the sirup is thick and the fruit is translucent. The temperature at which this concentration occurs varies from 217° to 226° F. If overcooked, the preserves will be dark and dull in appearance. Most fruits will plump up some if allowed to cool and stand in the sirup overnight. Pack the fruit in the jars, heat the juice to boiling, and pour over the fruit. Seal, label, and store.

STRAWBERRY PRESERVES

The color and flavor of strawberries are easily destroyed by heat so it is always important to apply as little heat as possible. Following are three methods for making strawberry preserves. With all

methods, after jars are cold, turn on their sides and let lay in that position about one week, turning jars each day so all berries absorb more juice.

Method I

Select large, firm tart berries. Wash, drain and cap. Weigh and for each pound of berries weigh out a pound of sugar. Combine in alternate layers and let stand overnight. Heat slowly to boiling temperature, stirring very carefully. Boil rapidly 15 to 20 minutes or until berries are somewhat clear and sirup slightly thick. Avoid burning. Remove scum. Pour into hot jars and seal.

Method II

1 quart berries (capped and shaken down)
1 quart sugar
1 teaspoon butter
2 tablespoons lemon juice

Mix berries and half of the sugar. Add butter, bring to boil. Boil 4 minutes. Add lemon juice and the rest of the sugar. Boil 4 more minutes. Pour into platters or a shallow dish and let stand overnight. Pour into jars and seal.

Method III

1 cup small strawberries (for juice)
6 cups berries for preserves
3 1/2 cups sugar
1/2 teaspoon salt
1/2 teaspoon butter

Wash, drain, and cap berries. Mash the juice berries and boil about 3 minutes. Put them through a strainer. Add the sugar to the juice and heat until the sugar is dissolved. Cool the sirup and add preserve berries, salt, and butter. Put over low heat and simmer 3 to 5 minutes. Increase heat and boil rapidly until berries are somewhat translucent (10 to 15 minutes). Pour into a shallow dish and let stand overnight. Put drained berries in jars. Reheat juice to boiling and pour over berries and seal.

CHERRY PRESERVES

Select sour red cherries. Wash and drain. Remove stems and pits without tearing the fruit needlessly. For each pound of pitted cherries, use ¾ to 1 pound of sugar. Combine the fruit and sugar in alternate layers and let them stand 8 to 10 hours, or overnight. Heat to the boiling point, stirring carefully. Boil rapidly until the sirup is somewhat thick, taking care to prevent scorching. Pour at once into hot jars and seal.

PEACH PRESERVES

Any variety of white or yellow peach of good dessert quality will make satisfactory preserves if chosen at the firm-ripe stage.

Wash and peel the peaches. Cut them into uniform pieces such as thin slices, quarters, or eighths. To each pound of prepared fruit allow ¾ pound of sugar. Combine the fruit and the sugar in alternate layers and let stand 8 to 10 hours or overnight before cooking. Or add the sugar and one-fourth cup of water for each pound of the fruit and cook at once. In either case, stir carefully while heating to boiling. Boil rapidly until the peaches are translucent and the sirup is somewhat thick. Stir constantly to prevent burning. Pour at once into hot jars and seal.

Strawberry preserves need be cooked only a short time. Too much heat destroys their color and flavor.

CITRON MELON PRESERVES

4 pounds citron melon
8 cups sugar
2 cups water
1 ounce ginger root
2 lemons

Peel and weigh melon. Cut into quarter-inch slices. Soak melon for 3 hours in cold salt water (1 tablespoon salt to 1 quart water). Drain and rinse. Cook melon and ginger root in boiling water until melon is slightly tender. Make a sirup of the sugar and water. Add melon and sliced lemon and cook until melon is clear and sirup as thick as honey. Pack into hot jars, seal, and store.

GINGER PEAR PRESERVES

Wash, peel, and core pears—preferably Kieffer pears. Cut into small uniform pieces. For each pound of fruit use ½ to ¾ pound of sugar, 1 or 2 pieces of ginger root, and ½ lemon thinly sliced. Combine the sliced pears and sugar in alternate layers and let them stand 8 to 10 hours before cooking. Boil the lemon for about 5 minutes in only enough water to cover. Add the lemon with what water remains and the ginger root to the pear and sugar mixture. Boil rapidly and stir constantly until the fruit is clear and of a rich amber color. Pour at once into hot jars and seal.

Fruit Butters

Fruit butters consist of fruit pulp, cooked in a comparatively small amount of sugar until thick and butter-like. They may be spiced if desired. The fruits most commonly used for butters are tart apples, apricots, grapes, peaches, pears, plums, and quince. Always choose ripe fruit. Broken and soft parts of fruits may be used.

General Cooking Directions

Cook the fruit until soft in a minimum amount of water. Put through a food grinder or a sieve. Weigh or measure and add one-third to one-half as much sugar as fruit. Use the larger amount for sour fruit. Cook until thick and translucent. Stir constantly during the last of cooking to prevent burning. Pour into hot jars, partially seal, and process in a water bath for 10 minutes. Seal and store.

CIDER APPLE BUTTER

2 quarts sweet cider
5 pounds apples
1 1/2 cups sugar
1/4 teaspoon each of cinnamon, allspice and salt
1/8 teaspoon cloves

Boil cider until it is reduced to about 1 quart. Wash apples and remove stems and blossom ends. Cut in thin slices. Add to boiling cider and cook until soft. Put through a food grinder or sieve and add sugar, spice, and salt. Cook, until thick and glossy, stirring constantly. Pour into hot jars, seal, label, and store. Makes 5 half-pints.

PEACH BUTTER

Wash and remove pits from 4 pounds of peaches. Cut in small pieces, add 2 cups water, and cook until soft. Put through a food grinder or sieve and add ⅔ cup sugar for each cup of pulp. Add 2 teaspoons cinnamon and 1 teaspoon cloves, if desired. Cook rapidly until it will round up on a spoon—stirring constantly. Pour into hot jars, seal, label, and store. Makes 3 pints.

EGG BUTTER

An Old Southern Recipe

Heat a cup of molasses to boiling temperature. Pour it slowly over a well-beaten egg, stirring constantly. Add a dash of nutmeg , cinnamon, or ginger, and a pinch of salt. Return to pan and boil just one minute, stirring constantly. Serve with pancakes or hot bread.

MOLASSES BUTTER

Cream ½ pound (1 cup) butter. Gradually add 2 teaspoons sugar and 2 tablespoons good sorghum or molasses. Chill and serve on toast, waffles, or griddle cakes. Makes 1 cup.

Marmalade

Marmalades consist of small pieces or shreds of fruit or peel suspended in jellied fruit juice. The typical marmalade is made from one or more citrus fruits. Other fruits may be used along with the citrus fruits.

To help prevent the pieces or shreds of fruit from rising to the top, cool the marmalade before pouring into containers, and lay the jars on their sides for a week, turning them each day.

ORANGE MARMALADE

6 oranges, medium-sized
6 lemons, medium-sized
Water
Sugar

Wash fruit. Cut into very thin slices. Cut slices into quarters. If time is more important than appearance, run fruit through food chopper. Measure fruit, including juice. Add three times its bulk in water. Let stand 24 hours. Boil 15 minutes. Let stand another 24 hours. Measure and add an equal amount of sugar. Cook until mixture jells. Pour into hot jars and seal.

APRICOT-PINEAPPLE MARMALADE

1 pound dried apricot
4 cups crushed pineapple (canned)
4 cups sugar

Put apricots through food chopper. Add pineapple. Blend fruit and sugar with pineapple juice. Boil rapidly until thick—about 5 or 6 minutes. Pour into jars and seal. Makes 6 pints.

Oranges and other citrus fruits make especially good marmalades because of their flavor and pectin content.

Conserves

Conserves are jam-like products which contain a mixture of fruit. They are similar to marmalades, but usually contain nuts and raisins.

GRAPE CONSERVE

4 pounds Concord grapes
4 cups sugar
1/4 teaspoon salt
1 cup raisins, seedless
1 orange, ground
1 cup nuts, chopped

Wash, drain, and stem grapes. Slip skins, dropping pulp into saucepan. Cook pulp 10 minutes. Rub through sieve. Add sugar, salt, raisins, and orange to grape pulp. Stir until sugar dissolves. Cook rapidly until it begins to thicken, stirring as needed. Add chopped grape skins, continue cooking until thick. Add nuts. Pour into jars and seal. Makes 4 pints.

APRICOT ORANGE

3 1/2 cups chopped drained apricots (2 No. 2 1/2 cans or 1 lb. dried)
1 1/2 cups orange juice (2 oranges)
Finely shredded peel from 1/2 orange
2 tablespoons lemon juice
3 1/4 cups sugar
1/2 cup chopped nuts

If you use dried apricots, add 3 cups water and cook uncovered until tender (about 20 minutes) then chop and drain. The unpeeled canned apricots may be used. Chop and drain them.

Combine the chopped drained apricots with the orange and lemon juice, the orange peel and sugar. Cook until thick, stirring constantly to prevent sticking. Remove from the heat and add the nuts. Let cool about 5 minutes and stir gently several times to distribute the pieces of fruit. Label into canning jars; seal, label and store. (Makes 6 half-pints).

CRANBERRY CONSERVE

1 quart (or 1 lb.) cranberries
2 cups water
3/4 cup raisins, chopped
2 oranges
3 cups sugar
1/4 cup chopped nuts

Cook cranberries in the 2 cups water until tender and then press through a sieve. Grate the yellow peel of the oranges, remove the white membrane and then chop or slice the oranges. Combine the sieved cranberries, chopped oranges, grated orange peel and raisins and cook 10 minutes. Add the sugar and cook until thick (15 to 20 minutes). Remove from heat. Add the nuts. Ladle into half-pint canning jars. Seal, label and store. Makes 6 half-pints.

Fruit spreads such as the conserves above are luxury products. Two to ten pints a year for each family member should be ample.

RHUBARB CONSERVE

1 pound rhubarb (1 pint finely cut)
2 cups sugar
1 orange
1 lemon
1/2 teaspoon salt
1/2 cup chopped nuts

Cut rhubarb in thin slices without peeling. Grate rind from orange and lemon. Juice lemon and cut orange in small pieces. Put rhubarb, rind, fruit, juice, sugar, and salt on low heat. Stir until sugar is dissolved. Then boil rapidly until thick, about 20 minutes. Stir in nuts and pour into hot jars and seal. Makes 3 pints.

BLUE PLUM CONSERVE

2 quarts seeded prunes
1 lemon
1/3 teaspoon salt
1 large stick cinnamon
6 cups sugar
1 cup raisins—seedless
1 cup nut meats

To the fruit, add the juice and grated rind of lemon. Add all remaining ingredients except nuts. Cook until thick. Remove cinnamon. Add nuts. Pour boiling hot into hot jars and seal.

CONTENTS

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AND THE UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

J. W. BURCH, Director, Agricultural Extension Service

Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914

MU Libraries
University of Missouri--Columbia

Digitization Information Page

Local identifier	MscSPEC-MU0MC672

Capture information

Date captured	2013/03
Scanner manufacturer	Zeutschel
Scanner model	OS 15000
Scanning system software	Omniscan v.12.4 SR4 (1947) 64-bit
Optical resolution	600 dpi
Color settings	24 bit color
File types	tiff

Source information

Source type	text book
Source ID	010-509809085
Notes	

Derivatives - Access copy

Compression	Tiff:compression: 1
Editing software	Adobe Photoshop CS5
Editing characteristics	
Resolution	300dpi
Color	gray scale
File types	pdf / tiff
Notes	