How To Make Jellies Jams and Preserves at Home
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Jelly, jam, conserve, marmalade, preserves—any of these fruit products can add zest to meals. Most of them also provide a good way to use fruit not at its best for canning or freezing—the largest or smallest fruits and berries and those that are imperfect or are irregularly shaped.

Basically these products are much alike; all of them are fruit preserved by means of sugar, and usually all are jellied to some extent. Their individual characteristics depend on the kind of fruit used and the way it is prepared, the proportions of different ingredients in the mixture, and the method of cooking.

Jelly is made from fruit juice; the product is clear, and firm enough to hold its shape when turned out of the container. Jam, made from crushed or ground fruit, tends to hold its shape but generally is less firm than jelly. Conserves are jams made from a mixture of fruits, usually including citrus fruit; often raisins and nuts are added. Marmalade is a tender jelly with pieces of fruit distributed evenly throughout; a marmalade commonly contains citrus fruit. Preserves are whole fruits or large pieces of fruit in a thick sirup, often slightly jellied.

Not all fruits have the properties needed for making satisfactory jellied products, but with the commercial pectins now on the market, the homemaker need not depend on the jellying quality of the fruit for successful results.

This publication tells how to make various kinds of jellies, jams, and conserves, with and without added pectin. It also includes recipes for marmalades and preserves made with no added pectin.

**Four essential ingredients**

Proper amounts of fruit, pectin, acid, and sugar are needed to make a jellied fruit product.

**Fruit**

Fruit gives each product its characteristic flavor and furnishes at least part of the pectin and acid required for successful gels. It also provides mineral salts, which add to the flavor.

Flavorful varieties of fruits are best for jellied products because the fruit flavor is diluted by the large proportion of sugar necessary for proper consistency and good keeping quality.
Pectin

Some kinds of fruit have enough natural pectin to make high-quality products. Others require added pectin, particularly when they are used for making jellies, which should be firm enough to hold their shape. All fruits have less pectin when they are fully ripe than when they are underripe.

Commercial fruit pectins, which are made from apples or citrus fruits, are on the market in two forms—liquid and powdered. Either form is satisfactory when used in a recipe developed especially for that form.

These pectins may be used with any fruit. Many homemakers prefer the added-pectin method for making jellied fruit products because fruit that is all fully ripe can be used, cooking time is shorter and is standardized so that there is no question as to when the product is done, and the yield from a given amount of fruit is greater.

Fruit pectins should be stored in a cool, dry place so they will keep their gel strength. They should not be held over from one year to the next.

Acid

Acid is needed for flavor and for gel formation. The acid content varies in different fruits and is higher in underripe than in fully ripe fruits.

With fruits that are low in acid, lemon juice or citric acid is commonly added in making jellied products. Also, commercial fruit pectins contain some acid.

In the recipes in this publication, lemon juice is included to supply additional acid when necessary. If you want to use citric acid instead, use 1/8 teaspoon of crystalline citric acid for each tablespoon of lemon juice called for.

Sugar

Sugar helps in gel formation, serves as a preserving agent, and contributes to the flavor of the jellied product. It also has a firming effect on fruit, a property that is useful in the making of preserves.

Beet and cane sugar can be used with equal success. Although they come from different sources they have the same composition. Corn sirup or honey can replace part of the sugar (p. 29).

Equipment and containers

Equipment

Little special equipment is needed for making jellied fruit products. Most of the tools and utensils required are generally on hand in the home kitchen.

A large kettle is one of the essentials. To allow mixture to come to a full boil without danger of boiling over, an 8- to 10-quart kettle with a broad flat bottom is needed for cooking most of the products described in this publication.

For extracting fruit juice for jellies, either a jelly bag or a fruit press may be used. The bag may be made of several thicknesses of closely
woven cheesecloth, of firm unbleached muslin, or of canton flannel with napped side in. Cheesecloth or a jelly bag is needed for straining pressed juice.

A stand to hold the jelly bag is convenient but not essential—a colander will serve the purpose.

A clock with a second hand is helpful for timing the short cooking processes used for products made with added pectin.

A jelly, candy, or deep-fat thermometer is an aid to success in making products without added pectin.

A household scale is handy for determining the amount of fruit that will have to be prepared.

Listed below are pieces of ordinary kitchen equipment that may be needed. The number of these items that will be used depends on the kind of fruit being prepared and the kind of product being made.

<table>
<thead>
<tr>
<th>Standard measures: Quart, cup, spoons</th>
<th>Grater</th>
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<tbody>
<tr>
<td>Paring and utility knives</td>
<td>Bowls</td>
</tr>
<tr>
<td>Food chopper</td>
<td>Wire basket</td>
</tr>
<tr>
<td>Masher</td>
<td>Colander</td>
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<tr>
<td>Reamer</td>
<td>Long-handled spoon</td>
</tr>
</tbody>
</table>

Containers

Glasses or canning jars may be used as containers for jellied fruit products. For jellies, it is generally preferable to use glasses or other straight-sided containers so that the jelly can be turned out in molded form. Glasses are suitable also for any other product that is firm enough to be sealed with paraffin. With preserves and soft jams, paraffin tends to loosen and make an imperfect seal. Such products should be put up in canning jars with lids that can be tightly sealed.

Get glasses or jars ready before you start to make the jellied product. Wash them in warm, soapy water, then rinse with hot water. Keep them hot, either in a slow oven or in hot water, until they are used, so that they won’t break when filled with hot jelly or jam.

Prepare jar lids for use according to the manufacturer’s directions in order to insure a good seal.

Making and storing jellied fruit products

Directions for making the different kinds of jellied fruit products from commonly used fruits are given in this publication. The formulas selected take into account the natural pectin and acid content of the particular fruit specified.

Following are general pointers that apply to the making of the products.

For freshness of flavor. To have jellied fruit products at their best, make up only the quantity that can be used within a few months; they lose flavor in storage.

For softer or firmer products. If fruit with average jellying properties is used, the jellied products made according to the directions given in this publication should be medium firm for their type. However, because various lots of a fruit may differ in composition, it is not possible to develop formulas that will always give exactly the same results.
If the first batch of a product from a particular lot of fruit proves to be softer or firmer than you like it, adjust the proportions of fruit or juice or the cooking time for the next batch as shown below.

For products made with added pectin:
- For softer product, use $\frac{3}{4}$ to $\frac{1}{2}$ cup more fruit or juice
- For firmer product, use $\frac{1}{4}$ to $\frac{1}{2}$ cup less fruit or juice

For products made without added pectin:
- For softer product, shorten the cooking time
- For firmer product, lengthen the cooking time

**Using canned, frozen, or dried fruits.** Any fresh fruit may be canned or frozen as fruit or juice and used in jellied products later. This makes it possible to have freshly made products at any season and to spread the work of making them over the year. Both fruit and juice should be canned or frozen unsweetened, or if sweetened the exact amount of sugar added should be noted and subtracted from the amount called for in the recipe used in making jelly. Fruit should be canned in its own juice or with only a small amount of water. If you plan to use the canned or frozen product without added pectin, it is best to have part of the fruit underripe, especially for making jelly.

Unsweetened commercially canned or frozen fruit or juice can also be used in jellied products. Concentrated frozen juices make especially flavorful jellies. Because they are usually prepared from fully ripe fruit, the commercially canned or frozen products require added pectin if used for jelly.

Dried fruit may be cooked in water until tender and used to make jams and conserves, with or without added pectin as required for the particular product.

**Filling and sealing containers.** Use glasses or canning jars prepared according to the directions on page 3.

**Glasses.** Pour hot fruit mixture into hot glasses to within $\frac{1}{2}$ inch of top. Cover immediately with hot paraffin. Use only enough paraffin to make a layer about $\frac{1}{2}$ inch thick. To help insure a good seal prick any air bubbles that appear in the paraffin; bubbles cause holes to form in the paraffin as it hardens, and an imperfect seal may result.

For a standard 6-ounce glass (top diameter about 2$\frac{1}{2}$ inches) it takes about 1 tablespoon of paraffin to make a $\frac{1}{2}$-inch layer. A single thin layer of paraffin is preferable to a thick layer or two thin layers because the thin layer can expand or contract more readily and will give a better seal.

A double boiler is handy for melting paraffin and keeping it hot without overheating. Paraffin should never be allowed to reach smoking temperatures.

**Canning jars.** Pour hot fruit mixture to top of jars, put lids in place, and seal immediately. Or if preferred, with mixtures that make fairly firm products, fill jars to about $\frac{1}{2}$ inch from top and cover immediately with hot paraffin.

**Storing jellied fruit products.** Allow the products to stand undisturbed overnight to avoid breaking the gel. Cover glasses with metal or paper lids. Label to show name of product, date, and lot number if you make more than one lot in a day. Store in a cool, dry place; the shorter the storage time, the better the eating quality of the product.

Uncooked jams (p. 26) cannot be stored under the same conditions as cooked products; they require refrigeration or freezer temperatures. They can be held for a few months in a refrigerator; for longer storage they should be in a freezer.
Jellies

When making jelly, whether with or without added pectin, it is best to prepare small cooking lots, as indicated in the recipes that follow. Increasing the quantities given is not recommended.

To prepare fruit

Approximate amounts of fruits needed to yield the amount of juice called for are given in each recipe. However, the exact amount will vary with juiciness of the particular lot of fruit used.

Wash all fruits in cold running water, or wash them in several changes of cold water, lifting them out of the water each time. Do not let fruit stand in water.

Prepare fruit for juice extraction as directed in the recipe; the method differs with different kinds of fruit. Juicy berries may be crushed and the juice pressed out without heating. For firm fruits, heating is needed to help start the flow of juice, and usually some water is added when the fruit is heated.

To extract juice

Put the prepared fruit in a damp jelly bag or fruit press to extract juice. The clearest jelly comes from fruit that has dripped through a jelly bag without pressing. But a greater yield of juice can be obtained by twisting the bag of fruit tightly and squeezing or pressing, or by using a fruit press. Pressed juice should be re-strained through a double thickness of damp cheesecloth or a damp jelly bag; the cloth or bag should not be squeezed.

To make jelly

With added pectin. In this publication some of the recipes have been developed with powdered pectin, others with liquid pectin. Because of differences between the two forms, each should be used only in recipes worked out for that form.

The order in which the ingredients are combined depends on the form of pectin. Powdered pectin is mixed with the unheated fruit juice. Liquid pectin is added to the boiling juice and sugar mixture.

Boiling time is the same with either form of pectin; a 1-minute boiling period is recommended. Accurate timing is important. Time should not be counted until the mixture has reached a full rolling boil—one that cannot be stirred down.

For best flavor, use fully ripe fruit when making jelly with added pectin.

Without added pectin. Jellies made without added pectin require less sugar per cup of fruit juice than do those with added pectin, and longer boiling is necessary to bring the mixture to the proper sugar concentration. Thus the yield of jelly per cup of juice is less.

It is usually best to have part of the fruit underripe when no pectin is added, because underripe fruit has a higher pectin content than fully ripe. One-fourth underripe to three-fourths fully ripe fruit is the proportion generally recommended to assure sufficient pectin for jelly.
To test for doneness

The biggest problem in making jelly without added pectin is to know when it is done. It is particularly important to remove the mixture from the heat before it is overcooked. Although an undercooked jelly can sometimes be recooked to make a satisfactory product (see p. 28), there is little that can be done to improve an overcooked mixture. Signs of overcooking are a change in color of the mixture and a taste or odor of caramelized sugar.

Three methods that may be used for testing doneness of jelly made at home are described below. Of these, the temperature test probably is the most dependable.

Temperature test. Before cooking the jelly, take the temperature of boiling water with a jelly, candy, or deep-fat thermometer. Cook the jelly mixture to a temperature 8° F. higher than the boiling point of water. At that point the concentration of sugar will be such that the mixture should form a satisfactory gel.

It is necessary to find out at what temperature water boils in your locality because the boiling point differs at different altitudes. And, because the boiling point at a given altitude may change with different atmospheric conditions, the temperature of boiling water should be checked shortly before the jelly is to be made.

For an accurate thermometer reading, have the thermometer in a vertical position and read it at eye level. The bulb of the thermometer must be completely covered with the jelly mixture, but must not touch the bottom of the kettle.

Spoon or sheet test. Dip a cool metal spoon in the boiling jelly mixture. Then raise it at least a foot above the kettle, out of the steam, and turn the spoon so the sirup runs off the side. If the sirup forms two drops that flow together and fall off the spoon as one sheet, the jelly should be done. This test has been widely used; however, it is not entirely dependable.

Refrigerator test. Pour a small amount of boiling jelly on a cold plate, and put it in the ice compartment of a refrigerator for a few minutes. If the mixture gels, it should be done. During this test, the jelly mixture should be removed from the heat.

Apple Jelly

without added pectin

4 cups apple juice (takes about 3 pounds apples and 3 cups water)
2 tablespoons strained lemon juice, if desired
3 cups sugar

To prepare juice. Select about one-fourth underripe and three-fourths fully ripe tart apples. Sort, wash, and remove stem and blossom ends; do not pare or core. Cut apples into small pieces. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 20 to 25 minutes, or until apples are soft. Extract juice (p. 5).

To make jelly. Measure apple juice into a kettle. Add lemon juice and sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 4 to 5 six-ounce glasses.
Blackberry Jelly
with liquid pectin

4 cups blackberry juice (takes about 3 quart boxes berries)
7 ½ cups sugar
1 bottle liquid pectin

- To prepare juice. Sort and wash fully ripe berries; remove any stems or caps. Crush the berries and extract juice (p. 5).
- To make jelly. Measure juice into a kettle. Stir in the sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the pectin and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 11 to 12 six-ounce glasses.

Blackberry Jelly
without added pectin

4 cups blackberry juice (takes about 2 1/2 quart boxes blackberries and 3/4 cup water)
3 cups sugar

- To prepare juice. Select about one-fourth underripe and three-fourths ripe berries. Sort and wash; remove any stems or caps. Crush the berries, add water, cover, and bring to a boil on high heat. Reduce heat and simmer for 5 minutes. Extract juice (p. 5).
- To make jelly. Measure juice into a kettle. Add sugar and stir well. Boil over high heat to 30 F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 5 six-ounce glasses.

Blackberry Jelly
with powdered pectin

3 ½ cups blackberry juice (takes about 3 quart boxes berries)
1 package powdered pectin
4 ½ cups sugar

- To prepare juice. Sort and wash fully ripe berries; remove any stems or caps. Crush the berries and extract juice (p. 5).
- To make jelly. Measure juice into kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 7 to 8 six-ounce glasses.

Cherry Jelly
with liquid pectin

3 cups cherry juice (takes about 3 pounds or 2 quart boxes sour cherries and ½ cup water)
7 cups sugar
1 bottle liquid pectin

- To prepare juice. Select fully ripe cherries. Sort, wash, and remove stems; do not pit. Crush the cherries, add water, cover, and bring to boil on high heat. Reduce heat and simmer 10 minutes. Extract juice (p. 5).
- To make jelly. Measure juice into a kettle. Stir in the sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the pectin and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 10 to 11 six-ounce glasses.
How To Make Jelly With Liquid Pectin

Strawberry Jelly

Select fully ripe sound strawberries. About 3 quart boxes are needed for each batch of jelly. Sort the berries. Wash about 1 quart at a time by placing berries in a wire basket and moving the basket up and down several times in cold water. Drain the berries.

Remove caps and crush the berries. Place crushed berries, a small amount at a time, in a damp jelly bag or double thickness of cheesecloth held in a colander over a bowl.

Bring the edges of the cloth together and twist tightly. Press or squeeze to extract the juice. Strain the juice again through two thicknesses of damp cheesecloth without squeezing.
Measure 4 cups of juice into a large kettle. Add 7 1/2 cups of sugar to the juice; stir to dissolve the sugar.

Place the kettle over high heat and, stirring constantly, bring the mixture quickly to a full rolling boil that cannot be stirred down. 

Add 1 bottle of liquid pectin. Again, bring to full rolling boil and boil hard for 1 minute.

Remove from heat and skim off foam quickly. If allowed to stand, the jelly may start to “set” in the kettle.

Pour jelly immediately into hot glasses to 1/2 inch of top. Cover each glass with a 1/2 inch layer of paraffin. Cool glasses on a metal rack or folded cloth, then cover with metal or paper lids, label, and store in a cool, dry place.
How To Make Jelly Without Added Pectin

Apple Jelly

Use tart, firm apples. It takes about 3 pounds for a batch of jelly; about one-fourth of them should be underripe. Sort and wash the apples. Remove stems and blossom ends and cut apples into small pieces. Do not pare or core. (NEG. 9053-D)

Put apples into a kettle. Add 1 cup water per pound of apples. Cover, bring to boil on high heat. Reduce heat and simmer until apples are tender, about 20 to 25 minutes, depending on the firmness or ripeness of the fruit. (NEG. 78437-B)

Put cooked apples into a jelly bag and allow to drip, or press to remove juice. Strain pressed juice through two thicknesses of damp cheesecloth without squeezing. (NEG. 9954-D)
Measure 4 cups of the apple juice into a large kettle. Add 3 cups of sugar and 2 tablespoons of lemon juice, if desired. Stir to dissolve the sugar.

(NEG. 78438-B)

Place on high heat and boil rapidly to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon. Remove from heat. Skim off foam.

(NEG. 78439-B)

Pour jelly immediately into hot glasses to 3/4 inch of top and cover with a 1/4-inch layer of paraffin. Or use canning jars, such as the new all-purpose jars with two-piece metal screw top lids shown here. Fill jars to top; wipe rims of jars.

Place clean, hot metal lid on jar so that sealing compound is next to the glass. Screw metal band on firmly. Cool jars on a metal rack or folded cloth, then label and store in a cool, dry place.

(NEG. 78440-B)
Cherry Jelly
with powdered pectin

3 1/2 cups cherry juice (takes about 3 pounds or 2 quart boxes sour cherries and 1/2 cup water)
1 package powdered pectin

4 1/2 cups sugar

To prepare juice. Select fully ripe cherries. Sort, wash, and remove stems; do not pit. Crush the cherries, add water, cover, bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).

To make jelly. Measure juice into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 7 to 9 six-ounce glasses.

Crabapple Jelly
without added pectin

4 cups crabapple juice (takes about 3 pounds crabapples and 3 cups water)
4 cups sugar

To prepare juice. Select firm, crisp crabapples, about one-fourth underripe, the rest fully ripe. Sort, wash, and remove stem and blossom ends; do not pare or core. Cut crabapples into small pieces. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 20 to 25 minutes, or until crabapples are soft. Extract juice (p. 5).

To make jelly. Measure juice into a kettle. Add sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 7 six-ounce glasses.

Currant Jelly
with liquid pectin

5 cups currant juice (takes about 3 quart boxes currants and 1 cup water)
7 1/2 cups sugar
1/2 bottle liquid pectin

To prepare juice. Sort, wash, and crush fully ripe currants; do not remove them from the stems. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).

To make jelly. Measure juice into a kettle. Stir in the sugar. Boil over high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the pectin and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 12 to 13 six-ounce glasses.

Currant Jelly
with powdered pectin

5 1/2 cups currant juice (takes about 3 quart boxes currants and 1 cup water)
1 package powdered pectin
7 cups sugar

To prepare juice. Sort, wash, and crush the fully ripe currants; do not remove them from the stems. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).
• To make jelly. Measure juice into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down. Add the sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 12 to 13 six-ounce glasses.

**Currant Jelly**

without added pectin

4 cups currant juice (takes about 2½ quart boxes currants and 1 cup water)

4 cups sugar

• To prepare juice. Select about one-fourth underripe and three-fourths fully ripe currants. Sort, wash, and crush the currants without removing them from the stems. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).

• To make jelly. Measure juice into a kettle. Add sugar and stir well. Boil over high heat to 8°F, above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 5 to 6 six-ounce glasses.

**Grape Jelly**

with liquid pectin

4 cups grape juice (takes about 3½ pounds Concord grapes and ½ cup water)

7 cups sugar

½ bottle liquid pectin

• To prepare juice. Select about one-fourth underripe and three-fourths fully ripe grapes. Sort, wash, and remove stems from fully ripe grapes. Crush grapes, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).

To prevent formation of tartrate crystals in the jelly, let juice stand in a cool place overnight, then strain through two thicknesses of damp cheesecloth to remove crystals that have formed.

• To make jelly. Measure juice into a kettle. Stir in the sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the pectin and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 5 six-ounce glasses.
Grape Jelly
with powdered pectin

5 cups grape juice (takes about 3½ pounds Concord grapes and 1 cup water)
1 package powdered pectin
7 cups sugar

To prepare juice. Sort, wash, and remove stems from fully ripe grapes. Crush grapes, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5). To prevent formation of tartrate crystals in the jelly, let juice stand in a cool place overnight, then strain through two thicknesses of damp cheesecloth to remove crystals that have formed.

To make jelly. Measure juice into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the sugar, continue stirring, and bring again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 11 to 12 six-ounce glasses.

Grape Jelly
made from frozen concentrated juice

6½ cups sugar
2½ cups water
1 bottle liquid pectin
3 six-ounce cans (2½ cups) frozen concentrated grape juice

Stir the sugar into the water. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down. Boil hard for 1 minute.

Remove from heat. Stir in the pectin. Add thawed concentrated grape juice and mix well. Pour immediately into hot containers and seal (p. 4).

Makes about 12 six-ounce glasses.

Orange-Grapefruit Jelly
made from frozen concentrated juice

3¼ cups sugar
1 cup water
3 tablespoons lemon juice
½ bottle liquid pectin
1 six-ounce can (½ cup) frozen concentrated orange-and-grapefruit juice

Stir the sugar into the water. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down. Add lemon juice. Boil hard for 1 minute.

Remove from heat. Stir in the pectin. Add thawed concentrated orange and grapefruit juice and mix well.

Pour immediately into hot containers and seal (p. 4).

Makes about 12 six-ounce glasses.

Plum Jelly
with liquid pectin

4 cups plum juice (takes about 4½ pounds plums and ½ cup water)
7½ cups sugar
½ bottle liquid pectin

To prepare juice. Sort and wash fully ripe plums and cut them in pieces; do not peel or pit. Crush the fruit, add water, cover, and bring to boil over high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).

To make jelly. Measure juice into a kettle. Stir in the sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the pectin and bring again to a full rolling boil. Boil hard for 1 minute.
Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 11 six-ounce glasses.

Plum Jelly
with powdered pectin

5 cups plum juice (takes about 4 1/2 pounds plums and 1 cup water)
1 package powdered pectin
7 cups sugar

To prepare juice. Sort and wash fully ripe plums and cut them in pieces; do not peel or pit. Crush the fruit, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 5).

To make jelly. Measure juice into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add the sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 11 to 12 six-ounce glasses.

Plum Jelly
without added pectin

4 cups plum juice (takes about 3 1/2 pounds plums and 1 1/2 cups water)
3 cups sugar

To prepare juice. Select about one-fourth underripe and three-fourths fully ripe plums. Sort, wash, and cut into pieces; do not peel or pit. Crush the fruit, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 15 to 20 minutes, or until fruit is soft. Extract juice (p. 5).

To make jelly. Measure juice into a kettle. Add sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 5 to 6 six-ounce glasses.

Quince Jelly
without added pectin

3 3/4 cups quince juice (takes about 3 1/2 pounds quince and 7 cups water)
1/4 cup lemon juice
3 cups sugar

To prepare juice. Select about one-fourth underripe and three-fourths fully ripe quince. Sort, wash, and remove stems and blossom ends; do not pare or core. Slice quince very thin or cut into small pieces. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 25 minutes. Extract juice (p. 5).

To make jelly. Measure quince juice into a kettle. Add lemon juice and sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 5 to 6 six-ounce glasses.

Strawberry Jelly
with liquid pectin

Follow directions for Blackberry Jelly With Liquid Pectin, page 7. (See also pp. 8 and 9.)

Strawberry Jelly
with powdered pectin

Follow directions for Blackberry Jelly With Powdered Pectin, page 7.
Jams, conserves, marmalades

On the following pages are directions for making jams, conserves, and marmalades from various fruits and combinations of fruits.

For products made with added pectin, use fully ripe fruit for best flavor. When no pectin is added it may be advisable to include some underripe fruit for its higher pectin content if you want a firm product.

Because the products contain fruit pulp or pieces of fruit, they tend to stick to the kettle during cooking and require constant stirring to prevent scorching.

To help prevent fruit from rising to the top in the finished product, stir the mixture at frequent intervals for 5 minutes after taking it from the heat. Before each stirring, skim off any foam that appears on the surface. Stir gently to avoid having air bubbles in the product.

With added pectin

For jams and conserves, as for jellies, the method of combining ingredients varies with the form of pectin used. Powdered pectin is mixed with the unheated crushed fruit; liquid pectin is added to the cooked fruit and sugar mixture immediately after it is removed from the heat.

Cooking time is the same for all the products—1 minute at a full boil. The full-boil stage is reached when bubbles form over the entire surface of the mixture.

With added pectin, jams can be made without cooking from some fresh or frozen fruits (see recipe, p. 26).

Without added pectin

Jams, conserves, and marmalades made without added pectin require longer cooking than those with added pectin. The most reliable way to judge doneness is to use a thermometer. Before making the product take the temperature of boiling water. Cook the mixture to a temperature 9° F. higher than the boiling point of water. It is important to stir the mixture thoroughly just before taking the temperature, to place thermometer vertically at the center of kettle, to have bulb covered with fruit mixture but not touching the bottom of the kettle. Read the thermometer at eye level.

If you have no thermometer, cook products made without added pectin until they have thickened somewhat. In judging thickness allow for the additional thickening of the mixture as it cools. The refrigerator test suggested for jelly may be used (see p. 6).

Apple Marmalade

without added pectin

Quarter the orange, remove any seeds, and slice very thin.

- To make marmalade. Heat water and sugar until sugar is dissolved. Add the lemon juice and fruit. Boil rapidly, stirring constantly, to 90° F. above the boiling point of water, or until the mixture thickens.

Remove from heat; skim and stir alternately for 5 minutes. Ladle marmalade into hot containers and seal immediately (p. 4).

Makes about 8 six-ounce glasses.
Apple Relish with powdered pectin
4 1/2 cups finely chopped red apples (takes about 3 pounds apples)
1/2 cup water
1/4 cup lemon juice
1/2 cup raisins
1 package powdered pectin
5 1/2 cups sugar
1/2 cup chopped nuts

To prepare fruit. Select tart apples. Sort and wash apples. Remove stem and blossom ends and core; do not pare. Chop apples fine.

To make relish. Combine the apples, water, lemon juice, and raisins in a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Add the nuts.

Remove from heat. If desired, add 3 or 4 drops of red food coloring. Alternately skim and stir relish for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 9 six-ounce glasses.

Blackberry Jam with liquid pectin

Follow directions for Strawberry Jam With Liquid Pectin, page 25. Put very seedy blackberries through a sieve or food mill.

Blackberry Jam with powdered pectin

6 cups crushed blackberries (takes about 3 quart boxes berries)
1 package powdered pectin
8 1/2 cups sugar

To prepare fruit. Sort and wash fully ripe berries; remove any stems or caps. Crush the berries. If they are very seedy, put part or all of them through a sieve or food mill.

To make jam. Measure crushed berries into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly.

Remove from heat; skim and stir alternately for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 14 six-ounce glasses.
How To Make Jam With Powdered Pectin

Peach Jam

Sort and wash fully ripe peaches. Remove stems, skins, and pits.

(CNEG. 78442-B)

Crush or chop the peaches. A stainless steel potato masher is useful for this purpose.

(CNEG. 78443-B)

Measure 3¼ cups of crushed peaches into a large kettle.

(CNEG. 78444-B)
Add one package of powdered pectin and 1/4 cup of lemon juice. Stir well to dissolve the pectin. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.  

Stir in 5 cups of sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly to prevent sticking. Remove jam from heat and skim and stir alternately for 5 minutes to help prevent fruit from floating.

Ladle the jam into hot glasses to 1/2 inch from top. Cover at once with a 1/8-inch layer of hot paraffin. Cool glasses on a metal rack or folded cloth, then cover them with metal or paper lids. Label, and store in a cool, dry place.
Blackberry Jam
without added pectin

Follow directions for Strawberry Jam Without Added Pectin, page 25. Put very seedy blackberries through a sieve or food mill.

Spiced Blueberry-Peach Jam
without added pectin

4 cups chopped or ground peaches (takes about 4 pounds peaches)
4 cups blueberries (takes about 1 quart fresh blueberries or 2 ten-ounce packages of unsweetened frozen blueberries)
2 tablespoons lemon juice
1/2 cup water
5 1/2 cups sugar
1/2 teaspoon salt
1 stick cinnamon
1/2 teaspoon whole cloves
1/4 teaspoon whole allspice

To prepare fruit. Sort and wash fully ripe peaches; peel and remove pits. Chop or grind the peaches. Sort, wash, and remove any stems from fresh blueberries. Thaw frozen berries.

To make jam. Measure fruits into a kettle; add lemon juice and water. Cover, bring to a boil, and simmer for 10 minutes, stirring occasionally.

Add sugar and salt and stir well. Add spices tied in cheesecloth. Boil rapidly, stirring constantly, to 90°F above the boiling point of water, or until the mixture thickens.

Remove from heat and take out spices. Alternately skim and stir the jam for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 10 six-ounce glasses.

Cherry Jam
with liquid pectin

4 1/2 cups ground or finely chopped pitted cherries (takes about 3 pounds or 2 quart boxes sour cherries)
7 cups sugar
1 bottle liquid pectin

To prepare fruit. Sort and wash fully ripe cherries; remove stems and pits. Grind the cherries or chop fine.

To make jam. Measure prepared cherries into a kettle. Add sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat, add the pectin, and alternately skim and stir for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 12 six-ounce glasses.

Cherry Jam
with powdered pectin

4 cups ground or finely chopped pitted cherries (takes about 3 pounds or 2 quart boxes sour cherries)
1 package powdered pectin
5 cups sugar

To prepare fruit. Sort and wash fully ripe cherries; remove stems and pits. Grind the cherries or chop fine.

To make jam. Measure prepared cherries into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 9 six-ounce glasses.
**Citrus Marmalade**
without added pectin

1 cup grapefruit juice (1 grapefruit)
1 1/4 cups orange juice (4 medium oranges)
1/3 cup lemon juice (1 lemon)
Peel of 1/2 grapefruit
Peel of 1 orange
Peel of 1 lemon
1 quart cold water
2 cups boiling water
3 cups sugar

• **To prepare fruit.** Wash fruit and extract juice. Remove membrane from inside of the peel. Cut peel into very thin strips about 1 to 1 1/2 inches long.

• **To make marmalade.** Add the cold water to the peel and simmer slowly in a covered pan until tender (30 minutes). Drain off and discard the liquid; add the boiling water to the peel. Add the sugar and boil rapidly to 9°F. above the boiling point of water (about 20 minutes). Add the fruit juices and cook again to the same temperature (about 25 minutes), stirring frequently.

Remove from heat; skim and stir alternately for 5 minutes. Ladle marmalade into hot containers and seal immediately (p. 4).

Makes 4 to 5 six-ounce glasses.

**Cranberry Conserve**
without added pectin

1 quart cranberries (takes about 1 pound cranberries)
2 cups water
3/4 cup raisins, chopped
2 oranges
3 cups sugar
1/4 cup chopped nuts

• **To prepare fruit.** Sort and wash cranberries, add water, and cook until tender. Press cranberries through a sieve.

Grate the peel from the oranges, remove white membrane and seeds, then chop the oranges.

• **To make conserve.** Combine sieved cranberries, chopped orange and grated peel, and raisins. Cook slowly for 10 minutes. Add sugar and boil rapidly, stirring constantly, to 9°F. above the boiling point of water, or until thick (about 15 to 20 minutes). Add the nuts and stir well.

Remove from heat; skim and stir alternately for 5 minutes. Ladle conserve into hot containers and seal immediately (p. 4).

Makes about 7 six-ounce glasses.

**Grape Conserve**
without added pectin

4 1/2 cups grapes with skins removed (takes about 4 pounds Concord grapes)
1 orange
4 cups sugar
1 cup seedless raisins
1/2 teaspoon salt
Skins from grapes
1 cup nuts, chopped fine

• **To prepare fruit.** Sort and wash grapes; remove from stems. Slip skins from grapes; save skins. Measure skinned grapes into a kettle and boil, stirring constantly, for about 10 minutes, or until the seeds show. Press through a sieve to remove seeds.

Chop the orange fine without peeling it.

• **To make conserve.** To the sieved grapes add the orange, sugar, raisins, and salt. Boil rapidly, stirring constantly, until the mixture begins to thicken (about 10 minutes).

Add the grape skins and boil, stirring constantly, to 9°F. above the boiling point of water (about 10 minutes). Do not overcook; the mixture will thicken more on cooling. Add nuts and stir well.

Remove from heat; skim and stir alternately for 5 minutes. Ladle conserve into hot containers and seal immediately (p. 4).

Makes 10 to 11 six-ounce glasses.
Grape-Cranberry Jam with powdered pectin

3 cups Concord grape juice (takes about 3 pounds fresh Concord grapes, or 2 six-ounce cans frozen concentrated grape juice plus 1 1/2 cups water)
2 cups whole raw cranberries (takes about 1/2 pound cranberries)
1 teaspoon finely grated orange rind
1 package powdered pectin
7 cups sugar

To prepare grape juice. Sort and wash grapes; remove from stems. Crush grapes, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice as for jelly (p. 5). To prevent formation of tartrate crystals in the jam, let juice stand in a cool place overnight. Strain through two thicknesses of damp cheesecloth to remove crystals that have formed.

If frozen grape juice is used, dilute it with the water.

To make jam. Combine grape juice, cranberries, and orange rind in a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 10 six-ounce glasses.

Peach Jam with powdered pectin

3 1/4 cups crushed peaches (takes about 3 pounds peaches)
1/4 cup lemon juice
1 package powdered pectin
5 cups sugar

To prepare fruit. Sort and wash fully ripe peaches. Remove stems, skins, and pits. Crush the peaches.

To make jam. Measure crushed peaches into a kettle. Add lemon juice and sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat, add the pectin, and alternately skim and stir for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 11 six-ounce glasses.

Peach Jam with liquid pectin

4 1/4 cups crushed peaches (takes about 3 1/2 pounds peaches)
1/4 cup lemon juice
7 cups sugar
1/2 bottle liquid pectin

To prepare fruit. Sort and wash fully ripe peaches. Remove stems, skins, and pits. Crush the peaches.

To make jam. Measure crushed peaches into a kettle. Add lemon juice and pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 8 six-ounce glasses.

Ginger-Peach Jam

To the recipe above add 1 to 2 ounces of finely chopped candied ginger, the amount depending on spiciness desired. Combine ginger with the crushed peaches before adding the pectin.
**Peach-Orange Marmalade without added pectin**

5 cups finely chopped or ground peaches (takes about 4 pounds peaches)

1 cup finely chopped or ground orange (takes about 2 medium-sized oranges)

Peel of 1 orange, shredded very fine

Kernels from 6 peach pits, ground

2 tablespoons lemon juice

6 cups sugar

**To prepare fruit.** Sort and wash fully ripe peaches. Remove stems, skins, and pits. Finely chop or grind the peaches.

Remove peel, white portion, and seeds from oranges. Finely chop or grind the pulp.

**To make marmalade.** Measure the prepared fruit into a kettle. Add remaining ingredients and stir well. Boil rapidly, stirring constantly, to 90°F. above the boiling point of water, or until the mixture thickens.

Remove from heat; skim and stir alternately for 5 minutes. Ladle marmalade into hot containers and seal immediately (p. 4).

Makes about 8 six-ounce glasses.

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**Minted Pineapple Jam with liquid pectin**

3½ cups crushed pineapple (No. 2½ can)

¾ cup water

¼ cup lemon juice

7½ cups sugar

1 bottle liquid pectin

½ teaspoon spearmint extract

Few drops green coloring

Place crushed pineapple in a kettle. Add water, lemon juice, and sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat and add pectin, flavor extract, and coloring. Alternately skim and stir the jam for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 11 six-ounce glasses.

**Variation.** Use ¾ teaspoon peppermint extract or 10 drops oil of spearmint instead of the spearmint extract.

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**Damson Plum-Orange Conserve with powdered pectin**

3½ cups finely chopped damson plums (takes about 1½ pounds plums)

1 cup finely chopped orange (takes 1 to 2 oranges)

Peel of ½ orange

2 cups water

½ cup seedless raisins

1 package powdered pectin

7 cups sugar

½ cup chopped nuts

**To prepare fruit.** Sort and wash plums and remove pits. Chop plums fine.

Peel and chop oranges. Shred peel of ½ orange very fine. Combine orange and peel, add the water, cover, and simmer for 20 minutes.

**To make conserve.** Measure chopped plums into a kettle. Add orange, raisins, and pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Stir in the nuts.

Remove from heat; skim and stir alternately for 5 minutes. Ladle conserve into hot containers and seal immediately (p. 4).

Makes about 11 six-ounce glasses.
Plum Jam with liquid pectin

4 1/2 cups crushed plums (takes about 2 1/2 pounds plums)
7 1/2 cups sugar
1/2 bottle liquid pectin

- To prepare fruit. Sort fully ripe plums, wash, cut into pieces, and remove pits. If flesh clings tightly to pits, simmer plums in a small amount of water for a few minutes until they are softened, then remove pits. Crush fruit.

- To make jam. Measure crushed plums into a kettle. Add the sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat, add the pectin, and alternately skim and stir the jam for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 12 six-ounce glasses.

Plum Jam with powdered pectin

6 cups crushed plums (takes about 3 1/2 pounds plums)
1 package powdered pectin
8 cups sugar

- To prepare fruit. Sort fully ripe plums, wash, cut into pieces, and remove pits. If flesh clings tightly to pits, simmer plums in a small amount of water for a few minutes until they are softened, then remove pits. Crush the fruit.

- To make jam. Measure crushed plums into a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 11 six-ounce glasses.

Plum-Peach Jam without added pectin

5 cups red plums (takes about 3 pounds plums)
4 cups peaches (takes about 3 pounds peaches)
8 cups sugar
1 lemon (sliced very thin)

- To prepare fruit. Sort and wash fruit. Peel and pit peaches; pit plums. Cut fruit into small pieces.

- To make jam. Measure the prepared fruit into a kettle. Add sugar and sliced lemon and stir well. Boil rapidly, stirring constantly, to 90 F. above the boiling point of water, or until mixture thickens.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 12 six-ounce glasses.

Rhubarb-Strawberry Jam with liquid pectin

1 cup cooked red-stalked rhubarb (takes about 1 pound rhubarb and 1/4 cup water)
2 1/2 cups crushed strawberries (takes about 1 1/2 quart boxes strawberries)
6 1/2 cups sugar
1/2 bottle liquid pectin

- To prepare fruit. Wash rhubarb and slice thin or chop; do not peel. Add the water, cover, and simmer until rhubarb is tender (about 1 minute).

Sort and wash fully ripe strawberries; remove stems and caps. Crush the berries.
• To make jam. Measure prepared rhubarb and strawberries into a kettle. Add the sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat, add the pectin, and alternately skim and stir the jam for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 9 six-ounce glasses.

Strawberry Jam
with liquid pectin

4 cups crushed strawberries (takes about 2 quart boxes strawberries)
7 cups sugar
½ bottle liquid pectin

• To prepare fruit. Sort and wash fully ripe strawberries; remove stems and caps. Crush the berries.

• To make jam. Measure crushed strawberries into a kettle. Add the sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat, add the pectin, and alternately skim and stir the jam for 5 minutes. Ladle into hot containers and seal immediately (p. 4).

Makes about 10 six-ounce glasses.

Strawberry Jam
with powdered pectin

5½ cups crushed strawberries (takes about 3 quart boxes strawberries)
1 package powdered pectin
8 cups sugar

• To prepare fruit. Sort and wash fully ripe strawberries; remove stems and caps. Crush the berries.

• To make jam. Measure crushed strawberries into a kettle. Add the sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 12 six-ounce glasses.

Strawberry Jam
without added pectin

4 cups crushed strawberries (takes about 2 quart boxes strawberries)
4 cups sugar

• To prepare fruit. Sort and wash the strawberries; remove any stems and caps. Crush the berries.

• To make jam. Measure crushed strawberries into a kettle. Add the sugar and stir well. Boil rapidly, stirring constantly, to 9° F. above the boiling point of water, or until the mixture thickens.

Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

Makes about 6 six-ounce glasses.

Strawberry-Orange Jam
with powdered pectin

2½ cups frozen strawberries (two 10-ounce packages)
1 medium-sized orange
¼ cup water
½ package powdered pectin (mix contents of package well before measuring)
3½ cups sugar

• To prepare fruit. Thaw the strawberries.

(Continued, next page)
Cut orange in halves and remove seeds and core; do not peel. Grind the orange, using a fine blade.

- **To make jam.** Combine strawberries, orange, and water in a kettle. Add the pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

  Add the sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly.

  Remove from heat; skim and stir alternately for 5 minutes. Ladle jam into hot containers and seal immediately (p. 4).

  Makes about 9 six-ounce glasses.

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**Uncooked Jam**

**made with berries or peaches**

3 cups crushed blackberries, blueberries, raspberries, strawberries, or peaches (takes about 1 quart blueberries, 11/2 quarts other berries, or 21/2 pounds peaches)

5 cups sugar
1 package powdered pectin
1 cup water

- **To prepare fruit.** Sort and wash fully ripe fruit. Drain. Remove caps and stems from berries and pits and skins from peaches. Grind blueberries; crush other berries or peaches.

- **To make jam.** Measure 3 cups of prepared fruit into a large mixing bowl. Add sugar, mix well, and let stand for 20 minutes, stirring occasionally.

  Dissolve the pectin in the water, bring to a boil, and boil for 1 minute. Add pectin solution to the fruit-and-sugar mixture and stir for 2 minutes. Ladle the jam into jelly glasses or into suitable freezer containers, leaving 3/4-inch space at the top. Cover the containers and let stand for 24 to 48 hours, or until the jam has set. Then cover jam with 3/4-inch layer of hot paraffin.

  Makes about 9 six-ounce glasses.

- **To store.** Store uncooked jams in a refrigerator or freezer. They can be held for a few months in a refrigerator or up to a year in a freezer. If kept at room temperature they will mold or ferment in a short time. Once a container is opened, the jam should be used within a few days.

  **Note.** If the jam is too firm it can be softened by stirring. If it tends to separate, stirring will blend it again. If it is too soft, bring the jam to a boil and it will thicken on cooling.
Preserves

For preserves, select fruit at the firm-ripe stage. If the fruit is to be left whole, it should be of uniform size and good shape.

The method used in making preserves differs somewhat with different fruits. Directions for making two popular kinds of preserves are given here.

**Damson Plum Preserves**

1½ quarts prepared damson plums (takes about 3 pounds ripe plums)
5½ cups sugar
1 cup water

1. **To prepare fruit.** Sort and wash plums; remove pits with pitting spoon, leaving plums whole.
2. **To make preserves.** Dissolve the sugar in the water and bring to boiling. Add the plums and boil, stirring gently, to 9° F. above the boiling point of water, or until the fruit is translucent and the sirup is thick.

Remove preserves from heat and ladle at once into hot jars, filling jars to top. Seal immediately.

Makes about 6 half-pint jars.

**Strawberry Preserves**

6 cups prepared strawberries (takes about 2 quart boxes berries)
4½ cups sugar

1. **To prepare fruit.** Select large, firm, tart strawberries. Wash and drain berries; remove caps.
2. **To make preserves.** Combine prepared fruit and sugar in alternate layers and let stand for 8 to 10 hours or overnight in the refrigerator or other cool place.

Heat the fruit mixture to boiling, stirring gently. Boil rapidly, stirring as needed to prevent sticking.

Cook to 9° F. above the boiling point of water, or until the sirup is somewhat thick (about 15 or 20 minutes).

Remove preserves from heat and skim. Ladle at once into hot jars, filling jars to top. Seal immediately.

Makes about 4 half-pint jars.

Questions and Answers

High quality in jellied fruit products depends on so many complex factors that it is seldom possible to give just one answer to questions about problems in making these products. Using recipes from a reliable source—and following directions accurately—is the surest aid to success but does not guarantee it; it is impossible to assure uniform results with different lots of fruit because they may vary widely in jellying quality.

The answers given here to questions commonly asked by homemakers who have had unsatisfactory results in making jellies and jams suggest possible reasons for lack of success. These suggestions may give the homemaker a clue to the cause of her particular problem.

Q. What makes jelly cloudy?

A. One or more of the following may cause cloudy jelly: Pouring jelly mixture into glasses too slowly. Allowing jelly mixture to stand before it is poured. Juice was not properly strained and so contained pulp. Jelly set too fast, usually the result of using fruit that is too green.
Q. Why do crystals form in jelly?
A. Crystals throughout the jelly may be caused by too much sugar in the jelly mixture, or cooking the mixture too little, too slowly, or too long. Crystals that form at the top of jelly that has been opened and allowed to stand are caused by evaporation of liquid. Crystals in grape jelly may be tartrate crystals (see recipe for grape jelly, p. 13).

Q. What causes jelly to be too soft?
A. One or more of the following may be the cause: Too much juice in the mixture. Too little sugar. Mixture not acid enough. Making too big a batch at one time.

Q. What can be done to make soft jellies firmer?
A. It is not always possible to remake soft jellies so that the product will be satisfactory. However, soft jellies can sometimes be improved by recooking according to the directions given below. It is best to recook only 4 to 6 cups of jelly at one time.

To remake with powdered pectin. Measure the jelly to be recooked. For each quart of jelly measure ½ cup sugar, ½ cup water, and 4 teaspoons powdered pectin. Mix the pectin and water and bring to boiling, stirring constantly to prevent scorching. Add the jelly and sugar. Stir thoroughly. Bring to a full rolling boil over high heat, stirring constantly. Boil mixture hard for ¾ minute. Remove jelly from the heat, skim, pour into hot containers, and seal.

To remake with liquid pectin. Measure the jelly to be recooked. For each quart of jelly measure ¾ cup sugar, 2 tablespoons lemon juice, and 2 tablespoons liquid pectin. Bring jelly to boiling over high heat. Quickly add the sugar, lemon juice, and pectin and bring to a full rolling boil; stir constantly. Boil mixture hard for 1 minute. Remove jelly from the heat, skim, pour into hot containers, and seal.

To remake without added pectin. Heat the jelly to boiling and boil for a few minutes. Use one of the tests described on page 6 to determine just how long to cook it. Remove jelly from the heat, skim, pour into hot containers, and seal.

Q. What makes jelly sirupy?
A. Too little pectin, acid, or sugar. A great excess of sugar can also cause sirupy jelly.

Q. What causes weeping jelly?
A. Too much acid. Layer of paraffin too thick. Storage place was too warm or storage temperature fluctuated.

Q. What makes jelly too stiff?
A. Too much pectin (fruit was not ripe enough or too much added pectin was used). Overcooking.

Q. What makes jelly tough?
A. Mixture had to be cooked too long to reach jellying stage, a result of too little sugar.

Q. What makes jelly gummy?
A. Overcooking.
Q. What causes fermentation of jelly?
A. Too little sugar, or improper sealing.

Q. Why does mold form on jelly or jam?
A. Because an imperfect seal has made it possible for mold and air to get into the container.

Q. What causes jelly or jam to darken at the top of the container?
A. Storage in too warm a place. Or a faulty seal that allows air to leak in.

Q. What causes fading?
A. Too warm a storage place or too long storage. Red fruits such as strawberries and raspberries are especially likely to fade.

Q. Why does fruit float in jam?
A. Fruit was not fully ripe, was not thoroughly crushed or ground, was cooked too little, or was poured into containers too soon after it was taken from the heat (see paragraph 4, p. 16).

Q. Can corn sirup or honey be used instead of sugar in making jelly and jam?
A. Either can be used in place of part, but not all, of the sugar in the recipes for jellied fruit products in this publication.

In recipes without added pectin, light corn sirup can replace up to one-fourth of the sugar in jellies and up to one-half of the sugar in other products. With added powdered pectin, corn sirup can replace up to one-half of the sugar in any of the products. With liquid pectin, corn sirup can replace up to 2 cups of the sugar.

Products made with honey will have a darker color than those made with sugar as the only sweetening, and the flavor will be somewhat different. Light, mild-flavored honey generally is the best kind to use.

Honey can replace up to one-half of the sugar in any of the recipes where no added pectin is used. In products made with added pectin 2 cups of honey can replace 2 cups of sugar in most recipes; only ⅛ to 1 cup of sugar should be replaced by honey in the small recipes yielding 5 to 6 glasses.

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