

Sweet Spreads and Syrups Information

So Easy to Preserve, Sixth Edition

Jelly, jam, preserves, conserves and marmalades are fruit products that are jellied or thickened. Most are preserved by sugar. 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. The characteristics of clarity or cleanliness, color, consistency and flavor are used to determine the quality of jellied products.

Jellies are usually made by cooking fruit juice with sugar. (Some are made without cooking using special uncooked jelly recipes.) A good jelly will be clear or translucent (depending on the type of juice), free from sediment, pulp or crystals. It should be firm enough to hold its shape when turned out of the container but should quiver when the container is moved. When cut, it should be tender yet retain the angle of the cut. Jelly should have a flavorful fresh fruity taste that is not too tart and not too sweet.

Jams are made by cooking crushed or chopped fruits with sugar. They are thick, sweet spreads that tend to hold their shape but are less firm than jelly. The shape of fruit pieces is not retained when making jam. Jam has a uniform consistency and is thick enough to spread.

Preserves are small, whole fruits or uniformly sized pieces in a thick slightly gelled sugar syrup. The fruit should be tender and plump and there should be no mushy or broken up fruit tissue. The color should be characteristic of the fruit, and fruit pieces should be translucent to clear.

Conserves are products with a consistency like jam. They are made by combining fruits. They may contain citrus fruits, nuts, raisins or coconut. They are easily spreadable and not stiff.

Marmalades are soft fruit jellies containing small pieces or slices of fruit or fruit peel evenly suspended in the transparent jelly. They usually include citrus.

Other fruit products that are preserved by sugar but are not jellied included butters, honeys and smooth syrups.

Fruit butters are sweet spreads made by cooking fruit pulp with sugar to a thick, spreadable consistency. They are thick enough to mound on a spoon. Spices are often added.

Honeys and syrups are made by cooking fruit juice or pulp with sugar until thickened, but not thick enough to mound or hold its shape. Honeys and syrups should be pourable.

JELLIED PRODUCT BASICS

Essential Ingredients

For successful jellied products, a proper ratio of fruit, pectin, acid and sugar is needed.

Fruit

Fruit provides the characteristic color and flavor to the jellied product. It also furnishes at least part of the pectin and acid needed for a gel. The fruit should be just at the ripe stage for best natural color and flavor. Fruits of irregular size and shape can be used as long as they are good quality, since they will be cut up, mashed or made into juice.

Canned or frozen fruit or fruit juice or fruit juice can be used to make jellied products. If you commercially canned or frozen products, select those that have no added sugar. It's best if canned fruits are canned in their own juice. Because commercial canned or frozen products are made from fully ripe fruit (which are lower in pectin than under-ripe fruit), pectin must be added.

If you can or freeze your own fruit or fruit juice, use some slightly under-ripe fruit (usually $\frac{1}{4}$ slightly under-ripe to $\frac{3}{4}$ fully ripe is recommended). Then if the fruit naturally contains adequate pectin, none

will have to be added to products made from that juice. Can fruit in its own juice. Do not add sugar, or if you do, note on each jar how much sugar it contains. They you can allow for that sugar in the jelly recipe.

Pectin

Pectin is the substance that causes the fruit to gel. Some kinds of fruits have enough natural pectin to make high quality products. Others require added pectin, especially when they are used for making jellies, which should be firm enough to hold their shape. The highest quality pectin is found in just-ripe fruit. Pectin from under-ripe or over-ripe fruit will not form a gel.

Commercial pectins are made from apples or citrus fruit and are available in both the powdered and liquid forms. Be sure to follow the manufacturers' directions or tested recipes when using commercial pectin. The powdered and liquid forms are not interchangeable in recipes.

Commercial pectins may be used with any fruit. Many consumers prefer the added pectin method for making jellied fruit products because: 1) fully ripe fruit can be used, 2) cooking time is shorter is set so there is no question when the product is done, and 3) the yield from a given amount of fruit is greater. However, because more sugar is used, the natural fruit flavor may be masked.

Commercial fruit pectin should be stored in a cool, dry place so it will keep its gel strength. Use pectin by the date indicated on its package. It should not be held over from one year to the next.

There are special pectins available to use for making jellied products with no added sugar or with less sugar than regular recipes. Specific recipes will be found on the package inserts, and directions should be followed carefully.

Acid

Acid is needed both for gel formation and flavor. The acid content varies among fruits and is higher in under-ripe fruits. When fruits are low in acid, lemon juice or citric acid may be used.

Sugar

Sugar is an important ingredient in jelled fruit products. It must be present in the proper proportion with pectin and acid to make a good gel. Sugar is the preservative for the product, preventing the growth of microorganisms. It also contributes to the taste of the product. Never cut down on the amount of sugar a recipe calls for unless syrup is the desired end result.

Granulated white sugar is usually used in homemade jellied fruit products. Sweeteners such as brown sugar, sorghum and molasses are not recommended since their flavor overpowers the fruit flavor and their sweetness varies.

Light corn syrup or light, mild honey can be used to replace part, but not all, of the sugar. For best results, used tested recipes that specify honey or syrup.

Artificial sweeteners cannot be substituted for sugar in regular recipes because the sugar is needed for gel formation.

Pectin and Acid Content of Common Fruits Used to Make Jelly

- Group I: If not overripe, has enough natural pectin and acid for gel formation with only added sugar.
- Group II: Low in natural acid or pectin, and may need addition of either acid or pectin.
- Group III: Always needs added acid, pectin or both.

Group I	Group II	Group III
Apples, sour	Apples, ripe	Apricots
Blackberries, sour	Blackberries, ripe	Blueberries
Crabapples	Cherries, sour	Figs
Cranberries	Chokecherries	Grapes (Western Concord)
Currants	Elderberries	Guavas
Gooseberries	Grapefruit	Peaches
Grapes (Eastern Concord)	Grape Juice, bottled (Eastern Concord)	Pears
Lemons	Grapes (Californian)	Plums (Italian)
Loganberries	Loquats	Raspberries
Plums (not Italian)	Oranges	Strawberries
Quinces		

Equipment and Containers

A large saucepot is essential as jellies and jams have a tendency to boil over. An 8-or 10-quart saucepot with a broad flat bottom is recommended. A heavy metal container is best because it allows even heat distribution.

A jelly bag or suitable cloth is needed, when extracting juice for jelly. Firm, unbleached muslin or cotton flannel with a napped side turned in can be used. Four thicknesses of closely woven cheesecloth may be used. Jelly bags or cloths should be dam when extracting juice.

A *jelly, candy or deep fat thermometer* can be used to determine doneness in jellied fruit products without added pectin.

A *boiling water bath* canner is necessary for processing all fruit spreads. A deep cooking pot with a rack may be used for a canner if it's deep enough for one to two inches of boiling water above the tops of jars. Be sure the pot has a close-fitting lid.

General Directions for Jellied Products

Amount to Prepare

To have jellied fruit products at their very best, make up only the quantity that can be used within a few months. They lose flavor, lose their bright color and turn darker during storage. For best results, make only one recipe at a time, using no more than 6 to 8 cups of juice *Doubled batches do not always gel properly.*

Adjusting for Desired Consistency

If fruit with the average jelling properties is used and tested recipes are followed, the products in this book should be medium firm for their type. However, because various lots of fruit differ in acid and pectin content, it is not possible to develop formulas that will always give exactly the same results.

If the first batch from a particular lot of fruit is too soft or too firm, adjust the proportions of fruit or the cooking time for the next batch.

For products with added pectin:

- For a softer product, use $\frac{1}{4}$ to $\frac{1}{2}$ cup more fruit or juice.
- For a firmer product, use $\frac{1}{4}$ to $\frac{1}{2}$ cup less fruit or juice.

For products without added pectin:

- For a softer product, shorten the cooking time (cook to a lower temperature).
- For a firmer product, lengthen the cooking time (cook to a higher temperature).

Preparing the Containers

Prepare the canning jars before you start to make the jellied product. It is best to use half-pint jars, unless a recipe specifies another size. Using larger jars can result in a weak gel, due to residual heat during cooling.

Wash the containers in hot, soapy water and rinse. Sterilize the jars by boiling them for 10 minutes. Then keep the jars in hot water until they are used. Keeping them hot will prevent the jars from breaking when filled with the hot product. **NOTE:** If you are at an altitude of 1000 feet or more, add 1 minute to the sterilizing time for each 1000 feet of altitude.

Wash and rinse all canning lids and bands. Treat the lids as directed by the manufacturer.

Sealing the Products

All jellied products are processed in a boiling water bath, to prevent mold growth. To process jellied products in a boiling water bath, pour the boiling product into a hot sterilized canning jar, leaving $\frac{1}{4}$ -inch headspace. Wipe the jar rim, and close with a properly pretreated canning lid. Place on a rack in a canner filled with boiling water. The water should cover the jars by at least one inch. Cover the canner. Bring the water back to a boil gently for 5 minutes. Then remove the jars to a protected surface and cool, away from drafts. (**NOTE:** If unsterilized jars are used, the product should be processed for 10 minutes. However, since this additional 5 minutes of processing can result in a weak gel, it is best to use sterilized jars.)

Caution! Altitude Adjustments

The processing times given for processing jellied fruit products are for processing at altitudes of 0-1000 feet. Add 1 minute to the processing time for each 1000 feet of additional altitude.

Storage

It is essential that jellied products, especially jelly, be allowed to sit undisturbed for 12 hours after they are made. Moving them could break the gel. After the jellied products have cooled for 12 hours, check the seal, remove the screw band if used, label and store in a cool, dry, dark place. The shorter the

storage time, the better the product. Though most jellied products should keep for at least a year, their flavor and quality begins to decrease with a few months.

MAKING JELLIES

There are basically two types of jellies: those made with added pectin and those made without it. The use of commercial pectin simplifies the jelly making procedure and yields more jelly per volume of juice. Jelly can be made more quickly using added pectin and its doneness is easier to determine. However, jelly made without added pectin contains less sugar and has a fruitier taste.

Preparing the Fruit

- Unless using added pectin, use $\frac{1}{4}$ slightly under-ripe fruit and $\frac{3}{4}$ just ripe fruit. If you're adding pectin, you can use all ripe fruit.
- Prepare fruit in small batches, enough for one recipe.
- Sort the fruit, discarding all damaged portions.
- Wash fruits, but do not remove skins or cores, since the pectin is most concentrated there. Cut into small pieces.
- Wash berries carefully to prevent loss of juice. Drain, remove caps and stems.

Extracting the Juice

- Place fruit into a flat-bottomed saucepan and add cold water. For apples and other hard fruits, add up to 1 cup per pound of fruit. For berries and grapes, use only enough water to prevent scorching. Crush soft fruits to start the flow of juice.
- Bring to a boil on high heat. Stir to prevent scorching.
- Reduce heat.
- Grapes and berries need 10 minutes or less to cook until soft. Apples and other hard fruits may need 20 to 25 minutes, depending on the firmness of the fruit. Do not overcook; excess boiling will destroy the pectin, flavor and color.
- Pour everything into a damp jelly bag and suspend the bag to drain the juice. The clearest jelly comes from juice that has dripped through a jelly bag without pressing or squeezing.
- If a fruit press is used to extract the juice, the juice should be restrained through a jelly bag.

NOTE: Juicy berries may be crushed, and the juice extracted without heating.

Jelly Made Without Added Pectin

Testing Pectin in the Juice

For jellies made without added pectin, it is important to know whether there is enough natural pectin to form a gel. There are two ways of determining this:

Cooking Test – Measure $\frac{1}{3}$ cup of juice and $\frac{1}{4}$ cup of sugar into a small saucepan. Heat slowly, stirring constantly until all the sugar is dissolved. Bring the mixture to a boil and boil rapidly until it gives the sheeting test. Pour the jelly into a clean, hot jelly glass or a small bowl and let cool. If the cooled mixture is jelly-like, your fruit will gel.

Alcohol Test - Add 1 teaspoon of juice to 1 tablespoon of rubbing alcohol. To mix, gently stir or shake the mixture in a closed container so that all the juice comes in contact with the alcohol. **DO NOT TASTE** -

the mixture is poisonous. Fruit high in pectin will form a solid jelly-like mass, that can be picked up with a fork. If the juice fails to gel or clumps into several small particles, there is not enough pectin for jelly.

Testing Acid in the Juice

There is no home test to determine the amount of acid present. But you can do a simple taste test for tartness by mixing 1 teaspoon lemon juice, 3 tablespoons water and ½ teaspoon sugar. If your fruit juice does not taste as tart as this mixture it is not tart enough. Add 1 tablespoon lemon juice or 1/8 teaspoon citric acid to each cup of fruit juice.

Cooking the Jelly

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, there is little that can be done to improve an overcooked mixture. Signs of overcooking are a change in color of the mixture. Signs of overcooking are a change in color of the mixture and a taste or odor of caramelized sugar.

When cooking jelly remember that it should be boiled rapidly, not simmered.

Testing for Doneness

Three methods of testing for doneness in jelly made without added pectin are given below. Of these, the temperature test is most dependable.

Temperature Test - Take the temperature of the jelly with a candy or jelly thermometer. When done, the temperature of the jelly should be 220°F, 8°F above the boiling point of water. **NOTE:** For each 1000 feet of altitude above sea level, subtract 2°. For instance, at 1000 feet of altitude, the jelly is done at 218°F; at 2000 feet, 216°F, etc.

For an accurate thermometer reading, place the thermometer in a vertical position and read at eye level. The bulb of the thermometer must be completely covered with the jelly but must not touch the bottom of the saucepot. (Remember to test the accuracy of the thermometer by placing it in boiling water.)

Spoon or Sheet Test - Dip a cool metal spoon into the boiling jelly mixture and lift the spoon out of the steam so the syrup runs off the side. When the mixture first starts to boil, the drops will light and syrupy. As the syrup continues to boil, the drops will become heavier and will drop off the spoon two at a time. When the two drops form together and “sheet” off the spoon, the jelling point has been reached.

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

Summary of Basic Steps for Making Jelly Without Added Pectin

1. Check recipe and assemble equipment.
2. Sterilize canning jars for 10 minutes and keep hot.
3. Pretreat canning lids.
4. Measure juice and sugar. When a recipe or jelmeter is not available, try using ¾ cup sugar for each 1 cup of juice. Put juice into large saucepot, bring to boiling.
5. Add sugar to juice. Stir until sugar dissolves. Boil rapidly to jelling point.

6. Test for doneness.
7. Remove Jelly from Heat; quickly skim to remove foam.
8. Pour quickly into hot jars, leaving ¼-inch headspace. Wipe jar rims, adjust lids and process in a boiling water bath for 5 minutes.

Jelly Made With Added Pectin

Jellies made from powdered or liquid pectin are prepared differently from those made without added pectin. Be sure to follow the manufacturer's directions carefully. Pectin, acid and doneness tests are not needed.

Basic Steps for Making Jelly With Powdered Pectin

1. Check recipe and assemble equipment.
2. Sterilize canning jars for 10 minutes and keep hot.
3. Pretreat canning lids.
4. Measure juice and sugar, combine in a large saucepot.
5. Bring to a rapid boil and add liquid pectin.
6. Bring back to a boil and boil hard for 1 minute, stirring constantly.
7. Remove from heat and skim off foam with a metal spoon or jelly skimmer.
8. Pour quickly into hot jars, leaving ¼-inch headspace. Wipe jar rims, adjust lids and process in a **Boiling Water Bath** for 5 minutes.

JELLY RECIPES

Remember to Make Altitude Adjustments

Apple Jelly (4 or 5 half-pint jars)

4 cups apple juice (almost 3 pounds apples and
3 cups water)

2 tablespoons lemon juice, if desired
3 cups sugar

To Prepare Juice – Select about ¼ firm-ripe and ¾ 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.

To Make Jelly - Sterilize canning jars. Measure apple juice into a stockpot. Add lemon juice and sugar and stir well. Boil over high heat at 8°F above the boiling point of water, or until jelly mixture sheets from spoon. Remove from heat, skim off foam quickly. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Blackberry Jelly (4 or 5 half-pint jars)

4 cups blackberry juice (about 2½ quart
boxes berries and ¾ cup water)

3 cups sugar

To Prepare Juice – Select about ¼ firm-ripe and ¾ fully ripe berries. Sort and wash; remove any stems or caps. Crush berries, add water, cover and bring to a boil on a high heat. Reduce heat and for 5 minutes. Extract juice.

To Make Jelly – Sterilize canning jars. Measure juice into saucepot. Add sugar and stir well, Boil over high heat to 8°F above the boiling point of water, or until jelly mixture sheets from spoon. Remove from heat; skim off foam quickly. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Blueberry Jelly with Liquid Pectin (7 or 8 half pint jars)

4 cups blueberry juice (about 2 quarts
blueberries)

7½ cups sugar
2 pouches liquid pectin

To Prepare Juice - Sort and wash ripe blueberries. Thoroughly crush, one layer at a time. Place in a saucepan, bring to a boil, cover and simmer for 5 minutes stirring occasionally. Extract juice.

To Make Jelly – Sterilize canning jars. Measure juice into a large saucepot. Stir in the sugar. Place on high heat; stir constantly and bring to a full rolling boil that cannot be stirred down.

Add the liquid pectin and heat again to a full rolling boil. Boil hard for 1 minute. Remove from heat; quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in AA **Boiling Water Bath**.

Crabapple Jelly (5 or 6 half-pint jars)

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

4 cups sugar

To Prepare Juice - Select firm, crisp crabapples, about ¼ firm-ripe and ¾ 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.

To Make Jelly - Sterilize canning jars. Measure juice into saucepot. Add sugar and stir well. Boil over high heat to 8°F above the boiling point of water, or until jelly mixture sheets from spoon. Remove from heat; quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Mint Jelly With Liquid Pectin (3 or 4 half-pint jars)

1¾ cups mint juice (1½ cups firmly packed
fresh mint and 2¼ cups water) 3½ cups sugar
1 pouch liquid pectin 2 tablespoons lemon juice

To Prepare Juice – Wash mint, crush leaves and stems or finely chop. Place in saucepan, add water and bring quickly to a boil. Remove from heat, cover and let stand 10 minutes. (A few drops of green food coloring can be added if desired.) Strain to remove mint. Discard mint.

To Make Jelly – Sterilize canning jars. Measure mint juice into a large saucepot. Stir in the sugar and lemon juice. Place on high heat, stir constantly and bring to a full boil. Boil hard for 1 minute. Remove from heat; quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Muscadine or Scuppernong Jelly (3 or 4 half-pint jars)

4 cups muscadine juice 3 cups sugar

To Make Jelly - Select grapes that are in the just-ripe stage. Wash and crush grapes. Without adding water, boil and simmer for about 10 minutes, stirring constantly. Press juice from the heated grapes. Pour the cool juice into glass containers and set in refrigerator. The next day strain the juice through a flannel bag. Do not squeeze the bag.

To Make Jelly - Sterilize canning jars. Heat 4 cups of juice of boiling in a saucepot. Add 3 cups sugar and stir until the sugar dissolves. Then boil rapidly over high heat to 8°F above the boiling point of water or until jelly mixture sheets from a spoon. Remove from heat; quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Orange Jelly from Frozen Concentrated Juice With Powdered Pectin (5 or 6 half-pint jars)

12 ounces concentrated orange juice, thawed 4½ cups sugar
2½ cups water 1 box powdered pectin

To Make Jelly – Sterilize canning jars. Measure sugar and set aside. Mix juice and water in a saucepot. Stir in powdered pectin. Bring to a full boil over high heat, stirring constantly. At once stir in sugar. Stir and bring to a full rolling boil that cannot be stirred down. Boil hard for 1 minute, stirring constantly. Remove from heat; quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Peach Jelly With Powdered Pectin (5 or 6 half-pint jars)

3 cups peach juice (about 3 ½ pounds peaches
And ½ cup water) 5 cups sugar
1 box powdered pectin ½ cup lemon juice

To Prepare Juice – Wash and slice or chop fully-ripe peaches. Do not pit or peel. Crush fruit. Place crushed fruit and ½ cup water in saucepan. Cover, bring to a boil and simmer 5 minutes, stirring occasionally. Extract juice.

To Make Jelly - Sterilize canning jars. Measure juice into a large saucepot. Measure sugar and set aside. Place prepared juice, powdered pectin and lemon juice in a large saucepot. Bring to a full boil over high heat, stirring constantly. At once stir in sugar. Bring to a full rolling boil that cannot be stirred down. Boil hard for 1 minute, stirring constantly. At once stir in sugar. Bring to a full rolling boil that cannot be stirred down. Boil hard for 1 minute, stirring constantly. Remove from heat, quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Pepper Jelly With Liquid Pectin (5 half-pint jars)

4 or 5 hot peppers, cored and cut in pieces 1 cup white vinegar
4 sweet green peppers, cored and cut in pieces 5 cups sugar
Green food coloring 1 pouch liquid pectin

To Make Jelly – Sterilize canning jars. Put half the peppers and half the vinegar into blender container; cover and process at liquefy until pepper is liquefied. Repeat with remaining peppers and vinegar. Combine liquified peppers/vinegar and sugar in a large saucepot and boil slowly for 10 minutes. Remove from heat. Add liquid pectin and boil hard for 1 minute. Skim and add a few drops of green food coloring. Pour jelly immediately into hot canning jars, leaving ¼-headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Golden Pepper Jelly (about 5 half-pint jars)

5 cups chopped yellow bell peppers (about 4 large fleshy peppers as purchased)
½ cup chopped Serrano chile peppers (about 5 peppers as purchased)
1½ cups white distilled vinegar (5%)
5 cups sugar
1 pouch (3 ounces) liquid pectin

CAUTION: Wear plastic or rubber gloves and do not touch your face while handling or cutting hot peppers. If you do not wear gloves, wash hands thoroughly with soap and water before touching your face or eyes.

To Prepare Pepper Juice – Pre-sterilize half-pint canning jars so they are ready by the time pepper juice has been extracted. Wash all peppers thoroughly; remove stems and seeds from the peppers. Do not remove the membrane from the hot peppers, since the remaining capsaicin for pepper heat is located there. Place sweet and hot peppers in a blender or food processor. Add enough of the vinegar to puree the peppers, then puree. Combine the pepper-vinegar puree and remaining vinegar into an 8- or 10-quart saucepan. Heat to a boil; then boil 10 minutes to extract flavors and color. Remove from heat and strain through a jelly bag into a bowl.

To Make Jelly – Measure 2 ¼ cups of the strained pepper-vinegar sauce into the 8- to 10-quart saucepan. Stir in sugar until dissolved and return mixture to a boil. Add the pectin, return to a full rolling boil and boil hard for 1 minute, stirring constantly. Remove from heat, skim off foam quickly. Pour jelly immediately into hot, sterile half-pint jars, leaving ¼-inch headspace. Wipe rims of jars with a dampened clean paper towel. Adjust lids. Process 5 minutes in **Boiling Water Bath**.

Variations – The use of yellow peppers gives this jelly a light golden color. Other colored sweet peppers can be substituted, but these will provide a different jelly color. Other hot peppers can also be substitute. If properly prepared, the jelly will have a mildly firm set; it is best to use half-pint jars.

Preparation Notes – The addition of vinegar to the low acid sweet and hot peppers makes this recipe safe for boiling water canning. Do not reduce the amount of vinegar. The amounts of vinegar and sugar are also necessary to provide the conditions required to form a gel with the added pectin.

Plum Jelly **(about 8 or 9 half-pint jars)**

Plum juice (1-pound plums and ½ cup water)

Sugar (¾ cup to each cup of juice)

To Prepare Juice – Wash plums. Crush fruit, add water, cover and bring to a boil over high heat. Reduce heat and simmer 15 to 20 minutes or until fruit is soft. Extract juice.

To Make Jelly – Sterilize canning jars. Measure juice into a large saucepot. Add sugar and stir well. Boil over high heat at 8°F above the boiling point of water or until the mixture sheets from a spoon. Pour jelly immediately into hot, sterile half-pint jars, leaving ¼-inch headspace. Wipe rims of jars with a dampened clean paper towel. Adjust lids. Process 5 minutes in **Boiling Water Bath**.

Quince Jelly **(about 4 half-pint jars)**

3¾ cups quince juice (about 3 ½ pounds quince
and 7 cups water)

¼ cup lemon juice
3 cups sugar

To Prepare Juice – Select about ¼ firm-ripe and ¾ 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 into a saucepan. Add water, cover and bring to boil on high heat. Reduce heat and simmer for 25 minutes. Extract juice.

To Make Jelly – Measure quince juice into a saucepot. 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 spoon. Remove from heat; skim off foam quickly. Pour jelly immediately into hot canning jars. Leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Strawberry-Rhubarb Jelly (about 7 half-pint jars)

1½ pounds red stalks or rhubarb
1½ quarts ripe strawberries

6 cups sugar
1 pouch liquid pectin

To Prepare Juice – Wash and cut rhubarb into 1-inch pieces and blend or grind. Wash, stem and crush strawberries; one layer at a time, in a bowl or saucepan. Place both fruits in a jelly bag or four layers of cheesecloth and gently squeeze out the juice.

To Make Jelly – Sterilize canning jars. Measure 3 ½ cups of juice into a large saucepan. Add sugar, mix well. Bring to a boil over high heat, stirring constantly. Immediately stir in pectin. Bring to a full rolling boil and boil hard 1 minute, stirring constantly. Remove from heat; quickly skim off foam. Pour jelly immediately into hot canning jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

MAKING JAMS, PRESERVES, MARMALADES, CONSERVES, BUTTERS, HONEYS AND SYRUPS

General Instructions

- Use canning jars and pretreated lids.
- Check jars and lids. Discard any cracked or chipped jars and any lids with blemished sealing surfaces. Wash in hot, soapy water; rinse. Boil jars for 10 minutes to sterilize. Keep jars hot.
- If you are not following an exact recipe and you are unsure whether pectin and acid are adequate for the product you're making, test as for jelly.
- Cook jellied products in small batches in a large, heavy saucepot (8-10-quart capacity).
- Stir fruit mixture over low heat until sugar dissolves. Then boil rapidly for a clear finished product. As the fruit mixture begins to thicken, stir frequently to prevent sticking and scorching.
- To judge the doneness of jellied products, boil until the temperature is 220°F or 8°F above the boiling point of water. For a softer product, shorten the cooking time; for a firmer product, lengthen it. The refrigerator/freezer test can also be used.
- Before filling jars, skim off foam which forms from the boiling process. The addition of ¼ teaspoon butter or margarine during cooking helps cut down on the foam formed.
- To fill jars, pour hot fruit mixture into hot sterilized canning jars, leaving ¼-inch headspace. Wipe jar rims, apply lids and process for room temperature storage.
- Process jams, preserves, marmalades, conserves, fruit butters, honeys and syrups in a **Boiling Water Bath** for the length of time specified in the recipe. If no processing time is given, process for 5 minutes. At altitudes over 1000 feet, add 1 minute to the processing time for each additional 1000 feet of altitude.
- Cool 12 to 24 hours; check seals. If jars have not sealed, refrigerate. If jars are sealed, remove screw bands if used and clean up jars and lids. Store in dark, dry, cool place. The shorter the storage time, the better the product.
- If liquid or powdered pectin is used, follow manufacturer's directions. The method of combining ingredients varies with the form of pectin used. Pectin, acid and doneness tests are not necessary with added pectin.

JAM RECIPES

Apricot Jam (about 10 half-pint jars)

2 quarts crushed, peeled apricots
¼ cup lemon juice

6 cups sugar

Sterilize canning jars. Combine all ingredients; slowly bring to boiling, stirring occasionally until sugar dissolves. Cook rapidly until thick, about 25 minutes. As mixture thickens, stir frequently to prevent sticking. Pour hot jams into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Berry Jams (Blackberry, Blueberry, Boysenberry, Dewberry, Gooseberry, Loganberry, Raspberry, Youngberry) (7 or 8 half-pint jars)

9 cups crushed berries

6 cups water

Sterilize canning jars. Combine berries and sugar bring slowly to a boil, stirring occasionally until sugar dissolves. Cook rapidly to, or almost to, jelling point, depending upon whether a firm or soft jam is desired. As mixture thickens, stir frequently to prevent sticking. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

NOTE: If seedless jam is preferred, crushed berries may be heated until soft and pressed through a sieve or food mill; then add sugar and proceed as above.

Blueberry-Currant Jam (about 4 half-pint jars)

1-quart stemmed blueberries
1 cup water
3 cups sugar

2 cups stemmed currants
1 cup water

Sterilize canning jars. Combine blueberries and 1 cup water; cook slowly 5 minutes. In another pan, combine currants and 1 cup water; cook slowly 10 minutes, then press through a sieve or food mill to remove seeds. Combine blueberries and currant pulp; cook rapidly 5 minutes. Add sugar, stirring occasionally until sugar dissolves. Cook rapidly until thick, about 20 minutes. As mixture thickens, stir frequently to prevent sticking. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Remove from heat. Skim foam if necessary. Ladle hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Muscadine or Scuppernong Jam

Follow recipe for Grape Jam, above.

Peach Jam (about 8 half-pint jars)

2 quarts crushed, peeled peaches
½ cup water

6 cups sugar

Sterilize canning jars. Combine peaches and water; cook gently 10 minutes. Add sugar; slowly bring to boiling, stirring occasionally until sugar dissolves. Cook rapidly until thick, about 15 minutes; stir frequently to prevent sticking. Pour hot jams into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

NOTE: For Spiced Peach Jam tie the following ingredients in cheesecloth and add to the jam during cooking. Remove spice bag before pouring hot jam into hot jars. Process as directed for peach jam.

1 teaspoon whole cloves
½ teaspoon whole allspice
1 stick cinnamon (3-inch piece)

Peach or Strawberry Jam From Commercially Frozen Fruit With Powdered Pectin (about 4 half-pint jars)

3 cups frozen peaches or strawberries, thawed
and crushed (about 30 ounces frozen peaches,
or strawberries)

For peaches only – 1 tablespoon lemon juice
2½ tablespoons powdered pectin
3 cups sugar

Sterilize canning jars. Drain fruit, reserving juice. Crush fruit and combine with reserved juice. Place 3 cups of mixture into a saucepot. If making peach jam, stir in lemon juice. Stir contents of pectin package and measure 2 ½ tablespoons of the pectin.

Measure sugar and set aside. Stir powdered pectin into the prepared fruit. Bring to a full boil over high heat, stirring constantly. At once stir in sugar. Stir and bring to a full rolling boil that cannot be stirred down. Boil hard for 1 minute, stirring constantly. Remove from heat. Skim off foam. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Peach or Pear Jam with Liquid Pectin (about 8 half-pint jars)

4 cups prepared fruit (about 3 pounds peaches
or pears
¼ cup lemon juice

7½ cups sugar
1 pouch liquid pectin

To Prepare Fruit - Wash fruit. Peel and pit peaches, or peel and core pears. Grind or finely chop fruit.

To Make Jam – Sterilize canning jars. Place prepared fruit into a saucepan. Stir in lemon juice. Measure sugar and set aside. Open liquid pectin pouch and stand upright in a cup or glass. Stir sugar into prepared fruit. Place over high heat and bring to a full rolling boil that cannot be stirred down. Boil hard for 1 minute, stirring constantly. Remove from heat, stir in liquid pectin. Skim off foam. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Pear-Apple Jam (about 7 or 8 half-pint jars)

3 cups peeled, cored and finely chopped pears (about 2 pounds)	¼ teaspoon ground cinnamon
1 cup peeled, cored and finely chopped apples	6½ cups sugar
1 pouch liquid pectin	½ cup bottled lemon juice

Sterilize canning jars. Crush pears and apples in a large saucepan. Stir in cinnamon. Thoroughly mix sugar and lemon juice with fruits and bring to a boil over high heat, stirring constantly. Immediately stir in pectin. Bring to a full rolling boil and boil hard 1 minute, stirring constantly. Remove from heat; quickly skim off foam. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Plum Jam (about 8 half-pint jars)

2 quarts chopped tart plums (about 4 pounds)	1½ cups water
6 cups sugar	¼ cup lemon juice

Sterilize canning jars. Combine all ingredients; bring slowly to boiling, stirring occasionally until sugar dissolves. Cook rapidly almost to jellying point, about 20 minutes. As mixture thickens, stir frequently to prevent sticking. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Strawberry Jam (about 8 half-pint jars)

2 quarts crushed strawberries	6 cups sugar
-------------------------------	--------------

Sterilize canning jars. Combine berries and sugar; bring slowly to boiling, stirring occasionally until sugar dissolves. Cook rapidly until thick, about 40 minutes. As mixture thickens, stir frequently to prevent sticking. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

Strawberry-Kiwi Jam (about 6 half-pint jars)

3 cups crushed strawberries
3 kiwis, peeled and diced
1 tablespoon lemon juice

1 package powdered pectin
5 cups sugar
1 tablespoon minced crystallized ginger

Combine strawberries, kiwis, lemon juice, ginger and pectin in a large saucepot. Bring quickly to a boil, stirring frequently. Add sugar, stirring until dissolved. Return to a rolling boil. Boil hard 1 minute, stirring constantly. Remove from heat skim foam if necessary. Ladle hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 10 minutes in a **Boiling Water Bath**.

Spiced Tomato Jam With Powdered Pectin (about 5 half-pint jars)

3 cups prepared tomatoes (about 2 ¼ pounds)
1½ teaspoons grated lemon rind
½ teaspoon ground allspice
1 box powdered pectin

½ teaspoon ground cinnamon
¼ teaspoon ground cloves
4½ cups sugar
¼ cup lemon juice

To Prepare Fruit – Wash firm-ripe tomatoes. Scald, peel, and chop tomatoes. Cover and simmer 10 minutes, stirring constantly. Measure 3 cups tomatoes into a saucepot. Add lemon rind, allspice, cinnamon and cloves.

To Make Jam – Sterilize canning jars. Place prepared fruit into a saucepot. Add lemon juice. Measure sugar and set aside. Stir powdered pectin into prepared fruit. Bring to a boil over high heat, stirring constantly. At once, stir in sugar. Stir and bring to a full rolling boil. That cannot be stirred down. Then boil hard for 1 minute, stirring constantly. Pour hot jam into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

PRESERVE RECIPES

Apple Preserves (about 6 half-pint jars)

6 cups peeled, cored, sliced apples
1 cup water
1 tablespoon lemon juice
2 teaspoons ground nutmeg

1 package powdered pectin
½ lemon, thinly sliced (optional)
4 cups sugar

Sterilize canning jars. Combine apples, water and lemon juice in a large saucepot. Simmer covered for 10 minutes. Stir in pectin and bring to a full rolling boil, stirring frequently. Add lemon slices (optional) and sugar. Return to a full rolling boil. Boil hard 1 minute stirring frequently. Remove from heat; add nutmeg. Pour hot preserves into hot jars, leaving ¼ inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Fig Preserves (about 10 half-pint jars)

3 quarts figs	1½ quarts water
3 quarts boiling water	2 lemons, thinly sliced (optional)
4 cups sugar	

Pour 3 quarts boiling water over figs. Let stand 15 minutes. Drain and discard liquid. Rinse figs in cold water and drain. Prepare syrup by mixing sugar, 1½ quarts water and lemon. Boil rapidly 10 minutes. Skim syrup, remove and discard lemon slices. Drop figs into syrup, a few at a time. Cook rapidly until figs are transparent. Remove figs and place in shallow pan. Boil syrup until thick, pour over figs and let stand 6 to 8 hours. Sterilize canning jars. Reheat figs and syrup to boiling. Pour hot preserves into hot jars, leaving ¼ inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Old-Fashioned Peach Preserves (about 7 half-pint jars)

2 quarts sliced, peeled, hard ripe peaches (about 10 large)	6 cups sugar
--	--------------

Combine fruit and sugar; let stand 12 to 18 hours in refrigerator. Sterilize canning jars. Bring fruit and sugar slowly to boiling, stirring frequently. Boil gently until fruit becomes clear and syrup thick, about 40 minutes. As mixture thickens, stir frequently to prevent sticking. Skin, if necessary. Pour hot preserves into hot jars, leaving ¼ inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Pear Preserves (about 5 half-pint jars)

1½ cups sugar	1½ cups sugar
2½ cups water	1 thinly sliced lemon
6 medium cored, pared, hard, ripe pears, cut in halves or quarters (about 2 pounds)	

Combine 1½ cups sugar with the 2½ cups water; cook rapidly for 2 minutes. Add pears and boil gently for 15 minutes. Add remaining sugar and lemon stirring until sugar dissolves. Cook rapidly until fruit is clear about 25 minutes. Cover and let stand 12 to 24 hours in refrigerator.

Sterilize canning jars. Heat fruit and syrup to boiling. Pack fruit into hot jars, leaving ¼-inch headspace. Cook syrup 3 to 5 minutes, or longer if too thin. Pour hot syrup over fruit, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

NOTE: Small pears may be preserved whole with stem intact; peel pears and wash stem well. For best flavor, Kieffer pear preserves should be stored in a cool, dry place from 3 to 5 weeks after processing before using. A piece of preserved ginger may be added to each jar.

Plum Preserves (about 5 half-pint jars)

5 cups pitted, tart plums (about 2½ pounds) 4 cups sugar
1 cup water

Sterilize canning jars. Combine all ingredients. Bring slowly to boiling, stirring until sugar dissolves. Cook rapidly almost to the jelling point, about 15 minutes, stirring frequently to prevent sticking. Pour hot preserves into hot jars, leaving ¼ inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Quince Preserves (about 4 half-pint jars)

3 cups sugar 7 cups quartered, cored, pared quince
2 quarts water (about 3 pounds before preparing)

Sterilize canning jars. When preparing quince, discard all gritty parts. Combine sugar and water; boil 5 minutes. Add quince and cook until fruit has a clear, red color and syrup is almost at jelling point, about 1 hour. As mixture thickens, stir frequently to prevent sticking. Pour hot preserves into hot jars, leaving ¼ inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Strawberry Preserves Deluxe (about 4 half-pint jars)

1½ quarts, stemmed, firm, red, ripe 5 cups sugar
strawberries 1/3 cup lemon juice

Berries with hollow cores should not be used. Combine strawberries and sugar; let stand 3 to hours in refrigerator.

Sterilize canning jars. Bring slowly to boiling, stirring occasionally until sugar dissolves. Add lemon juice. Cook rapidly until berries are clear and syrup thickens, about 10 to 12 minutes. Pour into a shallow pan. let stand uncovered 12 to 24 hours in refrigerator. Shake pan occasionally to distribute berries through syrup. Heat mixture and pour hot preserves into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Strawberry-Fig Preserves (8 half-pint jars)

3 cups mashed figs 3 cups sugar
2 packages (3 ounces each) strawberry gelatin

Sterilize canning jars. Wash, peel, and mash figs. Place figs, gelatin, and sugar in large pan and bring to a boil. Lower heat and continue to boil 3 to 5 minutes, stirring often. Pour hot preserves into hot jars, leaving ¼ inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Watermelon Rind Preserves (about 6 half-pint jars)

1½ quarts prepared watermelon rind	1 tablespoon ground ginger
4 tablespoons salt	4 cups sugar
2 quarts cold water	¼ cup lemon juice
1 thinly sliced lemon (optional)	7 cups water

To Prepare Watermelon Rind - Trim green skin and pink flesh from thick watermelon rind; cut into 1-inch pieces. Dissolve salt in 2 quarts water and pour over rind; let stand for 5 to 6 hours in refrigerator. Drain; rinse and drain again. Cover with cold water and let stand 30 minutes. Drain. Sprinkle ginger over rind; cover with water and cook until fork tender. Drain.

To Make Preserves – Sterilize canning jars. Combine sugar, lemon juice and 7 cups water. Boil 5 minutes; add rind and boil gently for 30 minutes. Add sliced lemon and cook until the melon rind is clear. Pack hot preserves into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in **Boiling Water Bath**.

MARMALADE RECIPES

NOTE: When peeling citrus fruits for marmalades, be sure to include some of the white membrane found just under the skin. this is where the most pectin is located.

Citrus Marmalade (3 or 4 half-pint jars)

¾ cup grapefruit peel (from 1/2 grapefruit)	Pulp of 1 grapefruit
¾ cup orange peel (1 orange)	Pulp of 4 medium-sized oranges
½ cup lemon peel (1 lemon)	2 cups boiling water
1-quart cold water	3 cups sugar

To Prepare Fruit – Wash and peel fruit. Cut peel in thin strips into a saucepan. Add cold water and simmer, covered, until tender (about 30 minutes). Drain.

Remove seeds and membrane from peeled fruit. Cut fruit into small pieces.

To Make Marmalade – Sterilize canning jars. Combine peel and fruit in saucepan, add boiling water and sugar. Boil rapidly to 8°F above the boiling point of water (about 20 minutes), stirring frequently. Remove from heat, skim. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Grape Marmalade

To Prepare Fruit – Select grapes about one-half of which are slightly underripe. Wash and stem the fruit. Separate the pulp from the skins. Cook pulp for 10 minutes and press through a sieve or colander to remove seeds. Add 3/4 cup water to each quart of skins and boil until tender. Put the pulp and skins together and measure.

To Make Marmalade – Sterilize canning jars. For every quart of the mixture, use 1 pound of sugar. Bring the fruit to a boil. Add the sugar; cook rapidly, stirring frequently until the jelling point is reached. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Orange Marmalade (about 7 half-pint jars)

4 cups thinly sliced orange peel (about 6 large oranges)	1 cup thinly sliced lemon (about 2 medium)
4 cups orange pulp, cut up (about 6 large oranges)	6 cups water
	Sugar (about 6 cups)

To Prepare Fruit – Add water to fruit in a saucepan. Heat to simmer and simmer for 5 minutes. Cover and let stand 12 to 18 hours in refrigerator. Heat and cook over medium heat until peel is tender, about 1 hour.

To Make Marmalade – Sterilize canning jars. Measure fruit and liquid. Add 1 cup sugar for each cup of fruit mixture. Bring slowly to boiling, stirring until the water dissolves. Cook rapidly to the jelling point, about 25 minutes, stirring occasionally. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Peach Marmalade (about 7 half-pint jars)

3 pounds peaches	1½ pints water
3 oranges	6 ¾ cups sugar

To Prepare Fruit – Wash, peel, and slice peaches into very thin strips or pieces. Peel oranges and thinly slice peel. Separate seeds and membrane from orange pulp. Cut pulp into pieces.

To Make Marmalade - Sterilize canning jars. boil sugar and water until dissolved and then add the fruit. Cook rapidly, stirring frequently until jelling point is reached. The finished product shows the fruit appearing in small pieces throughout the mixture and is a smooth consistency. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Pear Marmalade (about 2 half-pint jars)

2 pounds pears	1 cup water
4½ cups sugars	2 oranges (optional)

To Prepare Fruit – Wash and cut pears into small strips or pieces. Peel and cut up the oranges, discarding seeds and membranes, using one-half the peel chopped into small pieces.

To Make Marmalade – Sterilize canning jars. Combine all ingredients. Cook rapidly until thick and transparent, stirring frequently as it thickens. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Pear Honey Marmalade (about 2 half-pint jars)

4 cups prepared pears
1 cup crushed pineapple

4 cups sugar

To Prepare Fruit – Wash, peel pears, and put through food chopper, using coarse blade.

To Prepare Marmalade – Sterilize canning jars. Combine all ingredients. Bring to a boil, stirring occasionally. Cook rapidly until jelling point is reached. Stir as mixture thickens to prevent sticking. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

NOTE: To vary pear honey, you may use orange and lemon pulp instead of pineapple. Remove seeds from these and put through food chopper, using 2 oranges and 1 lemon to 5 cups of ground pears.

Tomato Marmalade (about 9 half-pint jars)

3 quarts ripe tomatoes (about 5 ½ pounds
Tomatoes)
3 oranges
3 lemons
4 sticks cinnamon (3-inch pieces)

6 whole allspice
1 tablespoon whole cloves
6 cups sugar
1 teaspoon salt

To Prepare Fruit – Peel tomatoes; cut tomatoes in small pieces. Drain. Slice oranges and lemons very thin; quarter the slices. Tie cinnamon, allspice and cloves in a cheesecloth bag.

To Make Marmalade – Sterilize canning jars. Place tomatoes in a large kettle. Add sugar and salt; stir until dissolved. Add oranges, lemon and spice bag. Boil rapidly, stirring constantly, until thick and clear (about 50 minutes). Remove from heat, skim. Pour hot marmalade into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

CONSERVE RECIPES

Blueberry Conserve (about 4 half-pint jars)

2 cups water
4 cups sugar
½ thinly sliced lemon

½ thinly sliced orange
½ cup seedless raisins
1-quart stemmed blueberries

Sterilize canning jars. Bring water and sugar to boiling. Add lemon, orange, and raisins; simmer 5 minutes. Add blueberries and cook rapidly until thick, about 30 minutes. As mixture thickens, stir

frequently to prevent sticking. Pour hot conserve into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Cranberry Conserve **(about 4 half-pint jars)**

1 unpeeled, finely chopped orange	1-quart cranberries, washed
2 cups water	½ cup seedless raisins
3 cups sugar	½ cup chopped nuts

Sterilize canning jars. Combine orange and water; cook rapidly until peel is tender (about 20 minutes). Add cranberries, sugar and raisins. Bring slowly to boiling, stirring occasionally until sugar dissolves. Cook rapidly, almost to the jelling point of 220°F (about 8 minutes). As mixture thickens, stir frequently to prevent sticking. Add nuts during the last 5 minutes of cooking. Pour hot conserve into hot jars, leaving 1/4-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Grape Conserve **(about 7 half-pint jars)**

2 quarts stemmed grapes (about 4 pounds)	1 cup chopped walnuts or other nuts
6 cups sugar	

To Prepare Fruit – If using Tokay or Malaga grapes, cook grapes whole. Otherwise, separate pulp from skins of grapes. Cook skins 15 to 20 minutes, adding only enough water to prevent sticking (about 1/2 cup). Cook pulp without water until soft; press through a sieve or food mill to remove seeds.

To Make Conserve – Sterilize canning jars. Combine skins, pulp and sugar. Bring slowly to boiling, stirring occasionally until sugar dissolves. Cook rapidly until thick, about 15 minutes. Stir frequently to prevent sticking. Add nuts the last 5 minutes of cooking. Pour hot conserve into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Peach Conserve **(about 8 half-pint jars)**

1 unpeeled chopped orange	5 cups sugar
7 cups chopped, peeled, firm, ripe peaches (about 10 to 12 large)	½ teaspoon ground ginger
	½ cup blanched, slivered almonds

Sterilize canning jars. Add orange to peaches; cook gently about 15 to 20 minutes. Add sugar and ginger. Bring slowly to boiling, stirring occasionally until sugar dissolves. Cook rapidly until thick, about 15 minutes. As mixture thickens, stir occasionally to prevent sticking. Add nuts the last 5 minutes of cooking. Pour hot conserve into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Pear Conserve **(about 3 half-pint jars)**

2 pounds prepared pears
3 cups sugar
½ cup water

½ cup chopped pecan meats
1 orange

To Prepare Fruit – Cut pears into small chips. Peel the orange and chop into small pieces.

To Make Conserve – Sterilize canning jars. Mix fruits, sugar, and water; bring to boiling point. Cook rapidly until clear and transparent and jelling point is reached. Add nuts last 5 minutes of cooking time. Pour hot conserve into hot jars, leaving 1/4-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Plum Conserve (about 10 half-pint jars)

2½ quarts chopped, pitted plums (about
4 pounds)
¾ cup thinly sliced orange peel
2 cups seedless raisins

1¾ cups chopped orange pulp (about 2 large)
6 cups sugar
2 cups broken pecans or other nuts

Sterilize canning jars. Combine plums, orange pulp and peel, raisins, and sugar; slowly bring to boiling, stirring occasionally until sugar dissolves. Cook rapidly almost to jelling point, about 15 to 20 minutes. As mixture thickens, stir frequently to prevent sticking. Add nuts the last 5 minutes of cooking. Pour hot conserve into hot jars, leaving 1/4-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

FRUIT BUTTER RECIPES

Apple Butter (about 9 or 10 half-pint jars)

8 pounds apples
2 cups cider
2 cups vinegar
2¼ cups white sugar

2¼ cups packed brown sugar
2 tablespoons ground cinnamon
1 tablespoon ground cloves

Wash, remove stems, quarter and core fruit. Cook slowly in cider and vinegar or until soft. Press fruit through a colander, food mill, or strainer. Cook fruit pulp with sugar and spices, stirring frequently. To test for doneness, remove a spoonful and hold it away from steam for 2 minutes. It is done if the butter remains mounded on the spoon. Another way to determine when the butter is cooked adequately is to spoon a small quantity onto a plate. When a rim of the liquid does not separate around the edge of the butter, it is ready for processing. Meanwhile, sterilize canning jars. Pour hot butter into hot half-pint or pint jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids process 5 minutes in a **Boiling Water Bath**.

Reduced Sugar Apple Butter (about 4 to 5 half-pint jars)

4 pounds apples*	1 tablespoon ground cinnamon
1 cup apple cider	¼ teaspoon ground cloves
½ cup granulated sucralose*	½ teaspoon ground allspice

*For testing purposes, Golden Delicious apples and Splenda ® were used.

Wash apples well and remove stems. Cut apples into quarters or eighths and remove cores. Combine unpeeled apples and cider in 8-quart saucepan. Cook slowly and stir occasionally to prevent sticking. Cook until apples are very soft (falling apart). Position a food mill or strainer securely over a large bowl. Press cooked apples with cider through the food mill or strainer to make a pulp. Be sure to collect all the pulp that comes through the food mill or strainer; for example, scrape any pulp clinging under the food mill into the bowl.

Combine apple pulp with sucralose and spices in an 8-quart saucepan. Simmer over low heat, stirring frequently, until thickened. To test for doneness as a butter, spoon a small quantity onto a clean plate. When the butter mounds on the plate without liquid separating around the edge of the butter, it is ready for processing. Another way to test for doneness is to remove a spoonful of the cooked butter on a spoon and hold it away from steam for 2 minutes. It is done if the butter remains mounded on the spoon.

Fill hot apple butter into clean hot jars, leaving ¼-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe jar rims with a clean, dampened paper towel. Adjust lids. Process 15 minutes in a **Boiling Water Bath**.

Grape Butter (about 8 half-pint jars)

5 pounds grape pulp and ground hulls	2 teaspoons ground mace
5 cups sugar	2 drops clove oil
2½ teaspoons ground cinnamon	

Wash and crush grapes. Separate hulls and pulp. Heat pulp with juice and put through a colander to remove seeds; grind hulls in a food chopper, using a fine blade. Combine deseeded pulp, juice and hulls. Cook until hulls are tender. Add sugar and spices. Cook very slowly, stirring repeatedly, until the mixture is very thick, with a jelly-like consistency. Meanwhile, sterilize canning jars. Pour hot butter into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Mayhaw Butter (about 6 half-pint jars)

8 cups mayhaw pulp (about 3 pounds mayhaws)	2 quarts water
4 cups sugar	

Peach Honey

8 cups peach juice (from peelings)

4 cups sugar

Sterilize canning jars. Measure juice, bring to a boil. When it boils vigorously, add sugar. Boil rapidly until the consistency of honey. Pour into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Pear Honey

8 cups pear juice (from peelings)

4 cups sugar

Juice of 1 lemon (if desired)

Sterilize canning jars. Measure juice, bring to a boil. When it boils vigorously, add sugar and lemon juice. Boil rapidly until the consistency of honey. pour into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

Strawberry Honey

9 cups strawberry juice

4 cups sugar

Sterilize canning jars. Wash and cap strawberries. Crush and add 1 cup water to 1-quart berries. Cook slowly for 15 minutes, strain, measure and bring to a boil. When it boils vigorously, add sugar. Boil rapidly until the consistency of honey. Pour into hot jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

FRUIT SYRUP RECIPES

Berry Syrup (about 2 half-pint jars)

1¼ cups prepared blackberry, blueberry,
raspberry or strawberry juice

¼ cup corn syrup

1 tablespoon lemon juice

1½ cups sugar

To Prepare Juice – Select table-ripe berries. Do not use underripe berries. Wash, cap, and remove stems. Crush berries and heat to a boil. Simmer 1 or 2 minutes. Extract juice.

To Make Syrup – Sterilize canning jars. Combine ingredients in a saucepan. Bring to a rolling boil and boil one minutes. Remove from heat and skim off foam. Pour into hot half-pint jars. Leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 10 minutes in a **Boiling Water Bath**.

Grape Syrup **(about 2 half-pint jars)**

1 cup grape puree
1½ cups sugar

¼ cup corn syrup
1 tablespoon lemon juice

To Prepare Puree – Wash and stem ripe grapes. In a large saucepot, heat grapes at a low heat setting for 8 to 10 minutes to loosen skins. DO NOT BOIL. Put through a food mill or wide mesh strainer. discard skins and seeds.

To Make Syrup – Sterilize canning jars. Combine ingredients in a saucepan. Bring to a rolling boil and boil 1 minute. Remove from heat and skim off foam. Pour into hot half-pint jars, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 5 minutes in a **Boiling Water Bath**.

CANNED SPREADS WITHOUT ADDED SUGAR

There are some methods for making jellied products without adding sugar or by adding less sugar than in a regular recipe that can be canned and stored at room temperature until opened. This cannot be done by simply leaving the sugar out of the recipe for regular pectin's. Naturally occurring pectin in fruit and purchased pectin's require a certain amount of sugar to gel.

Because these types of spreads do not have sugar as their preservative, be sure to process or store any of them as directed. Many recipes of these types also make smaller yields than regular jams and jellies. Without the sugar, they may lose quality more quickly than high sugar spreads during storage and once opened. All of these require refrigerator storage once opened.

There are two methods that can be used to create jellied products or fruit spreads without added sugar for room temperature storage:

1. **Special Modified Pectin's** – This is a quick, easy way to make lower sugar jellied products that can be stored on the pantry shelf until opened. These pectin's are not the same as regular pectin's. Look for packages that say "light," "less sugar," or "no sugar needed" on the label. Some products give the options of using no sugar with or without artificial sweeteners; others recommend reduced levels of sugar than a regular pectin. Specific recipes and directions are listed on the package insert. Follow the directions carefully for the brand of pectin you are using. Alterations in the recipe could result in product failures. we have not included recipes for these spreads in this book; follow the directions with the pectin you need to purchase.
2. **Long-Boil Methods** - Boiling fruit pulp for extended periods of time will make a product thicken and resemble a jam, preserve or fruit butter. Artificial sweetener may be added as desired. These recipes often require a longer canning process time than a pectin-gelled spread.

Peach-Pineapple Spread **(about 5-6 half-pint jars)**

4 cups drained peach pulp (procedure as below)
2 cups drained unsweetened crushed pineapple
¼ cup bottled lemon juice
2 cups sugar (optional)

Wash and rinse canning jars; keep hot until time to fill. Thoroughly wash 4 to 6 pounds of firm, ripe peaches. Drain well. Peel and remove pits. Grind fruit flesh with a medium or coarse blade, or crush with a fork (do not use a blender). Place ground or crushed fruit in a 2-quart saucepan. Heat slowly to release juice, stirring constantly, until fruit is tender. Place cooked fruit in a jelly bag or strainer lined with four layers of cheesecloth. Allow juice to drip about 15 minutes. Save the juice for jelly or other uses.

Measure 4 cups drained fruit pulp for making spread. Combine 4 cups of pulp, pineapple, and lemon juice in a 4-quart saucepan. Add up to 2 cups of sugar, if desired, and mix well. Heat and boil gently for 10 to 15 minutes, stirring enough to prevent sticking. Fill hot jars quickly, leaving ¼-inch headspace. Wipe jar rims and adjust lids. Process 15 minutes for half-pints and 20 minutes for pints in a **Boiling Water Bath**.

NOTE: This recipe may be made with any combination of peaches, nectarines, apricots, and plums. This recipe may be made without sugar or with up to 2 cups, according to taste or preference. Artificial sweeteners may be added. If aspartame (a low-calorie nutritive sweetener) is used, the sweetening power of aspartame may be lost with 3 to 4 weeks.

REFRIGERATOR/FREEZER SPREADS

This section contains several options for sweet spreads that are not canned for room temperature storage and must be stored in the refrigerator or freezer to prevent spoilage by molds or yeasts. Some use pectin and sugar while others use gelatin and artificial sweeteners.

It is recommended that some of these initially sit at room temperature until the gel forms. For those recipes specifying this step, do not store them in the freezer until after the gel is formed which could take up to 24 hours. Placing them in the freezer too soon will prevent the jam or jelly from “setting.” However, if they have not gelled within 24 hours they must be refrigerated or frozen as is. Do not leave them out at room temperature and longer than 24 hours.

After the gel is formed, these spreads generally can be kept up to three weeks in a refrigerator or up to a year in a freezer. Freezer storage is best for maintaining natural color as well as flavor. If kept at room temperature, they will mold or ferment in a short time. Once a container is removed from the freezer, the product should be kept refrigerated. Use within a few days to one week for best quality. These products tend to separate more quickly than cooked and canned jellied products. If they do separate but show no signs of spoilage, they can be stirred to re-mix the contents.

Two methods for making jellied refrigerator spreads without added sugar are common:

1. **Regular Pectin With Special Recipes** – These special recipes have been formulated so that no added sugar is needed. However, each package of regular pectin does contain some sugar. Artificial sweetener is often added. This book only has two recipes of this type (peach and strawberry).
2. **Recipes Using Gelatin** – Some recipes use unflavored gelatin as the thickener for the jelly or jam. Artificial sweetener is often added.

NOTE: The sweetener used in the following recipes is liquid saccharin. One-eighth (1/8) teaspoon of liquid saccharin equals the sweetening power of one teaspoon of sugar. If you use other sweeteners, read the label to determine their sweetening power.

Refrigerator/Freezer Spreads with Sugar

Uncooked Berry Jelly (about 6 half-pint jars)

3 cups unsweetened berry juice – fresh or 4½ cups sugar
 Frozen (strawberry, raspberry, or blackberry) 1 box powdered pectin
½ cups water

Add the sugar to 1 ¼ cups of berry juice. Stir thoroughly. Add the pectin slowly to the water. Heat almost to boiling, stirring constantly. Pour the pectin mixture into the remaining 1 ¾ cups of berry juice. Stir until pectin is completely dissolved. Let the pectin mixture stand for 15 minutes. Stir occasionally. Mix the juice mixture with pectin mixture. Stir until all sugar is dissolved.

Pour into freezer containers or canning jars, leaving ½-inch headspace. Cover with a tight lid. Let stand at room temperature until set (up to 24 hours). Store in refrigerator or freezer.

Uncooked Grape Jelly (about 5 half-pint jars)

1 box powdered pectin 1-ounce can frozen grape juice concentrate
1 box powdered pectin 3 ¼ cups sugar

Mix the pectin slowly into the lukewarm water in a two-quart mixing bowl. Stir constantly until completely dissolved. Let stand 45 minutes. Stir occasionally but do not beat.

Thaw juice by placing can in cold water. When juice is thawed, pour into one-quart mixing bowl. Add 1¾ cups sugar. Mix thoroughly. All the sugar will not be dissolved. Add the remaining 1½ cups of sugar to the dissolved pectin. Stir until all sugar is dissolved. Mix the juice mixture with the pectin mixture. Stir constantly until all sugar is dissolved.

Pour into freezer containers or canning jars. Leaving ½-inch headspace. Cover with a tight lid. Let stand at room temperature until set (up to 24 hours). Freeze or refrigerate.

Uncooked Orange Jelly (about 6 half-pint jars)

1 box powdered pectin 4½ cups sugar
2 cups lukewarm water ¼ cup fresh lemon juice
1 6-ounce can frozen orange juice concentrate

Mix the pectin slowly into the lukewarm water in a two-quart mixing bowl. Stir constantly until completely dissolved. Let stand 45 minutes. Stir occasionally but do not beat.

Thaw juice by placing can in cold water. When juice is thawed pour into a one-quart bowl. Add the lemon juice and 2 ½ cups of the sugar. Mix thoroughly. All the sugar will not dissolve. Add the remaining two cups of sugar to the dissolved pectin. Stir until all sugar is dissolved. Mix the juice mixture with the pectin mixture. Stir constantly until all the sugar is dissolved.

Pour into freezer containers or canning jars, leaving ½-inch headspace. Cover with a tight lid. Let stand at room temperature until set (up to 24 hours) Freeze or refrigerate.

**Uncooked Blackberry or Raspberry Jam
from Fresh Fruit
(about 7 half-pint jars)**

3 cups crushed blackberries or raspberries (about 1½ quarts)	5½ cups sugar 1 box powdered pectin and ¾ cup water
---	--

If blackberries are very seedy, put part or all of them through a sieve or food mill. Measure 3 cups of prepared berries. Place in an extra-large mixing bowl. Add sugar, mix well and let stand for 10 minutes, stirring occasionally.

Dissolve the powdered pectin in the water, bring to a boil and boil for one minute. Add pectin to berries and sugar and stir for 3 minutes.

Pour the jam into freezer containers or canning jars, leaving ½-inch headspace at the top. Cover container. Let stand at room temperature until set (up to 24 hours). Freeze or refrigerate.

**Uncooked Strawberry Jam from Fresh Fruit
(about 4 half-pint jars)**

1¾ cups crushed strawberries (about 1 quart)	2 tablespoons lemon juice
4 cups sugar	1 pouch liquid pectin

Measure 1 ¾ cups crushed strawberries. Place in an extra-large bowl. Add sugar, mix well and let stand for 10 minutes.

Measure lemon juice into a small bowl. Add liquid pectin and stir well. Stir into fruit and continue stirring for 3 minutes.

Pour jam into freezer containers or canning jars, leaving ½-inch headspace. Cover container. Let stand at room temperature until set (up to 24 hours). Freeze or refrigerate.

Refrigerator/Freezer Spreads Without Added Sugar

**Peach Jam with Pectin
(about 3 half-pint jars)
1 tablespoon = 10 calories**

4 cups peeled peaches	½ teaspoon ascorbic acid
3 to 4 teaspoon liquid artificial sweetener	1¾-ounce package powdered fruit pectin
1 tablespoon lemon juice	

Crush peaches in saucepan. Stir in sweetener, fruit pectin, lemon juice and ascorbic acid. Bring to a boil; boil 1 minute. Remove from heat. Continue to stir 2 minutes. Pour into freezer containers, cover and freeze. Thaw for use, then keep refrigerated.

Strawberry Jam with Pectin
(about 2 or 3 half-pint jars)
1 tablespoon = 5 calories

1-quart cleaned strawberries	1 package powdered fruit pectin
3 to 4 teaspoon liquid artificial sweetener	1 tablespoon lemon juice
Red food coloring as desired	

Crush strawberries in 1 ½ quart saucepan. Stir in artificial sweetener, food coloring, powdered fruit pectin, and lemon juice. Bring to a boil and boil 1 minute. Remove from heat. Continue to stir 2 minutes. Pour into freezer containers, cover and freeze. Thaw for use, then keep refrigerated.

Apple Jelly from Bottled Juice
(about 4 half-pint jars)
1 tablespoon = 10 calories

2 packages or 2 tablespoons unflavored gelatin	2 tablespoons lemon juice
1-quart unsweetened apple juice	2 tablespoons liquid sweetener
Food coloring, if desired	

Sterilize jars. In a saucepan soften gelatin in apple juice and lemon juice. Bring to a rolling boil, dissolving gelatin; boil 1 minute. Remove from heat. Stir in liquid sweetener and food coloring. Pour into hot sterilized jars. Seal, cool and store in refrigerator.

Apple Jelly with Gelatin
(about 2 half-pint jars)
1 tablespoon = 9 calories

4 tablespoons unflavored gelatin	2 tablespoons liquid sweetener
2 cups unsweetened apple juice	1½ tablespoons lemon juice
Food coloring, if desired	

Sterilize jars. Soften gelatin in ½ cup of apple juice. Bring remaining 1 ½ cups juice to a boil; remove from heat. Add softened gelatin, stirring to dissolve. Add liquid sweetener, lemon juice and coloring. Bring to a full rolling boil. Pour into sterilized jars. Seal, cool, and store in the refrigerator.

Grape Jelly with Gelatin
(about 3 half-pint jars)
1 tablespoon = 11 calories

2 packages or 2 tablespoons unflavored gelatin	1 bottle (24 ounces) unsweetened grape juice
2 tablespoons lemon juice	2 tablespoons liquid sweetener

Sterilize jars. In a saucepan, soften gelatin in lemon juice and grape juice. Bring to a rolling boil, dissolving gelatin; boil 1 minute. Remove from heat. Stir in liquid sweetener. Pour into hot sterilized jars. Seal, cool and store in the refrigerator.

Refrigerator Apple Butter
(about 10 half-pint jars)
1 tablespoon = 10 calories

Cored and sliced ripe apples – enough to fill a 6-quart pot	½ teaspoon salt
½ cup water	5 drops cinnamon oil
	Sweetener to equal 2 cups sugar

Sterilize canning jars. Heat apples and water, covered over medium heat for 6 to 8 hours, stirring frequently. Press through a sieve. Reheat and add salt, cinnamon oil and sweetener. Cook to the desired thickness. Pour into hot sterilized jars. Seal, cool and store in the refrigerator.

MICROWAVE JELLIED PRODUCTS

Jellied products can be made in the microwave, but they don't always save time. When making microwave products, it is important to use a recipe developed for a microwave oven. It is even better to use a recipe developed for your microwave. Because of power variations between microwaves, a recipe developed for one brand of microwave may not work for another, without experimenting. Microwave jellied products boil over easily, so be sure to use a deep bowl for cooling the product.

REMAKING RUNNY JELLY AND JAM

To Remake Cooked Jelly Without Added Pectin

If the fruit juice was not acid enough, add 1 ½ teaspoons lemon juice per cup jelly before boiling. Heat the jelly to boiling and boil until the jelling point is reached. Remove jelly from heat, skim, pour immediately into sterilized hot containers and seal and process for 5 minutes.

To Remake Cooked Jelly or Jam With Powdered Pectin

Recook a trial batch using 1 cup of jelly first. Measure jelly or jam to be recooked. Don't recook more than 8 cups at one time. For each cup of jelly or jam, measure 2 tablespoons sugar, 1 tablespoon water and 1 ½ teaspoons of powdered pectin. (Stir the package contents well before measuring) Mix the pectin and water and bring to a boil, stirring constantly. Add jelly or jam and sugar. Stir thoroughly. Bring to a full rolling boil over high heat, stirring constantly. Boil mixture hard for ½ minute. Remove from heat, skim and pour into hot, sterilized containers. Seal as recommended. Remember, all jellied products must be processed in a **Boiling Water Bath** for at least 5 minutes or time specified in the recipe.

To Remake Cooked Jelly or Jam With Liquid Pectin

Recook a trial batch using 1 cup of jelly or jam first. Measure jelly or jam to be recooked. Don't recook more than 8 cups at one time. For each cup of jelly or jam, measure 3 tablespoons sugar, 1 ½ teaspoons lemon juice and 1 ½ teaspoons of liquid fruit pectin, place jelly or jam in a saucepot and bring to a boil, stirring constantly. At once add sugar, lemon juice and liquid pectin. Bring to a full rolling boil, stirring

constantly, and boil hard for 1 minute. Remove from heat, skim and pour into hot, sterilized containers. Seal and process 5 minutes in a **Boiling Water Bath**.

To Remake Uncooked Jelly or Jam With Liquid Pectin

Remake a trial batch using 1 cup of jelly or jam first. Measure jelly or jam to be remade. Do not remake more than 8 cups at one time. In a bowl, mix jelly or jam and for each 1 cup of jelly or jam add 3 tablespoons sugar and 1 ½ teaspoons lemon juice. Stir well until sugar is dissolved (about 3 minutes). Add 1 ½ teaspoons liquid pectin per cup of jelly or jam and stir until well blended (about 3 minutes). Pour into clean containers. Cover with tight lids. Let stand in refrigerator until set. Then store in refrigerator or freezer.

To Remake Uncooked Jelly or Jam With Powdered Pectin

Remake a trial batch using 1 cup of jelly or jam first. Measure jelly or jam to be remade. Do not remake more than 8 cups at one time. In a bowl, mix jelly or jam and 2 tablespoons sugar for each cup of jelly or jam. Stir well until dissolved (about 3 minutes). Measure 1 tablespoon water and 1 ½ teaspoons powdered pectin for each cup of jelly or jam. Place in small saucepan and place over low heat, stirring, until the powdered pectin is dissolved. Add to the sugar and fruit mixture and stir until thoroughly blended (about 2-3 minutes). Pour into clean containers. Cover with tight lids. Let stand in refrigerator until set. Then store in refrigerator or freezer.

MOST FREQUENTLY ASKED JELLIED FRUIT PRODUCTS QUESTIONS

1. Why should cooked jelly be made in small batches?

If a larger quantity of juice is used, it will be necessary to boil it longer thus causing loss of flavor, darkening of jelly, and toughening of jelly.

2. Should jelly be boiled slowly or rapidly?

It should be boiled rapidly since long; slow boiling destroys the pectin in the fruit juice.

3. What do I do if there's mold on my jellied fruit product?

If the mold is extensive, discard all of the product. If there is a slight amount of mold on the surface, discard the mold. Then remove ½-inch of the good product underneath and around it.

4. Why did my jellied fruit product ferment, and what do I do?

Jellied fruit products may ferment because of yeast growth. This can occur if the product is improperly processed and sealed, or if the sugar content is low. Fermented fruit products have a disagreeable taste. Discard them.

REMEDIES FOR SWEET SPREAD PROBLEMS

Problem	Cause	Prevention
I. JELLIES Formation of crystals	1. Excess sugar. 2 Undissolved sugar sticking to sides of saucepot. 3 Tartrate crystals in grape juice. 4. Mixture cooked to slowly or too long.	1. Test fruit juice with jelmeter for proper proportions of sugar. 2. Wipe all crystals from side of pan with damp cloth before filling jars. 3. Extract grape juice and allow tartrate crystals to settle out by refrigerating the juice overnight. Strain juice to remove any remaining crystals before making jelly. 4. Cook at a rapid boil. Remove from heat immediately when jelling point is reached.
Bubbles	1. Pot was not held close to the top of jar as jelly was poured, or jelly was poured slowly and air became trapped in hot jelly. 2. May denote spoilage. If bubbles are moving, do not use.	1 Hold pot close to top of jars and pour jelly quickly into jar. 2. Follow recommended methods to get an airtight seal.
Too soft	1. Overcooking fruit to extract juice. 2. Using too much water to extract the juice. 3. Incorrect proportions of sugar and juice. 4. Undercooking causing insufficient concentration. 5. Insufficient acid. 6. Making too large a batch at one time. 7. Moving product too soon.	1. Avoid overcooking as this lowers the jelling capacity of pectin. 2 Use only the amount of water suggested in the instructions. 3. Follow recommended proportions. 4. Cook rapidly to the jelling point. 5. Lemon juice is sometimes added if the fruit is acid deficient. 6. Use only 4 to 6 cups of juice in each batch of jelly. 7. Do not move jellied products for 12 hours after they are made.
Syneresis or "weeping"	1. Excess acid in juice makes pectin unstable. 2. Storage place too warm or storage temperature fluctuated.	1 Maintain proper acidity of juice. 2. Store in a cool, dark, and dry place.

REMEDIES FOR SWEET SPREAD PROBLEMS (continued)

Problem	Cause	Prevention
Darker than normal color	<ol style="list-style-type: none"> 1. Overcooking sugar and juice. 2. Stored too long or at too high a temperature. 	<ol style="list-style-type: none"> 1. Avoid long boiling. Best to make small quantity of jelly and cook rapidly. 2. Store in a cool place and use within one year.
Fermentation (denotes spoilage – do not use)	<ol style="list-style-type: none"> 1. Yeasts grow on jelly when seal is not airtight (especially in paraffin sealed jars). 	<ol style="list-style-type: none"> Process in a boiling water bath. Test seal before storing.
Mold	<ol style="list-style-type: none"> 1. Imperfect sealing 	<ol style="list-style-type: none"> 1. Sterilize jars and use recommended methods to get airtight seal.
Cloudiness	<ol style="list-style-type: none"> 1. Green fruit (starch). 2. Imperfect straining. 3. Juice allowed to stand before it was poured into jars or poured too slowly. 	<ol style="list-style-type: none"> 1. Use firm, ripe fruit or slightly underripe. 2. Do not squeeze juice but let it drip through the jelly bag. 3. Pour into jars immediately upon reaching gelling point. Work quickly.
Too stiff or tough	<ol style="list-style-type: none"> 1. Overcooking. 2. Too much pectin in fruit. 3. Too little sugar which requires excessive cooking. 	<ol style="list-style-type: none"> 1. Cook jelly mixture to a temperature 8° higher than the boiling point of water or until it “sheets” from a spoon. 2. Use ripe fruit. Decrease amount if using commercial pectin. 3. When pectin is not added, use ¾ cup sugar to 1 cup juice for most fruits.
II. PRESERVES		
Shriveled product	<ol style="list-style-type: none"> 1. Syrup is too heavy for the fruit. 	<ol style="list-style-type: none"> 1. Follow instructions for the type of fruit being preserved.
Not a characteristic fruit flavor	<ol style="list-style-type: none"> 1. Overcooked or scorched. 2. Poor quality fruit used. 	<ol style="list-style-type: none"> 1. Should be stirred frequently when mixture begins to thicken to prevent sticking. Cook only to jelling point. 2. Select only sound, good flavored fruit.

REMEDIES FOR SWEET SPREAD PROBLEMS (continued)

Problem	Cause	Prevention
Tough product	<ol style="list-style-type: none">1. Starting fruit in too heavy in a syrup.2. Not plumping fruit properly.3. Overcooking.	<ol style="list-style-type: none">1. Cook each fruit according to directions; by evaporation the syrup concentration will gradually increase.2. Fruit should plump at least 24 hours covered in syrup before canning.3. Cook according to directions.
Sticky, gummy product	<ol style="list-style-type: none">1. Overcooking.	<ol style="list-style-type: none">1. Follow accepted directions for each product. (Cook only until syrup is quite thick and fruit is fairly translucent).
Darker than normal color	<ol style="list-style-type: none">1. Cooking too large quantities at a time.2. Cooked too slowly.3. Overcooked.	<ol style="list-style-type: none">1. It is usually best to cook not more than 2 to 4 pounds of prepared fruit at a time.2. A better color is usually produced if the product is cooked rapidly.3. Cook only until syrup is quite thick and the fruit is fairly translucent.
Loss of color	<ol style="list-style-type: none">1. Improper storage.	<ol style="list-style-type: none">1. Store in a dark, dry, cool place.
Mold or fermentation	<ol style="list-style-type: none">1. Improper sealing.2. Failure to process finished product.3. Improper storage.	<ol style="list-style-type: none">1. Jars should be sealed airtight.2. Process preserved products in boiling water bath to protect against mold or fermentation.3. Store in a dark, dry, cool place.

Source: So Easy to Preserve, Sixth Edition

Website: <https://setp.uga.edu/>