

Preserving Uncooked Jams and Jellies

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Today's busy consumer has the option to preserve fresh fruits by using recipes for uncooked jams and jellies. Uncooked jams and jellies are different from regular jams and jellies in that they require no cooking of the fruit. Since no processing is required, these jams have to be stored in the refrigerator or the freezer instead of on a shelf. They can be made from most fresh or frozen fruits or fruit juices. The secret of making successful no-cook jam is the fruit pectin. Pectin helps jam set to the right consistency. Pectin will gel with certain proportions of fruit, acid and sugar even if the ingredients are combined when cold. Various brands of pectin, in both powdered and liquid forms, are available.

Uncooked jams and jellies are appealing for the following reasons:

- They are bright in color, characteristic of the fruit(s) from which they are made.
- The amount of ingredients called for is usually less than in cooked jams and jellies.
- They have a stronger fruit taste than cooked jams and jellies, unclouded by the caramelization flavors that result when cooking a high-sugar item over direct heat.
- They require less equipment in the kitchen than cooked jams and jellies, less time to prepare and less use of heat.

Jellied Products

Jams, jellies, preserves, conserves, marmalades and conserves are fruit products that are jelled and thickened. Each fruit product has its own individual characteristics based on the kind of fruit used and the way it is prepared, the ingredients and their proportions in the mixture, and the method of preparation.

Uncooked jams are thick, sweet spreads made by mixing crushed or chopped fruits with pectin and sugar. Although jams hold their shape, they are generally less firm than jellies.

Uncooked jellies are usually made by mixing fruit juice with sugar and pectin. A good product is clear and firm enough to hold its shape when taken out of the container.

Uncooked preserves are spreads containing small, whole fruit or uniformly sized pieces of fruit in a clear,

slightly gelled syrup, which is created by mixing the fruit sugar and pectin. The fruit should be tender and plump.

Uncooked conserves are jamlike products made from a mixture of fruits. Conserves may also contain nuts, raisins or coconut.

Uncooked marmalades are soft fruit jellies containing small pieces of fruit or peel. Marmalades often contain citrus fruit.

Fruit butters are sweet spreads made by cooking fruit pulp with sugar to a thick consistency. Spices are often added. Because butters are not gelled, there is no uncooked equivalent of this product.

Essential Ingredients

A proper ratio of fruit, pectin, acid and sugar is needed for successful jellied products. Follow directions exactly.

Fruit



For best color, flavor and consistency, choose ripe fruit (shape is irrelevant). You can also use unsweetened, canned or frozen fruit, or you can use fruit juice to make jellied products. Because commercially canned or frozen products are made from fully ripe fruit (which is lower in pectin than under-ripe fruit), pectin must be added. If you preserve your own fruit or fruit juice, use some slightly under-ripe fruit (usually one-fourth slightly under-ripe and three-fourths fully ripe is recommended). Fruit to be used later for jam is best canned in its own juice. If adding sugar, note on each jar how much sugar the fruit contains. This will be needed to adjust recipes later.

Pectin

Pectin is the natural substance in fruit that causes the fruit juice to gel. Some kinds of fruit have enough natural pectin to make a firm gel; others require added pectin. The best type of pectin is found in just-ripe fruit. Pectin from under-ripe or overripe fruit will not form a gel. Commercially frozen and canned juices may be lower in natural pectin and make soft-textured spreads.



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Fruits containing enough natural pectin to form a gel include crab apples, tart apples, sour blackberries, sour boysenberries, most plums, cranberries, lemons and wild grapes (Eastern Concord variety). Fruits low in pectin include sweet cherries, quince, ripe blackberries, sour cherries, grapefruit, grapes, melons and oranges. With these latter fruits, you will usually need to add pectin. Fruits always requiring added pectin are peaches, pears, figs, apricots, elderberries, strawberries, raspberries, grapes (Western Concord variety), guava and pomegranates.

Commercial pectins are made from apples or citrus fruits and are available in both powdered and liquid forms. Be sure to follow the manufacturer's directions when using commercial pectin. **The powdered and liquid forms are not interchangeable in recipes.** Commercial pectins may be used with any fruit. Unlike cooked jams and jellies, freezer jams and jellies can be made using only commercial pectin.

Acid

Acid aids in gel formation and enhances flavor. The acid content varies among fruits and is higher in under-ripe fruits. When fruits are low in acid, add lemon juice or citric acid. Added acid is always required with some types of commercial pectins. Sometimes the acid is already combined with the commercial pectin. Check the ingredients list.

Sugar and Artificial Sweeteners



Sugar must be present in the proper proportions with pectin and acid to make a good gel. Sugar also prevents the growth of microorganisms in the product and contributes to the taste. **Never change the amount of**

sugar in a recipe.

Granulated white sugar (pure cane or beet) is usually used in homemade jellied fruit products. Sweeteners such as brown sugar, sorghum and molasses are not recommended because their flavors overpower the fruit and their sweetness varies.

You can replace part but not all of the sugar with light corn syrup or light, mild honey. For best results, use tested recipes that specify honey or corn syrup.

Artificial sweeteners cannot be substituted for sugar in regular recipes because gel formation specifically requires sugar. Jellied fruit products without added sugar must be made using special recipes or special gelling products. Approved recipes using artificial sweeteners are included in this fact sheet. Follow recipes exactly as they have been tested.

The University of Georgia has developed recipes for uncooked jams and jellies using artificial sweeteners. The recipes can be found online at nchfp.uga.edu/how/can_07/no_sugar_jelly.html.

Some artificial sweeteners are heat-stable, but some people do notice an aftertaste in other products. Therefore, it's possible that artificial sweetener might change in flavor a little over storage time. If you want to make jam or jelly using artificial sweetener, it is important to follow the directions on the packaging or refer to the specific manufacturer's website for recipes.

Equipment and Containers

Basic equipment for making freezer jams and jellies includes a bowl large enough to hold the fruit and sugar combination (a 2- or 3-quart bowl), a small pan to heat powdered pectin and water, measuring cups, and small and large mixing spoons.

If you will be extracting juice for jelly, you will also need a jelly bag or a suitable cloth. You can also use firm, unbleached muslin or cotton flannel with the napped side turned in, or you can use four thicknesses of closely woven cheesecloth. Jelly bags or cloths should be damp. Make sure the cheesecloth is not treated and is suitable for contact with food.

Store your uncooked jams and jellies in glass canning jars specifically designed for the freezer or in food-grade plastic containers, with headroom to allow for expansion. All containers should be moisture-resistant and vapor-resistant.

Making Uncooked Jams and Jellies

Amount to Prepare

For best results, follow the directions that come with the commercial pectin. Do not alter the recipe measurements.

Preparing the Containers

Wash your moisture- and vapor-resistant containers in warm water and detergent, then let them air dry. Sterilizing containers is not necessary. To maximize the strength of the gel, do not use jars larger than pint-size.

Storage

Uncooked jams and jellies must be stored in the refrigerator or freezer. Do not store them in the freezer until the gel has set. This could take up to 24 hours. Placing them in the freezer too soon will prevent the jam or jelly from "setting."

Uncooked jams and jellies can be kept for up to three weeks in the refrigerator or for up to a year in the freezer. They are subject to more syneresis ("weeping" or separation of liquid from the gel). Freezer storage is

best for maintaining natural color as well as flavor. Room temperature is not recommended because uncooked jellied products will mold or ferment in a short time. Once the container is opened, the product should be used within a few days.

Jellied Products Without Added Sugar

Jellied products without sugar or with reduced sugar cannot be made by leaving the sugar out of the regular freezer jam or jelly recipe. However, they can be made by the following methods:

1. **Specially modified pectins:** These pectins are not the same as regular pectin. They will say “light” or “less sugar” on the label. Follow the directions on the package. Some products are made with less sugar and some with artificial sweeteners.
2. **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 to these special recipes.
3. **Recipes using gelatin:** Some recipes use unflavored gelatin as the thickener for the jam or jelly. Artificial sweetener is often added. **These products do not freeze well. Treat them as refrigerator jams or jellies.**

Follow the directions on the modified pectin box or in a no-sugar recipe exactly. Alterations in the recipe could result in product failure. Because these products do not have enough sugar to act as a preservative, they must be stored in the refrigerator during gel formation instead of on the counter. Freeze after 12–24 hours.

Directions for Using Juices for Uncooked Jellies

Use fresh or frozen fruits or fruit juices to make uncooked jams and jellies. If using commercially canned fruit juices, pectin will need to be added in order for the finished product to gel.

Remaking Uncooked Jams and Jellies

With Liquid Pectin

Do not remake more than 4–6 cups at one time. In a bowl, combine measured jam or jelly, 3 tablespoons sugar and 1½ teaspoons lemon juice for each cup of jam or jelly. Stir well until sugar is dissolved (about 3 minutes). Add 1½ teaspoons liquid pectin per cup of jam or jelly 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.

With Powdered Pectin

Do not remake more than 4–6 cups at once. In a bowl, combine measured jam or jelly and 2 tablespoons sugar for each cup of jam or jelly. Stir well until dissolved (about 3 minutes). Measure 1 tablespoon water and 1½ teaspoons powdered pectin for each cup of jam or jelly. 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.

Recipes

Uncooked Artificially Sweetened Raspberry or Blackberry Jam With Pectin

Yields 2⅔ cups

- 1 quart cleaned raspberries or blackberries
- 3–4 teaspoons liquid artificial sweetener
- 1 package powdered pectin
- 1 tablespoon lemon juice

Crush berries in saucepan. Stir in powdered fruit pectin and lemon juice. Bring to a boil, then boil for 1 minute. Remove from heat. Add the sweetener, then continue to stir for 2 minutes. Pour into freezer containers, cover and freeze. Thaw before serving. Store in the refrigerator for up to 4 weeks.

Uncooked Berry Jam (using powdered pectin)

Yields 5 or 6 half-pint jars



- 2 cups crushed strawberries or blackberries (about 1 quart whole)
- 4 cups sugar
- 1 package powdered pectin
- 1 cup water

Sort and wash fully ripe berries. Drain. Remove caps and stems. Crush berries. Place prepared berries in a large mixing bowl. Add sugar, mix well and let stand for 20 minutes, stirring occasionally.

Dissolve pectin in water and boil for 1 minute. Add pectin solution to berry-and-sugar mixture, then stir for 2 minutes. Pour jam into freezer containers or canning jars, leaving one-half inch of headspace. Cover containers and let stand at room temperature for 24 hours or until jam sets. Label and freeze. Store up to 3 weeks in the refrigerator after opening or up to a year in the freezer. Once a container is opened, jam should be stored in the refrigerator and used within a few days.

Uncooked Grape Jelly

2 cups lukewarm water
 1 box powdered pectin
 1 6-ounce can frozen grape juice concentrate
 ¾ cups sugar

Mix the pectin slowly into the lukewarm water in a 2-quart mixing bowl. Stir constantly until pectin is 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 1-quart mixing bowl. Add ¾ cups sugar. Mix thoroughly. All the sugar will not be dissolved. Add the remaining ½ cups of sugar to the dissolved pectin mixture. Stir constantly until all sugar is dissolved. Mix the juice with the pectin mixture. Stir constantly until all the sugar is dissolved.

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

References

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