

Jam and Jelly Basics

Jelly, jam, preserves, conserves, marmalades and fruit butters are similar products. All are made from fruit, preserved by sugar and thickened or gelled to some extent.

To gel properly, sweet spreads must contain the right combination of fruit, pectin, acid and sugar. The fruit gives each spread its unique flavor and color. Fruit also supplies the water needed to dissolve the other ingredients and some or all of the pectin and acid. Good quality, flavorful fruits make the best sweet spreads.

If combined with the right amount of acid and sugar, pectins cause a gel to form. All fruits contain some pectin. Apples, crabapples, gooseberries and some plums and grapes contain enough natural pectin to form a gel. Other fruits, like strawberries, cherries and blueberries, contain little natural pectin. They must be mixed with other fruits high in pectin or with commercial pectin products for a gel to form. Fully ripened fruit contains less pectin, so combine it with one-fourth underripe fruit when making sweet spreads without added pectin.

Caution

Commercially frozen and canned juices are low in natural pectins and make soft-textured sweet spreads. Use only in recipes calling for added pectin.

The right amount of acid is critical to gel formation. With too little acid, the gel will never set. Too much acid will cause the gel to lose liquid (weep). If fruits are low in acid, add lemon juice or other acid ingredients as directed in recipes. Commercial pectin products contain enough acid to ensure gelling.

- Jelly is a mixture of fruit juice and sugar that is clear and firm enough to hold its shape.
- Other sweet spreads, like jam, are made from crushed or chopped fruit. Jam holds its shape, but is less firm than jelly. When jams are made from a mixture of fruits they are usually called conserves, especially when they contain citrus fruits, nuts, raisins or coconut.
- Preserves are made of small, whole fruits or pieces of fruits in a clear, thick, slightly gelled syrup.
- Marmalades are soft, transparent fruit jellies that contain small pieces of fruit or citrus peel.
- Fruit butters are made from fruit pulp cooked with sugar until thickened.

Sugar helps preserve sweet spreads, contributes flavor and aids in gelling. Granulated white sugar is most often used to make jelly or jam. You can replace part of the sugar with corn syrup or honey, but too much masks the fruit flavor and changes the gel structure. Use tested recipes for replacing sugar with honey and corn syrup. Don't reduce the amount of sugar in traditional recipes, because a gel won't form, and yeasts and molds may grow in the sweet spreads.

Don't seal it with a kiss —Use the right lids and procedures to prevent spoilage

Even though sugar helps preserve sweet spreads, molds can still grow on the surface of these products unless they are heat-processed. It is not a safe practice to scrape the mold off the surface of sweet spreads and use what's left in the jar. Poisons called mycotoxins — known to cause cancer in animals — have been found in some jars of jelly with surface mold growth. The effects of mycotoxins on humans are still being researched, so you should discard any sweet spread containing mold without tasting or sniffing it.

Paraffin or wax seals don't prevent mold growth and are no longer recommended for sealing any sweet spread, including jelly.

To prevent mold growth and to keep good flavor and color, pour hot sweet spreads into sterilized jars; leave 1/4-inch headspace. Seal with two-piece lids, and process. Be sure to use the processing time recommended for your altitude.

Sweet spreads are best if eaten within one year.

Source:

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<http://extension.missouri.edu/explore/hesguide/foodnut/gh1461.htm>