



LOW SUGAR FRUIT SPREADS

By
Kayla Wells-Moses, Extension Regional Specialist, Family and
Consumer Sciences Educator, WSU Colville Reservation Extension

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Abstract

Current U.S. Dietary Guidelines advise reducing the amount of sugar in American diets. In addition, there are many people who prefer or need to reduce their sugar intakes. Methods for canning jams, jellies, and other fruit spreads have been developed that limit or reduce the amount of sugar in the product. For home canning, there are four options for reducing sugar in fruit spreads: 1) using special modified pectin, 2) using regular pectin with special recipes, 3) using the long-boil method, and 4) using gelatin. The techniques and ingredients in these methods are not interchangeable, so follow tested recipes to produce the best-jelled, and safest, products. For added safety, be sure to process and store low-sugar or no-sugar fruit spreads exactly as stated in the tested recipes.

Low Sugar Fruit Spreads

General Information

Low- and no-sugar fruit spreads have become very popular, as people are changing their diets and consuming less sugar. To meet consumer demand for lower sugar products, many commercial pectin products have been developed for making low- and no-sugar fruit spreads at home. When making low- and no-sugar fruit spreads at home, it is important to follow recipes specifically designed for reduced sugar products, rather than reducing the amount of sugar in a traditional recipe.

Sugar has four functions when it comes to making a gelled product:

- Providing flavor by sweetening the product.
- Contributing to the glistening appearance of jams, jellies and other fruit spreads.
- Preserving fruit spreads by suppressing microbial growth.
- Helping set the pectin and providing the gel formation.

It is because of these four contributions that sugar cannot be altered in traditional recipes. The problems that occur with reducing sugar in a traditional recipe are: flavor and appearance may change, gel formation may be negatively affected, and the product may mold and spoil more quickly. However, for people wishing to make low- or no-sugar fruit spreads at home, there are four approved methods for doing so.

Methods for Producing Low- and No-Sugar Fruit Spreads

Modified Pectin: The first method is to use specially modified pectin. These will be labeled as “light,” “less sugar needed,” or “no sugar needed.” The pectin itself will come with recipes for using no sugar, less sugar, or sugar substitutes; follow the directions carefully. For assistance locating recipes using modified pectin, contact your local Extension office. Jams and jellies made with modified pectin can be water bath canned and stored at room temperature.



Modified pectin. Look for “no sugar needed” on the package. (Photo courtesy of Lizann Powers-Hammond.)

Regular/Commercial Pectin with Special Recipes: Some recipes have been tested to allow less sugar to be used in recipes using regular pectin. Pectin contains some sugar, so the products would not be sugar free. Artificial sweeteners are often added in these recipes. Low- or no-sugar fruit spreads made using commercial pectin and following a special recipe can be water bath canned and stored at room temperature.

Commercial pectin can be used with any fruit spread. Using commercial pectin shortens cooking time and allows the use of fully ripe fruits. Commercial pectin comes in both powdered and liquid forms, but recipes cannot be used interchangeably between the types. Liquid pectin is added to hot fruit and sugar (or sugar substitute) mixtures, and then boiled. Powdered pectin is added to unheated fruit or juice, boiled, and sugar (or sugar substitute) is added after the pectin is dissolved. When using powdered or liquid pectin, follow a recipe developed specifically for the type of pectin being used.

Long-Boil Method: Boiling the fruit pulp for long periods of time will thicken the product until it resembles a jam, but these spreads will not be true jams with pectin gels. Artificial sweeteners can be added for taste. Low- and no-sugar spreads made through the long-boil method can be water bath canned and stored at room temperature.

Recipes Using Gelatin: Some recipes use unflavored gelatin as the thickening agent. This is another method that allows you to control the amount of sugar or artificial sweetener added to the product. Fruit spreads using gelatin should not be processed in a water bath canner or frozen. Rather, these products should be kept in the refrigerator. Products thickened with gelatin can only be kept in the refrigerator for up to four weeks, so only make an amount of product that can be used in this time frame.

Using Alternative Sweeteners in Homemade Fruit Spreads

Another alternative to full-sugar, traditional fruit spreads is using alternative sweeteners. Both honey and corn syrup can be used to replace part of the sugar in a traditional fruit spread. Although making substitutions of honey and corn syrup is possible, it is preferable to use recipes specifically designed for those products. For assistance in locating special recipes, contact your local Extension office.

Using Honey: In recipes with no added pectin, half of the sugar may be replaced with honey. In recipes with added pectin, one-fourth of the sugar can be replaced with honey. Fruit spreads made using honey will be darker and have a slightly different flavor than those made using traditional, full-sugar recipes.



Regular pectin in powdered form. (Photo courtesy of Lizann Powers-Hammond.)



Regular pectin in liquid form. (Photo courtesy of Lizann Powers-Hammond.)

Using Corn Syrup: In recipes with no added pectin, one-fourth of the sugar may be replaced with light corn syrup. In recipes with added powdered pectin, up to one-half of the sugar may be replaced with light corn syrup. In recipes using liquid pectin, up to two cups of sugar may be replaced with light corn syrup.

Using Sugar Substitutes in Homemade Fruit Spreads

When using a traditional pectin recipe for making fruit spreads, artificial sweeteners cannot be substituted for sugar, due to the fact that sugar is needed for the gel formation. However, artificial sweeteners may be used for low- or no-sugar products made using a modified pectin or alternative thickener (like gelatin). When using an artificial sweetener in cooked products, it is preferable to use a heat-stable sweetener, like sucralose (Splenda) or stevia.

In contrast, a saccharin-based sweetener may leave a bitter taste in a product that is heated, and therefore is not recommended in cooked products. For example, do not use aspartame for a cooked product, because it loses its sweetness when heated. Always remember, when using artificial sweeteners to make fruit spreads, follow manufacturer suggestions for the best quality products.

Key Points to Remember

- Follow directions exactly on the pectin package or in a no-sugar recipe.
- Since these products do not have sugar as their preservative, be sure to process or store them exactly as directed in the recipe. Some require no processing, longer processing, or refrigeration.
- After opening, low- and no-sugar products should always be stored in the refrigerator.
- While there are a lot of ways to make jams and jellies, keep in mind that following tested recipes will produce the most successful jelled product.
- When low- or no-sugar fruit spreads are created using one of the four approved methods, the gels that form are a little different and may be softer than those made with traditional, high sugar recipe, but most people enjoy them nonetheless.

Further Reading

Driessen, S. 2014. [Low Sugar Alternatives for Jams and Jellies.](#) *University of Minnesota Extension Publication.* University of Minnesota.

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OSU Extension. 2014. [Food Safety and Preservation: Low Sugar Fruit Spreads.](#) *Oregon State University Extension Publication SP 50-765.* Oregon State University.

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