TIPS FOR REDUCING SUGAR IN FOOD PRESERVATION

Sugar is an important ingredient in many food preservation recipes. But, for a number of reasons, some people would like to use less than the required amount. Reducing the sugar content can lead to safety and quality changes.

**Jams and Jellies**
In jams and jellies, the sugar promotes gel formation and serves as a preservative. If the sugar is decreased in recipes that rely on pectin for thickening, the product will have the consistency of syrup rather than jelly. The correct proportions of fruit, pectin and sugar are essential for gelling.

There are special products available commercially for making low sugar gelled products. These products are either pectin substitutes or low-methoxyl pectins which do not require sugar for gelling. They can be found in the canning supply section of most supermarkets.

Sugar acts as a preservative when making regular jams and jellies. When it is reduced, the keeping quality is changed. Most low sugar jams and jellies must be processed in a boiling water canner for 10 minutes or frozen for long storage (follow package instructions). After opening, refrigerate to prevent mold growth.

**Pickles and Relishes**
Sugar in pickling is used to balance the tartness of the vinegar. Although the sugar can be eliminated from recipes, the pickles are likely to be too sour. Note: Under no circumstances should the amount of vinegar be decreased or diluted to compensate for less sugar. Vinegar provides a certain level of acidity that is essential for safe pickling.

**Canned and Frozen Fruits**
In frozen and canned fruits, sugar contributes to the flavor and aids in holding the shape of the fruit. If desired, the amount of sugar can be reduced or eliminated without changing the keeping quality of the product. Because the texture of frozen and canned fruits may change when preserved with reduced or no sugar, it is no savings if your family will not eat the food preserved because you were trying to cut down on sugar.

**Natural Juices**
Natural fruit juices such as apple can be used in place of sugared syrups for canning and freezing fruits. Try a variety and see what you like. Good combinations are peaches in orange or pineapple juice; pears and apples in apple, white grape, pineapple or orange juice, and berries in cranberry or grape juice. Fruit juices high in ascorbic acid (such as orange and pineapple juice) help to keep the light colored fruits from browning.
OTHER SWEETENERS

Honey
Some people substitute honey in place of sugar in food preservation recipes. This does not reduce the sugar content of preserved foods. Two types of sugar — fructose and glucose — are the major components of honey.

Honey can be substituted for sugar in canned and frozen fruits. The flavor of honey is sweeter than that of granulated sugar so it is advisable to use less honey than the amount of sugar specified in the recipe. Be sure to use light, mild-flavored honey if you don’t want noticeable flavor changes in your preserved product.

In jelly recipes without added pectin, honey can replace up to one-half of the granulated sugar. With added pectin, two cups of honey can replace two cups of sugar in most recipes. In recipes that yield small batches of five to six glasses, one cup of the sugar can be replaced by one cup of honey.

Some commercial pectin companies have honey only jam and jelly recipes. Call the pectin companies to request recipes.

Corn Syrup
Corn syrup is made up of the sugar dextrose or glucose. Because it is not as sweet in taste as sucrose (table sugar), it takes 2 cups corn syrup for the same sweetness as 1 cup sugar. Corn syrup can replace up to half the amount of sugar in making syrups for preserved fruits. Be sure to use light corn syrup. Dark corn syrup, sorghum, and molasses overpower the fruit flavor and may darken the fruit.

Fructose
Fructose is a natural sugar found in fruit. It has the same calorie value as sucrose but is much sweeter to taste. About _ cup of fructose has the same sweetness as 1 cup sucrose (table sugar). However, in order to have the product gel, substitute an equivalent amount of fructose for sucrose.

Artificial Sweetener
The OSU Extension Service does not promote the use of artificial sweeteners in food preservation. Persons on therapeutic diets (such as diabetics) should be referred to inserts in low-sugar jam and jelly product packages or literature available from manufacturers of artificial sweeteners. Diabetic counselors at hospitals are a good source of information for persons on therapeutic diets.

Source: OSU Master Food Preserver Program