

Sweeteners to Celebrate Good Health

by Cherie Soria



As raw food chefs, we have a desire (and responsibility) to create foods that support good health. This is the primary reason most of us avoid using processed white sugar. However, many of the concentrated sweeteners are nearly as detrimental to our health as common white sugar, and we are kidding ourselves if we think we can eat all we want of foods like agave, just because they are raw and low on the glycemic index. The quantity of the sweeteners we use is as important as the ones we choose.

Ideally we should choose sweeteners based on their characteristics—(color, texture, and flavor) in combination with the other ingredients used and the desired outcome—as well as their health effects. The two topics are not typically combined; usually we read about health separately from culinary art. However, responsible culinary artisans must keep in mind how sugars affect both health and the specific recipe. We encourage you to choose the sweet treat, the sweetener, and the serving size based upon the healthiest choice. Let's learn how we can support good health and make foods that taste better than cooked!

The Glycemic Index

The glycemic index (GI) is a way of classifying foods according to how they affect your blood sugar. The GI reflects how quickly the carbohydrate in a food enters your bloodstream, how much it raises your blood glucose, and how long your blood glucose remains elevated. Foods with a high GI often trigger a dramatic upward spike in your blood sugar, which tends to be followed by a drop in blood sugar. Foods with a low GI tend to gently and gradually supply the carbohydrate needed to fuel your brain and body; these foods cause a small rise.

Processing, such as grinding whole grains into flour, typically raises GI. Foods rich in fiber rank lower on the GI. Many other factors, such as acidity, density, and ripeness,

also affect GI. Lemon juice added to recipes reduces GI; light, fluffy breads score higher on the GI than heavy breads; and dried fruit has a higher GI than fresh fruit.

The GI of fructose and high-fructose foods, such as agave syrup, is considerably lower than that of other sugars. One would naturally assume that this makes fructose and high-fructose syrup the preferred sweeteners. However, recent research suggests that these sweeteners are harmful for our health and may work against our weight-loss goals. It's important to look beyond the glycemic index, especially when a food component has been refined (separated from a whole food) and concentrated, as with syrup. Fructose is metabolized very differently than glucose. Unlike glucose, fructose does not stimulate insulin secretion or enhance leptin production. Because insulin and leptin help to regulate appetite, excessive isolated fructose intake may contribute to increased calorie intake and weight gain.

When we eat fructose as a natural sugar in a whole, ripe fruit, the vitamins, minerals, and antioxidants nourish us, and the fiber modulates blood-sugar response. However, consuming large quantities of concentrated fructose (such as in soda and other processed foods) creates predictably negative health consequences, including weight gain. In addition to fructose-based sweeteners, other simple sugars extracted from plant foods generally contain few nutrients and rank high on the glycemic index. They digest quickly and can cause blood sugar to rise and then fall dramatically. These types of sweeteners should be limited to celebration foods. Eat refined simple carbohydrates in moderation, or on occasion (or in accordance with the advice of your health practitioner).

The bottom line? Unrefined fruits (the first two items in the table below) are the hands-down healthiest choice for sweetening our foods. (*continued*)

At-a-glance differences in sweeteners used by many raw food chefs:

PRODUCT	DESCRIPTION	CHARACTERISTICS/USES	HEALTH NOTES
Fresh dates	Three main categories: soft, semi-dry, and dry. Dates contain relatively little water and do not become much more concentrated upon drying.	Very sweet, bright taste; mild enough in flavor to be camouflaged by other ingredients. When soaked and blended, they thicken puddings, pie fillings, and sauces. When unsoaked and processed with nuts and/or dried coconut, they act as binding agents for pie crusts, cakes, and cookies.	High on the GI. Contain varying amounts of glucose, fructose and sucrose, depending on the freshness and variety of the dates.
Dried fruits: apples, apricots, bananas, cherries, figs, mangos, pineapples, prunes, raisins, etc.	Dry your own fresh fruits at low temperatures outside in the sun or in a dehydrator, to preserve enzymes and other nutrients.	Use to thicken and bind desserts. Most have a stronger, more distinct flavor than fresh and should be selected according to the flavor desired in the dessert. Dried mission figs complement chocolate nicely. Raisins give depth to mock graham cracker crusts. Soaked dried fruit may also be blended with the same fruit in fresh form to create a thick mousse (mangoes and pineapples are delicious prepared this way).	GI varies. Like fresh fruit, dried fruits contain significant amounts of vitamins, dietary fiber minerals, and phytonutrients, as well as concentrated fructose. Conventional dried fruit may contain sulfur dioxide, so buy organic.
Agave nectar or syrup	Thick, natural syrup made from the juice of the agave cactus.	Choose light agave nectar for a mild flavor and color, and dark agave syrup for a molasses-like taste, when color is not an issue, or when dark color is desirable. Use when thickness is not an issue (frozen desserts, soft creams, blends, etc.)	90 % fructose; lower GI than cane sugar, maple syrup, or honey. About ½ cup replaces 1 cup of sugar.
Evaporated cane juice	Flash dried, whole cane juice in granulated form. Rapadura brand is the highest-quality product on the market.	The color and flavor is similar to brown sugar, but deeper, with more molasses. It can replace white or brown sugar in desserts, in mock graham cracker crusts and fruit crisp toppings or anytime a brown sugar flavor is desired.	Not as high on the GI as white sugar, but still relatively high, it is 96 % sucrose and 4% percent minerals. Although not raw, it is a whole food.
Maca powder and maca syrup	The powder or syrup of a root-like vegetable shaped like a radish, which grows high in the Andes mountains.	Maca has a slightly sweet, malt-like taste. It can be used to thicken smoothies and shakes, or to replace flour in cakes and cookies. Use about 2 teaspoons per 1 cup recipe volume.	Rich in calcium and potassium, maca is reported to be a natural hormone balancer and to increase energy, libido, and stamina.
Mesquite meal	Made from pods from the mesquite tree.	Mildly sweet, caramel-like flavor. Use to thicken shakes and smoothies. Also use to replace flour in cakes, cookies, and pie crusts.	Lower on the GI than most other sweeteners, mesquite meal helps regulate other carbohydrates and helps curb the appetite.

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Maple syrup, maple butter, maple sugar	Maple syrup is made from the boiled sap of the maple tree. It takes about five gallons of sap to make a pint of syrup. Maple butter and maple sugar are more highly concentrated than the syrup.	Not raw, it has a unique and distinctive flavor and is used by many raw food chefs as an alternative to refined sugar.	High on the GI, it's 65 percent sucrose, 35 percent water, and it contains a minute amounts of minerals. Use only organic pure maple syrup, since anything less could be genetically modified corn syrup with as little as 3% maple syrup.
Molasses, muscovado sugar	Slightly sweet, intensely flavored syrup or sugar that remains after processing of beet sugar. First-press molasses is light in color and flavor. Repeated boiling results in dark blackstrap molasses.	Both products add a deep underlying flavor and are popular in cookies, especially ginger and spice cookies.	Blackstrap molasses and muscovado sugar are 65 % sucrose, ranking them high on the GI. They do contain measurable amounts of iron, calcium, magnesium, and potassium, making it more nutritious than most sweeteners.
Raw honey	Unprocessed, unfiltered syrup that contains pollen and enzymes. It is essentially stolen from bees, so it is not a vegan product.	Strong flavor can overpower other flavors. You can substitute dark agave syrup in most recipes.	High on the GI and not recommended for infants and small children, it is sweeter, higher in calories, and raises blood-sugar levels more quickly than white sugar. It is an animal product and is, therefore, not vegan.
Stevia	Derived from the leaf of the stevia plant. It has a naturally sweet taste, and comes in powder or liquid form.	200 times sweeter than sugar, with a strong licorice-like taste, stevia should be used in very small amounts. Use alone or combined with other sweeteners to decrease the total amount of sweetener.	Has a GI of 0, has no calories, and does not elevate blood-sugar levels.
Yacon syrup	Made from a delicious edible tuber grown in South America, yacon is sweet and low in calories.	The root, before being processed into syrup has a mild, sweet flavor with a moist, crunchy texture slightly reminiscent of fresh-picked apple, pineapple, and watermelon.	Low on the GI, it is used as an alternative glucose-free sweetener with few calories.



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