Sweeteners—What to Use and Why

There is evidence that refined sugar contributes to tooth decay, obesity, nutrient deficiencies, and hypoglycemia. Sugar tends to increase total cholesterol levels and decrease HDL levels and appears to play a role in the development of diabetes. It provides empty (nonnutritive) calories; in the refining process, it is stripped of all its vitamins and minerals, but it then needs some of these very nutrients to help metabolize it.

Refined sugar affects people in different ways and may be responsible for a variety of chronic complaints. If you avoid using it in for just 2–3 weeks, it is amazing to find that many long-standing symptoms will disappear. Energy and joint or muscle pains may improve, headaches may disappear, sleep may improve, and GI problems may no longer be an issue. Various studies in public schools have demonstrated that classroom performance improved when junk food was taken out of school lunch programs.

According to figures from the U.S. Department of Agriculture (USDA), consumption of various sweeteners, often in calorie-dense foods and drinks, increased in the United States from an estimated 113 pounds per person in 1966 to 147 pounds in 2001. Refined sugar shows up in many foods on the supermarket shelf—foods like spaghetti sauce, salad dressing, crackers, breads, and canned soups and vegetables. Because it is so addictive and so available, it can be difficult to remove from your diet.

To further complicate the issue, food processors try to mask the total amount of refined sugars in their products by using a variety of added sugars with different names. Some sugars that might be used are: high fructose corn syrup (HFCS), dextrose, honey, glucose, sucrose, sorbitol, evaporated cane juice, and brown sugar. Additionally, it can be difficult to calculate the total amount of added sugars because regulations require that labels indicate all sugars (both added refined sugars and naturally occurring sugars), and these amounts are lumped together. But generally speaking, we are most concerned with added sugars, not naturally occurring ones, such as fructose in an apple. For example, the label on a container of plain yogurt (which has *no added sugar*) may show a total of 17 grams of carbohydrate, with 16 grams of sugar. The naturally occurring sugar in yogurt is lactose, or milk sugar, which does not affect the body the way that most refined sugars may.

Most people enjoy sweet foods, but there are good and bad choices. Many alternative sweeteners are available, and which sweetener is best is a complicated question. Generally an added sweetener that has a low glycemic index—one that does not cause a spike in blood sugar—is preferable. One of the most beneficial is agave nectar, which has been proven to have a very low glycemic index. Other sweeteners that have some benefit over sucrose are brown rice syrup, barley malt syrup, blackstrap molasses, maple syrup, and fruit juice concentrates. These more natural sweeteners have some benefits such as iron, calcium, potassium, and B vitamins.

Fruit concentrates contain many nutrients and are made up mostly of fructose. While still a refined sugar, fructose can sometimes be a good alternative as an added sweetener because it has a very low glycemic index. Fructose is often confused with HFCS, an ingredient in much of the processed foods and soda that Americans ingest daily. HFCS is a thick liquid made from corn starch and consisting of 42–55% fructose and the remainder glucose. It therefore has a much higher glycemic index then fructose alone and should not be used. All of the preferred sweeteners listed place less stress on the body's glucose-/insulin-balancing mechanism.

Recently, stevia, an herbal sweetener that has no effect on blood sugar but is many times sweeter than white sugar, has become a potential replacement for aspartame (Equal®, NutraSweet®) or sucralose (Splenda®).

Hints for keeping added refined sugars to a minimum:

1. Ingredients are listed by weight in descending order. Sweeteners should never be the first ingredient, but instead should be listed toward the end in the list of ingredients. If they appear near the beginning of the list, that food probably should be avoided.
2. Sweeteners that may appear on the label include: HFCS, fructose, dextrose, glucose, molasses, sorbitol, evaporated cane juice, honey, brown sugar, maple syrup, brown rice syrup, and barley malt. A product may contain more than one kind of sugar.
3. Choose lower-glycemic-index and/or naturally occurring sweets over refined sweets, e.g. fruit juice or fruit, pure maple syrup, brown rice syrup, fructose, barley malt, stevia, agave nectar, or date sugar.
4. To satisfy a sweet tooth, choose fresh whole fruit as a snack or dessert.