







Are Any of Those "Healthy" Sugar Alternatives Better for You?

Sugar has gotten so complicated. There's plain old white cane sugar, raw sugar, brown sugar, coconut sugar, beet sugar, agave, honey... every month it seems like some new, allegedly better-for-you sugar-based sweetener debuts on the market. Still, while there are many different kinds of sugar-based sweeteners that are *marketed* as healthy alternatives to white sugar and high-fructose corn syrup, they don't necessarily live up to the hype.

Whole Fruit Vs. Added Sugars

<u>Summer Rayne Oakes</u>, certified holistic nutritionist and author of <u>SugarDetoxMe</u>, says that before digging into the healthy sugar myth, we need to draw a line between sugars that are tied up in fiber, like the sugar in an unprocessed piece of fruit, and "free sugars" that are added to foods to make them sweeter.

Because the fiber is stripped out when sugar is processed, the concept of any type of plant-based sweetener being more "natural" than any other plant-based sweetener really depends on how you <u>choose to define the term</u>. If you define it as simply "coming from nature," pure white cane sugar is, in some ways, just as natural (although significantly more processed than) maple syrup, honey, or agave.

Cane sugar is produced by chopping up sugar cane, extracting the juice, boiling it down, and then (for white sugar) removing the molasses. After that, it is processed into those pure white crystals we love to hate and hate to love. For turbinado or unrefined brown sugar, identifiable by the larger and less evenly sized crystals, some of the molasses is left in, and it skips the final refining process. For refined brown sugar, molasses is added back into the refined white sugar after it is processed.

The methods of production for other free sugars don't vary greatly from this model. Just as with cane sugar, coconut sugar and maple sugar are made by pulling the sap out of a plant and then boiling the sap until the water evaporates. Maple syrup and agave nectar are made in the same way, but the boiling process is stopped when it reaches the desired consistency. Even honey goes through a series of steps to take it from plant nectar to sticky sweet, although it's done by bees rather than humans. Bees collect the less-concentrated liquid nectar, bring it back to the hive, process it, and eventually, it becomes honey. We use machinery, and they use their mouths and stomachs, but the process isn't all that different.

Types of Sugar

There are a few main types of sugar that can be found in everything ranging from the banana on your kitchen counter to the processed sugar in your favorite pastries. There are the monosaccharides (one-molecule sugars), glucose, fructose, and galactose, and there are also disaccharides (two-molecule sugars), called lactose, sucrose, and maltose. We're going to focus here on the sugars that are used as "added sugars," rather than stuff like lactose, which occurs naturally in dairy products but isn't really added to any commercial products except infant formula. Because of this, lactose is not of great concern in the added sugar debate.

1. Glucose

Glucose is food for our cells, and our body produces it naturally. It is also what is measured when people talk about a food's glycemic index, a number that indicates the impact a food will have on blood sugar levels within two hours of consumption.

Balancing blood sugar can be a difficult task, especially for people with diabetes, but a well-functioning system <u>knows what to</u> <u>do with reasonable amounts of glucose</u> when it arrives in your stomach. Whole foods that are high in glucose include dried and fresh fruit, as well as also grains, beans, nuts, and vegetables like sweet bell peppers.

2. Fructose

Fructose is the sweetest-tasting of the natural sugars, <u>can only be broken down by the liver</u>, and much of it is turned into fat. Since it's in the liver rather than going straight into the bloodstream, it takes longer for the human body to process fructose and, subsequently, it doesn't cause the sudden spikes in blood sugar that other forms of sugar can trigger.

Because of this, sweeteners high in fructose have often been lauded as "healthy." But Robert Lustig, M.D., professor of pediatrics at University of California, San Francisco and director of the UCSF Weight Assessment for Teen and Child Health (WATCH) program, warns that fructose "floods the liver, creating fatty liver disease and insulin resistance."

And that's just the start of it: High fructose consumption <u>has been linked to</u> gout, weight-management problems, and a long list of other ailments that can take a while to manifest but that are very serious when they do.

3. Sucrose

Sucrose is made of one molecule of glucose and one molecule of fructose, and because it has the properties of both, it goes through the processes of both, impacting both the blood and the liver. While sucrose exists in many fruits, vegetables, and natural sweeteners, table sugar is pure sucrose, or 50 percent glucose and 50 percent fructose, with nothing else (like fiber) present to slow down absorption. The glucose half of sucrose hits your blood quickly, spiking blood sugar levels, while the fructose half makes its way through the liver, causing the long-term problems Lustig warns of.

So Are Those Alternative Sugars Really Better for You?

The high-fructose products being sold as alternatives to white cane sugar are often marketed as nutrient-rich, but they don't contain nearly enough healthy vitamins and minerals for their health benefits to outweigh their health consequences. Coconut sugar, for example, has trace amounts of minerals like calcium and iron, but it is also up to 80 percent sucrose. The glucose half of the sucrose in coconut sugar contributes to its relatively low glycemic index (GI) score, which has been reported as 35-42.

However, the glycemic index measures the short-term impact that a carbohydrate food has on a person's blood sugar, not the long-term health impacts fructose has on the liver. In the end, coconut sugar is still 35 percent fructose. So while its GI score is lower than sugar (which has a GI score of 63-69), that doesn't necessarily mean coconut sugar has earned a stamp of healthfulness.

Consumption of unfiltered and unpasteurized raw honey has been tied to weight management by natural wellness folks (and has been shown to be <u>antimicrobial and anti-inflammatory</u>, as well as to potentially provide allergy relief). But honey still has a GI of anywhere between <u>55</u> and <u>74</u>, and honey is still <u>82 percent sugar</u>, and <u>the majority of that is fructose</u>.

Agave is specially marketed as a healthy alternative to white cane sugar for people concerned about their blood sugar levels because it is so high in fructose, as opposed to glucose; <u>agave is about 84 percent fructose</u> and <u>71 percent sugar</u>. But there are potentially scary <u>long-term consequences</u> of <u>high fructose consumption</u> that are often overlooked (and are currently not very well understood).

Becca Rosencline, a certified holistic health coach, likens the marketing of alternative sweeteners like agave, honey, and maple syrup to the way hybrid vehicles have been marketed. Claiming that a non-cane-based sugar is healthy, she says, is "the equivalent of saying that a hybrid car is good for the environment. In reality, it's not contributing positively, it's just impacting the environment less negatively."

Justine Horne, a registered dietitian currently working toward a Ph.D. in genetics and weight management, agrees that we shouldn't be buying into any of the healthy sugar hype. "At the end the day," she says, "research has consistently shown that all added sugar has essentially the same impact on our overall health: That's right, maple syrup and honey are not healthy alternatives to refined white sugar or brown sugar."

Horne recommends that people limit their consumption of added sugar to less than 5 percent of their total calorie consumption, which is half of the <u>USDA Dietary Guidelines</u> maximum limit of 10 percent and <u>less than one-third</u> of the added sugar the average American consumes on average daily. It's not all about numbers, though. Each person is different, and every diet should be tuned to our specific needs.

Oakes, Rosencline, Horne, and Lustig all advocate for the conscious cutting out of added sugar in foods and drinks, as well as a decreased consumption of fruit juices and <u>smoothies</u>. Instead, they agree <u>we need to put an increased focus on finding sweetness</u> in whole foods like fruit, which metabolize much more slowly than pulverized, pureed, or otherwise processed fruit products and doesn't overload the liver.

The bottom line: Just because a label says "natural" doesn't mean it's any better for you, and trading one added sugar for another isn't necessarily going to solve the problem. Processed and added sugar isn't all the same, but none of it should be a huge part of your diet.

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