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# **Natural Sweeteners**

### Healthier options for a touch of sweetness

ubstituting alternative sweeteners for sugar may seem like a smart way to cut calories and lower risks of insulin resistance, high blood sugar, and type 2 diabetes. However, neither artificial nor natural sugar substitutes appear to promote weight loss, and because they still signal a sweet taste to your brain, they may trigger an insulin response even if they're non-glycemic, says Michael Finkelstein, MD, founder of SunRaven integrative medicine practice, in Bedford, New York. Research also shows artificial sweeteners such as acesulfame K (Sunett), aspartame (Nutrasweet), and saccharin (Sweet'N Low) may cause problems ranging from DNA damage to cancer. Sucralose (Splenda) has drawbacks as well-a 2008 animal study found it reduces good gut bacteria and limits bioavailability of orally administered drugs. While natural sweeteners may not pose these problems (and are better choices for those with insulin-dependent conditions), you're better off limiting use of added sweeteners and relying on naturally occurring sugars in whole fruit. But if you want a treat or need a sugar-alternative for baking or cooking, here's a look at safe options.

"My top choices for natural sweeteners are stevia leaf, maple syrup, and honey because they're whole foods," says Dr. Finkelstein. Maple syrup also contains antioxidants, as does honey, along with traces of minerals and polyphenols.

## NON-CALORIC, NON-GLYCEMIC SWEETENERS

Lo han Extracts of this Chinese fruit are 250 times sweeter than sugar, and research suggests this versatile sweetener may provide antioxidants. The sweetness comes from neutral-flavored compounds called mogrosides, rather than glucose. Erythritol Our bodies only partially absorb this naturally processed sugar alcohol, reducing its effect on blood sugar levels. It's about 70 percent as sweet as



sugar but tastes quite similar and is usually combined with other sweeteners. And erythritol is gentle on the GI tract: a 2007 study found it to be significantly easier to digest than other sugar alcohols. Stevia Derived from a South American shrub, stevia is 300 times sweeter than sugar. The leaves can be used directly or are available processed into a powder or a liquid extract. Its licorice-like flavor is an acquired taste, though some newer products are more palatable.

### **LOW-GLYCEMIC OPTIONS**

Agave I prefer the sweet nectar of this desert plant over honey, because it has a significantly lower glycemic-index due to its high ratio of fructose to glucose. Yet, as with all sweeteners, moderation is key-high amounts of fructose can raise triglycerides and contribute to obesity. Sustainability is also a concern since agave takes years to grow harvest-ready. Barley malt syrup This grain syrup is mostly maltose, which does not directly activate an insulin response. Processing creates grades of varying color and flavor (the darkest is similar to molasses) that work best in baking or cooking. Brown rice syrup Processing cultured cooked rice with enzymes converts some of the sugar to maltose to make this mild sweetener. It can serve as a healthier alternative to brown sugar and is also available in granulated form.

This monthly column on nutrition is produced in collaboration with the Arizona Center for Integrative Medicine. For more information, visit its website at *integrative medicine.arizona.edu*.