

Christopher Gardner on non-nutritive sweeteners

July 10 2012



Christopher Gardner

It sounds like a no-brainer: To cut your sugar intake, just switch to foods and drinks with no-calorie, artificial sweeteners. That way, you'll still satisfy your sweet tooth without packing on the extra pounds, right? Unfortunately, there's little scientific evidence supporting the theory. On July 9, the American Heart Association and the American Diabetes Association [issued a scientific statement](#) that, while encouraging Americans to reduce the added sugar in their diets, notes that the data are inconclusive about the effectiveness of using non-nutritive sweeteners to lose excess weight.

Nutrition expert Christopher Gardner, PhD, associate professor of medicine at the Stanford Prevention Research Center, chaired the writing committee for the group that prepared the statement. Gardner

spoke with writer Susan Ipaktchian in the medical school's Office of Communication & Public Affairs about the drawbacks of non-nutritive sweeteners.

Q: What's meant by the term “non-nutritive” sweeteners? Is it the same as artificial sweeteners?

Gardner: Not exactly. The sweeteners we looked at included those that are artificial — such as aspartame, saccharin, sucralose, neotame and acesulfame-K — and the plant-based [sweetener](#) stevia. The term “non-nutritive” basically means that you get these sweeteners in such very small amounts that they don't contribute any meaningful calories or nutrition to the diet — just sweetness.

Q: What prompted the AHA to look into the question of whether these sweeteners could be helpful to people who are trying to lose weight or reduce their sugar intake?

Gardner: In 2009, the AHA issued a position paper that recommended a population-wide reduction in the intake of added sugars. One of the practical questions arising from that recommendation was whether using non-nutritive sweeteners would be an effective approach to following that recommendation. Our committee was charged with answering that question.

We decided to review the science on six non-nutritive sweeteners that already had FDA approval as being [food](#) additives that are safe. We also chose to limit our review to studies done in humans.

In general, the studies we reviewed suggested that these sweeteners are

either just minimally effective or ineffective in terms of reducing [sugar intake](#). Interestingly, our review also turned up a set of theories as to why using these non-nutritive sweeteners might backfire and actually cause you to end up eating more sugar overall or more calories overall (for instance, make you hungrier late in the day), but the data either refuted these adverse effects or were inadequate for refuting or supporting the theories.

The one place where it appeared they might still be effective is in counseling diabetics to monitor their sugar intake. When used smartly and consciously, the non-nutritive sweeteners in beverages and foods are potentially important tools used by diabetes educators to help guide their patients with diabetes.

Q: Why aren't these types of sweeteners more effective in helping people lose weight?

Gardner: I came away with a deeper appreciation for a concept known as compensation. It's the idea that if you cut back on calories during one part of your day, then either psychologically or physiologically you want to make up for it later in the day. So you may think to yourself, "I saved calories this morning, so I'm going to have a cookie with lunch."

Context matters. Choosing a product sweetened with a non-nutritive sweetener over a product containing added sugars would help reduce calories and sugar intake if all else remains equal. But if this choice leads you to reward yourself with a treat later in the day, the net effect could be to minimize, negate or even reverse the original benefit.

We don't tend to compensate as much when it comes to beverages. If we switch to [diet soda](#) (or, better yet, water) instead of drinking regular soda with sugar, then we might make up some of those calories later in the

day but not all of them, so the net effect is likely to be beneficial. But when it comes to food items, people do tend to notice that they've eaten fewer calories and compensate for them later in the day.

Q: If relying on artificial sweeteners isn't the answer, what is?

Gardner: There really isn't a magic bullet or secret trick. The answer is to eat real, good, wholesome, hearty, seasonal foods. Let's face it: Non-nutritive sweeteners are primarily found in sodas and snack foods. There's no aspartame in broccoli.

The healthiest thing is still to have veggies and grains and culturally diverse foods — not food that's packaged and processed and artificially sweetened. Go for more savory foods rather than the sweet foods.

Q: What is the take-home message?

Gardner: Junk foods that offer a “diet” version where real sugars are replaced with non-nutritive sweeteners aren't transformed into health foods. They are still junk foods with less sugar and fewer calories — healthier, but not healthy. Go with real foods rather than diet foods. The two places where you are most likely to find the non-nutritive sweeteners helpful are with sodas and coffee; switching from regular soda to diet soda, or using those little pink, blue or yellow packets of sweeteners instead of sugar in your plain coffee is likely to help you consume less sugar and fewer calories overall for the whole day. But water would still be better than the diet soda, and beware the sugar-free mocha-frappuccino with double-whip.

Provided by Stanford University Medical Center

Citation: Christopher Gardner on non-nutritive sweeteners (2012, July 10) retrieved 6 May 2024 from

<https://medicalxpress.com/news/2012-07-christopher-gardner-non-nutritive-sweeteners.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.