

Editorial **Could Artificial Sweeteners Cause Weight Gain?**

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Editor

Artificial sweeteners appear to disturb the body's ability to count calories and, as a result, diet foods and drinks may wind up encouraging weight gain rather than weight loss, an expert contends.

These sweeteners may also increase the risk of health problems like heart disease and diabetes, some evidence suggests. In an opinion piece published July 10 in the journal *Trends in Endocrinology and Metabolism*, Susan Swithers, a professor of behavioral neuroscience at Purdue University in West Lafayette, Ind., rounded up recent research on artificial sweeteners. Commonly used sweeteners include sucralose, aspartame and saccharin, among others.

Swithers has been studying the effects of artificial sweeteners on rats, but the journal asked her to look at evidence of health effects in humans too. Swithers said studies following people who regularly consume diet soft drinks over time have found that those people are at higher risk for weight gain and obesity than people who don't drink sodas at all. Compared to people who avoid diet or regular soft drinks, diet soda drinkers also appear to have elevated risks for type 2 diabetes, heart disease and metabolic syndrome — a group of symptoms that puts people at increased risk for those conditions.

What's more, Swithers said, the risks for these health effects seem to be similar in people who drink diet sodas compared to those who drink regular sodas, suggesting that there isn't much benefit in switching. Some of those studies aren't conclusive, however, because they can't rule out the possibility that people were drinking diet sodas

because they were gaining weight, not the other way around — a problem called reverse causality. One study of soda-drinking teens found that those assigned to swap regular soda for one diet soda every day gained less weight over the course of 18 months than those who kept drinking sugar-sweetened soda. The study didn't look at what might happen if teens were asked to drink water instead of sweetened beverages, however. Not everyone agrees with Swithers's assessment of the research.

"The views in this opinion piece I found to be biased and speculative," said Theresa Hedrick, nutrition and scientific affairs specialist for the Calorie Control Council, a lobbying group for the manufacturers of artificial sweeteners. "She's presented only the research that supports her opinion and ignored the large body of scientific research that demonstrates the safety and benefits of low-calorie sweeteners." "I think it's important to remember that low-calorie sweeteners are one aspect of a multifaceted approach to health or obesity prevention," Hedrick said. "They aren't magic bullets." But Swithers said her animal studies support the counterintuitive notion that artificial sweeteners may lead to weight gain, even if they don't have any calories. She said she's seen evidence of metabolic disruptions caused by artificial sweeteners in rats.

It basically goes something like this: In a world without artificial sweeteners, a taste of something sweet preps the brain and the gut for digestion of incoming calories.