

Sugar Substitutes – Are They A Sweet Deal?

A recent report in the media touted reports of possible benefits to drinking diet soda. The study, published in *the Journal of Obesity*, tracked 300 participants over 12 weeks, and concluded that a group drinking diet soda (versus water, although this is a contentious point as we will see below) lost an average of 4 more pounds over the 12-week period than their water-drinking counterparts. Many people in the nutritional field have long reported detrimental effects of consuming sweeteners, but could they be wrong?

As nice as it would be to have a sweet treat without consequence, or what amounts to a nutritional "free ride," it just isn't possible. The above-referenced study has some generalized flaws that have to be taken into consideration. For one thing, the nutritional parameters of one group being allowed to drink diet soda and the other forbidden to drink it are very vague, to the point where it is unclear if the "water" drinkers were actually only drinking water. It is also a relatively short study and, as we'll see later, long-term studies on this subject tend to have the opposite results. Finally, the study was funded by the American Beverage Association, i.e., Coca-Cola, Pepsi, etc. According to the *Wall Street Journal*, diet soda sales have declined nearly 7 percent in the past year. Regular soda sales have also declined, as much of the population is moving towards a more whole-foods, preservative- and chemical-free diet. This industry definitely has motive to spin a study to promote sales. And nothing promotes sales in this country like the promise of easy weight loss.

The study's authors explain the improvement in weight loss through participant choices, assuming that those limited to water missed sweetness, and were therefore driven to succumb to other cravings (again, we don't know for sure what either group was consuming). But flaws aside, even if we assume this study provides evidence for weight loss in the short term by drinking diet sodas, is it relevant in the long term? Last year, a study at Purdue University found that diet soda drinkers have the same if not increased health issues as those who drink regular soda. It found that people who drink diet soda might be "at increased risk of excessive weight gain, metabolic syndrome, type 2 diabetes, and cardiovascular disease." The author of the study, which was a compilation of prospective long-term studies, also reports that if you go out 7 years, 10 years, 15 years, and 20 years, the individuals who consume diet sodas have much worse health outcomes, with increased risk for metabolic syndrome (insulin resistance, weight gain, and thus cardiovascular disease).

Statistics from the San Antonio Heart Study, a 25-year-long community-based epidemiologic study, suggest that the more diet sodas a person drinks, the greater the chance that he or she will become overweight or obese. This study cited that for each diet soft drink participants drank per day, they were 65 percent more likely to become overweight during the next seven to eight years, and 41 percent more likely to become obese.

A study earlier this year in the *Journal of the American College of Cardiology* again associated risk for cardiovascular disease with sweetener intake. Healthy postmenopausal women who drank two or more diet drinks a day were more likely to have a heart attack, stroke or other cardiovascular problems. In fact, compared to women who never consumed diet drinks, those who consumed two or more a day were "30 percent more likely to suffer a cardiovascular event and 50 percent more likely to die from related disease."

That we can cut calories by replacing a regular soda with a zero-calorie diet soda and potentially cause weight gain likely contradicts much of what you have been told about calories in versus calories out, and is just a portion of the evidence that it is an outdated notion that it doesn't matter what you are eating, just that you burn more calories than you take in. There are actually a few theories as to how sugar substitutes can wreck your metabolism.

Sugar substitutes, namely sucralose (Splenda), which is now the most commonly used, is approximately 600 times sweeter than naturally occurring sugar. Many theorize this sweetness alone eventually trains your taste buds to desire more and more sweetness. Biochemically, there is a question of what this sweet trigger does to your brain. In effect, when you consume a sugar substitute, your brain receives a message that you have eaten sugar, and your body then mobilizes efforts to process that sugar into your system. But, there is actually no sugar to be processed. Insulin released into your system is supposed to couple with newly ingested glucose and transport it into your cells to use as fuel. Insulin that is put into your blood stream without any glucose to metabolize instead feeds back to the brain, calling for more glucose. This makes you hungry (and specifically, hungry for sugar). What's worse, over time, elevated levels of insulin in your blood stream lead to signals of famine, so that you are not only driven to eat more, but your body learns to store energy more efficiently. And how do we store energy? We store it as fat ...usually loose fat around the middle, where it is easy for the body to use should the famine continue. The problem is that there is not a famine, just too much insulin. As if this weren't bad enough, elevated insulin over time leads to insulin resistance at the cell so that even when insulin is able to couple with glucose, it can't make it into the cell, and both insulin and glucose levels rise in the blood. This is metabolic syndrome, the precursor to Type 2 or non-insulin resistance diabetes.

So is it possible for a 12-week study to show positive results for sugar substitutes and weight loss? Yes. Could this result be seen over the long haul, which inarguably is more important? It's not likely and it seems the opposite has been shown many times over. As a side note, you might be wondering where Stevia falls into this mix. The answer is that there is no reason to think Stevia has different effects than other substitutes...it's just another sweet trick for your brain, and over time it will probably make your body more efficient at fat storage.

Sugar substitutes should be avoided in your diet as stringently as additives like high fructose corn syrup. It really comes down to common sense; eat whole foods that are low in preservatives and additives, moderate in natural sugars, and high in fiber and protein. Eat real food and your body will know how to process it into the fuel and nutrition that you need.

Please review our business at: [Yelp](#) [City Search](#) [Google +](#) [Angie's List](#)

We are proud winners of the 2016-2017 THE SPECTRUM AWARD FOR EXCELLENCE IN CUSTOMER SERVICE. View our Spectrum Award [here](#).

Trainerly allows you to workout and exercise at your home, office, hotel room or pretty much anywhere in the world through live 2-way webcam. [Sign-up](#) for a class with me today. Use the promotional code "trainerly20" to save 20% off any service.

[Click Here](#) to sign-up for our e-mail list so can receive all of our articles & download your free copy of our Dietary Information e-book.

View our books at amazon.com/author/terrylinde

[Like us on Facebook](#)/[Connect with us on LinkedIn](#)/[Follow us on Twitter](#)
[Follow us on Google+](#)/[Pinterest](#)/[Instagram](#)

(Hold down the Ctrl key & click the underlined words or logos)
Make sure to forward to friends and followers.