

Sugar & Sugar Substitutes

It has been said that when we lose the sweetness of life, we want sweetness on the tongue. In other words, when life becomes too harsh and stressful, we want sugar to help in coping with the stress. This is understandable, as sugar releases endorphins in the brain, increases serotonin and temporarily makes us feel good (besides tasting yummy and pleasurable).

Unfortunately, this temporary emotional benefit is short lived, since the serotonin boost by sugar actually depletes serotonin stores over time. Additionally, excess intake of sugar can cause insulin resistance over time, making it extremely difficult to maintain a healthy weight, as well as causing other health problems.

While eating sugar may bring tremendous temporary pleasure, the dark side of it is that it is extremely addictive - as addictive as cocaine. In brain scans the same reward centers light up very bright in response to sugar the same as cocaine. Other considerations are that sugar suppresses the immune system for 2-4 hours after ingestion of it. It also depletes the body of minerals, creates inflammation and (once the energy burst is over) causes brain fog, lethargy and fatigue, followed by more cravings. It's a vicious cycle.

Because of concern for elevated insulin and the weight gain that sugar creates, sugar substitutes have been developed to provide the artificial sweet taste and satisfaction, without the calories. A few have been successful, but unfortunately many create even worse side effects. A couple of good ones include Xylitol and Stevia. These are primarily found in mints and other food items one would find in a health food market.

Others such as aspartame, saccharin and sucralose are widely found at the supermarkets and especially in diet sodas. Unfortunately studies show that diet sodas create the same problems of insulin resistance and stubborn weight as sugar sodas. The additional concern (and maybe even greater concern) is that aspartame is an excitotoxin. When combined with caffeine, it is especially exciting to the brain and very addictive (because it feels so good). However, as the buzz wears off, brain cells die along with it. The aspartame, as an excitotoxin, excites the brain cells to death.

Aspartame has been directly related to depression, migraine headaches, anxiety attacks, muscle spasms, heart palpitations, insomnia and nausea.

A 1999 study published in The British Journal of Clinical Nutrition, found a wide range of blood glucose levels in response to aspartame consumption. This was suggested to be caused possibly due to the perception of sweetness of the product. Similarly, a 2007 study in patients with Type II Diabetes found a similar blood sugar and insulin response following an aspartame sweetened breakfast as compared to a sucrose sweetened one. These results suggest that aspartame may in fact have an effect on blood sugar, and hence appetite, contrary to the results of previous studies. So, if one has Diabetes and uses aspartame instead of sugar, they are likely to experience the same effect as eating sugar.

What can you do to satisfy your sweet tooth? Raw fruit and berries are an excellent option since they are loaded with fiber, enzymes, minerals and vitamins. And, if eaten whole, most will typically not spike blood sugar levels.