



SWEET TOOTH

We all love our sweets. Today the average American consumes 100 lbs. per year. That is 35 cubes of sugar per day! Do you know one soda contains **11 cubes of sugar**? 64% of us are now overweight (Body Mass Index or BMI > 25), including 36% who are outright obese (BMI>30). Therefore, out of 314 million Americans, 113 million are now obese!



There is a clear association between the rise in sugar consumption and the alarming rise in rates of obesity and diabetes. Sugar intake contributes directly to tooth decay and subsequent gum disease. While a little sugar is fine, it is clear that **too much is toxic!** The largest sources of daily over consumption of sugar are **soft drinks** and fruit juices.

Fructose is the worst, unlike glucose, it is processed in the liver, which is absorbed in the intestine. **Glucose** can be used directly by the blood stream and **sends signals** when it has had enough, unlike fructose. Fructose, from many surprising sources (corn syrup), accounts for 50% of the sugar we eat. The cost of all U.S. healthcare is \$922 billion per year. 20.6% or \$190 billion of this amount is due to obesity. With that in mind, we offer this list of sugar substitutes for your information.

Sugar Substitutes:

1. **Saccharin-Sweet’N Low:** Discovered in 1879, it was later found to cause bladder cancer in rats due to a precipitate it formed in rat urine. It is now considered safe due to the discovery that this precipitate does not form in humans. Saccharin has a bitter aftertaste.
2. **Aspartame-Equal, NutraSweet:** Discovered in 1965 and approved by FDA in 1974. Some feel it is linked to headaches, eye disorders and other problems. It is metabolised to aspartic acid, phenylalanine and methanol, all in lower doses than normally consumed in our daily diets. Thus, scientists consider it to be completely safe.
3. **Cyclamate:** Synthesized in 1937 and **banned** in the U.S. in 1970, it remains approved in 100 other countries including Canada. It has been re-summitted for approval in the U.S. . It has no aftertaste.
4. **Sucralose-Splenda:** Approved in 1998, it is a chlorinated sugar in which 3 chlorine atoms replace 3 hydroxyl groups in sucrose. Only 15% of sucralose is absorbed. Considered safe, it can be used in cooking.
5. **Acesulfame Potassium-Ace K, Sunett, Sweet One:** Discovered in 1967 and FDA approved 1988, it is in wide use today. It is usually blended with other sweeteners to mask its aftertaste.
6. **Agave:** Promoted as a natural sweetener, agave sugar has been used for thousands of years in dry regions where it is native. However natural, it is now processed from the Blue Agave **root bulb** and the result is a high **fructose** sweetener just like corn syrup.
7. **Stevia-Truvia, PureVia, Reb A:** Stevia is a natural sweetener derived from Paraguay plant that is a member of the Chrysanthemum family and that has been used for over 1,500 years. Approved in the U.S. in 2008, but there are concerns if used to excess. Considered by some to be the **safest sugar substitute**.....so far!
8. **Xylitol:** Discovered over 100 years ago, it was FDA approved in 1963. Created from wood and corn cob cellulose, it is a nonfermentable sugar alcohol with a low glycemic index. It has a dental plaque-reducing effect by attracting and then “starving” harmful micro-organisms. It also creates a more alkaline mouth environment which allows calcium in saliva to remineralize tooth enamel. Xylitol has been found to reduce ear infections and is great in baking. **Dentists love this, especially here at JCDG.**

