



How Sweet It's Not

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Human beings have evolved over thousands of years to trust the taste of sweet. First, there is the mother's milk, then fruits and vegetables, even grains are a little sweet. We know and trust the taste of sweet, because it is the first taste-sense that we develop in our body. Sweets are energy sources, and they include sugar and carbohydrates. Later we develop tastes for salty, bitter, pungent, etc. as our taste buds develop.

Human beings know innately that a sweet will provide us with energy. And of course energy is necessary for survival. Our brain operates on glucose which is the sweet molecule that circulates in the blood. Fructose is another sweet molecule, present in fruits and vegetables, along with fibre, protein, fats, vitamins and minerals. Fructose is a molecule metabolized by the body, and stored for future energy.



But when does sweet become a problem? Food labels do not usually distinguish between naturally occurring and added sugars. Healthy foods - fruit, vegetables, dairy - contain sugars that the human body is naturally able to handle. Added sugars are what you want to avoid.

Obviously, we all know that too much sugar isn't good for us. We know that too much sweet can cause diabetes, obesity and heart disease. When refined sugars are eaten alone, without nutrients, they enter the bloodstream all at once, causing a flood of insulin and other hormones which try to bring the blood sugar levels down to acceptable levels. Over time, high sugar intake will impair insulin, adrenal, and thyroid efficiency and tax the immune system. Constantly elevated levels of glucose will lead to insulin insensitivity and type 2 diabetes. There is also growing research that excess sugar consumption results in inflammation, and other diseases such as Alzheimer's and cancer.

But there's a new player on the scene - one that tastes even sweeter than sugar! This is glucose-fructose; the new manufactured sweetener on the scene of manufactured food.

Glucose-fructose

Glucose-fructose is replacing sugar as the primary sweetener in processed foods, because it is cheaper and sweeter. It's manufactured from corn starch, whereas sugar is refined from cane or beet. In the United States it is called HFCS - high fructose corn syrup. Basically it is manufactured to contain a higher ratio of free fructose to glucose.

A lot of people who read labels think that glucose-fructose is healthier because it has the word “fructose” implying that it is a natural fruit sugar. Unfortunately, this is not the case. Our bodies don’t process refined “free” fructose in the same way as fructose occurring naturally in whole foods. Instead of enzymatically converting it into the energy molecule “glucose”, when fructose appears in the free form (as in glucose-fructose HFCS) it tricks the body and is turned into fat instead of energy. This is why it contributes to obesity in such an epidemic way. This is especially harmful for young people who naturally crave sweets to fuel their high energy needs.

What about artificial sweeteners?

Artificial sweeteners like sucralose and aspartame are synthetic chemicals produced in a lab and may have negative effects on the body. Humans lack the enzymes to properly deal with sucralose and the metabolism of aspartame has been shown to produce neurotoxins (wood alcohol and formaldehyde) that could damage brain cells. Although artificial sweeteners like Nutrisweet or Aspartame are low in calories, they may actually lead to weight gain because although they are not recognized by the body, they influence our neurological satiation signals.

So, which sweeteners are best for you and your family?

Besides eating a whole diet with fruits, vegetables and whole grains, which are naturally sweet, the following are considered “healthy sweeteners”.

Honey: research shows that honey helps to replenish energy levels and stabilize blood sugar. Raw honey contains vitamins, minerals, phytonutrients, amino acids, and good bacteria.



Maple Syrup: has 54 antioxidants and a higher vitamin and mineral profile than any other sweetener!

Also consider: Stevia, Sucanat, Coconut sugar, Molasses

Natural sweeteners eaten in moderation are part of a healthy diet, especially when consumed with fibre, protein, vitamins and minerals. Human beings were designed to eat whole food, so it’s always best to avoid highly processed products, especially glucose-fructose sweeteners. Enjoy a healthy and happy 2014.

N.B. all pictures taken from Google images.