



Is the Sugar Substitute, Splenda, safe? And if not, what sweetener should you use?

A new study done at Duke University and published this past week in the *Journal of Toxicology and Environmental Health* has some interesting news about the sugar substitute known as Splenda (sucralose). Splenda is an artificial sweetener that creates the sugar sucralose from raffinose- a starch derived from sugar beets. The chemical sucralose, which contains chlorine, is marketed as a natural sugar. However, Splenda it isn't natural at all.

Dr. Rodger Murphree - Birmingham, AL

And, according to the study, the use of Splenda:

1.Reduces the amount of good bacteria in the intestines by fifty percent.

The bacteria in your bowels, some 100 trillion bacteria or about three pounds worth, outnumber the cells in your body by a factor of 10 to one. These bacteria or gut flora which line your intestinal tract are your first line of defense against potential pathogens (viruses, bacteria, and yeast). They play a crucial role in establishing an overall healthy immune system.

When bad bacteria and or yeast become overgrown in your intestinal tract, you have a condition called dysbiosis. **Dysbiosis** has been linked with disorders like yeast infections, irritable bowel syndrome and autoimmune disorders, including rheumatoid arthritis.

2.Increases the pH level in the intestines.

The stomach needs an acidic environment in order to digest food and destroy potentially harmful pathogens including unwanted bacteria and yeast. Low stomach acid triggers a chain reaction of digestive disorders, including malabsorption. Foods may be incompletely digested and subsequently absorbed into the bloodstream, where they can lead to **food allergies**, triggering pain and **inflammation** throughout the body. For more information about malabsorption and leaky gut syndrome –

3.Contributes to increases in body weight.

The study, authored by Drs. Mohamed B. Abou-Donia, Eman M. El-Masry, Ali A. Abdel-Rahman, Roger E. McLendon and Susan S. Schiffman, was conducted using male rats over a period of twelve weeks. Source: *Journal of Toxicology and Environmental Health, Part A, Volume 71, Issue 21 January 2008* , pages 1415 - 1429.

NutraSweet/Aspartame

Aspartame has been associated with a multitude of health risks and has largely lost favor around the world. Consider that the FDA had its concerns and denied approval of aspartame for 16 years before it finally gave in to political/economic pressure. This controversial artificial sweetener was approved through an interesting chain of events. When Ronald Reagan brought Don Rumsfeld, former CEO of the aspartame manufacturer, Monsanto, to Washington, a new FDA Commissioner was hastily appointed.

The new Commissioner approved the artificial sweetener and then went on to become a consultant for NutraSweet's public relations firm, receiving \$1000 a day for the next 10 years!

Aspartame, commonly known as NutraSweet or Equal, is an artificial sweetener. The body breaks it down into *methanol* and *formaldehyde* to metabolize it. Formaldehyde is grouped into the same class of



drugs as *cyanide and arsenic*. When the temperature of aspartame exceeds 86 degrees F, the wood alcohol in Aspartame is turned into formaldehyde and then into *formic acid*. Formic acid is the poison contained in the sting of a fire ant. It has been shown that methanol toxicity causes **depression**, brain fog, mood changes, **insomnia**, **seizures** and similar symptoms associated with **multiple sclerosis**.

There are over 92 symptoms documented from using aspartame.

I have more to say about the dangers of aspartame and NutraSweet in my book **“Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome.”**

What About Table Sugar?

There are 4 classes of simple sugars include- Sucrose (table sugar), fructose (fruit sugar), honey, and malts. Obviously whole fruits are a healthy choice.

Fruit juices on the other hand are like mainlining sugar; it's too much sugar at one time. Think about it this way, you'd have a hard time eating ten apples, but you could easily drink a glass of apple juice, which may contain up to 10 “juiced” apples.

Too much sugar no matter if fruit juice, honey, maple syrup, fructose (fruit sugar), evaporated cane juice, brown sugar, or white table sugar is not a healthy choice.

Sugar depletes the body of B vitamins, calcium, and magnesium. Three ounces of sugar, in any form, sucrose (table sugar), honey, or fruit juice, results in a 50% reduction in white blood cell activity for up to 5 hours. Sugar **lowers** our **immune function!**

The average American consumes over 150 ounces of sugar a day. A can of Coke has 9-10 teaspoons of sugar. Sugar has a number of other extremely damaging effects on the human body.

Too Much Sugar (Emphasis here on TOO much sugar)

- Sugar can **suppress the immune system**.
- Sugar can contribute to mood disorders including **hyperactivity, anxiety, depression**, and concentration difficulties, especially in children.
- Sugar can produce a significant **rise in triglycerides**.
- Sugar can cause drowsiness and decreased activity in children.
- Sugar can cause symptoms associated with **ADHD**, especially in children.
- Sugar can **reduce** helpful high density cholesterol (**HDLs**).
- Sugar can promote an **elevation** of harmful cholesterol (**LDLs**).
- Sugar can cause **hypoglycemia** (low blood sugar).
- Sugar can contribute to **kidney damage**.
- Sugar can **increase the risk of coronary heart disease**.
- Sugar may lead to **chromium deficiency**.
- Sugar can cause **copper deficiency**.
- Sugar **interferes with absorption of calcium and magnesium**.
- Sugar can upset the body's **mineral balance**.
- Sugar can promote **tooth decay**.
- Sugar can **raise adrenaline** levels in children.
- Sugar can lead to **periodontal disease**.
- Sugar can **speed the aging process**, causing wrinkles and grey hair.
- Sugar can **increase total cholesterol**.



- Sugar can contribute to **weight gain and obesity**.
- Sugar increases the risk of **Crohn's disease** and **ulcerative colitis**.
- Sugar can contribute to **Diabetes**.
- Sugar can contribute to **Osteoporosis**.
- Sugar can **increase systolic blood pressure**.
- Sugar can cause **free radical formation** in the bloodstream.
- Sugar can cause **atherosclerosis**.
- Sugar can cause **depression**.
- Sugar can increase the body's **fluid retention**.
- Sugar can cause **hormonal imbalance**.

OK, so I think I made my point. An occasional sweet treat is acceptable and encouraged. Moderation is the key. There's no reason to totally abstain (unless your fighting off an infection, have yeast overgrowth, or are battling Diabetes), just go easy and limit your sweets.

Brown Sugar

It is often said that brown sugar is a healthier option than white sugar. But you can chalk that up to clever marketing. In reality, brown sugar is most often ordinary table sugar that is turned brown by the reintroduction of molasses. Normally, molasses is separated and removed when sugar is created from sugarcane plants.

In some cases, brown sugar — particularly when it is referred to as “raw sugar” — is merely sugar that has not been fully refined. But more often than not, manufacturers prefer to reintroduce molasses to fine white sugar — creating a mixture with about 5 percent to 10 percent molasses — because it allows them to better control the color and size of the crystals in the final product.

Because of its molasses content, brown sugar does contain certain minerals, most notably calcium, potassium, iron and magnesium (white sugar contains none of these). But since these minerals are present in only minuscule amounts, there is no real health benefit to using brown sugar.

Stevia - I recommend using the natural sweetener Stevia.

Stevia is a South American herb that has been used as a sweetener by the Guarani Indians of Paraguay for hundreds of years. The leaves of the small, green Stevia Rebaudiana plant have a delicious and refreshing taste that can be 30 times sweeter than sugar (a little goes a long way).

For more about Stevia please see www.stevia.com.

You can find Stevia at any health food store. And while it may take time to get used to its taste, it won't deplete your good bacteria (Splenda), increase your risk of cancer (Sweet'N Low), or cause neurotoxicity (NutraSweet).

Dr. Rodger Murphree
Birmingham, AL