The Secret Dangers of Splenda (Sucralose), an Artificial Sweetener

Is Splenda Really As Safe As They Claim It to Be?

As of 2006, only six human trials have been published on Splenda (sucralose). Of these six trials, only two of the trials were completed and published before the FDA approved sucralose for human consumption. The two published trials had a grand total of 36 total human subjects.

36 people sure don't sound like many, but wait, it gets worse, only 23 total were actually given sucralose for testing and here is the real killer: The longest trial at this time had lasted only four days and looked at sucralose in relation to tooth decay, not human tolerance.

Why Do You Need to Know About Splenda?

Splenda, best known for its marketing logo, "made from sugar so it tastes like sugar,' has taken the sweetener industry by storm. Splenda has become the nation's number one selling artificial sweetener in a very short period of time.

Between 2000 and 2004, the percentage of US households using Splenda products jumped from 3 to 20 percent. In a one year period, Splenda sales topped $177 million compared with $62 million spent on aspartame-based Equal and $52 million on saccharin-based Sweet 'N Low.

McNeil Nutritionals, in their marketing pitch for Splenda emphasizes that Splenda has endured some of the most rigorous testing to date for any food additive. Enough so to convince the average consumer that it is in fact safe. They claim that over 100 studies have been conducted on Splenda. What they don't tell you is that most of the studies are on animals.

Additional Concerns About Splenda Studies

There have been no long-term human toxicity studies published until after the FDA approved sucralose for human consumption. Following FDA approval a human toxicity trial was conducted, but lasted only three months, hardly the length of time most Splenda users plan to consume sucralose. No studies have ever been done on children or pregnant women.

Much of the controversy surrounding Splenda does not focus just on its safety, but rather on its false advertising claims. The competition among sweeteners is anything but sweet. The sugar industry is currently suing McNeil Nutritionals for implying that Splenda is a natural form of sugar with no calories.

Is It REALLY Sugar?
There is no question that sucralose starts off as a sugar molecule, it is what goes on in the factory that is concerning. Sucralose is a synthetic chemical that was originally cooked up in a laboratory. In the five step patented process of making sucralose, three chlorine molecules are added to a sucrose or sugar molecule. A sucrose molecule is a disaccharide that contains two single sugars bound together; glucose and fructose.

The chemical process to make sucralose alters the chemical composition of the sugar so much that it is somehow converted to a fructo-galactose molecule. This type of sugar molecule does not occur in nature and therefore your body does not possess the ability to properly metabolize it. As a result of this "unique" biochemical make-up, McNeil Nutritionals makes it's claim that Splenda is not digested or metabolized by the body, making it have zero calories.

It is not that Splenda is naturally zero calories. If your body had the capacity to metabolize it then it would no longer has zero calories.

**How Much Splenda is Left In Your Body After You Eat It?**

If you look at the research (which is primarily extrapolated form animal studies) you will see that in fact 15% of sucralose is absorbed into your digestive system and ultimately is stored in your body. To reach a number such as 15% means some people absorb more and some people absorb less. In one human study, one of the eight participants did not excrete any sucralose even after 3 days. Clearly his body was absorbing and metabolizing this chemical. That is what our bodies are supposed to do.

The bottom line is that we all have our own unique biochemical make-up. Some of you will absorb and metabolize more than others. If you are healthy and your digestive system works well, you may be at higher risk for breaking down this product in your stomach and intestines. Please understand that it is impossible for the manufacturers of Splenda to make any guarantees based on their limited animal data.

If you feel that Splenda affects you adversely, it is valid. Don't let someone convince you that it is all in your head. You know your body better than anyone else.

**How to Determine if Splenda is Harming You**

The best way to determine if Splenda or sucralose is affecting you is to perform an elimination/challenge with it. First eliminate it and other artificial sweeteners from your diet completely for a period of one to two weeks. After this period reintroduce it in sufficient quantity.

For example, use it in your beverage in the morning, and eat at least two sucralose containing products the remainder of the day. On this day, avoid other artificial sweeteners so that you are able to differentiate which one may be causing a problem for you. Do this for a period of one to three days. Take notice of how your body is feeling, particularly if it feels different than when you were artificial sweetener free.
Splenda May Still Be Harming You

If you complete the elimination/challenge trial described above and do not notice any changes then it appears you are able to tolerate Splenda acutely. However, please understand that you are not out of the woods yet.

The entire issue of long-term safety has never been established. Let's look at the facts again:

- There have only been six human trials to date
- The longest trial lasted three months
- At LEAST 15% of Splenda is not excreted from your body in a timely manner

Considering that Splenda bears more chemical similarity to DDT than it does to sugar, are you willing to bet your health on this data? Remember that fat soluble substances, such as DDT, can remain in your fat for decades and devastate your health.

If the above facts don't concern because you believe the FDA would not ever allow a toxic substance into the market then read on.

Do You Really Believe These People Are Going to Protect You?

Please consider that the only organizations between you and potentially toxic side effects are the FDA and the manufacturers of sucralose (Tate & Lyle) and of Splenda (McNeil Nutritionals).

The FDA has a long standing history of ineffective screening and rampant conflict of interests as demonstrated in their inability to identify Vioxx as too dangerous to be on the market. This mistake costs 55,000 people their lives.

Now the point I want you to understand here, because it is really important, is that Splenda is not a drug and is only a food additive. As such the number of studies required to receive FDA approval is substantially less than drug. Vioxx had an order of magnitude of more comprehensive clinical trials than Splenda ever did, and despite this rigorous approval process it still killed 55,000 people.

So, now you have the primary concerns I have about Splenda and the choices is yours.

Read Splenda Horror Stories

We have more people on our site that have reported adverse reaction to Splenda than were formally studied in the research submitted for FDA approval. It would seem this collection of data is in some ways superior to the data submitted to the FDA for Splenda approval.

You can help us continue our Splenda research by supplying us with your own experience. If you or anyone you know have had an adverse reaction to Splenda or sucralose containing products please tell us your story.
Dr. Mercola's Comment:

Don't let these large companies fool you. There is no magic alternative to sugar when it comes to sweeteners. You simply can not have your cake and eat it too when it comes to this area. It is far too early to tell, as not enough people have consumed this product to observe large numbers of adverse effects.

However, I have had a number of patients in our Wellness Center who have had some severe migraines and even seizures possibly from consuming this product.

My advice?

**AVOID Sucralose.**

I am fond of telling people that if something tastes sweet you probably should spit it out as it is not likely to be to good for you. This of course, is a humorous exaggeration, but for most people who struggle with chronic illness, it is likely to be a helpful guide.

PLEASE note this article is being written in 2000. This is one of the first comprehensive clear investigative reports and warnings on sucralose on the Internet.

Related Articles:

- Sucralose (Splenda®) U.S. Product List
- The Potential Dangers of Sucralose: Reader Testimonials
- The Dangers of Chlorine and Issues With Sucralose
- 12 Questions You Need to Have Answered Before You Eat Splenda

Sources:
Food and Drug Administration "Final Rule " for Sucralose, 21 CFR Part 172, Docket No. 87F-0086.


Maudlin RK. FDA approves sucralose for expanded use. Modern Medicine, Oct99, Vol. 67 Issue 10, p57, 1/9p


Sucralose Toxicity Information Center

Splenda Product Web Site

Official Tate & Lyle Sucralose Web Site
