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The Bottom Line on the Latest Sucralose Study

“Sucralose causes cancer.”

“Sucralose prevents cancer.”

You’ve got to be confused when you read those recent headlines about **the same research study!** You read or listen to my messages because you want to know what I dig out of the original research to get past the confusion. Well, let’s get to it.

The Data

The data were messy (1). When you look at the numbers in the table that reported the incidences of cancers, the patterns were not clear. Using the data on the male mice, the incidence of cancers went up in three out of four doses when compared with controls, but down in the 8,000 ppm sucralose dose. What happened? Why did the rate of cancer go down? The same pattern existed with the data on leukemia.

There were no differences reported in the amount of chow the animals ate so the intake should have been what they intended. Is this a big deal? Yes, when you’re claiming that sucralose causes cancer in male mice. If the chow was too sweet and they ate less—or it was tastier and they ate more—you don’t have a level playing field. What happened to that group?

The data on female mice were avoided. Even if they weren’t statistically significant, it should have been mentioned in an 11-page research paper. The reduction in the rate of cancer should have been addressed. I’m not suggesting that sucralose prevents cancer in any way, but you can’t avoid results on female animals just because they aren’t consistent with the results on males.



The Species of Rodent

The researchers used Swiss mice in the study. They went through great detail to say how the mice were purchased, bred, housed, fed, and cared for during the study and after they died. All well and good. One of the reasons they cite as support for the conclusions that the sucralose caused the cancers were historical control rates for specific types of cancer, in this case, hematopoietic cancers. That simply means that without any intervention, these types of mice will get this type of tumor. The historical rate they cite was 5.7% while the rate for animals in this study was 8.5%.

The problem is two-fold. First, the range they cite for the historical control rates is a low of 0% to a high of 12.5% so the study’s rate of this type of tumor is well within the normal range. Second, that historical control rate isn’t supported by a study which examined all forms of cancer (2); in that study, just six of 254 Swiss mice developed those types of tumors. That’s only 2.5%.

What they completely avoided talking about was the high incidence of tumors in the control animals: 61.6% for all male and female mice. That exceeds the typical rate of 25% found in this type of mouse. The first question should be why they got such high rates of cancers in their control mice.

Significance

When you look at the results, it didn't seem the mice that were eating sucralose were getting excessive amounts of tumors compared with controls. In the male mice, 56.4% of the controls developed tumors along with 62.9% of the male mice that ate the most sucralose. In female mice, it was 67.6% for controls and 59.4% for the mice that ate the most sucralose. These are not world changing numbers in a small number of mice.

What would the numbers mean translated to humans in terms of sucralose intake? Based on the author's response to Dr. Willingham in the Forbes article, they claimed 500 ppm would be about 60 mg/kg body weight (3). That's 12 times the Acceptable Daily Intake of 5 mg/kg body weight in humans. To put that in perspective, a 150-pound person would have to ingest over 4,000 mg of sucralose per day: that's almost 70 cans of soda with Splenda per day or over 330 packets of Splenda. You can figure out how much more 16,000 ppm would be. It would be difficult to reach the lowest level used in the study let alone the highest amount used in the study; you'd have to be megastar rich to afford that much diet soda!

The Bottom Line

Based on this study, there's no reason to stop drinking or eating food with sucralose if you already do and you don't have any issues using it. Look, no matter what the category of food or food additives, there's always the possibility that someone will be allergic to it or might not be able to process it easily. It's not a characteristic of the ingredient, it's specific to the individual. Those who oppose artificial sweeteners always seem to find circumstances that support their position. I get it. But that doesn't mean it's generalizable to the whole population. That's what they don't get.

The Bottom Line on Sucralose

If you want to know more about sucralose, I'm collecting all the information in a new [Bottom Line](#); you'll get an announcement when it's ready next week. It covers the history of sucralose, a review of all the studies that are generally cited as an indictment of the safety of sucralose, the significant studies of the past year including this one, and my opinion on what research we still need to see done. If you're concerned about your health, or you're in a business that uses foods and drinks that contain sucralose, you need the state-of-the-art research as it exists today. Not the hype. Just the bottom line.

To read about sucralose and get all the references, order the PDF download. If you just want to listen, get the MP3 download. Each is priced at only \$1.99 so get them both and add them to your reference material.

What are you prepared to do today?

Dr. Chet

References:

1. <http://www.tandfonline.com/doi/abs/10.1080/10773525.2015.1106075?journalCode=yjoh20>
2. Cancer Research. 1973. 33:2768-2773.
3. <http://www.forbes.com/sites/emilywillingham/2016/03/10/splenda-reduces-cancer-rates-in-some-mice/#55fe66561e57http://onforb.es/1QGknfx>

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