

# The Harmful Effects of Soda



*The following is an excerpt of a post from Elizabeth Walker, RDH, BS, DC, that was part of a discussion about erosion of the lingual surfaces of the maxillary anterior teeth. The discussion centers around eating disorders, but this post on the negative effects of soda pop provided valuable information.*

We really need to caution people regarding the daily use of soda pop. Our fast-food culture has warped our perception of this chemical cocktail and marketed it as a legitimate beverage to be consumed with a meal. This is not food in any sense of the word. I prefer to call it a “party food,” which is only to be consumed at special occasions. This is the way I was brought up. We never kept soda in our house. It is also the way I brought up my son, and at 22 he has never taken a round of antibiotics and has never had a cavity in his adult teeth.

I teach my patients that soda harms you in three ways. First, the phosphoric acid and other chemicals that give it fizz cause an EXTREME chemical imbalance in the body that severely strains the body’s buffer systems. The bloodstream has to be flooded with calcium (which is taken from bones, teeth, heart and any other organ) to correct this imbalance. Daily consumption of soda in teens has caused a statistic of three times more bone fractures. We are creating an entire generation of future orthopedic invalids.

Second, the average soda has 10 tsp. of sugar. Sure, sugar gives you energy but it doesn’t travel through the citric acid cycle free of charge. This cycle has about a dozen metabolic reactions, all of which require nutrient cofactors. Therefore, the body has to steal these nutrients (again from all of our organs and tissues) to run this cycle. The nutrients needed by the Krebs’ cycle include B1, B2, B3, B5, B6, lipoic acid (important in preventing diabetes), Mn, biotin, Fe, Mg, S, and coenzyme Q-10.

Third, the caffeine in many brands races our heart and stresses our adrenals, both of which cause exhaustion and a decrease in our body’s resilience, which is the ability to handle stress of any kind. Also, the caffeine stimulation causes us to use up more nutrients (AGAIN!) and increases urinary loss of even more nutrients. These days it is “fashionable” to amp up the caffeine in many new beverages. Red Bull or Pepsi anyone?

In dentistry we are aware that Mountain Dew and Dr. Pepper seem to cause the worst demineralization. I was even more amazed when a psychologist patient of mine, who works for a major medical HMO, told me that they are often unable to achieve emotional stability in patients who use Mountain Dew! That is the only brand that they have noticed difficulties with. This would be an interesting thing to mention to patients who are on Prozac, Zoloft, Paxil, etc.

If you find explaining this whole diatribe too complex, refer patients to [www.dentalnutrients.com](http://www.dentalnutrients.com). You’ll find most of this under the subject “Cavities.” Thanks again for great info. That is what makes Hygienetown so helpful to those of us who want to offer the best to our patients. ■

# Study: Diet Soda Increases the Risk of Diabetes.

## Why Do We Still Drink This Stuff?

By Lylah M. Alphonse, Senior Editor, Yahoo! Shine



Yet another study confirms what people have been saying for ages: Stop drinking diet soda. Like, right now. Drinking just one 12-ounce can of an artificially sweetened fizzy drink per week can increase your risk of Type 2 diabetes by 33 percent, French researchers found. And given that most people don't stop at a single weekly serving, your real risk for diabetes could actually be much higher.

### Diet Soda May Increase Risk of Depression

The study, which was announced Thursday and will be published in the *American Journal of Clinical Nutrition*, was conducted by France's National Institute of Health and Medical Research and covered 66,118 middle-aged women whose dietary habits and health were tracked from 1993 to 2007.

### Diet Soda May Be Making You Fat

The results were unexpected. Though it's well-known that people who consume a lot of sugar are more likely to develop diabetes, the researchers found that participants who drank "light" or "diet" soft drinks had a higher risk of developing Type 2 diabetes than those who drank regular, sugar-filled sodas. Those who drank 100 percent natural squeezed fruit juices instead had no additional risk.

Women who choose artificially flavored soft drinks usually drink twice as many of them as women who choose regular soda or juice—2.8 glasses per week compared to 1.6 glasses. "Yet when an equal quantity is consumed, the risk of contracting diabetes is higher for 'light' or 'diet' drinks than for 'non-light' or 'non-diet' drinks," the researchers, epidemiologists Françoise Clavel-Chapelon and Guy Fagherazzi, said in a statement. Women who drank up to 500 milliliters (about 12 ounces) of artificially sweetened beverages per week were 33 percent more likely to develop the disease, and women who drank about 600 milliliters (about 20 ounces) per week had a 66 percent increase in risk.

Drinking sweetened beverages increases the risk of becoming overweight, which is itself a risk factor in developing diabetes. But the study didn't find that the results were the same even among overweight women. So how can artificially sweetened drinks be making the problem worse if they're fat- and calorie-free?

"With respect, in particular, to 'light' or 'diet' drinks, the relationship with diabetes can be explained partially by a greater craving for sugar in general by female consumers of this type of soft drink," the researchers explained. "Furthermore, aspartame, one of the main artificial sweeteners used today, causes an increase in glycaemia and consequently a rise in the insulin level in comparison to that produced by sucrose."

Translation: Drinking artificially sweetened drinks makes you crave other sweet things (hello, chocolate!). And your body reacts to aspartame—also known as NutraSweet and Equal—much in the same way that it reacts to plain old sugar.

According to the American Diabetes Association, about 25.8 million children and adults in the United States have diabetes—about 8.3 percent of the population. The disease is the leading cause of new

cases of blindness in people age 20 and older, and can also cause heart disease, stroke, high blood pressure, kidney disease, and damage to the nervous system. Type 2 diabetes—which can be controlled by diet and exercise rather than a daily insulin injection—is the most common form of diabetes in the United States.

The study's authors cautioned that more research was needed in order to prove a true causal link between diet sodas and Type 2 diabetes. "Information on beverage consumption was not updated during the follow-up, and dietary habits may have changed over time," they admitted in their report. "We cannot rule out that factors other than ASB [artificially sweetened beverages] are responsible for the association with diabetes."

## Drink More Diet Soda, Gain More Weight?

By [Daniel J. DeNoon](#). Reviewed by [Charlotte E. Grayson Mathis, MD](#) on June 13, 2005

[WebMD News Archive](#)

### Overweight Risk Soars 41% With Each Daily Can of Diet Soft Drink

June 13, 2005 -- People who drink [diet](#) soft drinks don't [lose weight](#). In fact, they [gain weight](#), a new study shows.

The findings come from eight years of data collected by Sharon P. Fowler, MPH, and colleagues at the University of Texas Health Science Center, San Antonio. Fowler reported the data at the annual meeting of the American [Diabetes](#) Association in San Diego.

"What didn't surprise us was that total soft drink use was linked to [overweight](#) and obesity," Fowler tells WebMD. "What was surprising was when we looked at people only drinking diet soft drinks, their risk of obesity was even higher."

In fact, when the researchers took a closer look at their data, they found that nearly all the obesity risk from soft drinks came from diet sodas.

"There was a 41% increase in risk of being overweight for every can or bottle of diet soft drink a person consumes each day," Fowler says.

More Diet Drinks, More Weight Gain

Fowler's team looked at seven to eight years of data on 1,550 Mexican-American and non-Hispanic white Americans aged 25 to 64. Of the 622 study participants who were of normal weight at the beginning of the study, about a third became overweight or obese.

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For regular soft-drink drinkers, the risk of becoming overweight or obese was:

- 26% for up to 1/2 can each day
- 30.4% for 1/2 to one can each day
- 32.8% for 1 to 2 cans each day
- 47.2% for more than 2 cans each day.

**For diet soft-drink drinkers, the risk of becoming overweight or obese was:**

- 36.5% for up to 1/2 can each day
- 37.5% for 1/2 to one can each day
- 54.5% for 1 to 2 cans each day
- 57.1% for more than 2 cans each day.

For each can of diet soft drink consumed each day, a person's risk of obesity went up 41%.