

## IS DIET SODA TO BE BLAMED FOR DIABETES AND OBESITY?

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Numerous studies during the past several years have reported links between diet soda and weight gain, diabetes, heart problems, and other health issues. Most recently alarm has been caused about a higher chance of dementia and stroke among diet soda drinkers.

Many questions have to be answered before we know whether diet soda (DS) raises our risk of medical problems.

### DEMENTIA AND STROKE

Boston University researchers examined 10 years of health information from nearly 3000 adults older than age 45 to count the number who had a stroke. They did the same for 1500 adults older than 60 to determine how many developed dementia. After counting a number of factors that could influence their health, such as age, physical activity and waist size, the researchers found that diet soda drinkers nearly tripled their chances of stroke and dementia, compared with those who drank no diet soda. Only 81 or 5% of the diet soda drinkers were diagnosed with dementia, and only 3% had a stroke. The researchers opined that people should not be alarmed. The results of their study published in the journal "Stroke" in April (2017) did not establish the link.

### OBESITY AND DIABETES

A study reported in 2014 that overweight and obese people who drank diet soda ate between 90 and 200 more calories of food per day than those who drank regular sodas. Also, in 2014, a review of several studies (British Journal of Nutrition) revealed that people who drink diet soda raise their risk of type 2 diabetes by about

13% for each 12-ounce can they drink each day. A 2015 BJN review of studies also found that a single daily serving of diet soda increased chance of diabetes by 8%. A 2012 study found that daily drinkers of diet soda who were, on average, 69 years old had a 43% higher chance of heart attack, stroke, or dying as a result of blood vessel problems.

A group of researchers suggested a few possible explanations. Artificial sweeteners in diet soda potentially changed gut bacteria which in turn affected metabolism. Artificial sweeteners may as well stimulate the appetite, which could lead to overeating.

Ludwig, MD, PhD, an endocrinologist and professor of nutrition at Harvard School of Public Health, and author of "Always Hungry" said "we need more clinical trials. In 2012, Ludwig randomly divided 224 overweight or obese teens into two groups. One group continued their normal habit of drinking sugary soda; the other switched to diet soda. After a year, the diet soda group had dropped a little bit of weight, compared with those who drank regular sodas. However, by the two-year mark, the two groups were about the same.

Ludwig said overall clinical trials showed that if you switched from sugary soda to diet Ones, your weight will benefit. However, no clinical trials have yet been long enough to answer whether diet soda affects the odds of developing diabetes or whether they are as safe as unsweetened drinks such as water. Diabetes and obesity are the primary focus of concerns about diet soda.



### DIET SODA MAY AFFECT YOUR DIET

One possible explanation for the link between diet sodas and weight gain and diabetes risks that the sweeteners in diet soda may trick you into overcompensating, eating a greater amount of calories than you normally would take. This is the view of Gardner, Director of nutrition studies and professor of medicine at the Stanford University. He says it is also psychological, if you choose no-calorie diet soda over a regular soda, you may reward yourself later in the day with a treat. And that treat may have more calories than you saved by avoiding the sugary soft drink.

Your brain chemistry may play a role as well. The sweetness in the diet soda may prime your brain to expect a calorie boost and lead you to eat more. Gardner says “diet soda may help you with weight loss if you do not overcompensate, but that is a big if”.

Ludwig suggested that drinking artificially sweetened beverages may affect your taste buds in ways that made you less likely to choose healthy foods. “You may find fruit less appealing because it is less sweet than your soda, and vegetable may become inedible”.

However, both Gardner and Ludwig acknowledge that their theories are just theories.

A Seattle-based dietitian Angel Planells encourages people to choose water over soda of

any kind. But he says, diet soda can fit into your meal plan as long as you make other healthy food choices. He adds if you choose to break the diet soda habit, it can be tough. He recommends to start with baby steps rather than taking big jumps. If you drink five or six diet sodas, drop down to two or three and then to one. Just be sure to drink water to stay hydrated.

Ludwig advises people who want to get sugary drinks to consider diet soda a temporary choice. “I tell my patients to continue making the transition to unsweetened beverages. We know that diet sodas are better than sugary beverages in terms of body weight, but we do not know if better is actually good”.

### REFERENCES

1. Boston University Researchers. 2017. No clear link could be established between diet soda drinkers and increase in stroke and dementia cases. *Stroke*. April, 2017.
2. Helpful hints were mostly obtained from Web MD September, 2017.
3. Ludwig MD. 2012. States in his book “Always Hungry” that diabetes and obesity are primary focus of concern about diet soda.
4. Review of several studies. 2014, 2015. Daily drinking of diet soda raises risk of type 2 diabetes by 13%. *British Journal of Nutrition*, 2015.