

Drink More Diet Soda, Gain More Weight?

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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.

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%.

Diet Soda No Smoking Gun

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Fowler is quick to note that a study of this kind does not prove that diet soda *causes* obesity. More likely, she says, it shows that something linked to diet soda drinking is also linked to obesity.

"One possible part of the explanation is that people who see they are beginning to gain weight may be more likely to switch from regular to diet soda," Fowler suggests. "But despite their switching, their weight may continue to grow for other reasons. So diet soft-drink use is a marker for overweight and obesity."

Why? Nutrition expert Leslie Bonci, MPH, RD, puts it in a nutshell.

"You have to look at what's on your plate, not just what's in your glass," Bonci tells WebMD.

People often mistake diet drinks for diets, says Bonci, director of sports nutrition at the University of Pittsburgh Medical Center and nutrition consultant to college and professional sports teams and to the Pittsburgh Ballet.

"A lot of people say, 'I am drinking a diet soft drink because that is better for me. But soft drinks by themselves are not the root of America's obesity problem,' she says. "You can't go into a fast-food restaurant and say, 'Oh, it's OK because I had diet soda.' If you don't do anything else but switch to a diet soft drink, you are not going to lose weight."

The Mad Hatter Theory

The Mad Hatter Theory

"Take some more tea," the March Hare said to Alice, very earnestly.

"I've had nothing yet," Alice replied in an offended tone, "so I can't take more."

"You mean you can't take less," said the Hatter: "It's very easy to take more than nothing." Lewis Carroll, *Alice's Adventures in Wonderland*

There is actually a way that diet drinks could contribute to weight gain, Fowler suggests.

She remembers being struck by the scene in *Alice's Adventures in Wonderland* in which Alice is offended because she is offered tea but is given none -- even though she hadn't asked for tea in the first place. So she helps herself to tea and bread and butter.

That may be just what happens when we offer our bodies the sweet taste of diet drinks, but give them no calories. Fowler points to a recent study in which feeding artificial sweeteners to rat pups made them crave more calories than animals fed real sugar.

"If you offer your body something that tastes like a lot of calories, but it isn't there, your body is alerted to the possibility that there is something there and it will search for the calories promised but not delivered," Fowler says.

Perhaps, Bonci says, our bodies are smarter than we think.

"People think they can just fool the body. But maybe the body isn't fooled," she says. "If you are not giving your body those calories you promised it, maybe your body will retaliate by wanting more calories. Some soft drink studies do suggest that diet drinks stimulate appetite."

SOURCES: Fowler, S.P. 65th Annual Scientific Sessions, American Diabetes Association, San Diego, June 10-14, 2005; Abstract 1058-P. Sharon P. Fowler, MPH, University of Texas Health Science Center School of Medicine, San Antonio. Leslie Bonci, MPH, RD, director, sports nutrition, University of Pittsburgh Medical Center. WebMD News: "Artificial Sweeteners May Damage Diet Efforts." "[Artificial Sweeteners May Damage Diet Efforts.](#)" Davidson, T.L. *International Journal of Obesity*, July 2004; vol 28: pp 933-955.

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