

The Effects of Water and Non-Nutritive Sweetened Beverages on Weight Loss During a 12-Week Weight Loss Treatment Program. John C. Peters, Holly R. Wyatt, Gary D. Foster, Zhaoxing Pan, Alexis C. Wojtanowski, Stephanie S. Vander Veur, Sharon J. Herring, Carrie Brill and James O. Hill

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Questions & Answers

What did the study examine?

This clinical trial was designed to measure the impact of consuming diet beverages on weight loss as part of a treatment program focused on both diet and exercise.

Why was this study undertaken?

There is considerable controversy in the media about diet beverages. Some observational studies on diet soda and other diet beverages have been done, but there are few, randomized clinical trials - which are considered to be the gold standard of scientific research.

How was the study designed?

In the study, participants were randomly assigned to either drink diet beverages or be in a second group that drank only water. Both groups followed the same diet and exercise regimen for a 12 week period. The water group agreed to drink at least 24 ounces of water daily. They could eat food that contained low-calorie sweeteners), but agreed not to drink diet beverages or put sugar substitutes in their coffee, tea or other beverages. The diet beverage group agreed to drink at least 24 ounces per day of diet beverages. Both groups received coupons to help them purchase water or diet beverages, respectively.

What did the study find?

Not only did the diet beverage group lose weight, they actually lost 44 percent *more weight* —an average of 13 pounds over 12 weeks—than the water group, which averaged a weight loss of 9 pounds during the same time period.

Did the study find other differences between the groups?

Yes, two-thirds of participants in the diet beverage group—64 percent—lost at least five percent of their body weight, compared with just 44 percent of the water group. (For a 200-pound person, a five percent weight loss

equals 10 pounds.) Losing just five percent of body weight has been shown to significantly improve health, including lowering the risk for developing heart disease, high blood pressure and type 2 diabetes, according to the American Heart Association and the U.S. Food and Drug Administration. Additionally, diet beverage drinkers reported a greater reduction in feelings of hunger.

Were there any other differences in health benefits?

Diet beverage participants had almost twice the reduction of total blood triglycerides, a factor linked to higher risk of heart disease, compared to the water group. They also had a two-fold greater reduction in blood levels of low-density lipoprotein — the so-called “bad” cholesterol that is linked to heart disease — than those in the water group.

Did the study find any differences in hunger?

Yes, the diet beverage group reported feeling significantly less hungry during the 12-week weight loss program than those in the water group who drank only water and reported a slight increase in hunger.

Were men and women participants in this study?

Yes, the study included both men and women, although women made up the majority of subjects.

Did the researchers examine participants’ consumption of diet beverages before the study began?

Yes, all participants had to report drinking at least three diet beverages weekly prior to participation in the study.

How do these findings compare to other research?

These findings, along with results from the Choose Healthy Options Consciously Everyday ([CHOICE](#)) study, conducted by University of North Carolina-Chapel Hill researchers and published in the *American Journal of Clinical Nutrition*, provide strong evidence that diet beverages do not hinder, but rather help with weight loss. The CHOICE study also examined the effects of beverages on food consumption and found that diet beverage drinkers ate less dessert than those who drank water alone. The new findings are also consistent with research on weight loss maintenance drawn from the National Weight Water Registry, which found that successful weight loss maintainers drank three times more diet beverages than those who had never lost weight.

Did the study address the safety of diet beverages?

The study only examined if diet beverages are effective with weight loss, because the safety of the low-calorie sweeteners in diet beverages is well documented by research and regulatory review worldwide. For aspartame alone, a comprehensive review of more than 500 studies showed that they were safe. Regulatory agencies worldwide have approved their use, including the U.S. Food and Drug Administration (FDA), and the European Food Safety Authority (EFSA). Leading health organizations, including the Academy of Nutrition and Dietetics (AND), the American Heart Association (AHA), the American Diabetes Association (ADA) and the 2010 Dietary Guidelines Advisory Committee all agree that low- and no-calorie sweeteners are safe to consume in moderation.

What’s the bottom line?

These results confirm definitively that drinking diet beverages can help people lose weight and that people should not be discouraged from drinking diet beverages for fear of undermining their weight loss efforts. This study also suggests that drinking diet beverages may help dieters feel less hungry. Other research has shown that drinking diet beverages seems to help reduce the intake of sweets and helps dieters keep weight off.

How was this study funded?

The study design was peer-reviewed and posted on www.clinicaltrials.gov. This study was funded by the American Beverage Association, a trade association in Washington, D.C. Neither ABA, nor any of its members, was involved in any part of the study, its analysis or the writing of this paper.

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