

Boston Health Notes

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Type 2 Diabetes and Sugary Drinks

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Chances are you know someone with diabetes. There are three types of diabetes, (Type 1, Gestational, and Type 2). For all types, a person's body is unable to either make or use the hormone insulin to move glucose (sugar) from the blood and use it for energy for your body to function. In the past 20 years, Type 2 diabetes has been on the rise and it is the leading underlying cause of deaths from heart disease or stroke.

While there are some risk factors for Type 2 diabetes that we can't change - like age, family history, and ethnicity - we can lower our risk by eating healthy, being physically active, and maintaining a healthy weight. For people living with Type 2 diabetes, these same steps can help to bring it under control, as part of your medical treatment plan.

What's the connection between diabetes and what we drink?

While diabetes has been rising, the amount of sugary drinks (like soda, sports drinks, fruit drinks, and pre-sweetened tea and coffee drinks) we drink has also increased. *Having* one or more of sugary drinks per day increases the risk of Type 2 diabetes.

Drinking a 20-ounce bottle of soda sends 17 teaspoons of sugar into the bloodstream, causing a quick spike in blood glucose levels. Our body quickly produces insulin to help move the glucose from the blood to be used for energy, causing blood glucose to come down rapidly. This result is a triple threat to health:

- First, the empty calories of sugary drinks lead to weight gain
- Secondly, the highs and lows of blood glucose levels boost appetites, which cause you to eat more
- Finally over time, your body weakens, as it tries to produce enough insulin in response to high blood glucose levels, and it can no longer convert the blood glucose into energy and eventually you develop diabetes

Drinking calories may also contribute to gaining extra weight because sugary drinks don't satisfy our hunger the way that food can. Although we may still eat about the same calories, we are adding a large amount of empty calories from sugary drinks. Why is weight important? Weight gain and obesity are the biggest controllable risk factors for Type 2 diabetes.

Drinking sugary drinks also promotes dental caries and gum disease. People with diabetes are at a higher risk for gum disease and other dental problems because diabetes weakens the body's germ-fighting powers, which can make gum disease worse, and make blood glucose levels harder to control.

What are better choices?

For adults, the best choice is water or another no- or low-calorie drink. People who drink more water tend to take in fewer calories overall – great news if you are trying to control weight! Sugary drinks also get in the way of other healthy drinks like milk, especially for children. Swapping soda at a meal with a small glass of skim milk will lower calorie intake and deliver some of the calcium and vitamin D we all need to promote good bone and dental health.

Fruit drinks, on the other hand, are not a good choice because most have just as much sugar as soda. While 100% fruit juices are fine to drink in small amounts because they have important vitamins, they have the same sugar content as other sugary drinks. Our bodies work much better when given a slow and steady supply of glucose from non-sugary drinks and food choices such as whole grains, vegetables, and fruits.

For More Information

For more information about diabetes, visit the American Diabetes Association website at www.diabetes.org. For more information about 'Rethink your Drink' and other healthy initiatives supported by the Boston Public Health Commission, visit www.bphc.org/programs/cib/chronicdisease.