

Thinking About Another Sweet Gulp? Think Again

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According to a recent Center for Disease Control (CDC) report, more than half of teenagers in the United States have had cavities in their adult teeth.¹ Dental cavities, together with other dental problems, are linked to unhappiness and feeling of worthlessness.² Children and teenagers with dental problems are more likely to miss school and not perform as well in school.² Sweetened drinks contribute to these dental problems. Given the widespread consumption of sweetened beverages³, it is essential to know why most of these drinks are not good for your teeth and gums.

Why are most sweetened beverages harmful? To answer this question, we will consider the two ingredients of these drinks: sugar and acids.

1) How does sugar harm your teeth?

Our teeth are immersed in saliva and supported by gums and bone. There are different kinds of bacteria, or “tooth bugs,” living on and around the teeth. These bacteria feed on the sugar in sweet drinks to grow. They create a community, in the form of plaque.⁴ The plaque allows bacteria to stay on the teeth longer. The bacteria make acids, which wear down the tooth enamel and cause cavities.⁵ The bacteria in the plaque that forms near the gums also produce toxic products that enter the gum tissues, causing gingivitis.⁴ If untreated, gingivitis may become periodontitis, a more serious disease where there is bone and tissue loss around the teeth.⁵ Sugar itself does not directly harm the teeth, but it enables the harmful bacteria to do so.

2) How do acids harm your teeth?

Besides sugar feeding the bacteria in the mouth, there are acids in sweetened drinks that are harmful to the teeth. These acids lead to dental erosion, or tooth wear. Soft drinks and fruit juices are acidic and have been shown to make the teeth weaker.^{6,7} As the enamel on the tooth continues to wear, the inner layer, dentin, becomes exposed. This leads to pain and toothache, a condition referred to as dentin hypersensitivity.⁸

Are all sweetened beverages harmful? Not all of them! In fact, several drinks are good for your teeth. In general, sweetened and acidic drinks that are high in calcium and

phosphate, such as milk and yogurt, can protect your teeth from the harmful effects of acids.^{6,7} Demineralization happens when tooth enamel is damaged by acids. Milk aids in remineralization, where calcium and phosphate are taken into the tooth enamel, making it stronger.⁹ There are also other components in milk that prevent the bacteria from sticking to the tooth and growing into plaque.⁹ Therefore, it is best to include milk and other dairy products into your daily routine.

In case you drink one of the harmful sweetened beverages, what can you do? Reducing the contact time between the acids and the teeth is most critical. Below are a few actions you can take:

- Do not brush your teeth immediately after drinking. The acids in the sweetened beverages make your teeth weaker. Tooth brushing can remove the softened enamel and produce wear. Wait at least half an hour before brushing your teeth.^{7,10,11}
- Drink with meals. This reduces the time the acids contact your teeth.¹¹
- Drink water alongside with sweetened beverages to wash away the sugar and acids from the teeth and gums.¹¹
- Use a straw to help reducing the contact of sweetened beverages with your teeth.¹¹
- Reduce the daily amount of sweetened drinks.¹¹
- Try finishing your drink quickly instead of sipping it for a long period of time.¹¹

The best action for most people is to replace the harmful drinks with milk, yogurt, or water.^{7,11} It is also important to visit your dentist at least twice a year for checkups and for application of fluoride varnish to help make your teeth stronger.^{11,12}

Following the actions above will reduce the harmful effects of drinking sweetened beverages. Your teeth and gums will stay stronger and healthier. As they help prevent dental problems, these actions should be part of a healthy routine for everyone.

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