

# Question

Doesn't drinking carbonated soft drinks cause tooth decay, enamel erosion and periodontal disease?

# Answer

All products containing fermentable carbohydrates (sugars and some starches) have the potential to cause tooth decay. However, there are several factors in the development of tooth decay (dental caries), including the interaction of saliva, oral bacteria, fermentable carbohydrates, as well as how long the tooth is exposed to the fermentable carbohydrate. Each plays an important role in the process.

Time is an important factor in the development of cavities; the less time oral bacteria are exposed to fermentable carbohydrates, the less likelihood acid will be produced by the bacteria. Frequently consuming fermentable carbohydrates can be important in the development of tooth decay, as well as consuming foods that remain in the mouth for a long time, such as chewy or sticky foods. Soft drinks, including those containing sugars, naturally leave the mouth quickly after you have swallowed. Tooth decay has dropped in the United States over the last 20 years, even as soft drink consumption has increased. There is a similar trend in most developed countries, with tooth decay declining among children under age 18, while soft drinks have become increasingly popular.

Good oral health practices are key to maintaining healthy teeth and a healthy mouth. Fluoride in drinking water and dental care products containing fluoride are credited for the decline in cavities.

Fluoride makes teeth more resistant to acids formed by the bacteria in dental plaque. As bottled waters become more popular for children, there are some concerns that children are no longer getting fluoride from tap water. To help address this concern in the United States, we offer our Spring! by Dannon bottled water with fluoride.

Any beverage that is high in acid content can contribute to or cause dental erosion if it is consumed too frequently or if a person allows the beverage to remain in his or her mouth for relatively long periods of time. Beverages that are high in acid content include orange, apple and grape juices, as well as soft drinks. But your saliva helps buffer the acids, greatly reducing the effect on tooth enamel. Saliva also contains calcium, phosphorus and fluoride, which can replace mineral loss from the tooth enamel. Exposure to fluoride also makes the teeth more resistant to acids from the foods or beverages.

Gum disease (periodontal disease) is a common infection that breaks down the gums and tissues supporting your teeth. Gum disease is seen primarily in adults and is started by plaque. There is no established link between carbonated soft drinks and gum disease. Other risk factors may play a role in developing gum disease including overall nutritional status, smoking, diabetes, and a family history of the disease.

## Sources

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