Sugar causes tooth decay! Here's how…

• A twenty eight year old man keeps himself awake on his graveyard shift job by sipping Coca-Cola all night long. Not much, just one or two cans a night, but sipping continuously. Result – Rampant tooth decay, leading to crowns, root canals, and lost teeth! (Others have done the same with sweetened coffee or tea – honey, molasses, syrup all have the same effect!)
• A seventeen year old girl decides that energy bars are food, and nibbles on them all day long. Result – Rampant tooth decay, and a whole new round of fillings!
• A forty four year old man quits smoking and starts chewing gum, with sugar. He keeps some going most of the day. Result – Rampant tooth decay requiring thousands of dollars in dental work! Dried fruit and raisins do the same!
• In a more exotic example, a woman places homeopathic sugar pills under her tongue before going to sleep at night, giving the lower molars a night-long sugar treatment. Result – those teeth are totally eaten up by decay. A man put Tic-Tacs up in his cheek for breath control every day. Result – the same!

What you should notice from these examples is that the amount of sugar is not as important as the frequency – how often you have it in your mouth. The reason for this lies in the biology of tooth decay.

Tooth decay is a disease caused by specific bacteria, called Streptococcus mutans. If you have ever had a cavity, Strep mutans is in your mouth, and you are susceptible to new tooth decay. Many bacteria don’t process their food into carbon dioxide and water, as we do in our “aerobic metabolism.” Instead they “ferment” their foods into other kinds of waste products, such as alcohols or acids. Strep mutans lives in microscopic colonies on the surface of the teeth, and has the distinction of being able to produce such concentrated acid waste that it can dissolve the tooth enamel on which it sits. In other words, they burn holes in teeth with their acid germ poop, and all they need is their favorite fuel – sugar!

The Twenty Minute Rule:

Each time you put something sugary in your mouth, these germs suck it right up. Each feeding gives them fifteen or twenty minutes of fuel, from which they excrete acid waste. If you eat a candy bar in one sitting, you have fed your germs once. If you take one bite, another bite fifteen minutes later, and finish it twenty minutes after, you have fed them three times with the same candy bar! If you sip a can of Coke over a period of two hours, you feed them continuously! It’s better to drink it down and rinse your mouth. Don’t nibble, sip or snack sugary foods.

The bottom line:

The more frequently you eat or drink something sugary, the more you feed your tooth decay causing bacteria, and the more likely you are to get cavities. So watch out for new sugar eating habits! Non-nutritive sweeteners like xylitol, saccharine and Nutri-Sweet may have their problems, but they don’t contribute to tooth decay.

Xylitol is actually protective. It is unique in that the tooth decay bacteria will absorb it, but it inhibits their metabolism, and slows them down. Xylitol also tastes the most like sugar, and is available in powdered form, as well as in many products.