

Dental Caries (Cavities)

Dental Caries is the most common chronic disease among children. Most people do not realize that it is a communicable disease. Many types of bacteria that are present in the mouth cause sugars to turn into acid. When you mix the sugars and plaque together that is when acid forms and cavities begin. Plaque is a thick white substance that is extremely sticky and will easily adhere to the teeth. "Babies and toddlers are most often infected with the *S. mutans* bacteria by a parent or other caretaker. This can happen in a variety of ways. Parents may let curious babies chew on toothbrushes. The bacteria may be passed on through kissing or using the same eating utensils. Once the *S. mutans* is in the child's mouth, it can multiply quickly. It has properties that prevent the growth of other similar bacteria and many other microorganisms, so it may become the most common organism in the child's mouth (Slavkin 1999)."

Your child is not born with the bacteria to form cavities, which is why it is important to keep anything that has been in your mouth, out of their mouth. "If babies use artificial nipples, including pacifiers, the parent or caretaker should never put them in his or her own mouth. Because *S. mutans* thrives in a low pH environment, keeping the mouth at a higher pH level is one way of preventing *S. mutans* from taking over the microbial ecosystem of the mouth (Slavkin 1999)." With the continued use of xylitol the pH level in the mouth becomes less acidic and makes the pH come to a more neutral level.

Xylitol is a sugar sweetener that decreases dental caries. Parents may even purchase candy, such as suckers, with the ingredient xylitol in them, which will help to prevent dental caries. "Studies show that 4 to 12 grams of xylitol per day are very effective. It's easy to keep track of your xylitol intake. The "all xylitol" mints and gums contain about one gram of xylitol in each piece. You could begin with as little as one piece four times a day for a total of four grams. It is not necessary to use more than 15 grams per day as higher intakes yield diminishing dental benefits" (<http://www.xylitol.org>). You can go to <http://carifree.com/> to buy xylitol products.

References:

Fowler, Joylyn. *Avoiding Dental Caries*. 2006 30 Sep. 2010

<<http://www.lli.org/nb/nbsep02p164.html>>.

Slavkin, H. *Streptococcus mutans*: early childhood caries and new opportunities. *JADA* 1999; 130:1787-92.

<http://www.xylitol.org/>