

Xylitol sweetener helps prevent caries.

Xylitol is a natural sweetener found in plants and fruits. It is a 100% natural product, a naturally occurring sweetener. Pure xylitol is a white crystalline substance that looks and taste like sugar but has 40% fewer calories. Xylitol was approved by the Food and Drug Administration (FDA) in 1986 as a food additive. Xylitol is used in sugar-free gum and mints. Xylitol has been shown to inhibit the growth of *Streptococcus mutans*, the oral bacteria that causes cavities.

When you chew xylitol gum or mints the bacteria (*Streptococcus mutans*) in the mouth which cause caries are unable to ferment xylitol in their metabolism and therefore their growth is reduced. The number of acid-producing bacteria may fall as much as 90%. Since no acid is formed, the pH of saliva does not fall. This reduces the acid attack on our teeth which can cause cavities to form. After taking xylitol, the bacteria do not stick well on the surface of the teeth and the amount of plaque decreases.

Research has shown that the use of xylitol gum or mints also helps correct incipient damage to the enamel. Saliva is increased and it helps to protect the mouth and teeth as well. Saliva containing xylitol is more alkaline than saliva which contains other sugar products. When salivary pH is above 7 the calcium and phosphate salts in saliva start to remineralize the enamel. Thus, soft, calcium-deficient enamel sites begin to harden again.

Research shows that 5-10g/ day divided into 3 – 7 consumption periods delivered the best results. Subject in this study had significantly lower levels of sucrose and acid in whole saliva than at baseline, and significantly lower plaque index scores.

One study showed that the use of xylitol gum by mothers (2-3 times per day) starting 3 months after delivery and until the child was 2 years old, reduced the *Streptococcus mutans* levels in children up to 6 years of age. This is significant as it is an easy and effective way to help reduce the incidence of childhood caries. The American Academy of Pediatric Dentistry in 2006 adopted a policy on the use of xylitol in caries prevention which supports preventive strategies aimed specifically at long term caries pathogen suppression and caries reduction using commercially available non-cariogenic sugar substitutes such as xylitol.

It is best to use gum or mints that are sweetened with 100% Xylitol as the presence of other sweeteners reduce the effectiveness of the xylitol. Use immediately after eating or snacking. If xylitol is the only sugar remaining in the mouth, most bacteria cannot metabolize it and will not be able to make the acids or biofilm that can attack teeth. 5 to 10g /day of xylitol is recommended. This can be achieved by eating 2 pieces of mints sweetened with 100% xylitol containing .5gms each 5 times a day. Read the label of products sweetened with Xylitol as the label will state how much xylitol is contained in each serving.

There is not an easier way to help reduce your risk for caries. Xylitol is widely available in health food stores in a variety of forms such as candy, toothpaste, mouthwash, floss, gums, mints, and as a bulk sweetener. Locally Sprouts Farmers Market carries Spry's chewing gum and mints which are flavored with 100% xylitol. Any brand will do but make sure you look for chewing gum and mints sweetened with 100% xylitol and then snack your way to reducing your risk for cavities.

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