

## Sweeten your smile - without destroying your teeth

Americans crave sugar. It seems that we just can't get enough of the stuff. On average, a half a cup of sugar is consumed per person every day. It is estimated that the average American eats, drinks, slurps, stirs and sprinkles about 150 pounds of it annually. Never in modern history has a culture consumed so much sugar. (Learn more.)



Thinking of sugar as a food is really a stretch of the imagination, because it is more a chemical that is difficult for our bodies to utilize and digest. Humans were really not designed to eat large amounts of sugar. You may think you can protect your health by eating more "sugarless" foods. In fact, almost 8 out of 10 U.S. adults consume some "sugarless" products. But not all "sugarless" foods are really sugarless. They take other forms: corn syrup, sucrose, dextrose, glucose, fructose, lactose, maltose, barley malt, honey, rice syrup and maple syrup.

Besides raising blood pressure, triglycerides and the bad cholesterol (LDL), increasing the risk of heart disease, sugar causes tooth decay and periodontal disease, which leads to tooth loss and systemic infections. So what are we to do? Will our sugar-cravings always hold us hostage, or is there really a way to lick the sugar habit successfully?

## Xylitol to the Rescue!

Xylitol is a natural substance found in fibrous vegetables and fruit, as well as in corn cobs and various hardwood trees like birch. It is produced naturally in our bodies; in fact, we make up to 15 grams daily during normal metabolism. Although xylitol tastes and looks exactly like sugar, that is where the similarities end. Xylitol is really sugar's mirror image. While sugar wreaks havoc on the body, xylitol heals and repairs.

During World War II, Finland was suffering from an acute sugar shortage. With no domestic supply of sugar, the Finns searched for an alternative. It was then that the Finnish scientists re-discovered xylitol, a low-calorie sugar made from birch bark. It had, in fact, been known to the world of organic chemistry since it was first manufactured in 1891 by a German chemist.

While prominent in Europe, xylitol has been relatively unknown in the USA, primarily because cheap supplies of cane sugar made the more expensive xylitol less economically viable.

Approved by the US Food and Drug Administration (FDA) in 1963, xylitol has no known toxic levels. The only known drawback to xylitol is the laxative effect it might have if large amounts of products that contain xylitol are eaten. For example, having more than 10 to 20 pieces of candy or gum per day may cause this effect.

Xylitol looks, feels and tastes exactly like sugar and leaves no unpleasant aftertaste. It is used in chewing gum, candy, gumdrops, mints, medicated syrups and tablets, toothpaste and mouthwashes. It's also found in dietetic and diabetic foods.

## Xylitol and Oral Health

Tooth decay and gum disease are serious problems. According to the American Dental Association, 75 per cent of American adults over the age of 35 suffer from some form of periodontal disease. Needless to

say, diet plays a major role in dental health. When there is an excess of sugar in the diet, this weakens the immune system and creates an acidic environment where bacteria thrives. This acid damages teeth, causing cavities. Xylitol is an antimicrobial, preventing the growth of bacteria. Bacteria in your mouth can't break down xylitol, so the acid that damages teeth is not produced.

Xylitol is a dentist's dream. It reverses all these destructive effects of sugar on oral health. Also, the sweetness of xylitol encourages salivation. Saliva washes out the mouth and helps prevent cavities.

Using xylitol right before bedtime, after brushing and flossing, protects and heals the teeth and gums. Unlike sugar, it can even be left on the teeth overnight. Consistently using small amounts of xylitol tends to increase protective factors in saliva. The best news is that studies have shown that xylitol's effect is long-lasting and possibly even permanent.

Xylitol has recently received positive support in the *Journal of the American Dental Association* for young and old alike. In a study conducted in the Republic of the Marshall Islands, an island chain in the Pacific Ocean where early childhood tooth decay is a major problem, a syrup containing xylitol was found to help prevent tooth decay in baby teeth. According to Dr. Burton L. Edelstein of the College of Dental Medicine at Columbia University in New York City, "Xylitol application, like fluoride varnish application, will likely become a routine element of early childhood caries [cavity] control." (Learn more.)

In a paper published in the *Journal of the American Geriatrics Society*, researchers reported that, based on clinical studies, xylitol gum can provide a "real clinical benefit" to frail, elderly people. (Learn more.)

### **The Safer Sweetener**

Increased sugar consumption has burdened Western cultures with more and more health problems, many of which are putting an enormous strain on health care systems. Finally, there is something truly healthy that can also satisfy our sweet tooth. Over 1,500 scientific studies have found that the more you use xylitol, the more you can eliminate sugar cravings, reduce insulin levels, and improve the acid/alkaline balance in your body.

Imagine never having to feel those twinges of guilt when you bite into a xylitol-sweetened brownie. Or how about knowing that xylitol-sweetened chewing gum is preventing cavities and gum disease?

With xylitol, you can now have your sweet tooth and treat it, too!

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