

Xylitol:

The Sweet Taste That's Good For You



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Xylitol, also known as birch sugar, is a naturally-occurring sweet compound found in fruits and vegetables. Xylitol is not only devoid of the downside of typical sugars, but also boasts a range of health benefits. Unlike table sugar or fruit sugar, both of which should only be consumed in minimal amounts, xylitol actually promotes our health, and is something we can consume every day. Because xylitol is completely natural, it is devoid of the undesirable side effects seen with artificial sweeteners. Xylitol may also be the ideal sweet compound for those with intestinal yeast overgrowths, because xylitol does not feed yeast as sugar does.

Xylitol is a five carbon sugar alcohol. Sugar alcohols naturally occur in foods such as berries, and have no relation to regular alcohol. Xylitol is also produced naturally by the human body. Xylitol supplements are made from the fiber of the birch tree. Xylitol is nearly as sweet as sucrose, tastes good, and has no after-taste. Xylitol also has 40% less calories than sugar, with a caloric value of 2.4 calories per gram.

Xylitol Helps You Get Off the Sugar Roller Coaster

Xylitol, unlike sugar, causes little change in blood sugar and insulin levels. Xylitol, therefore, will not sabotage your mood or energy levels like sugar can. If you eat a meal high in sugar (sucrose), your blood sugar jumps, your pancreas secretes insulin, and the sugar level comes down. Often, however, your blood sugar drops too quickly. If this happens, you will secrete adrenaline to try to get your blood sugar back up again. All the while, your mood and energy levels go up and down like a roller coaster, so you crave—and then eat—more sugar! This keeps your body in a constant state of disarray. Some people lead their entire lives on this blood sugar trampoline. This can lead to fatigue, weight gain, depression, and a disordered immune and digestive system. The message is clear: Stop the sugar, completely!

But how? First of all, try to consume more protein rich foods, especially at the beginning of the day. Then, increase your intake of blood sugar balancing nutrients such as chromium, zinc, magnesium, and lipoic acid. When you want something sweet, use xylitol in your foods and beverages. Xylitol will help you stay on an even keel, give you the sweet taste you love, and allow you to have the dietary and craving control you need.

Why is xylitol so easy on the body? When you eat xylitol, part of it is gradually metabolized into glucose in the liver, so it won't cause blood sugar extremes. Much of the xylitol also passes on to the large intestine where it is converted into short chain fatty acids. These nourish the large intestine wall. The reason why xylitol has less calories than sugar is because much of it's energy is used up during this conversion.

Natural Is Always Better

Because xylitol is naturally occurring, and a natural part of human metabolism, xylitol does not present you with any of the possible health risks that may occur with synthetically created artificial sweeteners. Companies that make artificial sweeteners have to create a new compound never seen before in nature—Frankenstein molecules—in order to make them patentable and profitable. Because of that, artificial sweeteners will always be just that—artificial—and will never be a natural and friendly part of human metabolism like xylitol is. Always choose xylitol!

Fighting Tooth Decay

Xylitol may be one of the most valuable natural ways we have to help maintain healthy teeth. Cavities are formed when the wrong bacteria are allowed to grow in our mouth. Regular sugar needs to be avoided for healthy teeth and gums, because sugar feeds the bacteria that destroy our teeth. Xylitol, however, does not feed these bacteria. What's more, xylitol interferes with many of the destructive elements that cause cavities. It does this by inhibiting microbial growth and by reducing the amount of plaque and bad bacteria (mutans streptococci) in both plaque and saliva.¹ A study conducted from 1989 to 1993 showed that chewing xylitol gum was more frequently associated with the arrest of caries than either sorbitol or sucrose gums. Using xylitol gum regularly also appeared to help repair caries lesions.² In another study of two years duration, children who used two or three xylitol gums per day experienced a caries reduction rate of 30% and 60%, respectively. In a sub-group with high

Benefits of Xylitol:

- Nature's ideal sweetener
- Does not cause blood sugar imbalance or yeast overgrowth like table sugar
- May help decrease the incidence of dental caries
- Fights plaque buildup and neutralizes plaque acids
- May reduce rates of ear infections in children
- Increases satiety
- May promote bone health

caries activity, reductions of 50% and 80% were achieved with 2 to 3 gums per day.³ These and other exciting findings prompted one leading researcher to say:

“Clearly, xylitol exhibits more dental benefits than any other sweetener.”

—Dr. Irwin Mandel, Chairman, Caries Prevention Symposium, University of Michigan

Xylitol Shows Promise for Diabetics

Xylitol does not require insulin to be metabolized, and therefore is a very useful sweetener for diabetics. Xylitol scores a 7 out of 100 on the glycemic index. This shows that xylitol has a minimal impact on blood sugar and insulin levels. A study of healthy men examined the metabolic effects of xylitol compared to those of glucose. After an overnight fast, the men consumed a 25 gram dose of xylitol, and their rise in blood sugar and insulin was lower than after consuming the same amount of glucose.⁴ In another study, a 30 gram dose of xylitol produced only a small increase in blood sugar, and no rise in insulin levels. This suggests that xylitol is safe, even in high doses.⁵ While xylitol appears to be safe for everyone, diabetics who are interested in using large amounts of xylitol regularly should do so with the guidance of their health care practitioner.

Increasing Satiety

Xylitol has been shown to slow stomach emptying, and thus to help promote a feeling of fullness with less food intake. Those given 25 grams of xylitol at mealtime needed only 690 calories before they felt full. Those who did not use xylitol consumed 920 calories in order to achieve satiety. A preload of glucose, fructose, or sucrose failed to suppress food intake.⁶ Xylitol, therefore, shows great promise as a natural way to decrease food intake, and thereby help promote weight loss.

Preventing Middle Ear Infections

Consuming eight to ten grams of xylitol per day led to a 30% decrease in ear infections (otitis media) in children after two to three months of use.⁷ Xylitol was well tolerated by the children. Researchers believe that xylitol used regularly helps inhibit the growth of *Streptococcus pneumoniae* as well as the attachment of both pneumococci and *Haemophilus influenzae* to the nasopharyngeal cells, thus helping to prevent infections.

Xylitol and Bone Health

Animal studies suggest that xylitol supplementation leads to improved bone strength during aging.⁸ Regular xylitol supplementation throughout the life cycle was needed to get this effect.⁹ Further research is needed to see if this benefit occurs in humans.

Safety

Xylitol was approved by the Food and Drug Administration (FDA) in 1963 for special dietary uses. In 1986, the FDA recognized xylitol as a safe sweetener. Xylitol is approved throughout Europe for various dietary, pharmaceutical, and cosmetic uses. The only side effect of too much xylitol (a single serving of 30 grams or more) is temporary gastrointestinal discomfort and diarrhea in sensitive individuals. This diarrhea results from xylitol's slow absorption from the intestinal tract. The syrup form of xylitol tends to have more side effects than powdered xylitol. Long-term feeding trials in humans have shown that xylitol does not cause any changes in metabolic functions.¹⁰ The human body produces up to 15 grams of xylitol per day from other food sources, so it should not come as a surprise that xylitol has such an impressive safety record.

Suggested Uses

Xylitol has a sweet, clean, cool taste. It works well in beverages, gums, and candies. Because xylitol does not feed yeast, it cannot be used to make bread, because it will not make dough rise. For those using xylitol to promote dental wellness, taking it many times throughout the day is recommended to maximize its effects. Researchers suggest that using 4 to 12 grams of xylitol in divided doses 3 to 5 times per day with or after meals is the best way to use this natural sweetener to help our teeth and body remain optimally well.

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