

## Xylitol Mouthwash

(Peppermint)

Stock #5425-6 (16 fl. oz.)



Evidence is mounting confirming the importance of good oral health as a vital part of systemic or whole-body health. The apparent link between oral health status and medical conditions such as diabetes, heart disease, lung disease, connective tissue diseases, cancer and the increased risk for preterm low birth-weight infants is of growing concern to researchers.<sup>1-5</sup>

It is well-known that diet plays an important role in preventing oral diseases, particularly dental caries (tooth decay). Results from both human observational and human intervention studies have confirmed the direct relationship between intake of dietary sugars and dental caries. However, one natural sweetener, xylitol, has been shown to effectively prevent dental caries and plaque formation by up to 80%.<sup>6-14</sup>

Xylitol is an all-natural sweetener that looks and tastes like regular table sugar (or sucrose). In technical terms, xylitol is a polyol (or sugar alcohol) derived from the plant fiber, hemicellulose.

Xylitol is found in many foods, including berries, plums, cauliflower, lettuce and mushrooms, and is derived from corn cobs and hardwoods such as birch. Xylitol is also produced by the body as part of normal glucose metabolism. Research has demonstrated that xylitol directly inhibits the growth of *Streptococcus mutans*, the oral bacteria associated with dental caries. As a result, xylitol use is being encouraged by clinicians and dental associations as a safe, efficient and inexpensive preventative measure against oral diseases. Even the United States Army has created a program for its dental corps encouraging the use of xylitol in dental care programs.<sup>7,9-11,14-21</sup>

Numerous studies conducted over the past 20 years have found that xylitol actually provides multiple health benefits. Xylitol has been shown to prevent tooth decay and cavities, reduce dental plaque formation and gingivitis (inflammation of the gums), and promote the remineralization (or rebuilding) of tooth enamel. Xylitol also stimulates saliva production and may help reduce abnormal dryness of the mouth, also known as xerostomia. It may be surprising to learn that dental caries is actually a transmissible infectious disease, one that is often transferred from mothers to their infants and young children. Studies have shown that the transmission of mutans streptococci from mother to child is blocked, resulting in fewer dental caries in children whose mothers chewed xylitol gum.<sup>7,9-14,22-32</sup>

By improving oral health, xylitol may also help reduce the risk of heart disease. Several studies have reported an association between poor oral health and heart disease, including atherosclerosis, myocardial infarction (heart attack) and vascular disease (conditions that affect the blood vessels). In fact, one study found that poor oral health was a greater predictor of heart disease than other indicators, such as high triglycerides or low HDL cholesterol levels.<sup>33-37</sup>

Another health benefit of xylitol is the reduction in episodes of acute otitis media (short-term inflammation and/or infection of the middle ear). Xylitol has been shown to effectively prevent acute otitis media by inhibiting the growth of *Streptococcus pneumoniae*. Research indicates that regular use of xylitol reduces the occurrence of acute otitis media in children by 30% to 40%. Xylitol's ability to inhibit the growth of disease-causing bacteria may also prove to have clinical significance in the prevention of other infections that originate in the mouth, including sinus and lung infections.<sup>9-11,38-45</sup>

Evidence suggests that the use of mouthwash containing active ingredients with effectiveness against mutans streptococci may play an important role in preventing dental caries. Frequent rinsing with mouthwash containing xylitol has been shown to decrease the saliva count of mutans streptococci, as well as reduce levels of dental plaque. Another study found that the use of xylitol mouthwash resulted in significantly elevated concentrations of xylitol in saliva, which remained elevated for up to 16 minutes. Xylitol concentrations in dental plaque were also significantly elevated and remained so during the entire 30-minute observation period. Since the presence of xylitol in the oral environment helps maintain a microbial homeostasis that significantly reduces dental caries, the frequent use of xylitol-containing mouthwash appears to be an effective application to promote oral health.<sup>12,46-50</sup>

Note: Xylitol is not recommended for pets, particularly dogs. Although completely safe for human consumption, in dogs, xylitol acts as a strong stimulator of insulin release, which can cause severe hypoglycemia accompanied by ataxia (loss of coordination), collapse, seizures, and even fatal liver failure. The effects of xylitol on cats and ferrets is unknown. If a pet is suspected of ingesting xylitol or xylitol-containing foods, contact a veterinarian or the Animal Poison Control Center (ASPCA) immediately.<sup>51-53</sup>

Nature's Sweet Life Xylitol Mouthwash contains no fluoride, alcohol, synthetic colors, or sugar or artificial sweeteners.

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