Cavity Fighting with XYLITOL Gum

What Is Xylitol
• Xylitol, a sugar alcohol, is a sugar substitute with a sweetness equal to sugar
• Xylitol is not metabolized by bacteria into acid, yet still stimulates saliva flow, protecting teeth
• Xylitol has been shown to prevent bacteria transmission from mother to child
• Xylitol has been shown to reduce or prevent cavities in children

Basic Dental Facts
• Dental Caries (cavities) is an infectious and transmissible disease
• There are many “good” and “bad” bacteria in mouths
• The “bad” bacteria (primarily Mutans Streptococci) feed on sugars and carbohydrates in your diet, producing acid by-products, which erode away teeth causing cavities
• The major source from which infants acquire S. mutans is their mother
• Early colonization by strep mutans is a major risk factor for future cavities
• The best way to reduce or eliminate cavities is to have fewer “bad” bacteria
• To get fewer bacteria, prevent the original infection (transmission), feed the bacteria less (diet), brush and floss them away faster than they can multiply (hygiene)

What the research says about Xylitol
• Finnish Mother-Child Study (2000)
  ○ Established that routine consumption of Xylitol gum reduced the transmission of S. mutans from mother to child, which had a long term protective effect
  ○ Mothers with high S. mutans levels were recruited to chew Xylitol gum 2-3 times a day from 3-24 months after the child was born. Control group received Fluoride every 6 months
  ○ Only 9% of the children had detectable S. mutans levels in the gum chewing group
  ○ 48% of the control group had detectable S. mutans levels at 24 months
  ○ 3 years later (at 5 yrs old), these children had a 70% cavity reduction over control group
    ▪ NONE OF THESE CHILDREN RECEIVED ANY XYLITOL
    ▪ The moms had not used Xylitol gum for 3 years!!!
• Washington State University Study (1999)
  ○ Children, average 6 years old, chewed Xylitol gum 3x/day for 2 years
  ○ 5 years later (13 yr olds) these children had 59% reduced cavity risk
  ○ Permanent teeth that erupted after 1 year of gum chewing or after the two year chewing period ended showed a risk reduction of 93%
  ○ Teeth that erupted before the gum chewing started had NO risk reduction
  ○ Xylitol gum reduces plaque adhesion to teeth, making it easily removed by brushing and saliva
  ○ Xylitol even reduces ear infections by 40% when used 4-5 times/day

What we recommend when using Xylitol
• Expectant and new mothers begin chewing Xylitol gum as early as the 2nd trimester
• Toddlers and young children begin chewing Xylitol gum by age 4 or 5
• Chew Xylitol gum for 5 min, 3 times/day for at least 2 years for max benefit