



Healthy Teeth in Pregnancy and Infancy

Question: This may not be your area of expertise, but I would value your opinion on this situation. I just called my dentist to make a first appointment for my 18-month old. The receptionist told me that the dentist doesn't see children under five, because "it's not needed." I'm confused, because I have a pamphlet in my hand (published by the American Dental Association) that says I should schedule my child's first visit to the dentist by his first birthday. I have a friend whose baby had cavities before the age of 2, and she was told it was from breastfeeding at night. My child still nurses a lot at night. Is it true, what my friend was told? Do I need to find a different dentist?

You have raised a huge and an important topic. While I certainly am not an expert in dental health, even experts debate and speculate over what constitutes the best practice for building strong and beautiful teeth. Your child's dental health is closely related to last month's topic of introducing solid foods. It is also closely related to your own health as a pregnant and/or nursing mother. And, as most health issues are, it is inseparable from the context of family and culture.

Let's start with the least debated part of this question - the tooth decay process. Every time we take in a piece of food, within minutes the sugars or fermentable carbohydrates in the food react with the bacteria present in our mouths, yielding acid. A decreased or acidic pH in our mouths encourages bacterial overgrowth and colonization, which, if left unchecked, eats away the hard outer enamel of our teeth. The more frequently we put those refined carbs or sugars in our mouths, the greater our potential for cavities. Therein lies the theory that frequent night nursing - when the baby's swallowing may be slowed and saliva production is decreased so that milk is allowed to stagnate on and around the teeth - causes "nursing caries" in young children. More on this later.

Some people might ask if it matters whether "baby" teeth are infected or lost, since these teeth will fall out and be replaced by permanent teeth anyway. It matters for many reasons: bacterial susceptibility and colonization in childhood will be carried through to adulthood; the primary teeth hold proper spaces for the secondary teeth and help shape facial structure, jaw alignment and bite; tooth decay and treatment can be a physically and emotionally painful experience; and the mouth is a main portal to our internal being - the ecosystem there will affect balances throughout the body.

There are two prerequisites for bacterial infection (infection really means an opportunistic imbalance and overgrowth of bacteria). First, the teeth must be susceptible to decay. Second, the bacteria must be left for long periods of time on the surface of the teeth. This is where things start to get complicated. For instance, over the years I have asked dentists if sugar causes cavities. They have always stated that it does not. This news took the guilt out of my sweet tooth but not the cavities! (You are not the only one confused by dentists.) I think my dentists were saying that both the susceptibility and a certain pattern of exposure are necessary before decay develops.

Susceptibility seems to be somewhat hereditary, meaning some people just naturally have more acidic, mineral- deficient saliva, poor quality tooth enamel, or mineral imbalances in their blood. Some people make less saliva than others, which makes them more susceptible to tooth decay, because saliva acts as a buffer. The bacteria involved in decay is Mutans Streptococcus. There are many strains of Streptococcus, which vary culturally and geographically, as well as in levels of virulence and cariogenicity. In infected children, the primary source for the bacteria is the mother.

There are windows of susceptibility. In children, there seems to be a window between 19 and 31 months of age, ending when all primary teeth have erupted. The reasons for this window are not clear, but the appearance of caries at this time is the end product of a long process. The susceptibility therefore was really at least six months prior. The first teeth to appear are typically the first affected. Another childhood window of caries appearance is at 6-8 years of age, when first permanent molars erupt.

The windows of susceptibility for you as a woman come after big hormonal changes such as childbirth, menstruation, menopause, and periods of high stress that result in decreased saliva production and acidity. During the first months of nursing, suppression of the hormone progesterone can cause decreased saliva production and increase your own risk of tooth decay. Throughout pregnancy and lactation, it is important for you to get enough calcium, protein, phosphorus, fat-soluble vitamins A and D, and vitamin C, the essential nutrients for healthy teeth in both you and your baby.

The second prerequisite for tooth decay is prolonged exposure to the bacterial matrix. Prolonged means more than 12 hours. This is where brushing twice a day and flossing come in. Brushing disrupts bacterial colonization and inhibits decay. Pediatric dentists and baby doctors such as Dr. William Sears recommend wiping your baby's gums and tongue with a slightly moist gauze or cloth as soon as first teeth appear, usually around 6-7 months. They recommend helping your child brush with a very soft tooth brush when your child begins to want to mimic your tooth-brushing rituals. Toothpaste is not technically necessary at any age – a thorough and methodical brushing is what accomplishes disruption of the harmful bacteria-sugar-acid cycle in your mouth. Flossing is recommended after all the teeth are in. In the United States, fluoride is also frequently recommended.

Some people believe brushing is more of a treatment than a prevention, and shouldn't be necessary for most babies, at least not while their diets are still within parental control. According both to Dr. Sears and lactation experts Jan Riordan and Kathleen Auerbach, the number one thing we can do to create cavity-free children is to breastfeed. Breastfeeding provides the essential nutrients for hard durable enamel, which is already fully formed by the time you begin to see the teeth. Breastfeeding, unlike bottle-feeding, provides the mechanical action necessary for preventing the milk from pooling in the mouth and leading to increased bacterial growth. Furthermore, breastfeeding babies work for their food, and the subsequent advantages to jaw and dental arch structure include ample room for teeth development. "Overall, breastfed children have less dental decay than do those who are fed otherwise," say Riordan and Auerbach.

What about night feeding in particular? Many pediatric dentists believe night-time nursing only slightly contributes to tooth decay. Compared to water, which has 0.0 tooth decay potential, breast milk has a 0.01 decay potential, while a 10% sucrose solution has a 1.0 decay potential. However, breast milk plus sucrose has a decay potential of 1.30! This means that how and what and when you start feeding your child beyond breast milk really matters. Avoid the worst culprits: fermentable carbohydrates (refined starches or carbs and sugars such as sodas and juices) and highly acidic foods (such as sodas, some fruits, chewable vitamin C). Avoid sticky sweet medicines. Discourage continual snacking. Too much phosphorus (as in a diet heavy in meat, cow's milk, and soda) can deplete calcium from the tooth enamel.

Foods for you and your child that help prevent tooth decay include mineral-rich vegetables, nuts, and whole grains. Tanin, found in some teas and herbs and in grapes, fights bacteria involved in tooth decay. It is easy to inspect your child's teeth regularly by lifting his lip and looking for varying white or stained areas, especially on the four upper front teeth. A well-baby prevention dental visit seems like a

reasonable plan to me. If your regular dentist does not see children under 5, you may want to seek a pediatric dentist. A holistic children's health guide such as Smart Medicine for a Healthier Child can help you individualize general recommendations.

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