

# Parents.

## Is Your Child at Risk?

When Karen Rice, of Aston, Pennsylvania, took her 4-year-old son, Luke, to the dentist for a checkup, she was shocked: He had a large cavity in one of his molars. Soon afterward, Luke complained that his teeth hurt, and the dentist found three more cavities between his teeth. "One was so big that the tooth got infected and had to be pulled," says Rice, who's endured five root canals herself.

Parents often assume that kids get cavities because they're lax about brushing and flossing. That's true to an extent, but what few people know is that tooth decay is a disease known as dental caries that's caused by specific germs, spreads easily within families, and can last a lifetime. What's more, it's more common among young children than any other chronic illness, including asthma and diabetes.

At least 4 million preschoolers suffer from tooth decay -- an increase of more than 600,000 kids in the last decade. "Children now have much more sugar in their diets at an early age," says Paul Casamassimo, D.D.S., professor of pediatric dentistry at the Ohio State University College of Medicine and Public Health, in Columbus. And the popularity of bottled water -- which usually doesn't contain fluoride -- may also contribute to the growing problem, he says.

Tooth decay begins with a group of germs called mutans streptococcus. "The bacteria feed on sugar and produce acid that eats away at the structure of teeth by depleting calcium," explains Parents advisor Burton Edelstein, D.D.S., founding director of the Children's Dental Health Project. The bacteria also create plaque -- a yellowish film that builds up on teeth and contains even more enamel-eroding acid. Once an area without calcium becomes big enough, the surface of the tooth collapses, and that's a cavity.

Babies are born without any of these harmful bacteria in their mouth, and studies have proven that moms (rather than dads) typically infect their children before age 2. It happens when you transfer your saliva into your child's mouth -- by repeatedly eating from the same spoon as your baby, for example, or letting your toddler brush his teeth with your toothbrush. And if you've frequently had cavities yourself, you're particularly likely to pass the germs along. Once a child's mouth has become colonized with mutans, he'll be prone to cavities in his baby and permanent teeth that can cause pain and difficulty eating. "It's an old wives' tale that 'soft teeth' run in families, but what's really passed along in families are high levels of decay-causing bacteria," says Dr. Edelstein. In fact, 80 percent of all cavities occur in just 25 percent of kids. The key role that bacteria plays in decay may also explain why some kids who eat tons of candy or never floss are lucky enough to avoid dental problems.

Emilie Mosby, of Kingman, Arizona, had lots of cavities when she was a kid, so she panicked when she saw a dark spot on her 3-year-old daughter's tooth. "I took Teagan to the dentist, and when he told me

she had a cavity, I almost cried," says Mosby. "It's so frustrating. I've always tried to take good care of her teeth, and I have a friend who doesn't even brush her kids' teeth every day and they've never gotten cavities."

If you've had trouble with your teeth, you need to take responsibility for your child's dental health -- just like you'd be vigilant if you've had a family history of high cholesterol or skin cancer. Unfortunately, antibiotics can't get rid of the cavity-causing bacteria in your child's mouth. That's why the American Academy of Pediatrics (AAP) actually urges pediatricians to ask parents about their own dental history by the time their baby is 6 months old, and to recommend taking extra precautions if a child is at high risk.

#### Time for a Checkup

A crucial way to help limit cavities -- regardless of whether they run in your family -- is to diligently brush and floss, which physically pushes bacteria, plaque, and sugar off the teeth. Fluoride is an essential part of dental health because it not only restores calcium to decaying teeth, but also limits the production of corrosive acid. Your child should see a dentist by his first birthday, according to recommendations from the American Academy of Pediatric Dentistry Association (AAPD) and the AAP. If you wait until your child is older, decay can be well underway: About 40 percent of 2- to 5-year-olds have cavities.

However, most parents don't know they should make an appointment for their baby. A recent study found that only 10 percent of 1-year-olds and 24 percent of 2-year-olds had ever visited the dentist. "Not all pediatricians look out for a toddler's oral health, and some doctors don't even look at the teeth," says Dr. Casamassimo. But it's important to treat cavities in baby teeth: These first teeth serve as space holders for permanent teeth, so losing one prematurely can cause alignment problems that will need to be corrected with braces later.

Although you may worry that your little one will never sit still and open her mouth, the first visit will be quick. The dentist can easily spot the telltale plaque buildup along the top gum line that's a sign of mutans (you can look for it too), and he can also do a culture to measure bacteria levels (in you and your child).

#### **Plaque Attack**

Even though some kids are at much higher risk of developing cavities, all children can get them. So it's important for everyone to follow this road map for dental health.

***Tame a sweet tooth.*** Limiting sugar -- which bacteria need in order to survive -- is the number-one way to prevent cavities. It's actually the frequency, not the total quantity of sugar consumption, that matters most, says Dr. Edelstein. (Eating a chocolate bar all at once is less harmful to the teeth than eating one bite every hour.) That's because repeatedly exposing the teeth to sugar prevents saliva, the body's

natural tooth cleanser, from doing its job. Candy isn't the only offender: Starchy carbohydrates like crackers and cereal and sticky foods such as raisins can also promote decay.

**Think about drinks.** Fruit juice (even diluted), as well as breast milk and formula, bathe the teeth in sugar, says Ronald Kosinski, D.M.D., chief of pediatric dentistry at Schneider Children's Hospital, in New Hyde Park, New York. In fact, dentists used to call early dental caries "baby-bottle tooth decay" because it often occurs in children who drink milk or juice during the night -- allowing sugar to sit on the teeth for ten or 12 hours. The AAPD advises weaning your child from the bottle by 14 months to prevent decay -- but you shouldn't let your toddler walk around all day with a Sippy cup either (unless it's filled with water).

**Focus on fluoride.** If your community's water is not fluoridated (check with your dentist or municipal-water-supply board) or your kids only drink unfluoridated bottled water, talk to your pediatrician about fluoride supplements. Too much fluoride, however, can lead to fluorosis, which causes white spots on the teeth. That's why kids under 2 or 3 shouldn't use fluoride toothpaste -- they'll swallow it instead of spitting it out.

**Treat teeth earlier.** Dentists can now apply a safe and protective fluoride varnish to young children's teeth. A recent study found that 1-year-olds who got this treatment twice a year were four times less likely to get cavities in their baby teeth. Also ask your dentist about sealants, plastic coatings that prevent decay. Some insurance plans will cover these two treatments.

**Take care of your own smile.** If you have a history of dental problems, avoid sharing utensils or toothbrushes with your baby or toddler -- or even letting him stick his fingers in your mouth. However, it's possible to reduce levels of mutans in your mouth. Your dentist can prescribe an antibacterial mouthwash that can reduce transmission to young children. Research has also found that chewing sugarless gum containing the sweetener Xylitol (such as Trident, Wrigley's Orbit, or Carefree Koolerz) four times a day significantly lowers a mother's bacteria levels. Good nutrition during pregnancy may also strengthen a baby's tooth enamel. Of course, you should brush and floss well, and get any problems treated promptly. This will also set a good example for your child and show him that protecting his smile is essential.

## **Help Keep Decay Away**

### ***Babies***

Clean your baby's gums even before her first teeth erupt. Wipe them with a damp washcloth after feedings.

Start brushing as soon as the first tooth appears. Wet a baby toothbrush and gently rub it back and forth on the surface of the tooth and along the gum line. If you use toothpaste, make sure it's fluoride-free.

### ***Preschoolers***

Brush your own teeth at the same time as your child brushes, and give him lots of positive feedback. Studies have found that manual toothbrushes are just as effective as powered ones. But if letting your kid use an electric or battery-operated one makes it easier to get her to brush, go for it.

### ***Toddlers***

Brush your child's teeth for at least 30 seconds (ideally a minute) after breakfast and before bed. Lean her head on your lap and place the brush at a 45-degree angle to the teeth. Start using a tiny amount of fluoride toothpaste when she's 2 or 3 years old. Begin flossing teeth for him when two of his teeth are touching.

### ***School-Age Kids***

Your child can start brushing and flossing on her own at around age 7. If she can tie her own shoes, chances are she's ready to brush solo. She should now brush for two minutes. Look for food and plaque around the gum line of her teeth to see whether she's doing a sufficient job. You can also let her chew gum with Xylitol.

### ***Smart Mouths***

Dr. Fresh Float'N Fire Fly. This confetti-filled brush blinks for a minute to let your child know how long he needs to brush.

DenTek Fun Flossers with Fluoride. Individual handheld flossers are easier for you -- and your child -- to use.

Orajel Toddler Training Toothpaste. Seeing Thomas on the tube of this fluoride-free brand may make your child more willing to open wide.