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Dental Health for Infants, Toddlers, and Preschoolers

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Healthy children have healthy teeth. Healthy teeth are important for eating, speech, and appearance. This guide describes steps parents may take to be certain that dental health is maintained from birth through the preschool years.

Dental health during the first year

Eruption of teeth

The primary or "baby teeth" usually appear when an infant is between 6 and 7 months old, although many babies begin to get their teeth a bit earlier or later than average. Sometimes, parents notice their baby is fussy when a new tooth is about to come through the gum. In other cases, parents notice a new baby tooth without being aware of any behavior change.

Before a new tooth appears, the gum may look red where the tooth is coming through, or there may be a bluish area of swelling on the gum. This goes away on its own after the tooth has come through. Although teething may make the gums uncomfortable, it will not cause fever or diarrhea. If either develops, it is not from teething, and you should contact a doctor or health care provider.

During teething, babies may drool or suck on their fingers more than usual. Often, infants want to bite. Give your baby a teething ring or hard cracker if it seems that she is

uncomfortable during teething. A teething ring that can be chilled in the refrigerator (available at most drugstores) may provide additional relief for your baby. Try to avoid using teething gels on the gums. These products contain fairly powerful drugs. Gently rubbing your finger on the gums can help as much as teething gels.

First teeth and chewing

The first front teeth are sharp, and are meant for biting off, not chewing. Babies do chew, though. They teach themselves to chew with their gums long before their back teeth arrive. In fact, infants begin to chew as soon as they can bring their hands and objects such as toys to their mouths. This signals that the time to begin solid foods is nearing.

Around 6 months of age, when babies can sit supported, they generally are ready to start eating solid foods. Slowly introduce soft foods one at a time, starting with iron-fortified baby cereal. Then add soft, cooked vegetables and soft fruit.

Finally, introduce harder foods such as peeled pieces of raw apple and plain crackers. Chewing these firmer foods helps your baby's jaw develop and "files down" the sharp points on his new teeth. In addition, allowing him to feed himself with his own hands before he uses utensils gives him the chance to develop both coordination and independence with feeding.

Have your baby sit upright when eating to avoid choking on foods.

Caring for your baby's teeth

When your baby's first tooth appears, clean the tooth and gums once a day using a soft, clean, wet washcloth wrapped around your finger. Gently rub along the tooth and gums.

Second teeth come in shortly after the first. After two or more teeth have appeared, brush your baby's teeth and gums twice a day using a child-size toothbrush with soft bristles. Brush with a gentle up and down motion to remove any food debris. This prevents the decay that can begin when food particles remain on the gums and between the teeth for many hours.

You may find it easier at first to brush without toothpaste. When you're comfortable with brushing, add a pea-sized drop of fluoride toothpaste to the brush.

By cleaning your baby's teeth twice a day, you'll make sure her teeth continue to grow in healthy and strong. Caring for your baby's primary teeth makes it less likely that she'll need special dental care when her permanent teeth begin to appear after the preschool years. Even if it appears that brushing her teeth doesn't accomplish

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much, remember that the fluoride in toothpaste strengthens the enamel on her teeth.

First teeth and breastfeeding

Your baby's first teeth won't interfere with breastfeeding. The first two teeth to come in are both bottom teeth, and infants cannot bite down on objects yet. When the top teeth arrive sometime after 6 months, babies are then able to bite down. As the upper teeth come in, just be sure your baby latches on well, with the nipple well back in his mouth. Remember, too, that exploratory biting is natural, and is not a signal to begin weaning an infant.

Baby bottle tooth decay

Although we tend to think only sticky foods can cause tooth decay, putting a baby down to sleep with a bottle of milk or sugary liquid also may cause tooth decay. This happens because the teeth and gums are exposed to the sugar in these liquids for a long time. Putting only breastmilk or formula in a bottle, rather than sweet juices, helps prevent this type of decay. If you give your baby a bottle at bedtime, fill it with plain water only.

Dental health during the toddler years, age 1 to 2^{1/2}

Eruption of teeth

The second year sees the arrival of many teeth. The first molars, or back teeth, come in around 12 to 15 months. These teeth may cause teething discomfort. The second molars appear as the second birthday approaches, and also may be painful. The canine teeth that erupt in between the first and second molars usually don't cause discomfort.

With teething pain comes unhappiness and irritability. You may find that your toddler's sleep is disturbed. Sucking and biting, which normally are comforting behaviors, now may cause pain. Rubbing the gum with your finger often provides relief. Letting your toddler drink from a cup instead

Understanding tooth decay

Tooth decay happens when food particles—especially sticky, sugary foods—remain on the teeth and gums for long periods. Bacteria in the mouth use these sticky starches as food. When this happens, *dental plaques* form and stick to teeth.

Plaques tend to attract more sugars. The bacteria in the mouth continue to use these sugars as food. When a lot of bacteria are allowed to use these sugars as food for hours at a time, they produce acid.

With a build-up of acid, the tooth enamel begins to dissolve. Enamel is what protects everyone's teeth, and when it breaks down, the tooth may begin to decay. By brushing your child's teeth and gums as described earlier, you are helping to prevent plaques from forming by removing the sugars that bacteria use for food.

of a bottle also may help, as sucking from a bottle often makes teething pains worse. The chilled teething ring mentioned earlier also may help.

Caring for your toddler's teeth

Continuing the daily brushing with a fluoride toothpaste is especially important now that there are many teeth, side-by-side, in your toddler's mouth. The bumpy surfaces on the molars give food and plaque more places to stick, and should be brushed regularly. Use the same gentle, up-and-down motion to brush each tooth and around the gums.

Do the evening brushing after dinner so that food debris does not have a chance to stay in the mouth overnight. If you do the evening brushing just before bed, avoid ending dinner with a starchy, sticky food. Rinse your toddler's mouth with plain water after eating to help wash away food particles that might stick to her teeth.

The first visit to the dentist

It's a good idea to take your child to the dentist as his second birthday approaches. This may seem early for a trip to the dentist, but at 2 years, toddlers usually are close to having all 20 primary teeth. Check around for dentists who welcome young children. They may have had special training, and work well with toddlers and preschoolers.

The dentist will want to make sure that your child's first teeth are healthy and properly spaced. Healthy primary teeth that are lined up correctly make it likely that the permanent teeth will grow in properly as well. Besides, these baby teeth have a lot of work yet to do before the permanent teeth arrive!

Taking your child to the dentist around age 2 also helps him become familiar with the dentist and the dentist's office. This may mean better acceptance of trips to the dentist during the preschool years.

Dental health during the preschool years, age 2^{1/2} to 5

Caring for your preschooler's teeth

As children approach age 2^{1/2}, they usually have a complete set of first teeth. There are 20 teeth, 10 in each jaw. Each jaw has four molars ("back teeth"), two canines ("eye teeth"), and four incisors ("front teeth").

When your child has this full set of teeth, cleaning them regularly becomes more important than ever. Because each tooth now has a neighbor, food particles can become wedged between teeth very easily. This can increase the risk of cavities, especially cavities between teeth.

Daily brushing, after the first and last meals of the day, removes the food debris from between teeth, and reduces the risk of cavities. Again, give your child a drink of plain water after meals or snacks eaten between breakfast and dinner to wash away at least some of the food debris left on the teeth.

Because sweet foods that stick to teeth are a leading cause of cavities, try to limit sticky candies such as toffees and treats such as lollipops, which take a long time to finish. When your preschooler eats sweets, encourage her to take what she wants and finish it rather than nibbling on these foods over a long period of time. By doing this, the amount of time her teeth are exposed to the sugars in these foods is reduced, and so is the risk of cavities.

When can preschoolers begin brushing their own teeth?

The age at which children can effectively brush their own teeth is different for different children. Both the front and back teeth need to be brushed properly, which takes quite a bit of coordination for young children.

Many dentists who specialize in childhood dentistry recommend that parents assist their children with brushing until they are at least 5 years old. After this time, children are beginning to master the muscle and hand-eye coordination that is necessary for effective tooth brushing.

You may wish to watch your child brush on his own, and decide whether the front and back teeth are getting really clean. You might assist in brushing the more difficult back teeth, while your child takes care of the front teeth. After some time and practice, your child will learn how to brush all of his teeth without help.

Going to the dentist

Having made the first visit during the second year, children at age 3 are ready to begin seeing a dentist for regular check-ups. This may seem early to begin regular visits to the dentist, but these first teeth are very important. By seeing the dentist early, parents make sure that these first teeth stay healthy until the permanent ones come in. Even though the first teeth are replaced, their healthy development maintains the proper spacing for later teeth. They also help a child's jaws grow into their proper shape.

Early damage to the tooth enamel is easily and painlessly repaired by the

What about fluoride?

Fluoride strengthens the tooth enamel, which makes it far more difficult for decay-causing acids and bacteria to damage teeth. Some communities add fluoride to the drinking water, although many do not. Find out whether your community has fluoridated water by asking your dentist, or call the local health department.

If the drinking water in your community doesn't contain added fluoride, you may consider adding fluoride drops or tablets to your child's drinking water. A dentist in your community is the best person to talk to about this idea, because there is a growing belief that the fluoride in toothpaste is enough for children. Not only is the fluoride in toothpaste absorbed by the tooth enamel, but a tiny bit is added to the diet because children usually swallow a small amount of toothpaste while brushing.

dentist. By taking your child in for a check-up between age 2½ and 3, any early problems will be cleared up before they turn into cavities. Because these early visits are less likely to involve any cavities or fillings, your child is given the chance to develop a relationship with the dentist before treatment is necessary. This can be an important reassurance for the child if later treatments such as fillings become necessary.

Cavities and first fillings

Even after careful attention, children sometimes get cavities. First fillings are not pleasant. Children do better when they understand what will happen and feel they have some control over the situation.

If a filling is necessary, you and the dentist can show your child the drill and explain its use. With a small mirror, the dentist can show your child the tiny cavity. To a child, the drilling may seem like it goes on and on, and it may be comforting to know it's just a

tiny hole. Also, your child will have more of a sense of control if she and the dentist arrange to have a hand wave or other signal mean it's time for a short rest.

If you manage your child's fear in this way, not only will she receive the necessary treatment, but she likely will handle future treatment even better.

Even though most preschoolers handle routine dental procedures quite well, especially when the dentist you've chosen works well with children, some children still have difficulty. If this happens, privately discuss your options with the dentist. The dentist may feel that a return visit in a few weeks or months will do the trick. If treatment cannot be put off for that long, you might want to find a pediatric dental specialist who can complete the treatment by using a very mild, short-acting sedative to help your child relax.

Accidents and teeth

Even though it takes a strong blow to knock a tooth out, this unfortunate accident sometimes occurs. If your child's tooth is knocked out, or if it's attached but loose and out of place, take your child directly to the dentist or emergency room. Transport a tooth that has been completely detached by placing it in milk or wrapping it in a clean, water-moistened towel.

Quick attention from a physician or dentist may save a baby tooth by replacing it and allowing it to reattach itself. If this kind of replacement will not work, the dentist will decide either to fill the gap with a false tooth, or simply leave the gap until the permanent tooth comes in.

Broken or chipped teeth also are serious enough for a visit to the dentist as soon as possible. Sharp edges on chipped or broken teeth may cut your child's tongue or lips. The dentist will file down any sharp edges, and also may "cap" the tooth to restore its appearance.

Sometimes, a tooth that receives a sharp blow will become damaged and "die." This happens because the nerve has been affected. Teeth with this type

of damage turn a dull yellow. Showing this to the dentist is a good idea, but this usually is not a serious situation. Most often, even a "dead" tooth can remain safely in place until the permanent teeth arrive.

Choosing a healthy diet for healthy teeth

A diet that promotes general health also promotes dental health. A healthy diet provides young children with the vitamins and minerals they need to build strong bones and teeth. For children 2 years of age and older, choose a variety of foods, limit sugar and fat intake, and use the USDA Food Guide Pyramid to plan a healthy diet.

Young children, with their small stomachs and high energy, need between-meal snacks each day. These snacktimes are opportunities for parents to provide healthy, nourishing snacks for children. Avoid sweet, sticky foods that cling to teeth and gums. Remember, a healthy diet doesn't mean cutting out *all* the sugar; it simply means limiting sugar intake and watching out for sticky, sugary foods in your child's diet.

Healthy snacks for healthy teeth

Try some of the following food combinations for healthy and tasty snacks

- Baby carrots and broccoli florets with a low-fat ranch dressing dip
- Celery sticks with a peanut butter or cream cheese spread
- Fresh pieces of fruit served with yogurt

Gather foods such as cheese, apples, cantaloupe, and tofu, and cut into small pieces for children to snack on. Pre-school children especially enjoy spreading and dipping with different foods. Cottage cheese, applesauce, refried beans, and oatmeal are foods you may place in a bowl for children to spread, dip other foods into, or just eat with a spoon. Remember to assist younger children with the spreading, and avoid using sharp, pointed utensils for this activity.

Additional healthy snack items include sliced fresh fruits, canned fruit salad, pieces of raw vegetable, toasted breads, crackers, pretzels, fruit juice, lunchmeats, and hard-boiled eggs.

Prevent choking

Some foods pose a choking risk for young children and toddlers. Beware of foods such as grapes, peanut butter, carrots, and hot dogs. Cut and serve foods of this type in smaller pieces to minimize the chances of choking.

For further reading

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Eisenberg, A., Murkof, H., and Hathaway, S. (1989). *What to Expect the First Year*. New York: Workman Publishing Company.

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Books for young children

Berenstain, S. and Berenstain, J. (1981). *The Berenstain Bears Visit the Dentist*. New York: Random House.

Rockwell, H. (1975). *My Dentist*. New York: Mulberry Books.

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Related OSU Extension publications

Food for Tots, EM 8351, (Oregon State University, Corvallis, 1994). No charge.

Helping Children Grow: Starting Healthy Eating Habits, EC 1292, (Oregon State University, Corvallis, 1993). No charge.

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