

Are Your Children's Teeth Healthy?

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Enamel hypoplasia is a defect in the tooth enamel that results in a reduced quantity and quality of the hard outer layer of the tooth. It can occur on any tooth or on many teeth and appears white, brown or yellowish in color. Usually there is a rough or pitted surface to the tooth, most often in a horizontal pattern. The condition can range from a single spot on one tooth, to multiple discolorations and pits on many teeth. The most common primary (baby) teeth to be affected are the incisors (front teeth) and the one year molars. The most common permanent teeth affected are the incisors and the six-year molars.

While there are genetic conditions resulting in this pattern of enamel problems, most of the enamel hypoplasia we see in our adopted children would be due to environmental factors. The conditions causing the problem must be present at the time enamel is forming on the tooth. Those teeth forming after the cause has been eliminated will not be affected. All the primary teeth have significant hard tissue formation in-utero and have complete crown (visible part of tooth) formation through the first year of life. So, the environmental factors affecting the child's enamel formation during pregnancy and year one of life can be significant. Some of these factors are nutritional deficiencies (vitamins A, D and C), poor intake or absorption of calcium, severe acute or chronic illnesses (such as mumps, measles, chicken pox or syphilis), R(h) factor issues, and traumatic birth. There is a high incidence of enamel hypoplasia in pre-term and low birth weight babies. Sometimes the formation of enamel stops for a

duration following birth resulting in a "neonatal line" in the primary teeth. Should these conditions of the pregnancy continue during the first year(or more) of life, more severe hypoplasia could be seen and greater numbers of teeth (including the front permanent teeth) could be affected. By looking at which teeth are affected, we can determine the timing (and possibly the severity) of the "injury", but the cause will be difficult or impossible to determine.

If your child has enamel hypoplasia, remember that you have already corrected or treated the conditions (under your control) that have caused the problem (diseases and nutritional status). Brush your child's teeth, floss them if there are two or more teeth side by side. Take your child to a dentist for an evaluation to determine if the teeth have decayed or at risk of decay. Ask your child's dentist about fluoride supplementation. There are treatments for every level of hypoplasia that your child may have, ranging from doing nothing, to bonding unsightly areas with tooth colored filling materials, to eliminating decay and restoring function (if the problem is severe). I recommend that all children see a dentist by age two, but our adopted children may have special dental needs and concerns that would warrant a trip to the dentist much earlier than that. Most general dentists are well trained in dealing with children and may feel comfortable treating young children. There are pediatric dentists for the very young and very fearful children. My personal opinion is that our adopted children may need the services of a specialist and your family dentist is qualified to advise you on this issue.