

Wisconsin Division of Public Health
Statement in Response to the American Dental Association's
Infant Formula Recommendation

In November 2006, the American Dental Association (ADA) released an "Interim Guidance on Fluoride Intake for Infants and Young Children." The ADA guidance was based on a report from the National Research Council (NRC) that raised the possibility that infants could receive a greater than optimal amount of fluoride from liquid concentrate or from powdered baby formula that was mixed with water containing fluoride during a time that their developing teeth may be susceptible to enamel fluorosis.

The ADA Interim Guidance recommends:

- Breast milk is widely acknowledged as the most complete form of nutrition for infants.
- For infants who get most of their nutrition from formula during the first 12 months, ready-to-feed formula is preferred to help ensure that infants do not exceed the optimal amount of fluoride intake.
- If liquid concentrate or powdered infant formula is the primary source of nutrition, it can be mixed with water that is fluoride free or contains low levels of fluoride to reduce the risk of fluorosis.
- The occasional use of water containing optimal levels of fluoride should not appreciably increase a child's risk for fluorosis.

The Wisconsin Division of Public Health recommends that the proper amount of fluoride be ingested from infancy through old age to prevent and control tooth decay. However, in a small number of children, excess fluoride exposure during the ages when teeth are forming (from birth through age 8) can result in a range of changes within the outer surface of the tooth called enamel fluorosis. In the vast majority of cases, fluorosis appears as barely noticeable faint white lines or streaks on tooth enamel and does not affect the function of the teeth. Studies have shown that teeth are unlikely to develop more esthetically noticeable forms of fluorosis, even with regular mixing of formula with fluoridated water.

Since fluoride exposure to developing teeth plays a very important long-term role in preventing tooth decay, parents and healthcare providers should weigh the small risk of the mild cosmetic effect from enamel fluorosis against the benefit of fluoride in preventing tooth decay and the need for dental fillings. This includes consideration of higher decay prevalence and low dental care access experienced by low income populations. Such populations are usually seen in Women, Infant and Child (WIC) clinics and other public health programs.

Community water fluoridation is safe and is beneficial for the dental health of children and adults. The Centers for Disease Control and Prevention (CDC) and the Wisconsin Division of Public Health promotes its use for people of all ages. Parents and caregivers of infants fed primarily with powdered or liquid concentrate formula mixed with fluoridated water, who are concerned about enamel fluorosis, can lessen this exposure by mixing formula with low fluoride water most of the time or by using ready-to-feed formula. (Note: per Federal WIC regulations, the WIC program cannot provide ready-to-feed formula for this purpose.) However, for many infants the use of fluoridated water in formula is appropriate and can reduce the risk of tooth decay.

For further information on infant formula and the risk for enamel fluorosis, see the CDC web site at: http://www.cdc.gov/fluoridation/safety/infant_formula.htm