



American Dental Association
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INTERIM GUIDANCE ON FLUORIDE INTAKE FOR INFANTS AND YOUNG CHILDREN

Recent studies cited in the report of the National Research Council (NRC), “Fluoride in Drinking Water: A Scientific Review of EPA’s Standards,” have raised the possibility that infants could receive a greater than optimal amount of fluoride through liquid concentrate or powdered baby formula that has been mixed with water containing fluoride during a time that their developing teeth may be susceptible to enamel fluorosis.

The appropriate amount of fluoride is essential to prevent tooth decay. But fluoride intake above optimal amounts can create a risk for enamel fluorosis in teeth during their development before eruption through the gums.

Enamel fluorosis is not a disease but rather affects the way that teeth look. Most cases of fluorosis result in faint white lines or streaks on tooth enamel that are not readily apparent to the affected individual or the casual observer.

While more research is needed before definitive recommendations can be made on fluoride intake by bottle-fed infants, the American Dental Association (ADA) issues this interim guidance because we know that parents and other caregivers are understandably cautious about what is best for their children.

ADA Interim Guidance: Infant Formula

The ADA offers these recommendations so parents, caregivers and health care professionals who are concerned have some simple and effective ways to reduce fluoride intake from reconstituted infant formula.

- Breast milk is widely acknowledged as the most complete form of nutrition for infants. The American Academy of Pediatrics recommends human milk for all infants (except for the few for whom breastfeeding is determined to be harmful).
- 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. Examples are water that is labeled purified, demineralized, deionized, distilled or reverse osmosis filtered water. Many grocery stores sell these types of drinking water for less than \$1 per gallon.
- The occasional use of water containing optimal levels of fluoride should not appreciably increase a child’s risk for fluorosis.

Parents and caregivers should consult with their pediatrician, family physician or dentist on the most appropriate water to use in their area to reconstitute infant formula. Ask your pediatrician or family physician whether water used in infant formula should be sterilized first (sterilization, however, will not remove fluoride).

ADA Guidance: Other Sources of Fluoride for Young Children

The ADA offers this additional guidance on other sources of fluoride for young children, each of which is beneficial under the circumstances described below:

- **Fluoride Toothpaste**
Parents and caregivers should ensure that young children use an appropriate size toothbrush with a small brushing surface and only a pea-sized amount of fluoride toothpaste at each brushing. Young children should always be supervised while brushing and taught to spit out rather than swallow toothpaste. Many children under age six have not fully developed their swallowing reflex and may be more likely to inadvertently swallow fluoride toothpaste. Unless advised to do so by a dentist or other health professional, parents should not use fluoride toothpaste for children less than two years of age.
- **Fluoride Mouthrinse**
Fluoride mouthrinses have been shown to help prevent tooth decay for both children and adults. However, the ADA does not recommend use of fluoride mouthrinses for children under six years of age, unless recommended by a dentist or other health professional. Children under age six may be more likely to inadvertently swallow fluoride mouthrinse.
- **Dietary Fluoride Supplements**
Children should only receive dietary supplemental fluoride tablets or drops as prescribed by their physician or dentist based on the dietary fluoride supplement schedule approved by the ADA, the American Academy of Pediatrics and the American Academy of Pediatric Dentistry. Supplements are not recommended for children under six months of age.
- **Naturally Occurring Fluoride in Water**
The optimal fluoride level in drinking water is 0.7 – 1.2 parts per million, an amount which has been proven beneficial in reducing tooth decay. Naturally occurring fluoride may be below or above these levels in some areas. Under the Safe Drinking Water Act, the U.S. Environmental Protection Agency requires notification by the water supplier if the fluoride level exceeds 2 parts per million. People living in areas where naturally occurring fluoride levels in drinking water exceed 2 parts per million should consider an alternative water source or home water treatments to reduce the risk of fluorosis for young children.

ADA Supports Community Water Fluoridation

The ADA supports community water fluoridation as the single most effective public health measure to prevent tooth decay. It is a powerful strategy to reduce disparities in tooth decay among different populations and is more cost-effective than other forms of fluoride treatments or applications. Fluoridation is endorsed by the Centers for Disease Control and Prevention, which has listed community water fluoridation as one of 10 great public health achievements of the 20th century.

As the leader of a science-based profession, the ADA continually reviews new information about fluoride's impact on health. As part of its ongoing assessment, the ADA will convene workshops with government and other professional organizations involved in this issue to determine the best way to evaluate the scientific literature on this topic and formulate more definitive recommendations on fluoride intake, including intake by infants and young children. The ADA also is pursuing other ways to address appropriate fluoride intake with medical, public health and other dental organizations.

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