

AMERICAN ACADEMY OF PEDIATRICS

Fluoride Supplementation for Children: Interim Policy Recommendations

Committee on Nutrition

The Committee on Nutrition of the American Academy of Pediatrics (AAP) last issued a statement in 1986 on the topic of fluoride supplementation for children. The recommendations made at that time recently have been reassessed because of what seems to be an increased incidence of dental fluorosis in children living in the United States. Dental fluorosis appears during tooth formation and is caused by excessive fluoride ingestion, which leads to enamel protein retention, hypomineralization of the dental enamel and dentin, and disruption of crystal formation. The effect is cosmetic only, ranging from barely perceptible white striations or specks to confluent areas of pitting or brownish gray staining. Teeth affected by fluorosis seem to continue to be resistant to dental caries.

The main sources of fluoride include fluoridated water, foods or drinks reconstituted or prepared with fluoridated water, dentifrices, and fluoride supplements. Water is not fluoridated to a uniform level throughout the United States, and young children ingest significant but variable amounts of fluoride while brushing their teeth with fluoride-containing toothpaste. Because both of these sources of fluoride are difficult to control, attention has been directed again at the dosage of fluoride supplements to attempt to prevent dental fluorosis.

In January 1994, a Dietary Fluoride Workshop sponsored by the American Dental Association was convened to address the issue of dental fluorosis. Although children can receive substantial amounts of fluoride from beverages and dentifrices, the experts at this workshop thought the only source of fluoride that could be easily altered was the supplement prescribed by physicians and dentists. The participants at the workshop recommended the schedule for fluoride supplementation given in the Table.

These recommendations for fluoride supplement-

TABLE. Fluoride Supplementation*

Age	Water Fluoride Content (in ppm)		
	<0.3	0.3-0.6	>0.6
Birth-6 mo	0	0	0
6 mo-3 y	0.25	0	0
3-6 y	0.50	0.25	0
6-16 y	1.00	0.50	0

* Fluoride daily doses are given in milligrams.

tation represent a modification of those adopted in 1979¹ and reaffirmed in 1986.² Fluoride supplementation is no longer recommended from birth, and doses have been decreased during the first 6 years of life. The level of water fluoride content when supplements are not needed has been lowered from 0.7 to 0.6 ppm. Recently the American Dental Association Council on Dental Therapeutics affirmed the recommendations adopted at the workshop. A council report of the workshop will appear in a future issue of the *Journal of the American Dental Association*, and the proceedings will be published in the *Journal of Public Health Dentistry*. The AAP concurs with these dosage recommendations, and its Committee on Nutrition is proceeding with a complete revision of the 1986 AAP policy statement entitled "Fluoride Supplementation." These recommendations supersede those contained in the 1986 statement and republished in the 1993 AAP *Pediatric Nutrition Handbook*.

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2. American Academy of Pediatrics, Committee on Nutrition. Fluoride supplementation. *Pediatrics*. 1986;77:758-761

The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.

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