

# THE CASE FOR ELIMINATING THE USE OF DIETARY FLUORIDE SUPPLEMENTS AMONG YOUNG CHILDREN

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## Abstract

Fluoride supplements have been used for years to prevent dental caries, but there are three reasons why their use is inappropriate today among young children in the United States. They are (a) the evidence for the efficacy of fluoride supplements in caries prevention is not strong, (b) supplements are a clear risk for dental fluorosis, and (c) fluoride's pre-eruptive effects in caries prevention are weak.

There are many studies published on the caries-preventive efficacy of supplements, but few meet the standards for acceptable clinical trials. Well-conducted studies showing supplements to be efficacious have been conducted with school-age children in supervised programs, with chewable tablets or lozenges for slow dissolution to achieve topical effects. The evidence to show that supplements are a risk factor for enamel fluorosis is strong, and so is the evidence to show that fluoride prevents caries principally through post-eruptive effects. North American children are today exposed to fluoride from many sources: drinking water, toothpaste, gels, rinses, and a considerable amount in foods and beverages.

The additional cariostatic benefits that would accrue from supplement use is marginal at best, while the risk of fluorosis is strong. There is evidence that the public is more aware of the milder forms of fluorosis than was previously thought, so dental policies should be aimed at reducing fluorosis. The risks of using fluoride supplements in young children outweigh the benefits. Since there are alternative forms of fluoride to use in high-risk individuals, fluoride supplements should no longer be used for young children in North America.