

# **Fluoride Action Network**

fluoridealert.org/issues/dental-products/

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#### Overview

Many dental products contain dangerously high levels of fluoride. For years, manufacturers and dentists failed to warn consumers about the risks from ingesting these products. Although the FDA now requires manufacturers to warn consumers that fluoride products are poisonous when swallowed, manufacturers and dentists are still using these products in ways that expose consumers and patients to potentially toxic levels of fluoride.

### **Fluoride Toothpastes**

- The vast majority of toothpastes now contain fluoride.
- Although research suggests adult-strength fluoride toothpaste (1,100-1,450 ppm F) can reduce tooth decay, this potential benefit comes with the risk of <u>disfigured teeth</u>.
- Use of fluoride toothpaste during childhood is a <u>major risk factor</u> for dental fluorosis, particularly for children who brush before the age of three and who live in areas with fluoridated water.
- Children who swallow fluoride toothpaste can reach fluoride levels in their blood that exceed the levels that have been found to inhibit <u>insulin secretion</u> and increase <u>blood glucose</u> in animals and humans.
- All fluoride toothpastes sold in the U.S. must now include a <u>poison label</u> that warns
  users to "contact a poison control center immediately" if they swallow more than used
  for brushing.
- Just 1 gram of fluoride toothpaste (a full strip of paste on a regular-sized brush) is sufficient to cause <u>acute fluoride toxicity</u> in two-year old children (e.g., nausea, vomiting, headache, diarrhea).

- In 2009, U.S. poison control centers received <u>over 25,000 calls</u> related to excessive ingestion of fluoride toothpaste, with over 378 users requiring emergency room treatment.
- In adults, fluoride toothpaste can cause skin rashes around the mouth known as <u>perioral dermatitis</u> as well as <u>canker sores</u>.

For more discussion on fluoride toothpaste, click here.

## Fluoride "Supplements"

- Fluoride <u>"supplements"</u> are tablets, drops, or lozenges that are designed to provide a
  substitute fluoride exposure for children living in areas where fluoride is not added to
  water. Unlike other dietary supplements, fluoride supplements cannot be purchased
  over the counter. They are only available by prescription.
- Fluoride supplements were introduced in the 1950s on two incorrect assumptions: (1) fluoride is a <u>nutrient</u> and (2) fluoride is effective when <u>swallowed</u>.
- Despite being prescribed by pediatricians and dentists for over 50 years, fluoride supplements have <u>never been approved</u> as either safe or effective by the FDA.
- As conceded by a pro-fluoride researcher, "virtually none of the early fluoride supplement studies would be published today, because of methodological and other shortcomings." (Riordan 1999).
- Modern research has consistently shown that children who use fluoride supplements
  have a much higher rate of dental fluorosis than children who do not. By contrast,
  the evidence that supplements reduce tooth decay has recently been described by profluoride researchers as "poor," "inconsistent," and "weak."
- Even the American Dental Association (ADA) and other pro-fluoride organizations no longer recommend fluoride supplements for <u>most children</u>. The ADA does not recommend fluoride supplements for <u>infants</u> under six months of age. After six months of age, the ADA only recommends supplements for children who are at "high risk" for cavities.
- Some children who take fluoride supplements can develop <u>allergic reactions</u>, including skin rashes, gastric distress, vomiting, and headache.
- Although fluoride supplements were only intended for children living in non-fluoridated areas, surveys have shown that some dentists prescribe supplements to children living in fluoridated areas as well. This places children at risk for the most <u>severe</u> forms of dental fluorosis.

For more discussion on fluoride supplements, click here.

### Fluoride Gels

"Fluoride Gels" are acidic, highly concentrated fluoride products that dentists topically apply to a patient's teeth about two times a year. Of all the fluoride products currently used in dentistry, fluoride gels are — without question — the most hazardous. While fluoride gels are designed to be applied "topically" (i.e., directly to teeth), very large quantities of fluoride are absorbed into the body during the treatment. Due to this large systemic exposure, many patients — particularly children — experience symptoms of acute fluoride toxicity, including nausea, gastrointestinal pain, and/or vomiting within an hour of the treatment. Gastric distress is not the only side effect. Fluoride gels produce an enormous spike in blood fluoride levels for up to 14 hours, exposing every tissue in the body to fluoride concentrations that have been can damage, in short-term exposures, the kidney, the male reproductive system, and glucose metabolism. Although the dental community has taken steps to reduce the amount of fluoride that gets into the blood from fluoride gels, the extent of fluoride exposure from these gels continues to remain excessive and toxic. Due to the conspicuous absence of safety studies, however, the public health consequences from the dental community's 40-year experiment with fluoride gels remains a disturbing mystery. Read More.

#### **Other Fluoride Products**

For information on other fluoridated products, including self-applied gels, fluoride varnishes, and fluoridated salt, click here.