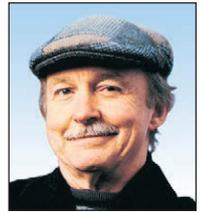




Fluoride and Dentistry: How Much Poison is in My Toothpaste?

By Bill Wolfe, DDS, NMD



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The second fastest way to deliver a drug, next to an IV, (intravenous delivery), is sublingually (under the tongue). It is very important, therefore, what chemicals we place in our mouths. Over 95% of toothpastes now contain fluoride, and many young children swallow over 50% of the toothpaste added to their brush—if they are not supervised during brushing. A single strip of toothpaste covering the length of a child's brush contains between 0.75 to 1.5 mg of fluoride. This exceeds the amount of fluoride in most prescription fluoride supplements (0.25 to 1.0mg). A 2-ounce tube of prescription "ControlRX" contains 282 milligrams of fluoride, a nearly-lethal dose to swallow for a 2 year old child.

At high doses, fluoride is a potent poison that rivals the toxicity of arsenic. Fluoride's potency explains why it was used for years as a rodenticide (to kill rodents) and why it is still being used as a pesticide. It also explains why the Food & Drug Administration (FDA) now requires that all fluoride toothpastes sold in the United States carry the following warning: "WARNING: Keep out of the reach of children under 6 years of age. If more than used for brushing is accidentally swallowed, get medical help or contact a Poison Control Center."

Fluoride toothpastes carry a poison warning for good reason. A tube of fluoride toothpaste, including bubblegum flavored varieties with child-friendly cartoon characters on the packaging, has enough fluoride to kill an average-weighting child under the age of nine. Although fatalities from toothpaste ingestion are rare, poisoning incidents are not. A young child can receive an "acutely toxic" dose of fluoride (the dose capable of inducing toxic responses such as gastric pain, nausea, or headache) by ingesting a mere 1 gram (1000 mg) of fluoridated toothpaste. Each year there are over 20,000 calls to Poison Control Centers as a result of excessive ingestion of fluoride toothpaste. Many poisoning incidents from fluoridated toothpaste, however, likely go unreported, as parents may not notice the symptoms associated with mild fluoride toxicity. Such symptoms may be attributed to colic or gastroenteritis, particularly if they did not see the child ingest fluoride.

The National Institutes of Health encourages parents to call the American Association of Poison Control Centers (800-222-1222) anytime they have a question about fluoride poisoning. Parents are advised to take extra care to lock up these types of prescription dental products, as well as any fluoride supplements, which can easily place a child at such risk.

The obvious question is, why even have fluoride products in the house at all? The fact is, fluoride is not an essential nutrient. No biological process in animals or humans has been shown to depend on it. On the contrary, it is known that fluoride can

interfere with many important biological processes and vital cellular constituents. This makes fluoride potentially toxic even at low doses.

It is known that fluorides are general protoplasmic poisons, likely related to their capacity to modify the metabolism of cells by changing the permeability of the cell membrane, thereby inhibiting basic enzyme functions. According to *The Clinical Toxicology of Commercial Products*, fluoride is more poisonous than lead and just slightly less poisonous than arsenic, and the PDR (*Physician's Desk Reference*) states that fluoride can cause various skin eruptions, gastric distress, headaches, and general weakness. In addition, JAMA (*The Journal of the American Medical Association*) has published three articles relating hip fractures in the elderly to areas of water fluoridation.

I am proud to say that I have never incorporated fluoride into any of my dental products, and I that my practice has been fluoride-free for 41 years. I haven't missed it at all.

Practical politics requires an ability to ignore the facts.

HENRY BANKS