



Fluoride and Fluoridation

Fluoride is a naturally occurring compound that is present in rocks, soil, water, and in varying amounts in almost all foods. Fluoride is also used in many consumer dental products such as toothpaste and mouth rinses. Often called “nature’s way to prevent tooth decay,” fluoride works topically and systemically. Applied topically, it strengthens teeth and makes them resistant to decay. Ingested through food and water, fluoride helps developing teeth emerge with a stronger, more decay-resistant outer layer.

Some communities have naturally occurring optimal levels of fluoride in their water supplies. For those that do not, adjusting the fluoride to an optimal level in the water can help prevent tooth decay. Grand Rapids, Michigan became the first city to fluoridate its water supply in 1945. Since then, the benefits have been repeatedly demonstrated, with studies showing that fluoridation can reduce the amount of decay in children’s teeth by as much as 60%. The U.S. Centers for Disease Control cited community water fluoridation as one of 10 great public health achievements of the 20th century.

Despite the claims of some activists, the overwhelming weight of scientific evidence shows that water fluoridation is safe. Backed by a 60-year record of practical experience and scholarly research, fluoridation has won the endorsement of countless national and international health organizations, from the American Academy of Pediatrics to the World Health Organization.

The California Dental Association is firmly committed to increasing fluoridation to prevent tooth decay, and commends communities that are taking this step to protect the oral health of their residents. Before CDA joined the effort to expand fluoridation in the early 1990s, only 17 percent of California’s population benefitted from fluoridated water. Reflecting its support for fluoridation, in 1995 CDA sponsored Assembly Bill 733, legislation that required communities with 10,000 or more water connections to fluoridate when funding became available to do so.

Since then, the number of Californians receiving fluoridated water has quadrupled. The Metropolitan Water District of Southern California began fluoridating its supply in October 2007, bringing fluoridated water to an additional 18 million people and raising the percentage of the population receiving this benefit to about 70%.

Aside from its oral health benefits, fluoridation is cost-effective. The estimated average cost for a community to fluoridate its water ranges from roughly \$0.62 a year per person in large communities to approximately \$3.90 a year per person in small communities. Over a lifetime, this amounts to less than the cost of one filling to repair one decayed tooth, making community fluoridation one of the most effective and cost-saving dental disease prevention programs available.