



METROPOLITAN DENVER
DENTAL SOCIETY

YOUR COMMUNITY PARTNERS IN ORAL HEALTH

Metropolitan Denver Dental Society

3690 South Yosemite Street, Suite 200, Denver, CO 80237

PHONE: (303) 488-9700 FAX: (303) 488-0177 E-MAIL: pr@mddsdentist.com

www.mddsdentist.com

Fluoride

FACTS

Community water fluoridation was named as one of the 10 greatest public health milestones of the 20th Century by the Centers for Disease Control

Of the 50 largest cities in the U.S., 43 have community water fluoridation, which reaches 62% of the population using public water supplies - more than 144 million people

Lack of fluoridated water leaves 100 million Americans at risk for dental disease

Water fluoridation is the safest and most cost-effective way to prevent tooth decay to people of all ages and socioeconomic backgrounds

The average cost of water fluoridation over an average life span is less than the price of having one cavity treated

What is Fluoride, and why is it good for teeth?

Fluoride is a compound of the element fluorine, which is found universally throughout nature in water, soil, air and in most foods. Existing abundantly in living tissue as an ion, fluoride is absorbed easily into tooth enamel, especially in children's growing teeth. Once teeth are developed, fluoride makes the entire tooth structure more resistant to decay and promotes remineralization, which aids in repairing early decay before the damage is even visible. "Systemic" fluoride is ingested when added to public and private water supplies, soft drinks and teas, and is available in dietary supplement form. Once systemic fluoride is absorbed via the gastrointestinal tract, the blood supply distributes it throughout the entire body. Most fluoride not excreted is deposited in bones and hard tissues like teeth.

What's a "topical" fluoride, and when should it be used?

"Topical" fluoride is found in products containing strong concentrations of fluoride to fight tooth decay. These products, including toothpaste and mouthwash are applied directly to the teeth and are then expectorated or rinsed from the mouth without swallowing. Dentists recommend brushing with a fluoride toothpaste at least twice a day or after every meal, combined with a regimen of flossing and regular dental checkups. Professionally-administered topical fluorides such as gels or varnishes are applied by the dentist and left on for about four minutes, usually during a cleaning treatment. For patients with a high risk of dental caries, the dentist may prescribe a special gel for daily home use, to be applied with or without a mouth tray for up to six weeks.

Why is most drinking water fluoridated and is it safe?

Fluoridated water protects against cavities and root caries—a progressive erosion of adult root surfaces caused by gum recession—and helps remineralize early carious lesions. Thanks to these preventive benefits, public water fluoridation is considered the most efficient and cost-effective dental caries prevention measure available. More than 144 million United States residents in more than 10,000 communities drink fluoridated water, most from public water supplies with sodium fluoride added artificially. A small percentage get water from private wells with naturally fluoridated water. The Environmental Protection Agency has determined that the accepted "optimal" range of fluoride in water lies between 0.7 and 1.2 parts per million (ppm) or mg per liter. The limit allowed by the EPA in public water is 4 ppm. Backed by results from more than 140 documented studies undertaken in 20 different countries over the past several decades, fluoridated water adhering to these standards has been scientifically established as safe for drinking. Water fluoridation is endorsed by nearly every major health and safety-related organization. Fluoridation of community water supplies is the single most effective public health measure to prevent tooth decay and to improve oral health for a lifetime. Extensive research conducted over 50 years has confirmed the safety and value of community water fluoridation, time and time again.

Is too much fluoride dangerous?

The use of fluoride is considered safe unless it's misused or over concentrated. Drinking excessively fluoridated water can cause a harmless cosmetic discoloring or mottling of the enamel, visible by chalky white specks and lines or pitted and brown stained enamel on developing teeth. Dentists recommend avoiding the swallowing of toothpaste or mouthwash, checking with a dentist on proper dosage, and being careful not to accidentally take too much. If you are concerned about the fluoride levels in your drinking water, call the local public water department. If the source is a private well, request a fluoride analysis taken via a water sample through your local health department.