



Water Fluoridation Facts

What is fluoride?

Fluoride is a form of fluorine, and one of the most common elements found in the earth's crust. Fluoride is found in soil, fresh water, sea water, plants, many foods, and is added to dental care products.

Fluoride in the right concentration has positive effects on dental health as it helps protect against tooth decay.

What is water fluoridation?

Most water contains some fluoride. Water fluoridation is a process where the natural fluoride levels in the water supply are supplemented to an amount that will help protect against tooth decay, or cavities.

In Canada, the recommended amount of fluoride is 0.7mg/L in drinking water for communities that wish to add fluoride to their water supply. Reliable equipment and careful monitoring help maintain these fluoride levels. The maximum acceptable concentration (MAC) in the Canadian Guidelines for Drinking Water Quality is 1.5 mg/L. Whether naturally occurring or added during the water treatment process, fluoride levels should never exceed this level.

How does fluoride prevent tooth decay?

Fluoride protects teeth when they first appear and as they develop over time. Fluoride bonds with the enamel or surface of teeth, making them more resistant to bacteria and decay. It also helps to repair the earliest stages of tooth decay.

Where can fluoridation occur?

Fluoridation can occur in public, private, and community water supplies and/or wells. Water suppliers are required to test for fluoride, and can make these results, as well as results for other chemicals available to users and the public. If they have a private, domestic well water source they should have a comprehensive chemical analysis done that includes fluoride.

What are the benefits of water fluoridation?

Extensive research done over the past 50 years shows that water fluoridation is a safe, effective and low-cost way to improve dental health for people of all ages.

Studies show that children who drink fluoridated water can expect up to 35 per cent less decay than those who drink non-fluoridated water. By using fluoridated water, children develop strong teeth. As adults, they will have fewer cavities or missing teeth. Adults who drink fluoridated water can also expect to have less tooth decay.

Is fluoridation safe?

Yes. Fluoride has been studied thoroughly as a public health measure and is deemed safe in low doses.

Since the 1940s, scientific studies have shown that the use of fluoride for dental health has had no harmful effects.

Extensive reviews of water fluoridation by leading experts have found no connection between fluoridation and cancer. There has

been no evidence that low levels of exposure to fluoride causes problems to other parts of the body. It has not been associated with birth defects or syndromes. However, as with any naturally occurring element, high concentrations may be bad for your health.

Fluoride is recommended to prevent tooth decay and to improve dental health. Water fluoridation is endorsed as a valuable and beneficial public health measure by:

- Health Canada
- The Canadian Dental Association
- The Canadian Medical Association
- The Canadian Pediatric Society
- The Canadian Public Health Association
- The World Health Organization

Should water supplies be fluoridated?

Water fluoridation plays a key role in dental health. Water fluoridation requires a community vote of more than 50 per cent to be installed or removed.

Some communities have stopped water fluoridation due to unfounded fear about harmful effects. Increased incidence of tooth decay has been found in communities that have stopped the use of fluoridation.

For More Information

For more information on water fluoridation, please contact your dentist or dental hygienist, the dental program at your local public health unit, or the British Columbia Dental Association <https://bcdental.org/>.

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/healthfiles or your local public health unit.

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