

Water Fluoridation Facts

What is fluoride?

Fluoride is a natural element found in soil, fresh water, sea water, plants and many foods. Fluoride is a form of fluorine and one of the most common elements in the earth's crust. Fluoride is considered valuable and has proven, positive effects on dental health.

What is water fluoridation?

All water contains some fluoride. Fluoridation is the process of adjusting the natural level of fluoride in the water supply to the amount necessary for protection against tooth decay. For British Columbia, the most effective amount is between 0.8 and 1.0 parts per million of fluoride in the water supplies. Reliable equipment and careful monitoring ensure that these fluoride levels are maintained.

Currently, over 10 million people in Canada are receiving the benefits of water fluoridation.

How does fluoride work to prevent tooth decay?

Fluoride works to prevent tooth decay in a number of ways. Fluoride protects teeth when they first appear or erupt from the gum 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, visible only under the microscope.

What are the benefits of water fluoridation?

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

Studies show that children who drink fluoridated water can expect to have up to 35 per cent less decay than those who drink non-fluoridated water. The strong teeth children develop by using fluoridated water last throughout adult life. 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. The safety of community water fluoridation has been studied more thoroughly than any other public health measure during the past 50 years.

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

Extensive reviews of 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.

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:

- The Canadian Dental Association;
- The Canadian Medical Association;
- The Canadian Public Health Association;
- The Canadian Pediatric Society; and
- The World Health Organization.

Is fluoridation expensive?

No. Fluoridating the water supply costs between 50-60 cents per person per year. This compares to \$50 to \$75 for a dentist to treat a simple cavity in a tooth.

Should water supplies be fluoridated?

Water fluoridation plays a key role in dental health.

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.

Communities must give careful consideration to this issue because unnecessary harm can result from stopping fluoridation.

The British Columbia Ministry of Health Services supports fluoridation of community water supplies as a proven method of reducing tooth decay.

For more facts and information on water fluoridation, please contact your dentist or dental hygienist, or the dental program at your local health unit.

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