



Fluoride in your water

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For over half a century, communities in western Canada have been adding fluoride to their drinking water. Ongoing testing, evaluation and study consistently conclude that this is a good thing to do and that it helps our dental health. Yet there is still controversy.

What is fluoride and why should we add it to drinking water?

Fluoride is a natural element found in air, earth and all water. It is also found in plants and many foods. Fluoride is a form of fluorine, one of the most common elements in the earth's crust, but still, we don't get enough.

Fluoridation is the controlled addition of fluoride to public water systems with the goal of bringing up the level to a point where it can help reduce dental cavities (caries). The process involves adjusting the natural fluoride already in the water and monitoring it to maintain those levels. How much fluoride do we need to make a difference to our teeth? About 0.8 parts per million (or about 0.8mg per litre of water).

Water fluoridation plays its role in dental health in a number of ways. It protects teeth when they first appear and as they develop over time. Fluoride bonds with the enamel of teeth and makes them more resistant to bacteria and decay. It also helps to repair the earliest stages of (microscopic) tooth decay.

There are some communities that do not provide fluoridation and some have stopped completely. The usual reasons are unfounded fears about harmful effects — they also face increased incidence of tooth decay. Indeed, the evidence shows increased levels of caries and dental problems following the cancellation of fluoride programs in these communities.

Over the past 60 years there has been extensive research done which consistently proves the safety and value of water fluoridation. But with literally thousands of articles and opinion pieces available, it can be daunting to try to become informed.

The internet is a good tool to do some of the research, but the quality and reliability of the information presented must be high. After all, anyone can put any idea on the internet, or publish a flyer or magazine for that matter. Fly-by-night products and equally unreliable ideas can flourish when no one challenges them; water fluoridation is no stranger to opinions masquerading as facts.

Start by considering the source: Is the information or research peer-reviewed (evaluated for quality and reliability by other experts in the field)? Is it supported by a description of how conclusions were reached? Or are they just stated (in which case, they are only opinions).

Is the 'evidence' just a series of anecdotal stories in the guise of fact? That is, are the presented as "it happened to this person or these people thus must be true"?

Again, this cannot be relied on as evidence.

An expert panel assembled by Health Canada in 2007 stated unequivocally that "community drinking water fluoridation is still an

effective public health method to reduced the prevalence of dental caries in the Canadian population." We agree.

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