

Evidence in Support of Water Fluoridation

The safety and efficacy of water fluoridation has been frequently studied and continues to be supported by current science. Over sixty years of research and recent systematic reviews have shown that water fluoridation is an effective and efficient public health measure for the prevention of dental decay. In fact, the U.S. Centers for Disease Control and Prevention has recognized water fluoridation as one of the ten great public health achievements of the twentieth century.

In 2006, Health Canada began an extensive review of fluoride for the Fluoride Guideline Technical Document. The update of the Guideline Technical Document is a normal part of the Guideline development process to reassess the science periodically. As part of this review, Health Canada sought the advice of an Expert Panel and in 2008 released a document on the resulting Findings and Recommendations. Based on recommendations from this document, a review of the available science on dental effects, and expert advice from the international scientific dental community, Health Canada determined that the optimal concentration of fluoride in drinking water for dental health should be 0.7 mg/l. This concentration provides optimal dental health benefits and is well below the maximum allowable concentration of 1.5 mg/l to protect against adverse effects. For more information on the last review process, please refer to the following site: <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/2008-fluoride-fluorure/index-eng.php>

Please find below some of the evidence in support of water fluoridation from both Canada and other countries.

Oral Health in America: A Report of the Surgeon General. 2004

“Community Water Fluoridation is safe and effective in preventing dental caries in both children and adults. Water fluoridation benefits all residents serviced by community water supplies regardless of their social or economic status.”

http://www.cdc.gov/fluoridation/fact_sheets/sg04.htm

Systematic Review of Water Fluoridation. UK/International study. 2000

“Water fluoridation was associated with an increased proportion of children without caries and a reduction in the number of teeth affected by caries.”

<http://www.bmj.com/content/321/7265/855.full>

Recommendations for Using Fluoride to Prevent and Control Dental Caries in the United States. US Department of Health and Human Services Centers for Disease Control and Prevention. 2001

“Fluoride has been a major factor in the decline in the prevalence and severity of dental caries in the United States and other countries. When used appropriately, fluoride is both safe and effective in preventing and controlling dental caries.”

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5014a1.htm>

Forum on Fluoridation. Ireland, 2002

“Water Fluoridation has been very effective in improving the oral health of the Irish population, especially of children, but also of adults and the elderly.”

http://www.dohc.ie/publications/pdf/fluoridation_forum.pdf?direct=1

Fluoridation Facts - American Dental Association. 2005

“Fluoridation of community water supplies is the single most effective public health measure to prevent dental decay.”

http://www.ada.org/sections/professionalResources/pdfs/fluoridation_facts.pdf

Global Consultation on Oral Health through Fluoride. 2006

“The consultation was jointly organized by the “World Dental Federation (FDI) the International Association for Dental Research (IADR) and the World Health Organisation (WHO). The expert panel urge governments and other influential bodies to take the following actions:

- Develop effective legislation, necessary directives and programmes ensuring access to fluoride for dental health in all countries;
- Include fluoride in health communications, health promotion strategies and programmes;
- Include fluoride for dental health when promoting health through healthy diets;
- Encourage governments to reduce or remove taxation and tariffs on fluoride products for dental health; and
- Encourage suppliers to improve availability of effective affordable fluoride toothpaste for disadvantaged populations.

http://www.who.int/oral_health/events/Global_consultation/en/index.html

Effectiveness of Fluoride in Preventing Caries in Adults, Griffin et al. 2007

“Fluoride prevents caries in adults of all ages.”

<http://jdr.sagepub.com/cgi/content/abstract/86/5/410>

**A Systematic Review of the Efficacy and Safety of Fluoridation,
National Health and Medical Research Council, Australian
Government. 2007**

“Fluoridation of drinking water remains the most effective and socially equitable means of achieving community-wide exposure to the caries prevention effects of fluoride.”

<http://www.nhmrc.gov.au/publications/synopses/eh41syn.htm>

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