

Water Fluoridation Demystified

Answers to commonly asked questions

Presented by the Northern Oral Health Network, North Coast Area Health Service and local medical and dental practitioners.

Q Is the fluoride used in water natural?

A Yes – in Australia natural fluoride is extracted from phosphate rock as a gas, is liquefied and purified. Fluoride is the 13th most common element on earth and it is simply made soluble for adding to water supplies. There is no difference in the fluoride in calcium fluoride or sodium silico fluoride, or any other fluoride compound for that matter, and the elements it is combined with to make it soluble are safe too.

Q Is fluoridated water free from other contaminants?

A Yes - it does not contain excessive lead or other heavy metals. Fluoridated water is rigorously tested every day to ensure it complies with the Australian Drinking Water Guidelines.

Q Can I drink lots of fluoridated water without worrying about toxicity?

A Yes – it is physically impossible to drink enough fluoridated water to receive a harmful dose. An adult would need to drink hundreds of litres at one time to receive a harmful dose of fluoride. It is recommended we drink 2-3 litres of water daily for healthy kidneys, an amount that is safe if the water is fluoridated.

Q Will fluoridated water harm my health?

A No – there is no evidence that says fluoridated water is harmful. It does not cause cancer or skeletal fluorosis or any other disease. Contrary reports on the Internet and in letters to the editor are based on misinformation. Peak health and social justice bodies in Australia support water fluoridation as does the World Health Organisation. People on kidney dialysis are not at risk; in fact most of them live in fluoridated capital cities without ill-effects.

Q I read lots of negative things about fluoride, why?

A Much of the negative comment on water fluoridation stems from opinion rather than fact. Science often uses complex language and people can misunderstand or misrepresent the evidence they quote. In countries where water fluoridation is not used, the reasons are based on infrastructure or politics – not health. In those places fluoride may be added to milk or salt or there are intensive oral health prevention campaigns based on fluoride rinses in schools or state funded fluoride varnishes for high risk children etc. Wherever dental decay has been reduced, fluoride has been responsible. In Australia, water fluoridation is the most cost-effective means of reducing decay. Since its introduction here 53 years ago our dental decay has gone from being one of the highest in the developed world to one of the lowest.

Q Once beyond childhood will fluoridated water help my teeth?

A Yes – by drinking fluoridated water, no matter what age we are, our tooth enamel is constantly repaired. Fluoride once in our saliva will rebuild tooth enamel that is continuously being attacked by acids from food. It's like having a dentist in our tap.

Q What about freedom of choice?

A Australia is a country where we value freedom of choice, but where we also understand the need to do things that are for the greater good – compulsory seat belts, mandatory helmets for cyclists and motor cyclists, random breath testing, smoking bans - have resulted in a safer environment and a healthier community. Bread and cereals have vitamins added, salt has iodine, and water has chlorine. These, like fluoride have safe and beneficial levels and no-one describes them as mass medication. Water already contains fluoride – the level is simply topped up to protect teeth. If people really want to exercise freedom of choice they can use bottled or tank water or buy a sophisticated water filter. Water fluoridation is a public health measure that benefits the majority – especially those least able to afford dental care.

Q What about fluoride supplements?

A Fluoride supplements taken daily (if you remember to do so!) lower the rate of tooth decay by only around 2% and are no longer recommended. Fluoridated water gives more continuous protection and reduces the rate of cavities by around 60% - or more than half the current number.

Q Is water fluoridation the only thing that reduces dental disease?

A No, but it is certainly the most effective! Teeth also need a healthy diet and regular brushing and flossing. NSW Health and other dental health advocates also strongly support and fund prevention campaigns aimed at reducing sugar intake from all sources, particularly sweet drinks. People who eat a balanced and nutritious diet, clean and floss their teeth properly, have regular visits to the dentist and drink fluoridated water have little or no risk of dental decay.

Q Is dental fluorosis a health problem?

A No. Dental fluorosis is characterised by white flecks on the teeth. It occurs in unfluoridated and fluoridated areas and is not a health problem. It cannot occur after the teeth are fully formed.

The evidence base for this information is from scientific studies conducted around the world. Many of them are accessible at the web site www.fluoridenow.com.au