



Bite

Word of mouth

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Featured

Fluoride—the great debate

The controversy over water fluoridation is one without much middle ground. Advocates are seen as big-government, corporate followers intent on dumping industrial waste products into our water supply while opponents are often regarded as radical hippies who reject scientific truth.

This debate has never been more apparent than in the lead up to implementing water fluoridation in Queensland. Today the fact remains that Queensland has now joined the rest of Australia by introducing water fluoridation as a public health initiative. So let's start to untangle this debate by looking at what fluoride is and does.

Fluoride is a naturally occurring mineral (salt) found in water, plants, rocks, soil, air and foods. When fluoride enters the body, it migrates to and is absorbed by teeth and bones. During the years of tooth development (birth to six years of age), a gradual absorption of fluoride ions helps us to develop stronger enamel that is more resistant to decay. When teeth are fully formed, they do not have the ability to "grow more enamel", what you have at 12 years of age is all the enamel that you have for the rest of your life. At low levels, fluoride ions continue to maintain the strength of tooth enamel and prevent cavities from forming. Fluoride can also re-mineralize the teeth to restore enamel that has started to decay or weaken. However, too much fluoride causes a condition known as fluorosis, which discolours the teeth and in severe cases weakens them.¹



The History of Water Fluoridation

Water fluoridation is the topping up of the levels of naturally occurring fluoride in the water to strengthen teeth against tooth decay. American scientists in the 1930s found that people living in towns with higher levels of fluoride in the water experienced less tooth decay than people living in areas with much lower levels of fluoride. Community water fluoridation began in the U.S. in 1945 and spread rapidly once its effectiveness against tooth decay became obvious.

Most Australian towns and cities were fluoridated in the 1960s and 70s, and today around 90% of Australians enjoy the decay fighting benefits of water fluoridation. Fluoridated water means fewer fillings, fewer extractions, and fewer visits to the dentist—resulting in healthier teeth, better smiles, and less pain and suffering.

Facts on tooth decay and water fluoridation in Queensland

The average Queensland child aged five to six years is likely to have nearly three decayed teeth and 67% of Queensland children have experienced tooth decay by eight years of age. Every year, around 2000

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This month...

We're discussing the contentious topic of water fluoridation. This was a hot debate a few years ago when it was introduced into the Queensland water supply. Now that the dust has settled, we thought we'd review what all the fuss is about.

You may notice my head down in the office as I prepare for my next round of exams in London... the end is near but I can't quite see the light yet!

We have finally completed the finishing touches to the renovations. I recently spent some time researching the history of this practice which dates back to the 1960s. The timeline is now on our wall for you to read—we're so proud to be continuing the legacy today!

Finally, Jenna has some special news.

Dr Simon Franks



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pre-schoolers need to be hospitalised for severe dental decay which involves a general anaesthetic and invasive surgery. These statistics are not only alarming but rival that of decay in a third-world environment.

Central Queensland dentist Dr John Ford said he knew of many children as young as three who had had all or half their rotten teeth removed under general anaesthetic in local hospitals. This is a concern as there are significant risks associated with general anaesthetic and invasive surgery. "You don't have to go to Nepal to work in a Third-World environment; you just come to Roma or Longreach or one of the central Queensland public dental clinics," Dr Ford said.

Paediatrician Dr Pat Bingall said the rate of dental decay in Central Queensland was "extremely high", especially among children from lower socio-economic backgrounds. Dr Bingall says most people do not realise this level of tooth decay-caused medical problems, including stunted growth because young children could not chew nutritious foods, and premature births²

Topping up fluoride levels in water can reduce the risk of dental decay by up to 40 per cent. Prior to 2008, only five per cent of Queenslanders had access to fluoridated drinking water while other states and territories have been fluoridated for 30-50 years.¹

Safety and cost-effectiveness of water fluoridation



Numerous studies and reviews have confirmed the effectiveness of water fluoridation in reducing dental decay for the whole population. In fact, the fluoridation of public water supplies has been acknowledged by the World Health Organisation as one of the 10 greatest public health achievements of the 20th century.

A recent national review of water fluoridation found no negative health effects and only a slight increase in dental fluorosis.¹ Most fluorosis is barely detectable and does not damage the teeth, whereas tooth decay is painful, unsightly and expensive to repair.

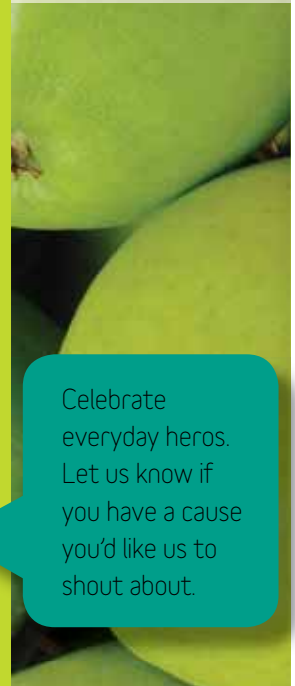
Concerns about safety and health risks are the driving force for the opponents of water fluoridation. Unsubstantiated statements have been made related to the effects of excessive fluoride toxicity which have been misleading.

The fact remains that scientific studies from around the world have failed to demonstrate a link between water fluoridation and any type of cancer, arthritis, bone fractures, or osteoporosis.² The incidence of these conditions in the rest of Australia (mostly fluoridated for decades) are no higher than in Queensland (largely non-fluoridated until 2008) and there has never been any evidence from doctors, let alone published studies, suggesting this.

Water fluoridation gives extra protection against tooth decay but a healthy diet, regular brushing and flossing and regular dental check-ups are all essential for good oral health. That's why at Bite Dental we take the time during our hygiene visits to discuss all of the lifestyle factors that interfere with the condition of your oral health. At Bite, we care about more than just your teeth!

References & resources:

1. Fluoride Now, Australian Dental Association, article updated 2016 at <http://www.ada.org.au/oralhealth/fln/fluoridation.aspx>
2. Scientific evidence based articles addressing the safety and effectiveness of water fluoridation, Queensland Health, 2012 found at <https://www.health.qld.gov.au/fluoride/articles.asp#osteosarcoma>
3. CHOICE "Bottle or tap - Fluoride", 2016 at <https://www.choice.com.au/food-and-drink/drinks/water/articles/bottled-water>



Celebrate everyday heroes. Let us know if you have a cause you'd like us to shout about.

Healthy Hygiene Hints

Take two for tooth brushing

I always recommended tooth-brushing for two minutes—which is necessary to remove all of the plaque from your mouth and teeth. But two minutes is long time without a roadmap of where to clean and it's easy to get lost!

The simplest way to achieve this is to divide your mouth into four sections (bottom-left, bottom-right, top-left and top-right), and spend 30 seconds on each.

Jenna



Community

Goodbye from Jenna

It's with a heavy heart that I announce I will be saying goodbye to Bite Dental this year. My partner and I are making a move overseas to begin a new chapter—the complicated part about meeting someone with a different passport! We are very excited but also so sad to part with the wonderful family of Bite Dental.

I will be here until the end of June so I hope that I can see as many familiar smiles as I can before I go!

