

Transcript

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Water Fluoridation

Catalyst

Ruben Meerman

This innocuous-looking glass of water has been hailed as one of the greatest health initiatives of the 20th century.

Dr Michael Foley

Everybody who has a tooth in their head will benefit from water fluoridation.

Dr Denis Ingham

It is very effective, and has been very effective in reducing tooth decay.

Journalist

These apples are being attacked by some of the best teeth in Australia.

NARRATION

Yass, in country New South Wales, was one of the first towns in Australia to fluoridate its water supply.

Journalist

It's won wide notoriety for the pioneering part it's played in fluoridation in Australia.

NARRATION

And now around 90% of us are covered. But, for decades, adding fluoride to the water was highly controversial. And in Queensland it still is.

Stephen Bennett

The amount of people with a passion for and against fluoride far outweighs anything outrageous a politician can do.

Ruben Meerman

We now have more than 50 years of research data on the subject. So what does the science say? Should we be adding fluoride to our water supplies?

NARRATION

In federated Australia, the decision to add fluoride to water is left to the States. I grew up in Queensland, here in Bundaberg. Dr Ingham was our family dentist.

Ruben Meerman

Dr Ingham!

Dr Denis Ingham

Ruben.

Ruben Meerman

Lovely to see you.

Dr Denis Ingham

And you.

Ruben Meerman

I'm here to see if you could check out my teeth, see how all the fillings are looking after all these years.

Dr Denis Ingham

Good.

NARRATION

Up until 2007, Townsville was the only place in all of Queensland that had fluoridated water. In other States, all major population areas were covered.

Dr Denis Ingham

You've got one, two, three, four, five, six, seven, eight fillings there.

Ruben Meerman

That's a lot.

Dr Denis Ingham

That's a lot. Maybe in a fluoridated area, if you had fluoride in the water supply, your curious experience would have been lower.

Ruben Meerman

I might have been better off, you think, if I'd been in Townsville, perhaps?

Dr Denis Ingham

Uh... yes, for sure.

NARRATION

In a 1996 study, the teeth of children in fluoridated Townsville were compared with those in unfluoridated Brisbane, and the difference was clear.

Dr Michael Foley

On average, there was about 45% less decay in the Townsville children than what there was in the Brisbane children. There was a massive difference. If somebody could reduce heart disease or cancer or something like that by 45%, they'd get a Nobel Prize for it.

Dr Michael Foley

Let's sit you back and I'll have a quick look.

NARRATION

The evidence that fluoride improves dental health extends to adults too.

Dr Michael Foley

The National Survey of Adult Oral Health was done back in 2004, 2006. Adults in fluoridated areas had significantly better teeth than adults in non-fluoridated areas.

NARRATION

So it's clear that water fluoridation works. But, how exactly? Teeth are the hardest substance in the body, primarily made up of a mineral called 'hydroxylapatite'. Fluoride, either in water or toothpaste, gets absorbed into the tooth enamel and forms a new, stronger mineral called 'fluorapatite'.

Dr Michael Foley

And that stronger mineral is then more resistant to the acid that causes tooth decay. Remember Mrs Marsh used to talk about, 'It gets in like liquid gets into this chalk'?

Mrs Marsh

It gets right into teeth, like this liquid gets into chalk.

Boy

To make teeth really tough.

Dr Michael Foley

Well, she was right. It strengthens the enamel, makes it much, much more resistant to acid. With fluoridated water, of course, you get both - you get the systemic benefit for little kiddies, and you get the much greater topical effect. You're always getting a little bit of a top-up. It's like a little fluoride treatment lots and lots of times during the day to make your teeth stronger.

NARRATION

Traditionally, the Queensland State Government has left the decision to add fluoride to local councils. This changed in 2008, when Anna Bligh's government made fluoridation mandatory across the State. But, before it could be fully implemented, the newly elected Campbell Newman government overturned the legislation, handing the decision-making power back to the councils.

Dr Michael Foley

I'm not going to criticise the government, but the decision and the legislation was not based on the health of Queenslanders - and, as a health professional, that disturbs me.

NARRATION

Citing financial concerns along with community pressure, more than a dozen councils have pulled the plug on fluoridation.

Ruben Meerman

Including my home town of Bundaberg.

Mal Forman

When I was elected as mayor, I made a commitment to the public and my people that I would not support the fluoridation of our city. I'm not convinced that's the way to go.

Stephen Bennett

We all know that there's a few consistent things that came through. But overwhelmingly they did have the issue of fluoride being seen as a poison.

Merilyn Haines

This is a Schedule 6 poison. Uses - as an insecticide, particularly for roaches and ants.

NARRATION

Merilyn Haines is a member of the anti-fluoride lobby.

Merilyn Haines

They can use it either for killing insects or fluoridation of drinking water.

NARRATION

Talking to people on the streets of my home town, it's clear the poison message has been very effective.

Ruben Meerman

What's the scary thing about having it in the water, or what's your concern?

Woman 1

It's chemicals.

Woman 2

We don't like it.

Man 1

It's just a poison.

Woman 3

Fluoride's good topically for your teeth, but ingested it's actually a poison.

Ruben Meerman

Ah, you're a New South Welshman.

Man 2

Damn right. It's the best thing they've ever done.

Woman 4

'Cause it's a poisonous chemical, so I just don't believe in it.

NARRATION

But toxicologist Michael Moore strongly disagrees with the line taken by the anti-fluoride lobby.

Professor Michael Moore

It's really very emotive language that's used. It goes back to one of the fundamental precepts of toxicology - the dose makes the poison. You take a lot of it, you get poisoned. If you take the right amount, it keeps you well. Have too little, you've got a problem.

NARRATION

So getting the dose right with water fluoridation is critical, just as it is when you treat water with chloride. But because fluoride is perceived only as a poison, people are concerned it only has adverse health effects.

Ruben Meerman

What are these risks they claim?

Dr Michael Foley

You name the disease, they claim it. I've seen diabetes, dementia, cancer, particularly osteosarcoma, kidney disease, IQ, different tumours...

Man

Fluoride is not good for you.

Ruben Meerman

These health concerns are not new. So what is the latest science on the adverse health effects? Is there cause for concern?

NARRATION

In 2011, Harvard University researchers looked at the selected link between bone cancer and water fluoridation.

Professor Michael Moore

The Harvard study was an excellent one, trying to see whether there was any relationship between the presence of fluoride in bone next to an osteosarcoma and the development of the cancer, and they could find no association whatsoever. It was a very, very thorough review, large number of subjects, a highly credible bit of work.

NARRATION

In 2007, Australia's top research body, the National Health and Medical Research Council, released a major report on water fluoridation.

Professor Michael Moore

They reviewed 5,500 papers, and, on the basis of the papers of the highest quality, concluded that there was no association between fluoridation and illness. When you're looking at it from the position of a research scientist, it's very hard to understand the objections that people place in the presence of fluoride in water supplies. There are so many studies saying that it's safe when it's used properly.

NARRATION

But that's the problem. Local councillors usually aren't scientists, and, by their own admission, don't feel qualified to make these decisions.

Mal Forman

It's not up to us to be doing and dealing with health issues because it's not our department. And, being not a medical person or a scientist, we can only go on what people put on their labels and what people tell us, and go from there.

Dr Michael Foley

Just put a little bit of fluoride on a couple of those...

Dr Michael Foley

It's like decisions on vaccinations or speed limits or bicycle helmets or smoking. Major health decisions like that are best made at State and Federal level.

NARRATION

And across most of the country, that's the case - but not in Queensland.

Ruben Meerman

What do you think about fluoride in drinking water?

Man

Don't need it.

Ruben Meerman

Ah! You don't, do you?

Topics: [Health](#)

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