

THE BIGGER PICTURE

Ross Forbes

Science turning against fluoridation

Retired paediatrician Roger Tuck (Irresponsible stance, letters March 25) is well out of touch with growing medical science on how ingested fluoride affects the whole of the human body, not just teeth.

He also appears to be unaware that fluoride works best on the surface of teeth, not by pushing it into the bloodstream.

Even at concentrations found in fluoridated community water supplies there are negative effects on several bodily functions.

Roger Tuck might think that fluoride science is settled, but it isn't. Ministry of Health advisers to government on fluoridation have been overly influenced by the dental profession.

How does Roger Tuck account for the fact that about 180 to 200 children in greater Auckland are referred to the hospital service for dental surgery every month? This is in fluoridated Auckland!

There is no doubt that there is gross decay in many children's teeth, but if Roger Tuck believes that such widespread decay might be cured by fluoridating community water supplies he is dreaming.

A sugar tax would be much more effective than compulsory fluoridation, and would also avoid the risk of a neurotoxin affecting the brain. Tooth decay rates are also strongly associated with poverty, and its elimination would have a much greater beneficial impact than

supplies, of what the US National Toxicology Program presumes to be a cognitive neurodevelopmental hazard to humans, a government must be absolutely sure that any questionable benefit outweighs potentially significant costs.

There is much evidence in peer-reviewed medical journals that fluoride in the body has negative health effects. Issues of concern relate to fluoride ingestion from all sources, neurotoxicity and neuro-behavioral effects, endocrine systems and thyroid functions, kidney patients and diabetics, the pineal gland, mixing infant formula with fluoridated water, processing food with fluoridated water, effect on teenage sleep, but especially the risks of fluoride to babies in the womb.

The ministry ignores a WHO report which clearly states that public health administrators should assess the total fluoride exposure of a population before introducing any additional fluoridation or supplementation programmes for caries prevention.

Whangārei mayor Sheryl Mai should be applauded for questioning the economics of adding fluoride to her city's water, as significantly less than 1 per cent of a water supply is swallowed by people.

In 2014 the city's water services manager estimated the cost of adding fluoride to Whangārei's water was \$1.5 million in capital expenditure, along with annual operating costs, including chemical supply, electricity and staff expenses, of about \$100,000

per year. New water fluoridation engineering capital cost requirements have been published since then, and the cost of ongoing operation and maintenance will now be much higher.

The latest oral health statistics from the New Zealand school dental service for 12-year-olds (2019) show statistically insignificant differences between fluoridated and non-fluoridated groups.

The 28,349 children fluoridated were 70.21 per cent caries free, with a mean of 0.65 decayed, missing or filled teeth (dmft), and the 23,129 non-fluoridated children 66.44 per cent caries free, with a mean of 0.77 dmft. That is less than 4 per cent difference in caries free, and with dmft the difference is less than one-quarter of a tooth.

To spend tens of millions of dollars nationally on fluoridation (might be hundreds of millions over a 20-year time horizon) in a forlorn attempt to close those gaps is economic lunacy, especially when more targeted, more effective and much cheaper options are well proven.

Such expenditure, if redirected to supervised oral health programmes in early childhood centres and primary and intermediate schools, such as Scotland's Childsmile core programme, would be much more effective than fluoridation in improving dental health. With supervised tooth brushing, Scotland's programme achieves higher child oral health standards than in

fluoridated New Zealand communities. Scotland is not fluoridated.

There is a parallel New Zealand example: in 2015 Northland DHB dentist Ellen Clark set up a highly controlled tooth-brushing trial in Northland schools for her master's thesis in Public Health. A teacher aide was paid to supervise tooth-brushing sessions once a day for 170 children at Kaitiaki Intermediate School, and the results exceeded expectations.

Trevor Sheldon, who chaired the advisory group for the systematic review on the effects of water fluoridation, commonly known as the York Review 2000 (published in the British Medical Journal), says if fluoridation were to be submitted anew for approval today nobody would even think about it due to the shoddy evidence of effectiveness.

He also said that when a public health intervention is applied to everybody, the burden of evidence to know that people are likely to benefit and not to be harmed is much higher since people can't choose.

Roger Tuck should take note of this criticism, but so should Associate Minister of Health Dr Ayesha Verrall, who doesn't seem to have a wide knowledge of what she is ardently promoting through the draconian Health (Fluoridation of Drinking Water) Amendment Bill.

In your issue of March 25 Marie Kaire made eminent sense on fluoridation, but GM Tinker lost the plot



fluoridation, which is just a relegated cop-out.

A Ministry of Health response to me from an Official Information Act request for ministry research on the whole-of-body effects (not just teeth) of ingesting fluoride highlighted the fact that little, if any, such work has been undertaken by the ministry.

So unconscionably narrow is the ministry's belief in fluoridation that the contract establishing the former National Fluoridation Information Service included a requirement that the NFIS would "... not act in any way that may contradict or be inconsistent with ministry policy on water fluoridation or with the MoH publication Good Oral Health for All, For Life", both of which unequivocally advocate fluoridation.

When deciding to mandate adding fluoride to community water