## OPINION FOR THE CALGARY HERALD RE: ARTIFICIAL WATER FLUORIDATION

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What if our medical community was wrong once again? It has happened all too often, at times taking decades before we work through and come to grips with new facts and science, and new realities.

Recall fiascos like smoking for women, asbestos, mercury, BPA, thalidomide, Vioxx, and lead in gasoline and paint. In every instance, our medical profession avidly supported these entities. Today, it is embarrassing to believe we could have been so wrong.

Water fluoridation falls directly into this category of failed medical practices, supported by professional unions and associations for decades with weak or nonexistent evidence, buried and manipulated science, and blinded and passionate fervor to "help those poor kids". Unfortunately, the deleterious effects of fluoride mostly affect babies, children, the poor, chronically ill, elderly and people of colour.

Recently, in a Calgary Herald opinion piece, in blogs, and on radio talk shows, proponents of this failing public health practice have made egregious statements and highly misleading errors. Let's unpack a few of these.

Error # 1. "3 years after fluoridation was removed, decayed primary tooth surfaces had risen 146%".

Reality: The 2016 study by McLaren was debunked in the same journal months later. Caries also increased in fluoridated Edmonton. Almost all increase in Calgary caries were prior to 2010, while we were still fluoridated. No study has been able to definitively measure the effect of stopping fluoridation in Calgary. All cities, fluoridated or not, are experiencing increases in caries, mostly due to the prevalence of extremely high sugar and junk foods.

Error # 2. \$1 spent on fluoridation saves between \$68 and \$140 in dental care.

Reality: Calgary was going to spend  $\sim$  \$6 million in upgrades and at least \$0.7 to 1 million for annual chemicals, not including operating costs, training, staff time, maintenance, repairs, Hazmat suits, etc. After 20 years, 0.5 fillings would be saved per person (Slade et al, 2018). The \$20 to \$26 million that would be spent on fluoridation would supposedly save over \$3 BILLION in dental costs, or \$5000 per filling. This claim is clearly a huge exaggeration!

Error # 3. On a Calgary radio last week, it was stated there is "no evidence of harm at 4.0 ppm and below".

Reality: The US NRC Committee reviewed all literature and recommended to the US EPA to markedly lower the 4.0 ppm limit due to all the adverse health effects. Over 200 studies now show significant neurological trauma, and 53 of 60 of these are human studies that reveal a significant decrease in IQ in kids at fluoride levels similar to North America.

Error # 4. Dental fluorosis produced from water fluoridation is seen as mild white flecks on the teeth that can only be seen by the dentist. It does not affect the form and function of the tooth.

Reality: Dozens of peer-reviewed studies show that fluoridation produces fluorosis that is objectionable and often damaging. Prevalence has recently been shown to be much higher in a study of American children accepted for publication in a

prestigious dental journal and by the NHANES Population study that is predicting an astonishing 61% fluorosis in American teens in 2018.

Error # 5. "So many European and other countries fluoridate the salt instead".

Reality: Only 6% of Europeans have access to fluoridated salt, and there has never been a single randomized double-blinded clinical trial (RCT) to prove fluoridated salt lowers dental decay more than toothpaste. In fact, there has never been a single RCT for any water fluoridation.

Only 5% of the world is fluoridated so Calgary is part of a huge majority that chooses not to put toxic waste from fertilizer industries of Florida and China, contaminated with arsenic, mercury and traces of other dangerous toxins, into our water. Health Canada has admitted it has no studies to prove that fluoride is safe to use in public water.

Fluoride is not necessary for a single body function.

In today's world, when Alberta is trying to clean up our biosphere from carbon pollution, we should remain a leader in quality, fluoride free drinking water.

Dr. Hardy Limeback is a dentist and a long time fluoride researcher, with a PhD in Biochemistry. He is retired Head of Preventative Dentistry at the University of Toronto.

Dr. Robert Dickson is a family physician in NW Calgary. He is the founder of Safe Water Calgary www.safewatercalgary.com