From:	Jim Powell
To:	Mike DePue; Bruce Mayer; Madeline Gotkowitz; Weier, Anita; Cnare, Lauren; Nelson, Larry; pdelmore@edgewood.edu; Voegeli, Doug
Cc:	Robb, Amy
Subject:	Nobel Laureate in Medicine and fluoridation ban in Europe
Date:	Saturday, October 25, 2014 12:23:49 PM

Dear Water Utility Board Members:

Please add my comments to the minutes for the October 28 meeting.

While I do not expect you to change anything about the current fluoridation levels in our drinking water (because rational debate is not possible due to our sordid national history regarding fluoride), I still think it important for you to consider three things:

<!--[if !supportLists]-->1. <!--[endif]-->Fluoride's cavity prevention properties are topical (meaning applied to teeth via toothpaste), so drinking fluoridated water does not help. So why do it?

<!--[if !supportLists]-->2. <!--[endif]-->The fluoride put into our drinking water is a waste product from the industrial production of commercial fertilizer.

<!--[if !supportLists]-->3. <!--[endif]-->In many European countries (where scientific debate), decision makers have banned the use of fluoride in drinking water at the national level. The following statement by a Nobel Laureate helps explain why.

POSTSCRIPT from *The Fluoride Deception* by Christopher Bryson, Seven Stories Press, 2004

I am a pharmacologist and my interest in the fluoridation issue goes back to the sixties, seventies, and eighties when the addition of fluoride to the public water supplies was discussed in Sweden. During that period I studied the scientific literature and the arguments for and against water fluoridation thoroughly. My conclusion was clear: Fluoride is a pharmacologically very active compound with an action on a variety of enzymes and tissues in the body already in low concentrations. In concentrations not far above those recommended it has overt toxic actions. Fluoride added to the drinking water can prevent caries to some extent but it can do so at least as efficiently when applied locally. Moreover, local treatment, preferentially via toothpaste, is more rational, because the caries-preventive action is exerted directly on the erupted teeth. The previous belief that its action is limited to an early period before the eruption of the teeth, is not correct. The systemic action of fluoride via the blood before tooth eruption can lead to damage of the enamel, and mottled teeth. This side effect, as well as other toxic actions of fluoride, is very much reduced when fluoride is applied via toothpaste.

The addition of fluoride to water supplies violates modern pharmacological principles. Recent research has revealed a sometimes enormous individual variation in the response to drugs. If a pharmacologically active agent is supplied via the drinking water, the individual variation in response, which is considerable even when the dosage is fixed, will be markedly increased by the individual variation in water consumption. In addition, this measure is ethically questionable and unnecessarily expensive. **When the fluoridation issue was debated in Sweden several decades ago I took part in the public debate, and we managed to convince the Swedish Parliament that the addition of fluoride to the water supplies should be rendered illegal. Similar decisions have been taken in most European countries. There is to my knowledge no evidence to suggest that dental health in Europe is worse than in the United States. [bold added]**

During the past two decades water fluoridation has not been debated much in Sweden, and I have not followed the scientific literature in this area closely. I have now read several chapters in Christopher Bryson's book and have found them quite interesting. Christopher Bryson is an excellent narrator, and he reports on recent research previously not known to me. Especially I am intrigued by the story about Phyllis Mullenix and her animal research on the influence of fluoride on behavior and brain development. I am not surprised by the resistance that Phyllis Mullenix so unfortunately experienced. Novel and surprising observations are often met with disbelief by the scientific community, and in this case the prestige of influential people is probably an additional factor.

It is my sincere hope that Christopher Bryson's apparently thorough and comprehensive perusal of the scientific literature on the biological actions of fluoride and the ensuing debates through the years will receive the attention it deserves and that its implications will be seriously considered.

Dr. Arvid Carlsson, 2000 Nobel Laureate for Physiology or Medicine (for discoveries concerning signal transduction in the nervous system)