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July 16, 2012

Dear Fluoride Free Windsor, Windsor, Canada City Officials, and other interested parties,

As a research scientist and educator with experience in experimental toxicology, I submitted an 80 page petition to the U.S. Food and Drug Administration, calling for a ban on industrial fluoride infusions into public water supplies in the U.S., that was accepted for review in 2007. In 2010 the FDA decided that fluoride is a contaminant and is the responsibility of the EPA. I was allowed to write a Petition for Reconsideration however, another 80 page report proving that the EPA relinquished its control over water additives in 1988, and that only the FDA is responsible for regulating the intentional ingestion of fluoride compounds used to treat humans in the U.S., and the petition is still under consideration. I've sent 23 detailed letters of supplemental information in support of the petition since then. One is a sworn private affidavit on the detailed chemistry of fluorosilicic acid, requested by a law firm in Texas for a Court case. I was allowed by the firm to send the manuscript to the FDA.

I now have an article entitled *Physiologic Conditions Affect the Toxicity of Industrial Fluoride* that is under review by the **Journal of Environmental Toxicology**. I regularly submit information to citizen groups and to city officials in Asheville, NC, Milwaukee, WI, San Diego, CA, Los Angeles, CA and in Everett, WA and other cities. Much of what I have written is posted on the website of attorney James Deal, candidate for Lieutenant Governor, in Washington State at: www.fluorideclassaction.com.

The recent 360 page report by Declan Waugh in Ireland with 1,216 references (I happened to be reference #137) is also referenced on the site (http://www.enviro.ie/risk.html). This treatise is a scathing report on the adverse health consequences experienced by Southern Ireland with soft fluoridated water, compared to non-fluoridated Northern Ireland. It has thus far caused one entire county in Southern Ireland to decide to halt fluoridation. Waugh believes the rest of the country will be fluoride free soon also, rendering virtually all of Europe with regular, non-drugged water.

If there are specific concerns you would like to see addressed, please do not hesitate to contact me. Calgary, Canada halted water fluoridation in 2011 and this is fortunate because the Calgary Stampede has been plagued of late with horse breakdowns from heart attacks and then bone breaks on the track. In Los Angeles, the Los Alamitos racetrack experienced a steep rise in fatal horse breakdowns after fluoridation in Los Angeles began in 2007, and the numbers remain elevated and rising. Fluoride from the bloodstream has been observed in PET scans, taken of cardiovascular disease patients at the Veterans Administration Health Care Center in Los Angeles, to incorporate into aorta and atherosclerotic plaque present in coronary arteries (Yuxin, **Nuclear Medicine Communications**, Jan, 2012) and of course accumulates permanently lifetime into bone (National Research Council, **Report on Fluoride in Drinking Water, A Scientific Review of EPA's Standards**, Washington, D.C., 2006) where it does not belong and is a cumulative structure-altering substance known to weaken bone at 3,000 mg/kg or above.

The following information is being sent to the Oral Health Division officials at the CDC who request mass fluoridation, which is prohibited by the U.S. Safe Drinking Water Act:

Oral Health Division
U.S. Centers for Disease Control and Prevention
Atlanta, Georgia

Dear sirs,

Toothpaste contains 1,500 ppm fluoride, argued to be an effective decay-preventing dentifice. On the other end of the spectrum, fluoride in saliva from ingested industrial fluoride in treated water supplies is only 0.02 ppm (NRC, 2006 p.81), which although unable to enter teeth enamel is also claimed by dental officials at OHD to prevent teeth decay by topical means.

Questions:

1) If 1,500 ppm fluoride acts topically to prevent teeth decay during teeth brushing, then how does fluoridated water prevent tooth decay when ingested fluoride is present in saliva at 75,000 times lower concentration than in

toothpaste? Could you please provide the data that prove 0.02 ppm fluoride bathing teeth is superior to 0.01 ppm or less that is typically found in saliva in non-fluoridated cities, that would justify the U.S. to continue spending over 300 million dollars annually to adjust fluoride levels in most all U.S. water supplies?

On the other hand:

2) If 1 ppm fluoridated water that produces 0.02 ppm fluoride in saliva can act topically to reduce decay as many dental officials argue, with only 0.02 mg available per 24 hour day, then why does toothpaste need to be 75,000 times more concentrated than this to be effective at treating teeth to prevent decay? Where is the data that proves a need for 1,500 ppm fluoride in toothpaste, when 0.02 ppm for a 24 hour period between brushings contains only 0.02 mg fluoride total available (1 liter of saliva daily) while a tooth brush would contain 1.5 mg, 75 times more than in 24 hours worth of saliva, a 75 day supply?

Please respond to these questions at your earliest convenience with data from these studies for all to see and analyze. The usual claim that 'fluoride is a great public health achievement' or that ‘fluoride decreases decay' do not suffice, since no mention is made of the amounts of fluoride required to achieve these claims. Indeed, the CDC publication in **Morbidity and Mortality Weekly**, August, 2001 stated that systemic fluoride from ingestion does not decrease teeth caries, and fluoride is only believed to act topically (i.e. presumably from toothpaste).

We have city Council members from many U.S. and Canadian cities needing answers to these questions, before deciding to continue infusing industrial fluorosilicic acid/caustic soda materials into drinking water to treat citizens for the purpose of taking fluoride internally, all without FDA approval for ingestion. Cities infusing industrial fluoride into water to treat citizens are fully liable and know full well that the FDA ruled in 1963 that fluoride is not a mineral nutrient and when injected into water is an uncontrolled use of an unapproved (1993) drug.

The U.S. Health and Human Services request in 2011, that fluoride in water not exceed 0.7 ppm until updated guidelines are developed, addressed the problem that 41% of U.S. teens as of 2003 have permanent fluorotic teeth with abnormal enamel hypoplasia and ugliness. Colgate toothpaste manufacturers have written that water districts are at fault for this endemic (*Los Angeles Times*, Jan., 2011) by allowing fluoride to be swallowed-- toothpaste is not to be swallowed, but applied directly to teeth. On the other hand, water district officials argue that toothpaste manufacturers are at fault for the endemic, because fluoridated water began in 1945 and toothpaste use followed many years afterward, so water fluoridation was set in place prior to the pervasive use of concentrated toothpastes. The FDA would argue that both contributors are at fault, since the NRC 2006 report clarified that 55% of fluoride in the bloodstream is that ingested from treated water, and 35% is from toothpaste use.

Currently there are no city officials who obtain measurements of blood fluoride or saliva in treated citizens to ensure that infused industrial fluoride from fluorosilicic acid/caustic soda mixtures is either safe or effective, in spite of vast data indicating that soft water allows blood fluoride levels to accumulate to 4 times higher concentrations than fluoride present from ingesting treated hard water containing sufficient calcium to minimize assimilation of fluoride from the GI tract.

Richard Sauerheber, Ph.D. Chemistry

Copy sent to U.S. Food and Drug Administration, Center for Drug Evaluation and Research, Rockville, MD 20857 (in care of petition FDA-2007-P-0346)

Additional comments specifically for the U.S. FDA:

Food and Drug Administration
Centers for Drug Evaluation and Research
Rockville, MD 20857

Dear petition reviewers:

As you know, the original notion that natural calcium fluoride in drinking water associated with whitish teeth assumed that fluoride was responsible for this effect, even though calcium in the water was extremely high at over 300 ppm calcium and magnesium. We now know that it is calcium that builds strong teeth, not fluoride: fluoride is a general enzyme inhibitor at concentrations known to prevail in human blood and tissues due to ingestion from water supplies, and topical fluoride at miniscule levels does not remineralize or incorporate into enamel (high fluoride concentrations as found in dental gels rather form calcium fluoride globules from salivary calcium which

are readily washed away and swallowed after eating a meal) and Ziegelbecker extensively published vast data indicating the wide scatter that first caused the misleading proposed correlation that turns out to be anecdotal, finding no association between caries incidence and blood fluoride over a wide fluoride range, and Teotia and Teotia in the largest international study ever conducted over 30 years with 100,000 subjects reported that highest cavity incidence occurs in fluoridated cities with calcium deficient diets and lowest caries incidence occurs in non-fluoridated regions with typical calcium-sufficient diets (see original petition FDA-P-0346).

Sadly, there are no controlled prospective clinical trials conducted with human volunteers to eliminate extraneous variables, to help separate anecdotal correlation from cause and effect fact. However, the reason we now have conclusive proof that industrial fluoride ingestion is harmful and ineffective when ingested from 1 ppm treated water is because of the large number of U.S. cities that have been infusing industrial fluoride into water supplies that have acted as a trials data set. The evidence of harm and ineffectiveness have been amply discussed with references in Connett, P., et.al. **The Case Against Fluoride, how Hazardous Waste ended up in our Drinking Water and the Politics that Keep it There**, Chelsea Green Publishing, White River Junction, VT, ,2010 and recently the 360 page report by the Irish environmental scientist Declan Waugh, 2012 and in the NRC, 2006 Report, all which present the results of over 1,000 recent studies published on this issue. The original test experiments in cities in 1945 switched from natural calcium fluoride to use of industrial sodium fluoride without FDA approval, and today most water districts use industrial toxic diluted hazardous waste fluorosilicic acid without FDA approval to infuse into municipal drinking water.

We would appreciate action on the part of the FDA in addition to the correct and excellent former FDA rulings from 1963 to 1993 (that fluoride is not a mineral nutrient, does no strengthen bone, and when added into water is an uncontrolled use of an unapproved drug). We again request that industrial fluoride either be banned from application into public water supplies without a prescription, or that CDC officials be halted from requesting water be treated with industrial (unnatural lacking calcium antidote) fluorides since the SDWA prohibits adding any chemical into to water other than to sanitize it, or that chemical suppliers provide FDA with data demonstrating safety and effectiveness even in the infirmed who consume the water product, or that fluoridation only be allowed in cities with hard water in the 300 ppm calcium range, or that calcium and/or vitamin D infusions into soft water supplies be suggested as a dental aid rather than diluted toxic industrial fluorides, or that any municipality that continues to infuse industrial fluorides into public waters be requested to inform citizens to halt use of Luride sodium fluoride tablets, to halt use of prescription drugs that interact with or are impaired by fluoride, and that citizens afflicted with bone diseases, with cardiovascular disease, kidney disease or diabetics, athletes and laborers who can ingest much more water be warned to consume non-fluoridated water, or other action(s) deemed the FDA CDER deems appropriate. We now have sufficient data available that acts as a substitute for the lack of initial controlled clinical trials with human volunteers (that remains non-existent to this date).

Thank you very much again for your attention on this matter.

Copy sent to U.S. CDC