# et Water

# Be Water

### Ayesha Drouillard

### **Comparing Apples to Oranges**



#### Calcium Fluoride CaF2

Naturally occurring
Safe to hold with bare hands
Sparingly soluble in neutral pH water
Fluoride toxicity reduced by calcium
LD 50 = oral rat, 4250 ppm
Source: REAGENTS, INC.--MSDS--CALCIUM FLUORIDE



#### Hydrofluorosilicic Acid H2SiF6

- •Man-made toxic waste product
- •Highly corrosive liquid that legally requires
  - full personal protective equipment to handle
- •Fluoride toxicity increased by co-contaminants
- •LD 100 = guinea pig, **80** ppm (2 % solution)

Source: Issuing date 06.07.2009 SOLVAY Chemicals

Each year, in Ontario alone, billions of litres, the equivalent of 840,000 Olympic-size pools contaminated with fluosilicates, are discharged into the environment. In Lake Ontario and the St. Lawrence River, the ambient level of fluoride is already double the level considered safe set as the standard in the Canadian Water Quality Guidelines (CWQG), i.e. 0.12 mg/L.



PHARMACEUTICAL GRADE FLUORIDE Pea-sized amount of toothpaste = 0.225 mg F



WATER FLUORIDATED WITH TOXIC WASSER H 1 glass = 0.21 mg F



### **NOT** SAFE TO SWALLOW

### SAFE TO SWALLOW?

## **ACCEPTABLE HARM?**



mild



moderate



severe

"The claim that mild to moderate fluorosis is 'ONLY' a cosmetic issue is **MISLEADING**.

That level of fluorosis has permanently affected tooth structure, including the underlying dentin.

It is also associated with many other health effects."

Dr. Hardy Limeback, Head of Preventive Dentistry – University of Toronto and former President of the Canadian Association of Dental Research

## Viceroys FILTER the Smoke!

### As your Dentist, I would recommend VICEROYS

Throughout time, we've been led to believe many products were safe and beneficial and later discovered they were **NOT** PROTECT YOUR CHILDREN COCAINE

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this is one case where the

best is really the cheapest.

LEAD INDUSTRIES ASSOCIATION

420 Lexington Avenue

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According to repeated nationwide surveys, **More Doctors** Smoke CA than any other

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RIMZ DD CHILDREN'S ROOM

Against Disease-Carrying Insects !



### Lifetime Impact of Fluoridation

(documented)

Pro	Con
<ul> <li>1 less cavity, (maybe)</li> </ul>	Increased risk of: • arthritis at younger ages • thyroid disease • bone disease
P F AND	<ul> <li>heart disease</li> <li>kidney disease</li> <li>diabetes</li> <li>irritable bowel conditions</li> <li>allergies</li> <li>chronic skin conditions</li> <li>chemical intolerances</li> <li>learning disabilities</li> <li>lead poisoning</li> <li>dementia</li> <li>crowns</li> </ul>

No matter which scientific studies you examine or which population trends you view, the rational conclusion is that fluoride's health dangers far outweigh the marginal dental benefits it *might* offer. Dental caries can be effectively prevented with means other than fluoridation, thereby avoiding the adverse effects of fluoride.



Health Canada's "adequate intake" of fluoride for babies is met drinking just 1 tbsp. of 0.7 mg/L fluoridated water per day.

If mom's away that's not much tap water to mix my formula.

### **Existing Warnings for Formula Fed Infants**

National Research Council In March 2006, the National Research Council (NRC) cautioned that infants can fluoride-overdose via reconstituted baby formula. (2) The American Dental Association (ADA) passed this information on to its members in a November 2006 e-gram.

Vermont Department of Health: "The Vermont Department of Health recommends mixing powdered or concentrated baby formula with water that is fluoride-free, or contains very low levels of fluoride, for feeding infants under 12 months of age. Recent studies have discovered the possibility that infants in this age group may be consuming more fluoride than necessary."

New York State Department of Health: "Parents who are concerned about the risk of enamel fluorosis, can mix liquid concentrate or powdered infant formula with water that is fluoride free or contains low levels of fluoride. Examples are water that is labeled purified, demineralized, deionized, distilled or reverse osmosis filtered water."

California Dental Association: "Mixing powdered or liquid infant formula concentrate with fluoridated water on a regular basis for infants primarily fed in this way may increase the chance of a child's developing enamel fluorosis." according to the CDA's Feb 2010 Report, Oral Health During Pregnancyand Early Childhood: Evidence-Based Guidelines for Health Professionals. (Page 12)

Des Moines Water Works: Powdered or liquid concentrate infant formula can be mixed with water that is fluoride free or contains low levels of fluoride. These types of water are labeled as purified, demineralized, deionized, distilled or reverse osmosis filtered water.

American Dental Association- Evidence-based Infant Formula Chairside Guide: Recommendations for infants who consume reconstituted infant formula as the main source of nutrition: • Continue use of liquid or powdered concentrate infant formulas reconstituted with optimally fluoridated drinking water while being cognizant of the potential risk for enamel fluorosis. • Use ready-to-feed formula or liquid or powdered concentrate formula reconstituted with water that is either fluoride-free or has low concentrations of fluoride when the potential risk for enamel fluorosis is a concern. (This is not a complete list.)







Until my tiny body and organs get un-fluoridated tap water, it's bottled water for my bowl.

COF-COF.co

Our pets are often smaller than us. It's easy for them to become overexposed! Especially when fluoride is also in their dog and cat foods.





## These are just some of the North American communities who have stopped adding fluoridation chemicals to their water since 1999:

Niagara Region, ON Portland, Oregon Muskoka, ON Juneau, Alaska Moncton, New Brunswick Wichita, Kansas Waterloo, ON Dryden, ON Salt Lake City, Utah Kirkland Lake, ON Spokane, Washington Churchill, Manitoba

Whitehorse, Yukon Santa Fe, New Mexico Okotoks, Alberta Saint John, New Brunswick Amherstburg, ON Huntsville, ON Erie, Pennsylvania Cornwall, ON Parry Sound, ON Albany, New York Clearwater, Florida Santa Barbara, California

West Elgin, ON Quebec City, Quebec Tottenham, ON Cobalt, ON Lake of Bays, ON Dutton-Dunwich, ON Honolulu, Hawaii Orillia, ON Dieppe, New Brunswick Santa Cruz, California Calgary, Alberta Flagstaff, Arizona

# Some of the Countries Who BAN or REJECT Water Fluoridation

Iceland	Austria	France
Italy	Germany	Sweden
Greece	Israel	Netherlands
Norway	Denmark	Switzerland
Finland	Estonia	Belgium
Croatia	Latvia	Hungary
Mexico	Luxembourg	China

We are in good company! Here are just some of the fabulous cities across the globe who choose water free of fluoride:

Vancouver	Montreal	Portland
Paris	Rome	Berlin
Venice	Athens	Reykjavik
Moscow	Brussels	Tokyo
Vienna	Budapest	Helsinki
Amsterdam	Geneva	Quebec City
Hong Kong	Niagara Falls	Oslo
Guelph	Thunder Bay	The Hague

### **Organizations Opposed to Fluoridation**

- Council of Canadians
- Windsor on Watch (WOW)
- Great Lakes United
- Local 444 Environmental Committee
- Citizens Environmental Alliance (CEA)
- Windsor District Labour Council (WDLC) Environment Committee
- The Canadian Auto Workers Windsor Regional Environment Council (CAW WREC)
- The Green Party
- International Academy of Oral Medicine and Toxicology (IAOMT)
- Greenpeace International
- Physicians for Social Responsibility
- American Psychiatric Association
- American Chiropractic Association
- American Academy of Allergy and Immunology
- International Society of Doctors for the Environment
- Center for Health, Environment and Justice
- Environmental Health Foundation
- Science and Environmental Health Network
- The U.S. EPA Headquarters Union of Scientists
- Austria Water Department
- Danish Ministry of the Environment and Energy

\* (This is **not** a complete list)

### **Experts Opposed to Water Fluoridation**

- Hardy Limeback, PhD, DDS, Former President, Canadian Association of Dental Research
- Arvid Carlsson, Nobel Laureate for Physiology or Medicine, 2000
- Paul Connett, Ph.D. Chemistry
- Dr. David Kennedy, past president of International Academy of Oral Medicine and Toxicology (IAOMT)
- Kathleen M. Thiessen, PhD, Senior Scientist. SENES Oak Ridge, Inc.
- Theo Colborn, PhD, co-author, Our Stolen Future
- Ken Cook, President, Environmental Working Group (EWG)
- Sam Epstein, MD, author, "Politics of Cancer" and Chairman, Cancer Prevention Coalition
- Doug Everingham, former Federal Health Minister, Australia

• Lois Gibbs, Executive Director, Center for Health, Environment, and Justice, Goldman Prize Winner (1990), Falls Church, VA

• Robert Isaacson, PhD, Distinguished Professor of Psychology Emeritus, State University of New York at Binghamton

• William Marcus, PhD, Former chief toxicologist of the EPA Water Division, Boyds, MD

• Raul Montenegro, PhD, Right Livelihood Award 2004 (known as the Alternative Nobel Prize), President of FUNAM, Professor of Evolutionary Biology, National University of Cordoba, Argentina

- Robert F. Kennedy Jr.
- Erin Brockovich, consumer advocate and environmental activist
- Ralph Nader

(Not a complete list)

As stated by Dr. Peter Mansfield, a physician from the UK and advisory board member of the recent government review of fluoridation (*McDonagh et al 2000*):

"No physician in his right senses would prescribe for a person he has never met, whose medical history he does not know, a substance which is intended to create bodily change, with the advice: 'Take as much as you like, but you will take it for the rest of your life because some children suffer from tooth decay. ' It is a preposterous notion."

