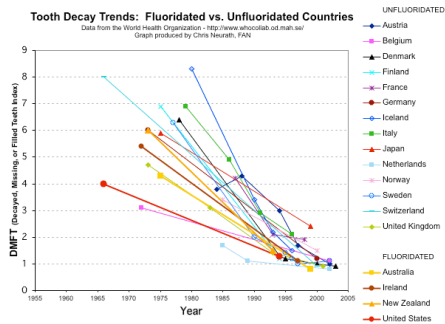


To Fluoridate or Not an ethical and health issue which affects everyone

A Submission to Councils,
Health Departments
and People

Everyone is Welcome to use this presentation



Dr Robert Gammal BDS
www.realdentalinfo.com

Australian Drinking Water is Fluoridated at
1.2 part per million

American Drinking Water is Fluoridated at
0.7 parts per million

Almost $\frac{1}{2}$ of Australia
???

Is Fluoride Safe?

"Drinking water containing as little as

**1.2 ppm fluoride
will cause
developmental disturbances**

We cannot run the risk of producing such serious systemic disturbances.

The potentialities for harm outweigh those for good."

Journal of the **American Dental Association**, Editorial, Oct 1, **1944**



The TGA in Australia
Nor
The FDA in America



Have ever approved the use of
ANY FORM OF FLUORIDE
As a medicine
To REDUCE tooth decay

Where does the Fluoride Come From?

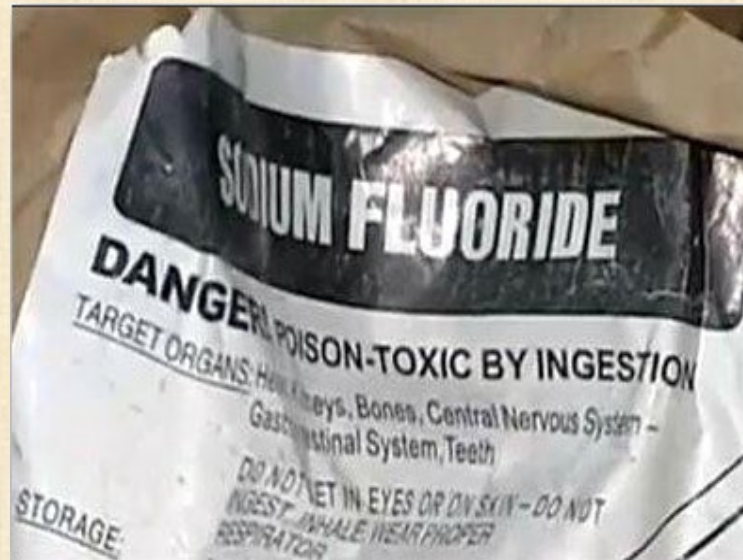
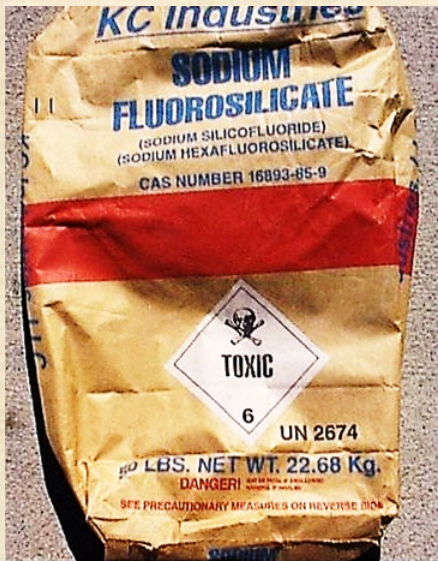
Most of this comes from waste produced by fertilizer industries in China

Some comes from waste produced by aluminium manufacturers

It is all Industrial Waste product

We pay these multinational conglomerates to dump their waste in our drinking water.

This saves these companies from having to pay for disposal of their TOXIC WASTE!



China does not fluoridate - 95 % of the world's population do not fluoridate water

Synergistic Toxicity

Toxic heavy metals when combined will Not have a simple additive effect in their toxicity.

When combined, the toxicity of each metal will be multiplied, sometimes 100X

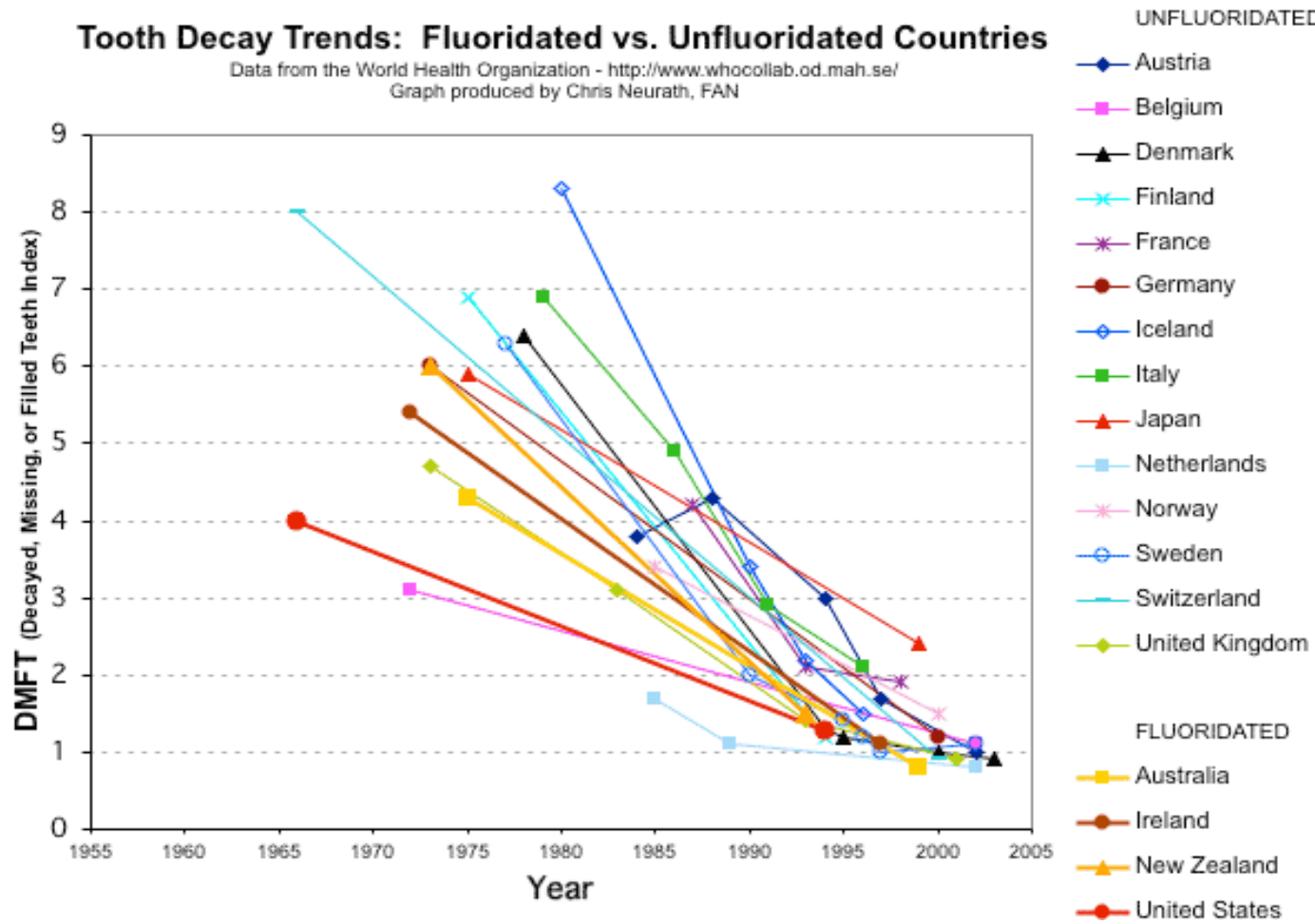
This is called a SYNERGISTIC EFFECT

Other Sources of Fluoride

- Dental Products – filling materials, topical gels
- Beverages and foods
- Pesticides
- Tea – plants absorb large amounts from the soil
- Pharmaceutical Products
- Mechanically deboned meats
- Teflon Pans
- Some workplace exposures
- Nuclear Industry

Lack of fluoride does NOT cause decay

Fluoride in the water does not reduce decay
1965 - 2005



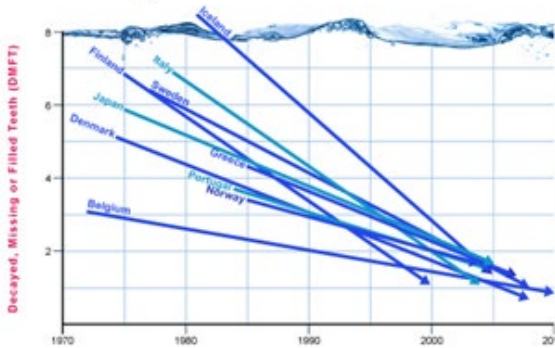
W.H.O. Tooth Decay Trends 1970 - 2010

Some countries without fluoridation have lower decay rates than those who do add fluoride to the water



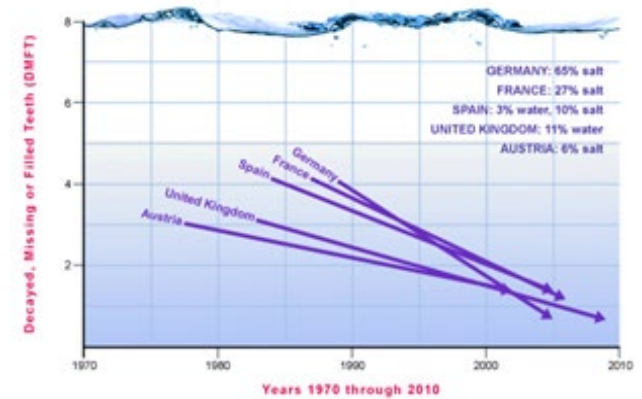
Tooth Decay Trends in Fluoridated, Non-fluoridated and Partially Fluoridated Countries
WHO data on DMFT in 12 year olds*

Tooth decay in countries with NO water or salt fluoridation



NO fluoridation

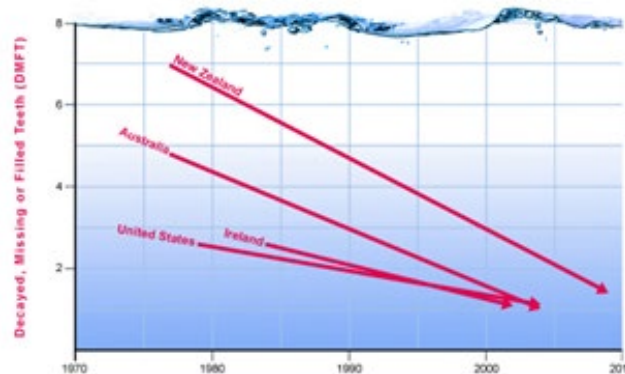
Tooth decay in countries with some water or salt fluoridation



* World Health Organization (WHO), Collaborating Centre for Education, Training, and Research in Oral Health, Malmö University, Sweden. <http://www.mah.se/CAPPV> (accessed June 10, 2012).

Some water and salt fluoridation

Tooth decay in countries that fluoridate most of the water



Most water is fluoridated

Only 11 countries in the world have more than 50% of their population drinking fluoridated water:

Australia (80%),
Brunei (95%);
Chile (70%),
Guyana (62%),
Hong Kong (100%),
the Irish Republic (73%),
Malaysia (75%),
New Zealand (62%),
Singapore (100%),
United States (64%).

Most **developed nations** do not fluoridate their water.

Only 5% of the world's population drink fluoridated water.

There are more people drinking fluoridated water in the United States than the rest of the world combined.

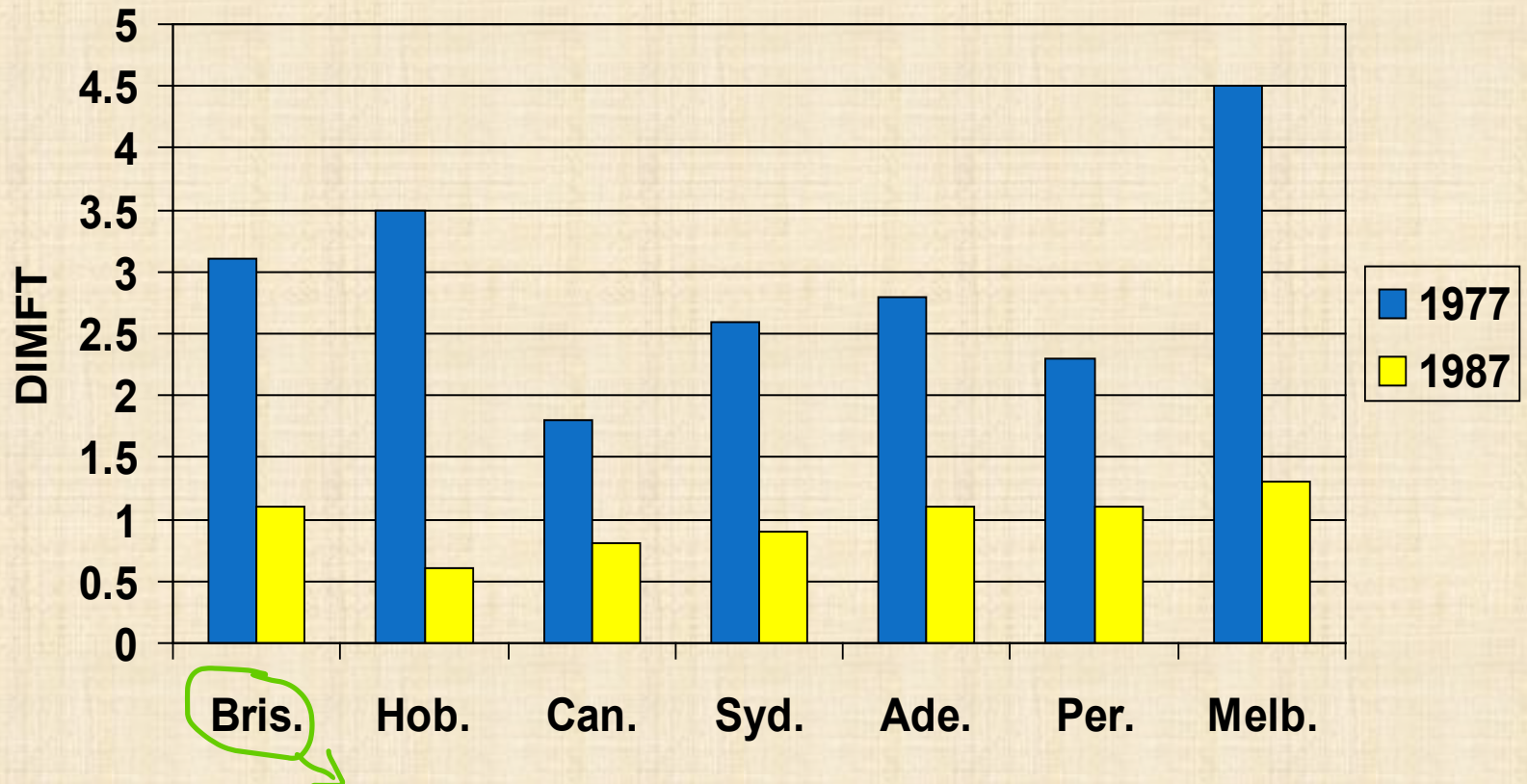
Dental data from the World Health Organisation shows little difference in child tooth decay between fluoridated and non-fluoridated countries – tooth decay has declined similarly regardless of fluoridation

Collated child tooth decay data
World Health Organisation –
2012

DMFT (Decayed, Missing & Filled teeth) Status for 12 year olds by Country
- World Health Organization Data (2012) -

Country	DMFTs	Year	Status*
<i>Denmark</i>	0.7	2008	<u>No</u> water fluoridation. <u>No</u> salt fluoridation.
<i>Germany</i>	0.7	2005	<u>No</u> water fluoridation. 67% salt fluoridation.
<i>England</i>	0.7	2009	11% water fluoridation. <u>No</u> salt fluoridation.
<i>Netherlands*</i>	0.8	2002	<u>No</u> water fluoridation. <u>No</u> salt fluoridation.
<i>Switzerland**</i>	0.82	2009	<u>No</u> water fluoridation. 88% salt fluoridation.
<i>Belgium</i>	0.9	2009-10	<u>No</u> water fluoridation. <u>No</u> salt fluoridation.
<i>Sweden</i>	0.9	2008	<u>No</u> water fluoridation. <u>No</u> salt fluoridation.
<i>Australia</i>	1.0	2003-2004	80% water fluoridation. No salt fluoridation.
<i>Austria</i>	1.0	2002	<u>No</u> water fluoridation. 6% salt fluoridation.
<i>Ireland</i>	1.1	2002	100% water fluoridation in study. <u>No</u> salt fluoridation.
<i>Italy</i>	1.1	2004	<u>No</u> water fluoridation. <u>No</u> salt fluoridation.
<i>United States</i>	1.19	1999-2004	64% water fluoridation. <u>No</u> salt fluoridation.
<i>Finland</i>	1.2	2006	<u>No</u> water fluoridation. <u>No</u> salt fluoridation.
<i>France</i>	1.2	2006	<u>No</u> water fluoridation. 65% salt fluoridation.

Decay rates in Australian Capital Cities 1977 – 1987



All cities except Brisbane fluoridated for at least 10 years by 1987

School Dental Service data for permanent teeth in 10 year olds

Dr Mark Diesendorf 1990

Consumption of non-public water: implications for children's caries experience "

J. Armfield, A. J Spencer. *Community Dent Oral Epidemiol* 2004 ;32 :283-96

"no significant difference in decay in permanent teeth of children aged 10 to 15 years who had always drunk fluoridated water for all of their lives compared to those who had never drunk fluoridated water"

Fluoride's Main Action is Topical

This claim was made by the CDC in 1999
This claim is very poorly referenced.

topical application of fluoride
only benefits the pockets
of the

dentists and tooth paste manufacturers

**Tooth enamel
with higher fluoride levels
does not withstand acid
any better than enamel
with lower levels of fluoride**

Journal of American Dental Association 2000

Fluoride incorporated during tooth development from **ingested** fluoride is **insufficient** to play a significant role in caries protection."

Even when the outer enamel has higher fluoride levels, such as 1000 ppm, **it does not** measurably **withstand acid-induced dissolution** any better than enamel with lower levels of fluoride.

Featherstone, J.D.B. The Science and Practice of Caries Prevention. Journal of the American Dental Association. 131, 887-899) 2000

& they still say it reduces decay!

Prof Hardy Limeback:

“Rampant smooth surface decay, especially in the front teeth,
as well as that massive open bite (suggesting constant sucking on a soother or baby bottle)
...all point to obvious baby bottle tooth decay.



That kind of tooth decay occurs even in cities that are fluoridated and, in my opinion, will NOT be prevented in non-fluoridated areas even if the formula is made with fluoridated bottled or tap water.

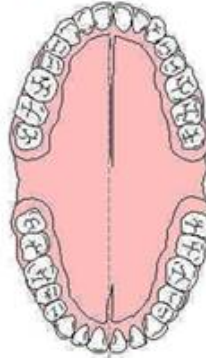
It is false and misleading
to use such a severe case of dental decay
to suggest that fluoridation would help these children.

The largest US survey of tooth decay

Brunelle and Carlos 1990

- Increased sensitivity by measuring tooth decay in individual tooth surfaces
- Children from age 5 to 17 years were examined
- 4 tooth surfaces for incisor teeth 5 tooth surfaces for molar teeth
- 128 tooth surfaces by age 12 years old

Average DMFS in
Non fluoridated
communities was 3.4



Average DMFS in
Fluoridated
communities was 2.8

There was an average difference of 0.6 of one tooth surface for children aged 5 to 17 years (in out of over 100 tooth surfaces)

the life time difference was only

0.6 of a tooth surface

between fluoridated areas and non- fluoridated areas
(there are over 100 tooth surfaces in a child's mouth)

The Centre for Disease Control have stated in 2001;

"The prevalence of dental caries in a population is not inversely related to the concentration of fluoride in enamel,
and a higher concentration of enamel fluoride
is not necessarily more efficacious in preventing dental caries"

McFarlane, D.J. (former Senior Dental Consultant, Ontario Ministry of Health). Personal Communication (1993) (cited in reference no. 33).

Canadian Paediatric Society (CPS). Nutrition Committee. Fluoride Supplementation. Canadian Paediatric Society Statement: N 86-01. Ottawa, Ont. (1986).

Community Dent Oral Epidemiol. 2001

“Caries incidence ... was not different between the still-fluoridating and fluoridation-ended communities.”

Patterns of dental caries following the cessation of water fluoridation. Maupomé G, Clark DC, Levy SM, Berkowitz J. *Community Dent Oral Epidemiol.* 2001 Feb;29(1):37-47.

The *Journal of the*
American Dental Association 1988:

“The current reported decline in caries tooth decay in the US and other Western industrialized countries has been observed in both fluoridated and nonfluoridated communities, with percentage reductions in each community apparently about the same”

Journal of Public Health Dentistry 1991

“During the past 40 years dental caries has been declining in the US, as well as in most other developed nations of the world... The decline in dental caries has occurred both in fluoride and in fluoride-deficient communities, lending further credence to the notion that modes other than water fluoridation, especially dentrifices, have made a major contribution.”

The Critical Review of Oral Biology and Medicine noted in 2002

“It is remarkable, however, that the dramatic decline in dental caries which we have witnessed in many different parts of the world ...has occurred without the dental profession being fully able to explain the relative role of fluoride in this intriguing process.

The British Medical Journal 2007

“Although the prevalence of caries varies between countries, **levels everywhere have fallen** greatly in the past three decades, and national rates of caries are now universally low.

This trend has occurred **regardless of the concentration of fluoride in water or the use of fluoridated salt...**

Clinical Oral Investigations 2007:

“In **most European countries**, where community water **fluoridation has never been adopted**, a substantial decline in caries prevalence has been reported in the last decades, with **reductions in lifetime caries experience exceeding 75%.**”

Oral Implantol (Rome) (2011 Jan)

“Fluoride administration during pregnancy and postpartum does not seem to have a significant impact on the reduction of caries incidence.”

Maturo P Costacurta M Perugia C Docimo R Fluoride supplements in pregnancy, effectiveness in the prevention of dental caries in a group of children. Oral Implantol (Rome) (2011 Jan) 4(1-2):23-7

Decay rates have dropped equally in fluoridated and non fluoridated countries

- <http://www.fluoridealert.org/studies/caries01/>
- Chlapowska J, Opydo-Szymaczek J [Dietary and hygienic aspects of fluoride exposure in pregnant women] Ekspozycja na fluorki kobiet ciężarnych w aspekcie diety i nawyków higienicznych. *Ann Acad Med Stetin* (2004) 50 Suppl 1:19-22
- Cheng KK, et al. (2007). Adding fluoride to water supplies. *British Medical Journal* 335(7622):699-702.
- Pizzo G, et al. (2007). Community water fluoridation and caries prevention: a critical review. *Clinical Oral Investigations* 11(3):189-93.
- Neurath C. (2005). Tooth decay trends for 12 year olds in nonfluoridated and fluoridated countries. *Fluoride* 38:324-325.
- Aoba T, Fejerskov O. (2002). Dental fluorosis: chemistry and biology. *Critical Review of Oral Biology and Medicine* 13: 155-70.
- Reich E. (2001). Trends in caries and periodontal health epidemiology in Europe. *International Dentistry Journal* 51(6 Suppl 1):392-8.
- Fomon SJ, Ekstrand J, Ziegler EE. (2000). Fluoride intake and prevalence of dental fluorosis: trends in fluoride intake with special attention to infants. *Journal of Public Health Dentistry* 60:131.
- Bratthall D, Hansel-Petersson G, Sundberg H. (1996). Reasons for the caries decline: what do the experts believe? *European Journal of Oral Science* 104:416-22.
- Marthaler TM, O'Mullane DM, Vrbic V. (1996). The prevalence of dental caries in Europe 1990-1995. ORCA Saturday afternoon symposium 1995. *Caries Research* 30: 237-55
- Petersson GH, Bratthall D. (1996). The caries decline: a review of reviews. *European Journal of Oral Science* 104: 436-43.
- Haugejorden O. (1996). Using the DMF gender difference to assess the "major" role of fluoride toothpastes in the caries decline in industrialized countries: a meta-analysis. *Community Dentistry and Oral Epidemiology* 24: 369-75.
- Binus W, Lowinger K, Walther G. (1989). Caries decline and changing pattern of dental therapy *Stomatol DDR* 39: 322-6.
- Heifetz SB, et al. (1988). Prevalence of dental caries and dental fluorosis in areas with optimal and above-optimal water-fluoride concentrations: a 5-year follow-up survey. *Journal of the American Dental Association* 116: 490-5.
- Diesendorf, D. (1986). The Mystery of Declining Tooth Decay. *Nature* 322: 125-129.
- Bohannon HM, et al. (1985). Effect of secular decline on the evaluation of preventive dentistry demonstrations. *Journal of Public Health Dentistry* 45: 83-89.
- Leverett DH. (1982). Fluorides and the changing prevalence of dental caries. *Science* 217: 26-30.

Decay rates drop when fluoride is removed from the water supply the.

Canada, Finland, East and West Germany, Cuba, New Zealand and Australia.

- Patterns of dental caries following the cessation of water fluoridation. **Community Dent Oral Epidemiol 2001** Feb;29(1):37-47 Maupome G, Clark DC, Levy SM, Berkowitz J Faculty of Dentistry, University of British Columbia, Vancouver, Canada.
- Caries Trends 1992-1998 in Two Low-Fluoride Finnish Towns Formerly with and without Fluoridation. **Caries Res 2000** Nov;34(6):462-468 Seppa L, Karkkainen S, Hausen H
- Decline of caries prevalence after the cessation of water fluoridation in the former East Germany. **Community Dent Oral Epidemiol 2000** Oct;28(5):382-9 Kunzel W, Fischer T, Lorenz R, Bruhmann S
- The effects of a break in water fluoridation on the development of dental caries and fluorosis. **J Dent Res 2000** Feb;79(2):761-9 Burt BA, Keels MA, Heller KE
- Caries prevalence after cessation of water fluoridation in La Salud, Cuba. **Caries Res 2000** Jan-Feb;34(1):20-5 Kunzel W, Fischer T
- **Gesundheitswesen 1997** Dec;59(12):710-5 Caries decline in Germany--causes and consequences. Kunzel W Poliklinik fur Praventive Zahnheilkunde, Friedrich-Schiller-Universitat Jena
- The decline of caries in New Zealand over the past 40 years. **N Z Dent J 1998** Sep;94(417):109-13 de Liefde B
- Water Fluoridation & Tooth Decay: Results from the 1986-1987 National Survey of U.S. Schoolchildren **Fluoride April 1990**; 23(2): 55-67 Yiamouyiannis, J

“Large temporal reductions in tooth decay, which cannot be attributed to fluoridation, have been observed in both unfluoridated and fluoridated areas of at least eight developed countries over the past thirty years.

It is now time for a scientific re-examination of the alleged enormous benefits of fluoridation.”

The Mystery of Declining Tooth Decay **Nature July 1986** Vol. 322
Diesendorf, M. Human Sciences Program, **Australian National University, Canberra, Australia**

"The prevalence of caries decreased over time in the fluoridation-ended community while remaining unchanged in the fluoridated community." *Patterns of dental caries following the cessation of water fluoridation Community Dent Oral Epidemiol*

The fact that no increase in caries was found in Kuopio despite discontinuation of water fluoridation and decrease in preventive procedures suggests that not all of these measures were necessary for each child. *Caries trends 1992-1998 in two low-fluoride Finnish towns formerly with and without fluoridation Caries Res . Nov-Dec 2000;34(6):462-8. doi: 10.1159/000016624.. 2001 Feb;29(1):37-47*

Chemnitz (formerly Karl-Marx-Stadt) and Plauen, a significant fall in caries prevalence was observed. *Decline of caries prevalence after the cessation of water fluoridation in the former East Germany. Community Dent Oral Epidemiol 2000 Oct;28(5):382-9*

..dental fluorosis is sensitive to even small changes in fluoride exposure from drinking water, and this sensitivity is greater at 1 to 3 years of age than at 4 or 5 years. *The effects of a break in water fluoridation on the development of dental caries and fluorosis. J Dent Res 2000 Feb;79(2):761-9*

In 1997, following the cessation of drinking water fluoridation, in contrast to an expected rise in caries prevalence, DMFT and DMFS values remained at a low level for the 6- to 9-year-olds and appeared to decrease for the 10/11-year-olds (from 1.1 to 0.8) and DMFS (from 1.5 to 1.2). In the 12/13-year-olds, there was a significant decrease (DMFT from 2.1 to 1.1; DMFS from 3.1 to 1.5), while the percentage of caries-free children of this age group had increased from 4.8 (1973) and 33.3 (1982) up to 55.2%. *Caries prevalence after cessation of water fluoridation in La Salud, Cuba. Caries Res* 2000 Jan-Feb;34(1):20-5

No statistically significant differences were found in the decay rates of permanent teeth or the percentages of decay-free children in the F, NF, and PF areas. *Water Fluoridation & Tooth Decay: Results from the 1986-1987 National Survey of U.S. Schoolchildren Fluoride* April 1990; 23(2): 55-67

Large temporal reductions in tooth decay, which cannot be attributed to fluoridation, have been observed in both unfluoridated and fluoridated areas of at least eight developed countries over the past thirty years. It is now time for a scientific re-examination of the alleged enormous benefits of fluoridation. *The Mystery of Declining Tooth Decay Diesendorf, M. Nature* July 1986 Vol. 322

When there is NO
science...

Run a propaganda campaign?

How to do this is written by;

Dr Shanti Sivaneswaran

Faculty of Dentistry, The University of Sydney.
NSW Health Department, Centre for Oral Health
Strategy Westmead, NSW, Australia published in
Community Dental Oral Epidemiology 2012

This paper outlines
**the methods that should be employed
to run a Pro-Fluoridation propaganda campaign!**

Tell the same lie often enough
and everyone will believe it



Erzähle oft genug dieselbe Lüge
und jeder wird es glauben

“At the time of writing, 20 councils have implemented fluoridation, which increased the population coverage of water fluoridation from 90% in 2004 (1) to 94% in mid-June 2010 (2) and to 96% at present (Centre for Oral Health Strategy – New South Wales Department of Health, **unpublished data**).”

If unpublished then Where Did It Come From?

“A grass roots approach using basic principles of **social marketing**, which included use of **solid scientific evidence, local statistics, anecdotal evidence, a powerful lobbying machine and skillful use of the media**, was used in the ‘Teeth for Life Project’.”

The same propaganda tactics that were used to bring Hitler and every other dictator to power.

“... endorsement of water fluoridation was also sought from **expert medical professional organizations** who have their own medical advisory committees. ... **chosen for the purpose of countering claims** made by antifluoridationists concerning the **plethora of maladies and side effects caused by drinking fluoridated water.**” (rg. What an admission!!!)

Expert medical professionals are purchased

“**To compensate for the lack of clinical disease data**, rates of dental treatment performed under **general anaesthetic** were used instead. In NSW, data on hospital admissions are routinely collected and readily accessible and were therefore **used to demonstrate that their local children were at greater risk for undergoing dental treatment under general anaesthetic** than their counterparts in fluoridated areas.”

A blatant admission that there is NO clinical or scientific data

Dr Shanti Sivaneswaran

My Comments

“When dental decay data were available, **figures for 5- to 6-years-olds were used**, as the caries experience is usually greater, and **public sympathy for small children is usually greater as well.**”

If there were real data, they would not have to rely on public sympathy.

“**Anecdotal evidence** provided by local health professionals including doctors of the extent of poor oral health at public forums and in submissions to councils also played **a critical role in swaying the opinion of councillors** to supporting fluoridation.”

*Anecdotal Evidence is NOT scientific evidence.
We All have opinions.*

“The role of the **media in any fluoridation program** cannot be underestimated. It was therefore essential that NSW Health Department **identified spokespersons** for fluoridation who **underwent media training** to assist with media liaisons. A **pool of credible, media savvy spokespersons was identified**”

*A way of getting mass opinion in a population.
It is only a numbers game strategy.*

“... the extension of fluoridation to rural communities in NSW would not have been possible without the commitment and dedication to fluoridation by **senior bureaucrats in the NSW Health Department and the NSW Office of Water.**”

Dr Shanti Sivaneswaran

They may just be faceless, nameless people of Dr Sivaneswaran’s imagination, which certainly puts the concept of peer review into question.

My Comments

Fluoridation is Mass Medication

With a chemical that is a
Toxic Waste Product

Biocide

Endocrine Disrupting Chemical

Hormone Disrupting Chemical

Polluted with Arsenic and other metals

&

Which has **NO** beneficial effect

FACTS

Fluoride is NOT a nutrient

Fluoride is NOT an essential element

Hexafluorosilicic acid added to the water is NOT what is found in nature

Adjusting the fluoride dose to dental requirements is complete NONSENSE – this requirement is fabricated

There is NO such thing as a fluoride deficiency

FACTS

Fluoride is **NOT** responsible for the worldwide decline in dental decay.

There is **NO scientific justification** to support the continued fluoridation of any water supply.

Fluoridation must be considered a waste of the **tax payer's money.**

The continued promotion of this practice is **unscientific** and **outdated.**

Many developed countries around the world, particularly in Europe, have not fluoridated their water supply, or have fluoridated their water supply and then ceased fluoridation or in some cases used an alternative form of supplementary fluoridation.

Some of these largely unfluoridated countries have reported steep declines in dental caries that parallel declines seen in largely fluoridated countries.

(Marthaler 2004)

Water Fluoridation Q & As | [NSW Health](#) | November 2015 pdf [fluoridation-questions-and-answers-nsw.pdf](#)

The National Research Council of America 2006

clearly identified

children as a high priority risk group

requiring special consideration because their health risks can differ from those of adults as a result of their immature physiology, metabolism, and differing levels of exposure due to factors such as greater food consumption per unit of body weight.

NO Safety Data

National Research Council of America 2006 (NRC)

The scientific committee highlighted the **lack of toxicity data on silicofluorides** and the **lack of appropriate safety standards for children** for fluoride exposure or its long term toxicity on humans.

**Absence of evidence
Is not
Evidence of Absence**

Carl Sagan

Hexafluorosilicic is classified as a

BIOCIDE

(it KILLS LIFE)

The **European Union** banned

Hexafluorosilicic acid (H_2SiF_6) for use as a biocidal product within the EU due to lack of toxicological data to demonstrate that it was safe for humans and the environment.

Lead absorption is enhanced with fluoride intake which also reacts with other metals

- Sawan RM Leite GA Saraiva MC Barbosa F Tanus-Santos JE Gerlach RF Fluoride increases lead concentrations in whole blood and in calcified tissues from lead-exposed rats. *Toxicology* (2010 Apr 30) 271(1-2):21-6
- Ricks GM et al; "The Possible Formation of Hydrogen Fluoride from the Reaction of Silicon Tetrafluoride with Humid Air": *Am. Ind. Hyg. Assoc. J.* (54); 272-276, 1993
- Maas RP Patch SC Christian AM Coplan MJ Effects of fluoridation and disinfection agent combinations on lead leaching from leaded-brass parts. *Neurotoxicology* (2007 Sep) 28(5):1023-31

Uncontrollable Dosage

“Analysis of data from 70 cases revealed that as the amount of fluoride ingested increased, the percentage of patients with symptoms increased.”

Augenstein WL Spoerke DG Kulig KW Hall AH Hall PK Riggs BS el Saadi M Rumack BH Fluoride ingestion in children: a review of 87 cases. *Pediatrics* (1991 Nov) 88(5):907-12

Uncontrollable dosage

Many Sources – Extra Fluoride

- Accidental over dosage -common
- Beverages and processed foods
- Prescription Medicines
- Fluoridated Dental Products
- Tooth paste
- Food additives
- Residues of fluoride based pesticides and fumigants

Uncontrollable dosage Tea

Tea and Coffee -individual dietary exposure of up to **9mg of fluoride per day** for an adult. (NRC Report 2006)

This level exceeds the maximum daily limit recommended by the WHO .”

Uncontrollable dosage

Baby Formula

total fluoride intake for formula fed babies using fluoridated water (up to 6 months in age) is **186 times greater** than for breast fed babies.

Babies who are less than one year old, are exposed to a fluoride intake on average of about **three times that of adults.**

Sudden Infant Deaths

300% higher

in fluoridated Republic of Ireland
than in non-fluoridated Northern Ireland

Comparable rates in USA, Canada, NZ and Australia

Public Health Investigation of Epidemiological data on Disease and Mortality in Ireland related to Water Fluoridation and Fluoride Exposure - Declan Waugh BSc. CEnv. MCIWEM. MIEMA. MCIWM
March 2013.

Fluoride Damages Teeth

The NRC Report 2006 states;

“Severe enamel fluorosis compromises that health-protective function by **causing structural damage** to the tooth.

The damage to teeth caused by **severe enamel fluorosis is a toxic effect** that is consistent with prevailing risk assessment definitions of **adverse health effects.**”

When we have Dental Fluorosis we will also have fluorosis and weakening of the bone in a dose dependant manner.

- Kevin P Balanda and Jane Wilde, Inequalities in Mortality, A Report on All Ireland Mortality, 1989-99, Institute of Public Health, 2001. <http://www.publichealth.ie/files/file/Inequalities%20in%20Mortality.pdf>
- "Safe Water Coalition of Washington State," Townsend Letter for Doctors, Op., Cit., June 1989, p. 291.
- Groth, E. (1973), Two Issues of Science and Public Policy: Air Pollution Control in the San Francisco Bay Area, and Fluoridation of Community Water Supplies. Ph.D. Dissertation, Department of Biological Sciences, Stanford University, May 1973.
- <http://www.arthritistrust.org/Articles/Fluoride.pdf>
- <http://www.slweb.org/CEN.skeletal-fluorosis.html>
- Bhavsar BS, Desai VK, Mehta NR, Vashi RT, Krishnamachari KAVR. (1985). Neighborhood Fluorosis in Western India Part II: Population Study. Fluoride 18: 86-92.
- Krishnamachari KA. (1986). Skeletal fluorosis in humans: a review of recent progress in the understanding of the disease. Progress in Food and Nutrition Sciences 10(3-4):279-314
- Schmidt CW Kunze P Funke U Auermann E Bone fluorosis without occupational exposure in chronic renal insufficiency Z Gesamte Inn Med (1978 Nov 15) 33(22):837-40
- Grafe EM Dominok GW Bone fluorosis Z Gesamte Inn Med (1978 Dec 1) 33(23):866-9
- Gupta SK Gambhir S Mithal A Das BK Skeletal scintigraphic findings in endemic skeletal fluorosis. Nucl Med Commun (1993 May) 14(5):384-90

Fluorosis Bone Papers

- Grandjean P Thomsen G Reversibility of skeletal fluorosis. *Br J Ind Med* (1983 Nov) 40(4):456-61
- Jolly SS Singh BM Mathur OC Malhotra KC Epidemiological, clinical, and biochemical study of endemic dental and skeletal fluorosis in punjab. *Br Med J* (1968 Nov 16) 4(5628):427-9
- Barot VV Occurrence of endemic fluorosis in human population of North Gujarat, India: human health risk. *Bull Environ Contam Toxicol* (1998 Sep) 61(3):303-10
- Yildiz M Akdogan M Tamer N Oral B Bone mineral density of the spine and femur in early postmenopausal Turkish women with endemic skeletal fluorosis. *Calcif Tissue Int* (2003 Jun) 72(6):689-93
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Fluorosis Bone Papers

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Fluoride is a Cumulative Poison

Fluoride concentration in water mg/L	Fluoride in Bone Ash concentrations mg/Kg
<0.3	140-790
1.0	400-2300
4.0	6900

- “The EFSA note that with increasing fluoride incorporation into bone, clinical stage I and II with **pain and stiffness of joints, osteosclerosis** of both cortical and cancellous bone, osteophytes and calcification of ligaments develop. **Crippling skeletal fluorosis** (clinical stage III) may be associated with movement restriction of joints, skeletal deformities, severe **calcification of ligaments, muscle wasting and neurological symptoms**.
- All stages are accompanied by disturbed or **deficient mineralisation** of the bone, and **osteomalacia** may be present, particularly when calcium intake is insufficient.
- The EFSA also highlight that patients with **renal insufficiency** have an increased risk of developing skeletal fluorosis.”

Opinion of the Scientific Panel on Dietetic Products, Nutrition and Allergies on a request from the Commission related to the Tolerable Upper Intake Level of Fluoride. The **EFSA Journal (2005)** 192, 1-6

Spina Bifida

There is an increased incidence
in fluoridated areas

Gupta SK Gupta RC Seth AK Chaturvedi CS Increased incidence of spina bifida occulta
in fluorosis prone areas. Acta Paediatr Jpn (1995 Aug) 37(4):503-6

Bones get weaker from childhood on

Combinations of osteomalacia, osteoporosis, and osteosclerosis result in a spectrum of bone changes from an early age.

Christie DP The spectrum of radiographic bone changes in children with fluorosis.
Radiology (1980 Jul) 136(1):85-90

Fluoride weakens the bones at 1ppm

- Selz T Caverzasio J Bonjour JP Fluoride selectively stimulates Na-dependent phosphate transport in osteoblast-like cells. *Am J Physiol* (1991 Jun) 260(6 Pt 1):E833-8
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- Jin XQ Xu H Shi HY Zhang JM Zhang HQ Fluoride-induced oxidative stress of osteoblasts and protective effects of baicalein against fluoride toxicity. *Biol Trace Elem Res* (2007 Apr) 116(1):81-9
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- Baum K Borner W Reiners C Moll E [Bone density and thyroid gland function in adolescents in relation to fluoride content of drinking water] *Fortschr Med* (1981 Sep 24) 99(36):1470-2
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- Bourgoin SG Harbour D Poubelle PE Role of protein kinase C alpha, Arf, and cytoplasmic calcium transients in phospholipase D activation by sodium fluoride in osteoblast-like cells. *J Bone Miner Res* (1996 Nov) 11(11):1655-65
- Thomas AB Hashimoto H Baylink DJ Lau KH Fluoride at mitogenic concentrations increases the steady state phosphotyrosyl phosphorylation level of cellular proteins in human bone cells. *J Clin Endocrinol Metab* (1996 Jul) 81(7):2570-8
- Di Loreto V Rigalli A Puche R Effect of sodium fluoride administration to rats on bone phosphorous content and phosphatemia. *Arzneimittelforschung* (2006) 56(11):760-6
- Shalina TI Vasil'eva LS [Femoral bone morphogenesis in human fetuses in the area of environmental fluoride pollution]. *Morfologija* (2010) 137(1):54-7
- Yildiz M Oral B The effect of pregnancy and lactation on bone mineral density in fluoride-exposed rats. *Toxicol Ind Health* (2006 Jun) 22(5):217-22
- Zhang Y Liang YJ Guo XY Li X [The effect of high dose fluoride on the rat offspring osteoblasts which ingested by female rats] *Wei Sheng Yan Jiu* (2005 Jan) 34(1):29-32
- Susheela AK Sharma YD Chemical profile of blood in fluoride toxicity. III. Plasma fibrinogen levels in rabbit. *Toxicol Eur Res* (1981 Mar) 3(2):105-7
- Cao J Zhao Y Liu J Xirao R Brick-tea type adult bone fluorosis *Wei Sheng Yan Jiu* (2003 Mar) 32(2):141-3
- Liu BC Xu ZL Miao Q Xu YY Xu M Qian XJ You BR Yuan BH Kang N
- Expression of type II collagen gene and structural change in bone tissues of rats with experimental fluorosis *Zhonghua Yu Fang Yi Xue Za Zhi* (2003 Jul) 37(4):243-5
- Christie DP The spectrum of radiographic bone changes in children with fluorosis. *Radiology* (1980 Jul) 136(1):85-90

The NRC 2006 state;

“... intake of fluoride will manifest itself in a **musculoskeletal disease** with associated symptoms such as **chronic joint pain, arthritic symptoms, calcification of ligaments and osteosclerosis of cancellous bones.**

Older People Accumulate large amounts of fluoride

The NRC 2006



The **elderly** are another sector of the population of concern, because of their **long-term accumulation** of fluoride into their bones.

Neurological Damage in the Fetus

The NRC Report 2006 states

“Reduced thyroid hormones during pregnancy is also associated with **reduced intelligence** quotient, **ADHD** and even **autism** in children.”

The Environmental Protection Agency states that fluoride is a chemical "with substantial evidence of **developmental neurotoxicity.**"

Neurological Damage in the Fetus

- “It is apparent that fluorides have the ability to **interfere with the functions of the brain** and the body by direct and indirect means”
- “Fluorides also increase the **production of free radicals in the brain**, through several different biological pathways. These changes have a bearing on the possibility that fluorides act to **increase the risk of developing Alzheimer’s disease.**”
- “...**aluminium fluoride** complexes not only provides **false messages** throughout the nervous system but, at the same time, **diminishes the energy essential to brain function.**”
- “There are numerous reports of **mental and physiological** changes after exposure to fluoride ...

The NRC 2006 Report states;

IQ Severely Affected

The NRC Report 2006 states;

“there is some evidence that impaired thyroid function in pregnant women can lead to children with lower IQ scores”

Harvard University in 2012

up to a SEVEN point reduction in IQ.

Anna L. Choi, Guifan Sun, Ying Zhang, Philippe Grandjean Environ Health Perspect. 2012 October; 120(10): 1362–1368. Published online 2012 July 20. doi: 10.1289/ehp.1104912

Prof. Sheldon's Letter to UK Parliament....

“The review **did not show water fluoridation to be safe**. The quality of the research was too poor to establish with confidence whether or not there are potentially important adverse effects in addition to high levels of fluorosis.”

“The review found water fluoridation to be **significantly associated with high levels of dental fluorosis** which was not characterised as just a cosmetic issue”

Dental Fluorosis



Normal



Questionable



Very mild



Mild



Moderate



Severe

Fluoride Is Neurotoxic.

Fluoride **damages the brain** and other **nerve cells**.

Fluoride will have a negative impact on **neural development**.

Interference with Neurological development may result in **Down Syndrome, autism,**

and may be associated with **early onset dementia** in the adult.

This developmental interference may translate into a **reduction in IQ**.

- Bharti VK Srivastava RS Fluoride-induced oxidative stress in rat's brain and its amelioration by buffalo (*Bubalus bubalis*) pineal proteins and melatonin. *Biol Trace Elem Res* (2009 Aug) 130(2):131-40
- Long YG Wang YN Chen J Jiang SF Nordberg A Guan ZZ Chronic fluoride toxicity decreases the number of nicotinic acetylcholine receptors in rat brain. *Neurotoxicol Teratol* (2002 Nov-Dec) 24(6):751-7
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- Basha PM Rai P Begum S Fluoride toxicity and status of serum thyroid hormones, brain histopathology, and learning memory in rats: a multigenerational assessment. *Biol Trace Elem Res* (2011 Dec) 144(1-3):1083-94
- Narayanaswamy M Piler MB Effect of maternal exposure of fluoride on biometals and oxidative stress parameters in developing CNS of rat. *Biol Trace Elem Res* (2010 Jan) 133(1):71-82
- Madhusudhan N Basha PM Rai P Ahmed F Prasad GR Effect of maternal fluoride exposure on developing CNS of rats: protective role of *Aloe vera*, *Curcuma longa* and *Ocimum sanctum*. *Indian J Exp Biol* (2010 Aug) 48(8):830-6
- California. Office of Environmental Health Hazard Assessment. Cyloxanes. Materials for the December 4-5, 2008, Meeting of the California Environmental Contaminant Biomonitoring Program Scientific Guidance Panel. <http://oehha.ca.gov/multimedia/biomon/pdf/1208cyclosiloxanes.pdf>
- Shivarajashankara Y.M., Shivashankara A.R.. Neurotoxic Effects Of Fluoride In Endemic Skeletal Fluorosis And In Experimental Chronic Fluoride Toxicity. *Journal of Clinical and Diagnostic Research* [serial online] 2012 May [cited: 2013 Feb 22]; 6:740-744
- Li Y Li X Wei S Effect of excessive fluoride intake on mental work capacity of children and a preliminary study of its mechanism Hua Hsi I Ko Ta Hsueh Hsueh Pao (1994 Jun) 25(2):188-91

Behavioral changes & Learning Deficits

- Banji D Banji OJ Pratusha NG Annamalai AR Investigation on the role of Spirulina platensis in ameliorating behavioural changes, thyroid dysfunction and oxidative stress in offspring of pregnant rats exposed to fluoride. *Food Chem* (2013 Sep 1) 140(1-2):321-31
- Flace P Benagiano V Vermesan D Sabatini R Inchingolo AM Inchingolo A Auteri P Ambrosi G Tarullo A Cagiano R Effects of developmental fluoride exposure on rat ultrasonic vocalization, acoustic startle reflex and pre-pulse inhibition. *Eur Rev Med Pharmacol Sci* (2010 Jun) 14(6):507-12
- Basha PM Madhusudhan N Pre and post natal exposure of fluoride induced oxidative macromolecular alterations in developing central nervous system of rat and amelioration by antioxidants. *Neurochem Res* (2010 Jul) 35(7):1017-28
- Long YG Wang YN Chen J Jiang SF Nordberg A Guan ZZ Chronic fluoride toxicity decreases the number of nicotinic acetylcholine receptors in rat brain. *Neurotoxicol Teratol* (2002 Nov-Dec) 24(6):751-7
- Carcoba LM Santiago M Moss DE Cabeza R In utero methanesulfonyl fluoride differentially affects learning and maze performance in the absence of long-lasting cholinergic changes in the adult rat. *Pharmacol Biochem Behav* (2008 Feb) 88(4):374-84

Early Onset Dementia

450%

more prevalent
in fluoridated Republic of Ireland
than in non-fluoridated Northern Ireland.

Fluoride Intolerance (Sensitivity not Allergy)

“Certain individuals are intolerant to fluoride and reproducibly developed **gastrointestinal** symptoms with pains in the epigastric area and in the bowels; **nausea; vomiting; diarrhea alternating with constipation**; and symptoms attributable to the neuromuscular system, namely **headaches, paresthesias, muscular fibrillation, pains in arms and legs, and arthritis in the spinal column** as well as **skin disorders** such as (urticaria), **inflammation oral cavity** (stomatitis), **visual disturbances** and **excessive thirst** (polydipsia).

The findings of this public health study ultimately resulted in cessation of water fluoridation in the Netherlands in 1973.”

G. W. Grimbergen, A Double Blind Test for Determination of Intolerance to Fluoridated Water, Fluoride, Volume 7, Number 3 July, 1974

Fluoride Intolerance

NRC 2006

chemical intolerance and increased exposure to fluorides through fluoridation of public water supplies may be viewed as one of the largest single causes of preventable death and health inequality in the Republic of Ireland.

Gastrointestinal Disorders

“when we consume fluoridated water hydrofluoric acid is created in the stomach which is highly corrosive and damaging, it destroys the lining of the stomach and intestine.

Fluoride inhibits the enzymes that produce the mucus in the goblet cells. When your microvilli in the lining is gone, you will not absorb nutrients no matter what food you consume.”

Kidneys and Bones

NRC 2006

In patients with **reduced renal function** the potential for fluoride **accumulation in the skeleton is increased.**

RG NOTE: One amalgam filling releases enough mercury to reduce kidney filtration by 60%. Populations with amalgam fillings have a higher risk of kidney disease when exposed to fluoride as well.

Kidney Disease

NRC 2006

The committee also identified Individuals with **renal disease** as a subgroup of particular concern because their **ability to excrete fluoride can be seriously inhibited**, causing **greater accumulation of fluoride** in their bodies.

Kidney Damage

“These observations emphasize the risk of high chronic fluoride intake in patients with renal failure, even with mild reduction of glomerular filtration rate.”

Noel C Gosselin B Dracon M Pagniez D Lemaguer D Lemaitre L Dhondt JL Lelievre G Tacquet A Risk of bone disease as a result of fluoride intake in chronic renal insufficiency Nephrologie (1985) 6(4):181-5

RG Note:

One amalgam filling releases enough mercury to reduce kidney glomerular filtration rate by 60%.

Fluoride must be filtered out of water that is used for Kidney Dialysis

CANCER

The NRC stated;

Alterations in DNA suggest that Fluoride has the potential to cause genetic effects as well as **carcinogenic potential**.

Fluoride has a role in **p53 mutations** that could influence the development of **osteosarcoma**

Human **leukemic cells lines** may also be susceptible to the effects of hexafluorosilicic acid the compound used for fluoridation.

“Free radicals participate in the development of carcinogenesis, particularly tumor promotion.” Journal of Free Radical Biology and Medicine Volume 2 Issue 2,

1988

CANCER

U.S Public Health Service 1991 & NRC 2006

- soft tissue sarcoma,
- non-Hodgkin's lymphoma,
- colorectal cancer
- lip cancer
- Uterine Cancer

Osteosarcoma

There is a
5 – 7 fold increase
in Osteosarcoma
in fluoridated compared to non fluoridated areas

Bassin EB Wypij D Davis RB Mittleman MA Age-specific fluoride exposure in drinking water and osteosarcoma (United States). *Cancer Causes Control* (2006 May) 17(4):421-8

Calcium Metabolism

The NRC 2006 Report states; “Fluoride exposure contributes to hyperparathyroidism, increased calcium deficiency, osteoporosis, hypertension, arteriosclerosis, degenerative neurological diseases, diabetes mellitus, muscular dystrophy colorectal cancer.”

Calcium Metabolism Is Interfered with & Calcium Absorption Reduced

- Shankar P Ghosh S Bhaskarachary K Venkaiah K Khandare AL Amelioration of chronic fluoride toxicity by calcium and fluoride- free water in rats. *Br J Nutr* (2013 Jul 14) 110(1):95-104
- Tiwari S Gupta SK Kumar K Trivedi R Godbole MM Simultaneous exposure of excess fluoride and calcium deficiency alters VDR, CaR, and calbindin D 9 k mRNA levels in rat duodenal mucosa. *Calcif Tissue Int* (2004 Oct) 75(4):313-20
- Verma RJ Sherlin DM Hypocalcaemia in parental and F1 generation rats treated with sodium fluoride. *Food Chem Toxicol* (2002 Apr) 40(4):551-4
- Guna Sherlin DM Verma RJ Amelioration of fluoride-induced hypocalcaemia by vitamins. *Hum Exp Toxicol* (2000 Nov) 19(11):632-4

United States Public health Service has identified

segments of the population are unusually susceptible to the toxic effects of fluoride. They include

postmenopausal women and elderly men,
pregnant woman and their foetuses,
people with deficiencies of calcium, magnesium and/or
vitamin C,
people with cardiovascular and kidney problems.

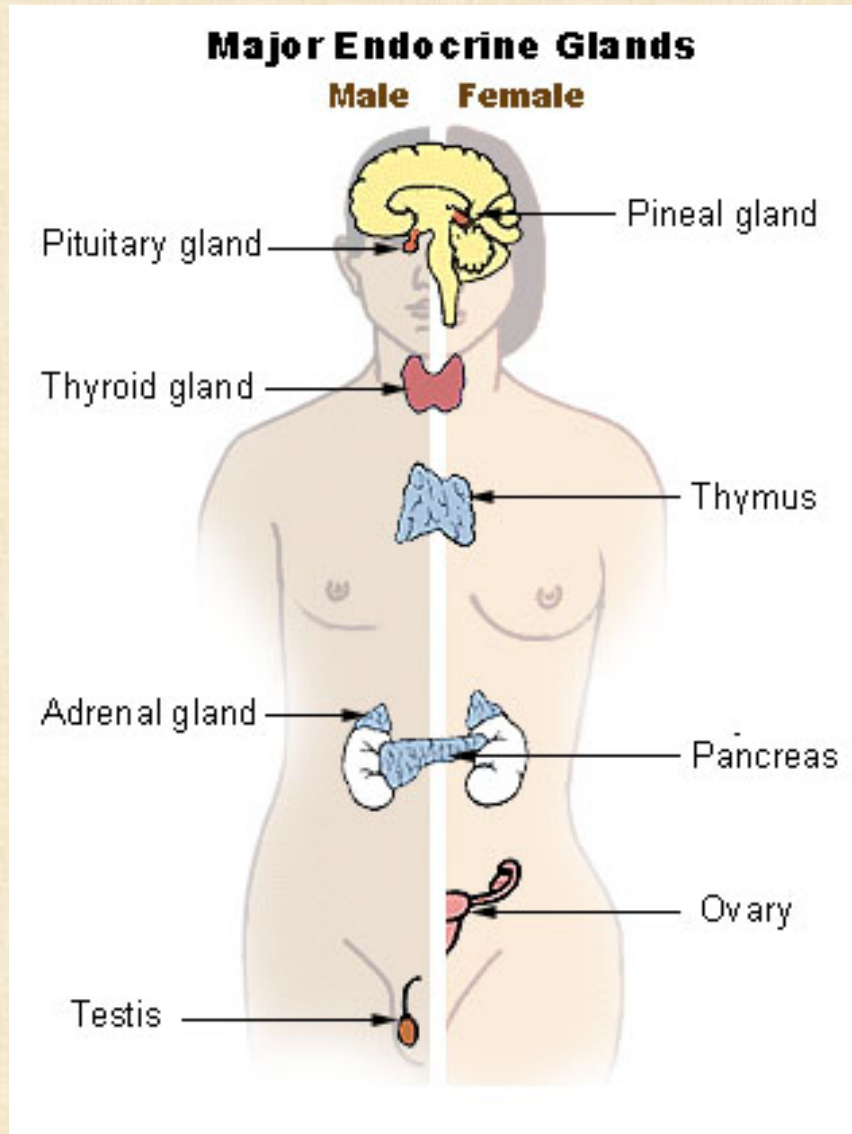
United States Public Health Service Report (ATSDR TP-91/17, April 1993)

Melatonin Production Reduced in Pineal Gland

NRC 2006

Fluoride exposure **decreases melatonin production** that may indirectly contribute to: **increased anxiety** reactions, development of **postmenopausal osteoporosis**, **anticarcinogenic effects** and **psychiatric diseases**.

Low Dose Endocrine Disrupting Chemical



Other Hormone Producing
Organs Include;

Heart

Kidneys

Digestive System

Adipose Tissue

Placenta

Low Dose Endocrine Disrupting Chemical

- Thyroid-related disorders
(Hypothyroidism **delays the eruption of teeth**)
- **Immune function** is interfered with
- **Bone** diseases
- **Neuro-developmental** disorders in children
- Hormone Related **Cancers**
- **Metabolic** Disorders
- **Reproductive** Disorders

Low Dose Endocrine Disrupting Chemical

EDCs can interfere with endocrine signalling of **pubertal timing, fecundity and fertility** and with **menopause**

Can cause **cognitive and behavioural deficits** in humans

Reduced thyroid hormones during pregnancy are also associated with reduced intelligence quotient, **ADHD** and even **autism** in children.

Obesity, diabetes and metabolic syndrome are due to disruption of the energy storage–energy balance endocrine system and thus are potentially sensitive to EDCs.

These chemicals constitute a new class of endocrine disruptors called **“obesogens”**.

Low Dose Endocrine Disrupting Chemical

... result in **altered glucose tolerance** and **reduced insulin** resistance.

... can play a role in the development of **immune-related** disorders

Systemic inflammation, **immune dysfunction** and **immune cancers** such as **lymphoma** and **leukaemia** in humans have been associated with EDC exposures.

A wide variety of **developmental problems** and common adult diseases and disorders are well-known to be **caused by abnormal endocrine function**.

Exposure to some endocrine disrupting chemicals during pregnancy can lead to altered cholesterol metabolism, **weight gain** and **type 2 diabetes** in the offspring later in life.

Low Dose

Endocrine Disrupting Chemical

The immune system plays an important role in osteoporosis, which often arises from estrogen deficiency and **secondary hyperparathyroidism**. It is possible that exposure to EDCs may influence the development of **osteopenia** and **osteoporosis**.

The developing and neonatal immune response is easily affected by EDCs, and disruption during critical windows of development may have **detrimental long-term** consequences.

Thyroid Function

The thyroid is severely affected by fluoride.

Fluoride can replace **iodine** and thus reduces thyroid function.

Hypothyroidism is common in fluoridated areas.

Reproduction and early puberty associated with reduced thyroid function.

Bobek S Kahl S Ewy Z Effect of long-term fluoride administration on thyroid hormones level blood in rats. *Endocrinol Exp* (1976) 10(4):289-95

Borner W Eichner R Henschler D Moll E Ruppert G [Pharmacokinetics of fluorides in thyroid dysfunctions. The plasma fluoride concentration after oral administration of 40 mg of NaF in delayed and nondelayed form depending on the thyroid function] *Fortschr Med* (1980 Jul 26) 98(28):1083-6

Siebenhuner L Miloni E Burgi H Effects of fluoride on thyroid hormone biosynthesis. Studies in a highly sensitive test system. *Klin Wochenschr* (1984 Sep 17) 62(18):859-61

Wang H Yang Z Zhou B Gao H Yan X Wang J Fluoride-induced thyroid dysfunction in rats: roles of dietary protein and calcium level. *Toxicol Ind Health* (2009 Feb) 25(1):49-57

Zeng Q Cui YS Zhang L Fu G Hou CC Zhao L Wang AG Liu HL [Studies of fluoride on the thyroid cell apoptosis and mechanism]. *Zhonghua Yu Fang Yi Xue Za Zhi* (2012 Mar) 46(3):233-6

Tokar' VI Voroshnin VV Sherbakov SV Chronic effects of fluorides on the pituitary-thyroid system in industrial workers *Gig Tr Prof Zabol* (1989)(9):19-22

Parathyroid Function

National Research Council Report 2006

“Fluoride clearly has the effect of **decreasing serum calcium** and **increasing the calcium requirement** in some or many exposed persons.

This “may contribute to a number of diseases, including **osteoporosis, hypertension, arteriosclerosis, degenerative neurological diseases, diabetes mellitus, some forms of muscular dystrophy and colorectal cancer.**”

Effects on Parathyroid gland

- Ream LJ Principato R Fluoride stimulation of the rat parathyroid gland: an ultrastructural study. *Am J Anat* (1981 Nov) 162(3):233-41
- Koroglu BK Ersoy IH Koroglu M Balkarli A Ersoy S Varol S Tamer MN Serum parathyroid hormone levels in chronic endemic fluorosis. *Biol Trace Elem Res* (2011 Oct) 143(1):79-86
- Pettifor JM Schnitzler CM Ross FP Moodley GP Endemic skeletal fluorosis in children: hypocalcemia and the presence of renal resistance to parathyroid hormone. *Bone Miner* (1989 Nov) 7(3):275-88
- Ream LJ Principato R Glycogen accumulation in the parathyroid gland of the rat after fluoride ingestion. *Cell Tissue Res* (1981) 220(1):125-30
- Stamp TC Saphier PW Loveridge N Kelsey CR Goldstein AJ Katakity M Jenkins MV Rose GA Fluoride therapy and parathyroid hormone activity in osteoporosis. *Clin Sci (Colch)* (1990 Sep) 79(3):233-8
- Stamp TC Jenkins MV Loveridge N Saphier PW Katakity M MacArthur SE Fluoride therapy in osteoporosis: acute effects on parathyroid and mineral homeostasis. *Clin Sci* (1988 Aug) 75(2):143-6
- Sugimoto T Civitelli R Ritter C Slatopolsky E Morrissey J Regulation of cytosolic pH in bovine parathyroid cells: effect of fluoride. *Endocrinology* (1989 Jan) 124(1):149-56
- Shoback DM McGhee JM Fluoride stimulates the accumulation of inositol phosphates, increases intracellular free calcium, and inhibits parathyroid hormone release in dispersed bovine parathyroid cells.: *Endocrinology* (1988 Jun) 122(6):2833-9
- Tokar' VI Voroshinin VV Zhovtak EP Shcherbakov SV [Chronic effect of inorganic fluorides on the parathyroid and C-cells of the thyroid in industrial workers] *Gig Sanit* (1989 Dec)(12):85-6
- Tokar' VI Voroshnin VV Sherbakov SV [Chronic effects of fluorides on the pituitary-thyroid system in industrial workers] *Gig Tr Prof Zabol* (1989)(9):19-22
- Chen CJ Anast CS Brown EM Effects of fluoride on parathyroid hormone secretion and intracellular second messengers in bovine parathyroid cells. *J Bone Miner Res* (1988 Jun) 3(3):279-88

Insulin Levels are affected by fluoride.

This will affect the **rate of tumor growth**
and will **damage all tissues** in the body

- Hu CY Ren LQ Li XN Wu N Li GS Liu QY Xu H Effect of fluoride on insulin level of rats and insulin receptor expression in the MC3T3-E1 cells. *Biol Trace Elem Res* (2012 Dec) 150(1-3):297-305
- Nabavi SM Nabavi SF Moghaddam AH Setzer WN Mirzaei M Effect of silymarin on sodium fluoride-induced toxicity and oxidative stress in rat cardiac tissues. *An Acad Bras Cienc* (2012 Dec) 84(4):1121-6
- Varol E Varol S Effect of fluoride toxicity on cardiovascular systems: role of oxidative stress. *Arch Toxicol* (2012 Oct) 86(10):1627
- BÅ,aszczyk I Birkner E Kasperczyk S Influence of methionine on toxicity of fluoride in the liver of rats. *Biol Trace Elem Res* (2011 Mar) 139(3):325-31
- Jhala DD Chinoy NJ Rao MV Mitigating effects of some antidotes on fluoride and arsenic induced free radical toxicity in mice ovary. *Food Chem Toxicol* (2008 Mar) 46(3):1138-42
- Mansour HH Tawfik SS Efficacy of lycopene against fluoride toxicity in rats. *Pharm Biol* (2012 Jun) 50(6):707-11
- Bouaziz H Croute F Boudawara T Soleilhavoup JP Zeghal N Oxidative stress induced by fluoride in adult mice and their suckling pups. *Exp Toxicol Pathol* (2007 Apr) 58(5):339-49
- García-Montalvo EA, Reyes-Pérez H, Del Razo LM. Fluoride exposure impairs glucose tolerance via decreased insulin expression and oxidative stress. *Toxicology*. 2009 Sep 19;263(2-3):75-83. doi: 10.1016/j.tox.2009.06.008. Epub 2009 Jun 21.
- Varol E Icli A Aksoy F Bas HA Sutcu R Ersoy IH Varol S Ozaydin M Evaluation of total oxidative status and total antioxidant capacity in patients with endemic fluorosis. *Toxicol Ind Health* (2013 Mar) 29(2):175-80

Special Endocrine Disrupting Chemical called an **OBEOSGEN** causes Obesity

The countries with the highest incidence of obesity are the **USA** (about 30% of the population), **Australia**, **New Zealand**, **Ireland**, the **UK** and also **Chile** all of which practice **water fluoridation**.

Water Fluoridation and Health, Working Group Report, **National Health & Medical Research Council**, 2002

Male and Female Reproduction severely affected by fluoride

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- Izquierdo-Vega JA Sanchez-Gutierrez M Del Razo LM Decreased in vitro fertility in male rats exposed to fluoride-induced oxidative stress damage and mitochondrial transmembrane potential loss. *Toxicol Appl Pharmacol* (2008 Aug 1) 230(3):352-7
- Gupta RS Khan TI Agrawal D Kachhawa JB The toxic effects of sodium fluoride on the reproductive system of male rats. *Toxicol Ind Health* (2007 Oct) 23(9):507-13
- Zhou T Yang R Li S Zheng G Xi Y Cheng X Hou J Cui L Ba Y [Influence of water fluoride exposure on sex hormone binding globulin and testosterone in adult male]. *Wei Sheng Yan Jiu* (2013 Mar) 42(2):241-4
- Tokar' VI Effect of chorionic gonadotropin on estrogen excretion in healthy men and in fluorosis patients *Probl Endokrinol (Mosk)* (1980 Jan-Feb) 26(1):34-8
- Tokar' VI Savchenko ON Effect of inorganic fluorine compounds on the functional state of the pituitary-testis system *Probl Endokrinol (Mosk)* (1977 Jul-Aug) 23(4):104-7
- Zhang C Ling B Liu J Wang G [Toxic effect of fluoride-arsenic on the reproduction and development of rats] *Wei Sheng Yan Jiu* (2000 May 30) 29(3):138-40
- European Commission. Regulation (EC) 1272/2008 , Annex VI, Table 3.2. Sep 2009.<http://ecb.jrc.ec.europa.eu/classification-labelling/>
- DHI Water and Environment. Study on Enhancing the Endocrine Disrupter Priority List with a Focus on Low Production Volume Chemicals. Revised Report to DG Environment. Hershholm, Denmark: DHI, 2007.
http://ec.europa.eu/environment/endocrine/documents/final_report_2007.pdf

Fluorides effects on Genetics

1933 According to a study by Freni in 1994 (71), in 1933 and again in 1984 that fluorides produce cumulative generational effects on biological organisms.

1956 Tabulating the 687 urban cases, he finds a **two-fold statistically significant greater prevalence** or risk of **mongoloid births** in communities **with 1 ppm** or more in the water. The incidence of the birth defect increases as the fluoride content of the water increases. This is the only study of its kind to include maternal data { Bulletin of the Academy of National Medicine, Paris, Vol 140, pp.529-531}

1958 fluorides produce primary damage by injuring the genetic material of the cells they enter. [Muller, Symposium on Emphysema and Chronic Bronchitis: "Do Air Pollutants Act as Mutagens?", Aspen, Colorado, June 13-15, 1958]

1959 Rapaport a highly significant association between the frequency of Down's Syndrome and the fluoride content of the mother's drinking water.

1959 the incidence of Mongolism in cities in Wisconsin, Illinois and the Dakotas published in 1959 in the official publication of the French Academy of Medicine, it was found that as the percentage of fluorides in the water rose, there was a parallel rise in the incidence of Mongoloid births the age of the mothers giving birth to Mongoloid babies also declined with rising fluoride levels. It is interesting that in the first three years of fluoridation, New Britain, Connecticut experienced a 150% rise in still births.

Leading Edge Research Group. <http://www.trufax.org>

Fluorides effects on Genetics

1960 ...As fluorine is a known active enzyme poison, it is known to affect cell division (mitotic) in the fetus, resulting in anatomical anomalies (teratism).

1968 A study at the University of Missouri shows that fluoride causes genetic damage to tomatoes.

1968 Scientists at the University of Holland, Drs. Mukherjee and Sobels, find that fluorides increase the frequency of genetic damage in sperm cells of lab animals exposed to X-rays. Fluorides inhibited the repair of DNA damaged by radiation.

1973 Russian Research Institute of Industrial Health and Occupational Diseases discovers fluorides cause genetic damage in rats.

1973 A study at the Central Laboratory for Mutagen Testing in West Germany shows that fluorides cause genetic damage to fruit flies.

Leading Edge Research Group. <http://www.trufax.org>

Fluorides effects on Genetics

1973 A study at Texas A&M University shows that fluorides cause genetic damage to barley.

1974 Columbia University College of Physicians and Surgeons discovers fluoride causes genetic damage, in rodents, sheep and cows.

1978 Pomeranian Medical Academy in Poland discovers that fluorides cause genetic damage in human blood cells.

1981 Institute of Botany in Baku, USSR, does three studies which indicate fluoride causes genetic damage in rats.

1981 Research is done at the Department of Toxicology at the Central University of Venezuela by Dr. A lares showing fluoride added to drinking water of rats caused birth defects. Repeated in 1982 in China, with same results.

Leading Edge Research Group. <http://www.trufax.org>

Fluorides effects on Genetics

1982 A study at the University of Missouri concludes that fluoride causes genetic damage in mice.

1983 Zhang and Zhang publish a study which shows that fluorides cause birth defects in fish.

1984 Research work at Nippon Dental University in Japan prove that fluorides cause genetic damage in hamster cells, human embryo and blood cells. Research also indicated that fluoride was also capable of transforming normal cells into cancer cells

1985 Research is conducted by the Edinburgh Medical Research Council in England which indicates that fluoride causes genetic damage in human blood cells.

1986 Research is conducted at the University of Sussex in England which indicates that fluoride causes genetic damage in mouse lymphoma (white) cells.

1987 Paterson Institute for Cancer Research in England demonstrates that fluoride causes genetic damage to human cells.

Leading Edge Research Group. <http://www.trufax.org>

Fluorides effects on Genetics

1987 In the United States, research is conducted at the National Institute of Environmental Health which indicates that fluoride causes genetic damage to mouse lymphoma cells.

1987 Research is conducted at Imperial Chemical Industries (ICI) in England which indicates that fluorides cause genetic damage in human blood cells.

1987 A study is done at the Institute of Pitaniia in the USSR which indicates that fluoride causes genetic damage in rat bone marrow cells.

1989 Research studies are conducted at Nippon University in Japan which shows that fluorides causes genetic damage to human cell cultures.

1992 Chinese research at the Department of Pathology, Guiyang Medical College, finds cellular abnormalities in fetal brain tissue exposed to fluorides.

1993 fluoride is genotoxic (indicating chromosome damage), including those at concentrations of 1.0 – 5.0 ppm. [Ziegler et al, Experimental Carcinogenesis and Mutagenesis Branch, National Institute for Environmental Health Sciences, "Genetic Toxicity of Fluoride", Environmental and Molecular Mutagenesis, Vol 21, 1993, p.309-318.

Leading Edge Research Group. <http://www.trufax.org>

Fluoride is Toxic **Across Generations**

“... presence of **generational or cumulative effects** of fluoride on the development of the offspring when it is ingested continuously through **multiple generations** is evident from the present study.”

Basha PM Rai P Begum S Fluoride toxicity and status of serum thyroid hormones, brain histopathology, and learning memory in rats: a multigenerational assessment.

Biol Trace Elem Res (2011 Dec) 144(1-3):1083-94

Fluoride is **Embryo Toxic**

The NRC also associate fluoride poisoning with a range of other diseases which are **now being seen in childhood rather than adults**, including **arthritis, diabetes, lung diseases and other muscular-skeletal disorders.**

- Verma RJ Sherlin DM Vitamin C ameliorates fluoride-induced embryotoxicity in pregnant rats. Hum Exp Toxicol (2001 Dec) 20(12):619-23
- Guna Sherlin DM Verma RJ Vitamin D ameliorates fluoride-induced embryotoxicity in pregnant rats. Neurotoxicol Teratol (2001 Mar-Apr) 23(2):197-201
- Zhang C Liu J Ling B Song X Gu W Wang G [The effect of fluoride-arsenic exposure on the lipid peroxidation and antioxidation of the offspring of rats] Zhonghua Yu Fang Yi Xue Za Zhi (2000 May) 34(3):134-5

Fluoride Causes Learning Deficits

- Masters, Roger D., with Baldwin Way, Brian T. Hone, David J. Grelotti, David Gonzalez, and David Jones (1997) "Neurotoxicity and Violence," Vermont Law Review, 22:358-382.
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- Masters, R. and Coplan, M. (1999a) "Water Treatment with Silicofluorides and Lead Toxicity," International Journal of Environmental Studies, 56: 435-49
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- Masters, R. D. and Coplan, M. J., with Hone, B.T., Grelotti, D. J., Gonzalez, D. and Jones, D. (1999). "Brain Biochemistry and the Violence Epidemic: Toward a 'Win-Win' Strategy for Reducing Crime," in Stuart Nagel, ed., Super-Optimizing Examples Across Public Policy Problems (NOVA Science Publishers)
- Masters, R.D., Coplan, M. J., Hone, B.T., and Dykes, J.E. (2000). "Association of Silicofluoride Treated Water with Elevated Blood Lead," Neurotoxicology 21: 1091-1100.
- Myron J. Coplan and Roger Masters. (2001). "Guest Editorial: Silicofluorides and fluoridation," Fluoride: Quarterly Journal of the International Society for Fluoride Research, 34: 161-220.
- Masters, R.D. (2002). "MacLean's Evolutionary Neuroethology: Environmental Pollution, Brain Chemistry, and Violent Crime," Gerald A. Corey Jr. & Russell Gardner Jr., eds. The Evolutionary Neuroethology of Paul MacLean (Westport: Praeger), pp.275-296 (Ch. 15).
- Masters, Roger D. (2003). "The Social Implications of Evolutionary Psychology: Linking Brain Biochemistry, Toxins, and Violent Crime," in Richard W. Bloom and Nancy K. Dess, eds., Evolutionary Psychology and Violence: A Primer for Policymakers and Public Policy Advocates (Westwood: Praeger), Ch. 2, pp. 23-56.
- Richard P. Maas, Steven C. Patch, Anna-Marie Christian, Myron J. Coplan, "Effects of fluoridation and disinfection agent combinations on lead leaching from leaded-brass parts," Neurotoxicology (September 2007), 38: 1023-31.
- Myron J. Coplan, Steven C. Patch, Roger D. Masters, Marcia S. Bachman, "Confirmation of and Explanations for Elevated Blood Lead and Other Disorders in Children Exposed to Water Disinfection and Fluoridation Chemicals," Neurotoxicology (September, 2007), 38: 1032-1041.
- New Biochemical Changes Found in Children With ADHD, Science Daily , Dec. 6, 2011
- Johansson, J. et al. Altered tryptophan and alanine transport in fibroblasts from boys with attention deficit/hyperactivity disorder (ADHD): an in vitro study. Behavioral and Brain Functions, September 24 2011, doi:10.1186/1744-9081-7-40 323 Bradley H Smith, Brooke S.G. Molina and William E. Pelham

Developmental Effects

NRC 2006

Down's syndrome
is a biologically
plausible
outcome of exposure

Collins TF Sprando RL Black TN Shackelford ME Olejnik N Ames MJ Rorie JI Ruggles DI Developmental toxicity of sodium fluoride measured during multiple generations. Food Chem Toxicol (2001 Aug) 39(8):867-76

Downs Syndrome

In Ireland
the incidence of
Downs Syndrome is **1 in 546** births

compared to UK which is
1 in 1,000 births.

Immune System

NRC 2006

“There is no question that fluoride can affect the cells involved in providing immune responses.”

“Several **subpopulations** are likely to be **susceptible** to the effects of fluoride exposure. From an immunologic standpoint, individuals who are immune compromised (e.g., **AIDS, transplant, and bone marrow-replacement patients**) could be at greater risk of immunologic effects of fluoride.”

Immune System

NRC 2006.

Fluoride directly affects the immune system while silicofluorides inhibit cholinesterases, including acetylcholinesterase which is a contributory factor in **Alzheimer disease**.

Rheumatoid Arthritis

Northern Ireland 0.55% (not fluoridated)

- Republic of Ireland 0.89%
- Australia 1.7%,
- New Zealand 1-2%,
- America 1.02 – 1.07%,
- Singapore 1%
- Canada 1%.



Water Fluoridation and Health, Working Group
Report, Medical Research Council, 2002

Fluoride plays a critical role in the development of Heart Disease

- Klaus Ley and Yuqing Huo, VCAM-1 is critical in atherosclerosis, *J Clin Invest.* 2001 May 15; 107(10): 1209–1210.
- Harrington J.R. The role of MCP-1 in Atherosclerosis. *Stems cells Fundamentals of Cancer medicine, Stem Cells* 2000; 18:65-66
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- Jan H. Von der Thüsen, et al, Interleukins in Atherosclerosis: Molecular Pathways and Therapeutic Potential, *Pharmacol Rev* March 1, 2003 55:133-166; published online March 1, 2003, doi:10.1124/pr.55.1.5
- Schieffer B, et al. Impact of interleukin-6 on plaque development and morphology in experimental atherosclerosis. *Circulation.* 2004 Nov 30;110(22):3493-500.
- Dong, M.Z et al. Prominent Role of P-Selectin in the Development of Advanced Atherosclerosis in ApoE-Deficient Mice, *American Heart Association*, 2000; 101: 2290-2295.
- Molenaar J.M. et al. P-selectin as a candidate target in atherosclerosis, *Biochemical Pharmacology* Volume 66, Issue 5, 1 September 2003, Pages 859–866
- Burger PC, Platelet P-selectin facilitates atherosclerotic lesion development, *Blood* 2003 Apr 1;101(7):2661-6. Epub 2002 Dec

Red Blood Cells are affected

Red cells from humans exposed chronically to toxic levels of fluoride through drinking water showed **significant increase in lipid peroxidation and membranous cholesterol and phospholipids.**

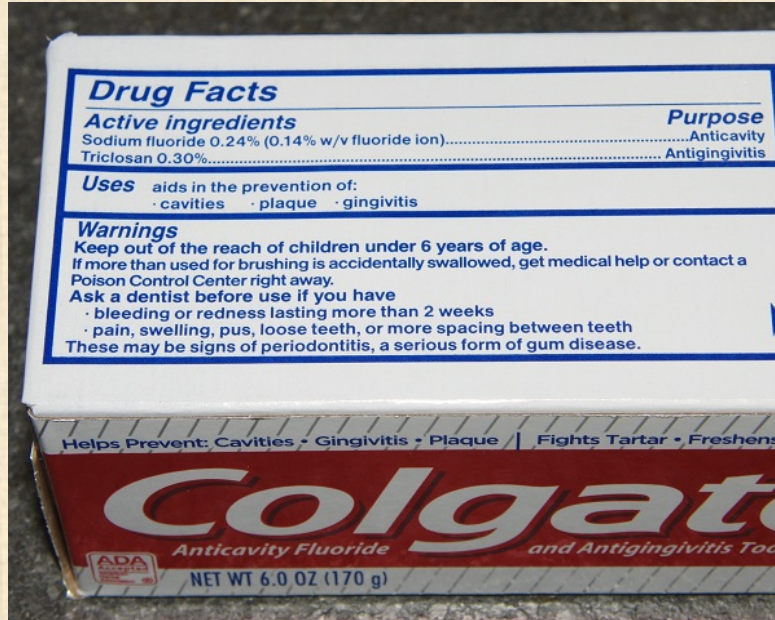
- Saralakumari D Rao PR Erythrocyte glutathione metabolism in human chronic fluoride toxicity. *Biochem Int* (1991 Jan) 23(2):349-57
- Kumari DS Rao PR Red cell membrane alterations in human chronic fluoride toxicity. *Biochem Int* (1991 Mar) 23(4):639-48

Fluoridated Tooth Paste is TOXIC

“... the potential for toxicity requires that fluoride-containing materials be handled and stored with the respect they deserve.”

Whitford GM Acute toxicity of ingested fluoride. Monogr Oral Sci (2011)

Colgate Fluoride toothpaste



Note; Sodium Fluoride is not contaminated with arsenic, cadmium, radium or lead

contains **0.24% Sodium Fluoride**

Its purpose is listed as 'Anticavity' – (clearly the label is misleading.)

Warnings

Keep out of reach of **children under 6 years** of age.

If more than used for brushing is accidently swallowed, **get medical help** or contact a **Poisons Control Centre** right away.

Ireland Report

The NRC report 2006 comparing disease states in
Republic of Ireland compared to non-fluoridated Northern Ireland and Europe.

Early Onset Dementia (450%)

Sudden Infant Death Syndrome (300%),

Sarcoidosis (250%),

Congenital Hypothyroidism (220%),

Osteoporosis (100%)

Downs syndrome (83%),

Depression (78%),

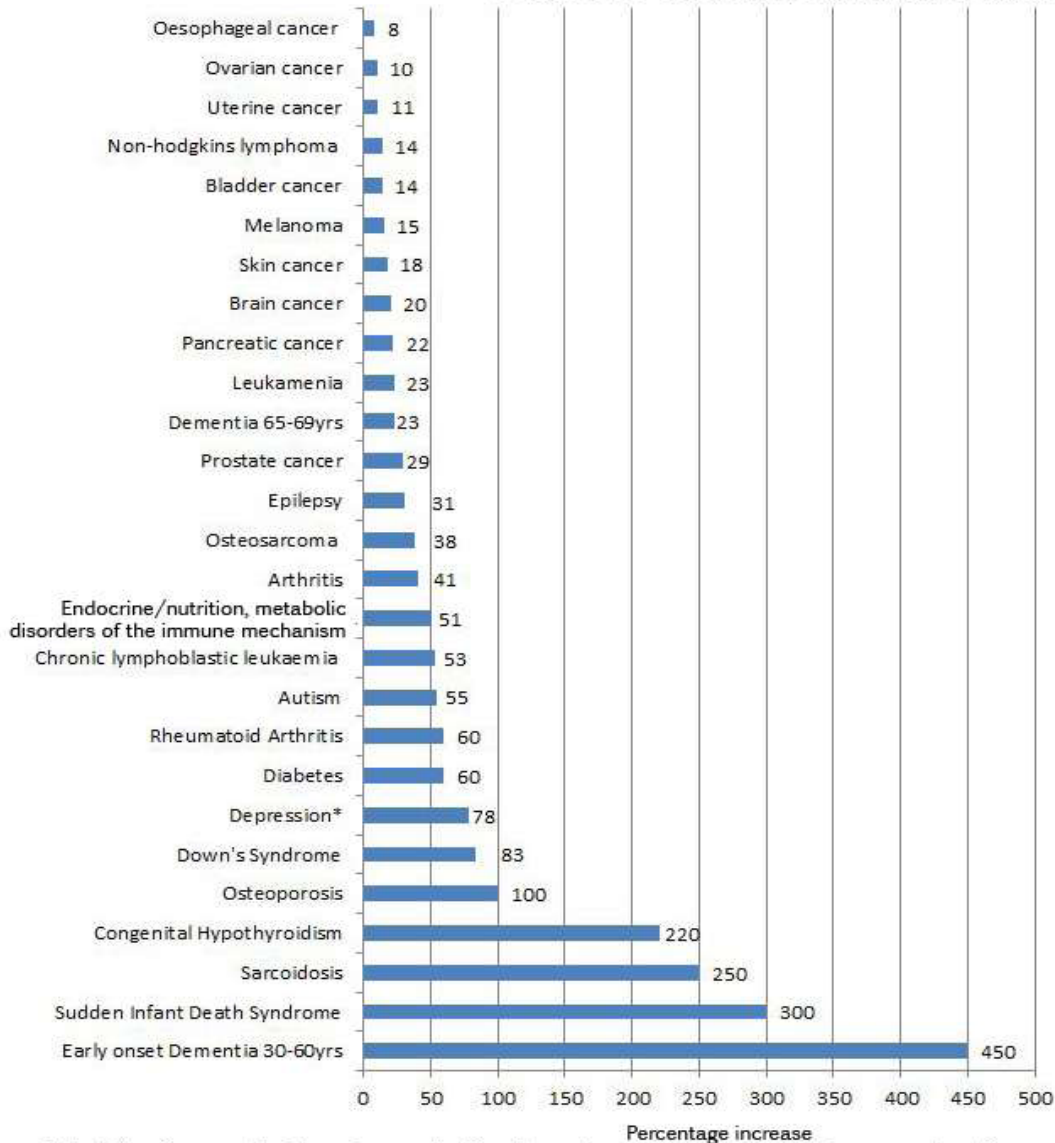
Rheumatoid Arthritis (60%)

Diabetes (60%)

Cancer -significant increased risk

(The % figures are the % increase in fluoridated Republic of Ireland)

Figure 1. Variation in Disease Burden for Population of Republic of Ireland (Fluoridated) compared to Northern Ireland (Non-Fluoridated).



Republic of Ireland also has the highest incidence in the EU of

Prostate Cancer,
Non-Hodgkin's Lymphoma
Ovarian Cancer

Note: Where increased incidence is recorded for either male or females in certain instances, such as for cancers, the highest percentage increase is presented for either sex. Where data is not available for NI, UK data is provided.

* Data from AWARE ROI/NI and Health Promotion Agency UK. Further information included in report. Ireland has highest incidence in EU of Prostate cancer, Non-Hodgkins lymphoma and Ovarian cancer.

** Data from NICR/NCRI Cancer in Ireland 1994-2004

The American Dental Association responded to this report on 22 March 2006 and state on their website;

“This report is limited to a review of the level of naturally occurring fluoride currently recommended in drinking water - a level many (2 to 5) times higher than the level of fluoride used in optimally fluoridated community water systems. Nothing in this report calls into question the optimal levels of **0.7-1.2 parts per million** in fluoridated community water systems.”

http://www.ada.org/sections/advocacy/pdfs/fluoride_report_response.pdf

This is a blatant lie

Dr. Hardy Limeback

Preventive Dentistry at the Faculty of Dentistry, University of Toronto
US National Academy of Sciences Subcommittee on Fluoride in Drinking Water 2006 report.

“... it is illogical to assume that tooth enamel is the only tissue affected by low daily doses of fluoride ingestion.”

"Fluoridation is the greatest case
Of
scientific fraud of this century"

Robert Carlton, Ph.D., former U.S. EPA scientist
Canadian Broadcast Company Nov 24, 1992

Fluoride is Disastrous in the Environment

Only 5% of Fluoridated water is consumed for Drinking.

The rest goes into the environment

An excellent paper is at [IAOMT-Fact-Sheet-on-Fluoride-and-the-Environment.pdf](#)

Also a vast collection of information at <https://fluoridealert.org/issues/pollution/>



never forget
that everything
Hitler did in Germany
was legal

Martin Luther King

Fluoride Damages Genetics of ALL Life Forms

Animals Insects Plants Humans

& does NOT stop Tooth Decay



Opposing Views

Australian Dental Association forced to admit

**Sugar is the cause of decay
and
Not a Lack of Fluoride**

“Fluoride ... does not eliminate tooth decay
and it does not get rid of the cause
– dietary sugars.”

Effect on Caries of Restricting Sugars Intake:
Systematic Review to Inform WHO Guidelines
J DENT RES December 9, 2013 . Study funded by WHO

from the ADA website

http://www.ada.org.au/App_CmsLib/Media/Lib/1312/M717902_v1_635223518532062748.pdf

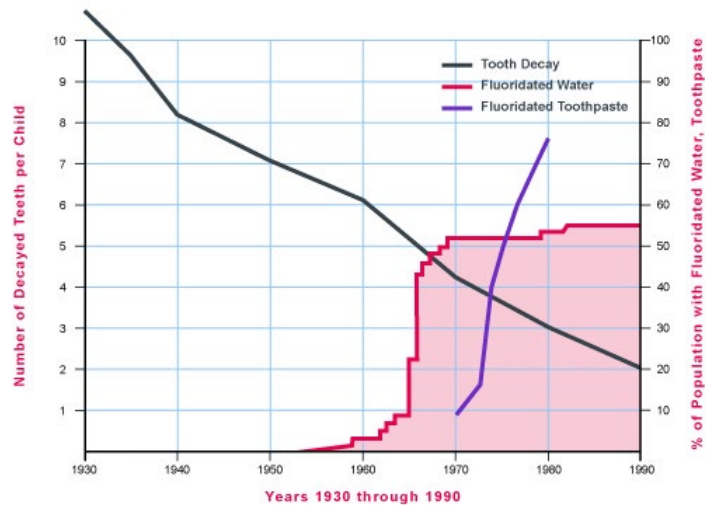
Dr Arvid Carlsson – 2000 Nobel Laureate in Medicine



Interview Oct 4 – 2005 “ *this is against all principles of modern pharmacology. It’s really obsolete. No doubt about that. I mean, I think those nations that are using it should feel ashamed of themselves. It’s against science*”



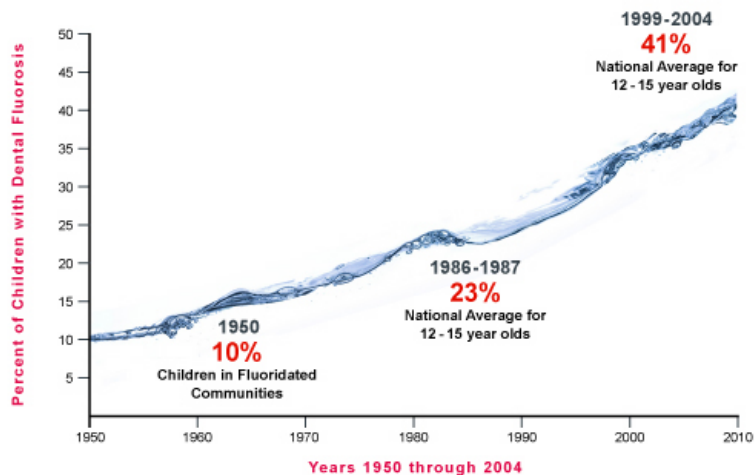
Introduction of Fluoridated Water and Fluoride Toothpaste and Tooth Decay Rate of 5-year-old Children in New Zealand



Colquhoun J. (1997). Why I changed my mind about fluoridation. *Perspectives in Biology and Medicine* 41(1):29-44.



Dental Fluorosis Rates in the United States: 1950 through 2004

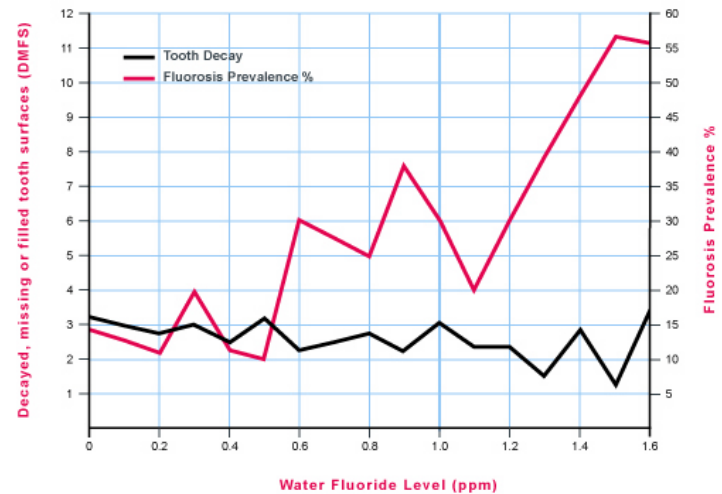


Beltran ED, et al. (2010). Prevalence and Severity of Dental Fluorosis in the United States, 1999-2004. NCHS Data Brief No. 53. Figure 3.

National Research Council. (1993). Health Effects of Ingested Fluoride. National Academy Press, Washington DC. p. 4-5.



Fluoridation, Tooth Decay, and Dental Fluorosis Results from NIDR's 1988-87 National Survey



Heller KE, et al (1997). Dental caries and dental fluorosis at varying water fluoride concentrations. *Journal of Public Health Dentistry* 57:136-143, Figures 1 & 2.

**70% of the Population
Want Fluoridation
=**



Journal of the American Dental Association, Editorial, October 1, 1944.

"Drinking water containing as little as 1.2 ppm fluoride will cause developmental disturbances. We cannot run the risk of producing such serious systemic disturbances.

The potentialities for harm outweigh those for good."

**Letter from Dr. Flanagan, Assistant Director of the
American Medical Association May 13 1965**

"The American Medical Association is NOT prepared to state that no harm will be done to any person by water fluoridation.

The AMA has not carried out any research work, either long-term or short-term, regarding the possibility of any side effects."

Dr. Robert Carlton, former *EPA Scientist*.

"Based on data from the National Academy of Sciences current levels of fluoride exposure in drinking water may cause arthritis in a substantial portion of the population long before they reach old age"

United States Public Health Service Report (ATSDR TP-91/17, pg. 112, Sec.2.7, April 1993) (ATSDR = Agency for Toxic Substances and Disease Registry in the USA)

Segments of the population are unusually susceptible to the toxic effects of fluoride. They include "postmenopausal women and elderly men, pregnant woman and their fetuses, people with deficiencies of calcium, magnesium and/or vitamin C, and people with cardiovascular and kidney problems."

Dr. Charles Gordon Heyd, Past President of the American Medical Association.

"I am appalled at the prospect of using water as a vehicle for drugs. Fluoride is a corrosive poison that will produce serious effects on a long range basis. Any attempt to use water this way is deplorable."

Australian & New Zealand Journal of Public Health, 1997 vol. 21 no. 24

"Since 1990, five major epidemiological studies from three countries
- the United States, United Kingdom and France - showing a higher
- rate of hip fractures in fluoridated regions."

Judge Farris, presiding judge in a case involving the fluoridation of Houston's water.

"That the artificial fluoridation of public water supplies, such as is contemplated by [Houston] City Ordinance No. 80-2530, *may cause or may contribute to the cause of cancer, genetic damage, intolerant reactions, and chronic toxicity, including dental mottling, in man;* That the said artificial fluoridation may aggravate malnutrition and existing illnesses in man; and that the value of said artificial fluoridation is in doubt as to the reduction of tooth decay in man."

Journal of the American Medical Association, August 1992

"..significant increase in the risk of hip fracture in both men and women exposed to artificial fluoridation at 1 ppm."

(Note that Australia has fluoride levels of 1 – 1.5 ppm Australian Drinking Water Guidelines

for fluoride is 0.9 – 1.5 mg/l About 1ppm

Dr. Simon Beisler, Chief of Urology, Roosevelt Hospital and Past President of the American Urological Association.

"It is now clear that fluoride is a potentially harmful substance when present in the drinking water **in any amount.**"

William Marcus, Ph.D., senior EPA toxicologist, Covert Action, Fall 1992, p.66

"Regarding fluoridation, the EPA should act immediately to protect the public, not just on the cancer data, but on the evidence of bone fractures, arthritis, mutagenicity and other effects

Dr. Kennedy, Past President of International Academy of Oral Medicine and Toxicology and a practicing Dentist for 20 years.

"All of the organizations promoting water fluoridation agree that *dental fluorosis, which is the first visible sign of systemic poisoning, increases with water fluoride levels.*"

Greater Boston Physicians for Social Responsibility, May 2000

"fluoride exposure, at levels that are experienced by a significant proportion of the population whose drinking water is fluoridated, may have ***adverse impacts on the developing brain.***"

**Research Microbiologist, U.S. Army, Dr. B. J. Gallo,
Environmental Chemist, J. Kupperschmidt
Apollo Program Project Scientist, Dr. N.R. Mancuso,
U.S. Army Natick Research Labs, A. Murray, Molecular Biologist, Dr. Strauss**
"Fluoride has been shown to **adversely effect the central nervous system,**
causing behavioral changes, increased hip fractures and reproduction problems."

American Dental Association, May 2000

In Harlem, NY, which has been fluoridated for 32 years,
"There's more dental decay among these kids; we see the
beginning of inflamed gingivitis in their mouths."

**Dr. Ludwig Grosse, Chief of Cancer Research,
U.S. Veterans Administration.**

"The plain fact that **fluorine is an insidious poison harmful,
toxic and cumulative in its effects,** even when ingested in
minimal amounts, will remain unchanged no matter how many
times it will be repeated in print that fluoridation of the water supply is 'safe.'"

Dr. Phyllis Mullenix, *Children's Hospital, Boston*

"The evidence against the safety of this public health policy keeps mounting; it is ***too compelling to ignore.***"

Dr. Hardy Limeback, a *leading Canadian fluoride authority, former fluoride advocate* and long-standing consultant to Canadian Dental Association.

Fluoride may be destroying our bones, our teeth and overall health.. it doesn't need to be added to our water and we may be taking unnecessary risks by doing so.

Dr. Professor Albert Schatz, (Microbiology), co-discoverer of Streptomycin, the cure for tuberculosis and numerous other bacterial infections.

"fluoridation ... it is ***the greatest fraud that has ever been perpetrated*** and it has been perpetrated on more people than any other fraud has."

Illinois Judge Ronald Niemann

"This ***record is barren of any credible and reputable scientific epidemiological studies*** and/or analysis of statistical data which would support the Illinois Legislatures determination that fluoridation of the water supplies is both a safe and effective means of promoting public health." -

Chief Justice John Flaherty, of the Supreme Court of Pennsylvania

".. the evidence is quite convincing that the addition of sodium fluoride to the public water supply at one part per million is ***extremely deleterious to the human body***". -

Dr. Colquhoun, former *Principal Dental Officer* for Auckland New Zealand.

"By 1983 I was thoroughly convinced that ***fluoridation caused more harm than good***. I expressed the opinion that some of these children with dental fluorosis could, just possibly, have also suffered harm to their bones"

American Journal of Epidemiology, October 1999

"...fluoride damages bone even at levels added to public drinking water"

Dr. William Marcus, *Senior Toxicologist* at E.P.A.

"E.P.A. should act immediately to protect the public, not just on the cancer data, but on the ***evidence of bone fractures, arthritis,*** mutagenicity and other effects." -

Texas Judge Anthony Farris (litigation involving fluoridation)

"the artificial fluoridation of public water supplies, such as contemplated by (Houston) City ordinance No. 80-2530 ***may cause or may contribute to the cause of cancer, genetic damage, intolerant reactions, and chronic toxicity,*** including dental mottling, in man; that the said artificial fluoridation may aggravate tooth decay in man." -

Journal of Public Health Dentistry

Hundreds of millions of dollars may be ***wasted annually on children's fluoride treatments*** by dentists.

Typically given once or twice a year at routine checkups, the treatments do ***nothing to reduce cavities*** in kids, says a study of insurance records.

OFFICIAL STATEMENTS FROM EUROPE



Finland:

“We do not favor or recommend fluoridation of drinking water. There are better ways of providing the fluoride our teeth need.”

SOURCE: Paavo Poteri, Acting Managing Director, Helsinki Water, Finland, February 7, 2000.

“Artificial fluoridation of drinking water supplies has been practiced in Finland only in one town, Kuopio, situated in eastern Finland and with a population of about 80,000 people (1.6% of the Finnish population). Fluoridation started in 1959 and finished in 1992 as a result of the resistance of local population. The most usual grounds for the resistance presented in this context were an individual’s right to drinking water without additional chemicals used for the medication of limited population groups. A concept of “force-feeding” was also mentioned. Drinking water fluoridation is not prohibited in Finland but no municipalities have turned out to be willing to practice it. Water suppliers, naturally, have always been against dosing of fluoride chemicals into water.”

SOURCE: Leena Hiisvirta, M.Sc., Chief Engineer, Ministry of Social Affairs and Health, Finland, January 12, 1996.

Netherlands:

“From the end of the 1960s until the beginning of the 1970s drinking water in various places in the Netherlands was fluoridated to prevent caries. However, in its judgement of 22 June 1973 in case No. 10683 (Budding and co. versus the City of Amsterdam) the Supreme Court (Hoge Raad) ruled there was no legal basis for fluoridation. After that judgement, amendment to the Water Supply Act was prepared to provide a legal basis for fluoridation. During the process it became clear that there was not enough support from Parliament for this amendment and the proposal was withdrawn.”

SOURCE: Wilfred Reinhold, Legal Advisor, Directorate Drinking Water, Netherlands, January 15, 2000.

Germany:

“Generally, in Germany fluoridation of drinking water is forbidden. The relevant German law allows exceptions to the fluoridation ban on application. The argumentation of the Federal Ministry of Health against a general permission of fluoridation of drinking water is the problematic nature of compulsory medication.”

SOURCE: Gerda Hankel-Khan, Embassy of Federal Republic of Germany, September 16, 1999.

Belgium:

“This water treatment has never been of use in Belgium and will never be (we hope so) into the future. The main reason for that is the fundamental position of the drinking water sector that it is not its task to deliver medicinal treatment to people. This is the sole responsibility of health services.”

SOURCE: Chr. Legros, Directeur, Belgaqua, Brussels, Belgium, February 28, 2000.

Denmark:

“We are pleased to inform you that according to the Danish Ministry of Environment and Energy, toxic fluorides have never been added to the public water supplies. Consequently, no Danish city has ever been fluoridated.”

SOURCE: Klaus Werner, Royal Danish Embassy, Washington DC, December 22, 1999.

Austria:

“Toxic fluorides have never been added to the public water supplies in Austria.”

SOURCE: M. Eisenhut, Head of Water Department, Osterreichische Yereinigung fur das Gas-und Wasserfach Schuberting 14, A-1015 Wien, Austria, February 17, 2000.

Northern Ireland:

“The water supply in Northern Ireland has never been artificially fluoridated except in 2 small localities where fluoride was added to the water for about 30 years up to last year. Fluoridation ceased at these locations for operational reasons. At this time, there are no plans to commence fluoridation of water supplies in Northern Ireland.”

SOURCE: C.J. Grimes, Department for Regional Development, Belfast, November 6, 2000.

France:

“Fluoride chemicals are not included in the list of 'chemicals for drinking water treatment'. This is due to ethical as well as medical considerations.”

SOURCE: Louis Sanchez, Directeur de la Protection de l'Environnement, August 25, 2000.

Luxembourg:

“Fluoride has never been added to the public water supplies in Luxembourg. In our views, the drinking water isn't the suitable way for medicinal treatment and that people needing an addition of fluoride can decide by their own to use the most appropriate way, like the intake of fluoride tablets, to cover their daily needs.”

SOURCE: Jean-Marie RIES, Head, Water Department, Administration De L'Environnement, May 3, 2000.

Norway:

“In Norway we had a rather intense discussion on this subject some 20 years ago, and the conclusion was that drinking water should not be fluoridated.”

SOURCE: Truls Krogh & Toril Hofshagen, Folkehelse Statens institutt for folkehelse (National Institute of Public Health) Oslo, Norway, March 1, 2000.

Sweden:

“Drinking water fluoridation is not allowed in Sweden...New scientific documentation or changes in dental health situation that could alter the conclusions of the Commission have not been shown.”

SOURCE: Gunnar Guzikowski, Chief Government Inspector, Livsmedels Verket — National Food Administration Drinking Water Division, Sweden, February 28, 2000.

Czech Republic:

“Since 1993, drinking water has not been treated with fluoride in public water supplies throughout the Czech Republic. Although fluoridation of drinking water has not actually been proscribed it is not under consideration because this form of supplementation is considered:

uneconomical (only 0.54% of water suitable for drinking is used as such; the remainder is employed for hygiene etc. Furthermore, an increasing amount of consumers (particularly children) are using bottled water for drinking (underground water usually with fluor)

unecological (environmental load by a foreign substance) unethical (“forced medication”)

toxicologically and physiologically debateable (fluoridation represents an untargeted form of supplementation which disregards actual individual intake and requirements and may lead to excessive health-threatening intake in certain population groups; [and] complexation of fluor in water into non biological active forms of fluor.”

SOURCE: Dr. B. Havlik, Ministerstvo Zdravotnictvi Ceske Republiky, October 14, 1999.



**If it Doesn't Stop Decay,
& Causes massive Health Damage
& Poisons the Environment
& Most Countries Don't Fluoridate**

Then What's the Agenda?