# TRUTH DECAY

# Challenging New Labour's propaganda on water fluoridation

Or

# A few things you might want to know about FLUORIDE before Tony Blair adds it to your drinking water

Spencer Fitz-Gibbon for the Green Party of England & Wales

Second edition, revised August 2003

Published by Spencer Fitz-Gibbon for the Green Party of England & Wales
1a Waterlow Road, London N19 5NJ.
Tel 020 7561 0282. Fax 020 7272 6653.

media@greenparty.org.uk
www.greenparty.org.uk

# "Water fluoridation is the greatest case of scientific fraud of this century, if not of all time."

Dr Robert Carton, former President of the Union of Government Scientists at the US Environmental Protection Agency

"No physician in his right senses would prescribe for someone 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 people say that it can reduce tooth decay in children'."

Dr Peter Mansfield, Director, Templegarth Trust

"The imposition of fluoridation on the UK public presents a significant public health hazard. Over 100 leading national and international cancer prevention scientists endorse the Cancer Prevention Coalition's opposition to fluoride."

Dr Sam Epstein, Professor Environmental and Occupational Medicine, University of Illinois

"Children under three should never use fluoridated toothpaste. Or drink fluoridated water. And baby formula should never be made up using fluoridated water."

Professor Hardy Limeback, Professor of Dentistry at the University of Toronto

# "In point of fact, fluoride causes more human cancer death, and causes it faster, than any other chemical."

Dean Burk, Chief Chemist Emeritus, US National Cancer Institute

"I think a lot of people with arthritis may actually be suffering from early symptoms of skeletal sclerosis as a result of drinking fluoridated water."

Tony Lees, dentist

"It has long been known that excessive fluoride intake carries serious toxic effects. But scientists are now debating whether fluoride confers any benefit at all."

UNICEF

#### **Acknowledgements**

Sincere thanks to Cllr Craig Simmons (Green Party, Oxfordshire County Council),
Felicity Mawson (Green Party Anti-Fluoridation Co-ordinator),
George Glasser and Jane Jones (National Pure Water Association),
Mark Westcott, Sorania Kochat and Trish Schofield for additional research.
Thanks also to Barry Groves, Grace Gedge, Lucy Williams, Peter Saunders and Shamini Sriskandarajah.

### **Contents**

Introduction p 5
1. Fluoride is harmful to health p8
2. Fluoride doesn't necessarily prevent tooth decay p 12
3. Scientific advisors who aren't being scientific p 14
4. Environmental risks of fluoridation p 16
5. Widespread opposition to fluoridation p 16
6. Fluoridation violates human rights p 20
7. Don't fluoridate – educate p 22
8. What can you do? Useful contacts; Web resources; Books p 22
Appendix: The case against fluoride: scientific references p 25
Tables
1. Comparison of toxicity levels of two cumulative poisons, fluoride and lead, with their maximum allowable level in drinking water p 9
2. Comparison of decayed missing and filled teeth (DMFT) in 12-year olds in European countries compared with the Republic of Ireland p 13
3. European countries which have tried and abandoned fluoridation p 17

#### Introduction

- 1. In 1931 a chemist identified fluoride as a harmful pollutant and toxic to children's teeth. But Tony Blair's government has decided that putting fluoride in your drinking water is a "good thing", claiming that this will reduce tooth decay in under-fives.
- 2. Fluoridation chemicals are scheduled Part II poisons under the UK Poisons Act 1972. They are untested, unlicensed and therefore prohibited from prescription.
- 3. In addition to the 10% of British people who are already compelled to drink water dosed with fluoride, mainly in the West Midlands and the North East, people in four new areas are on Mr Blair's fluoride hit list in this new drive for fluoridation: Inner London, North West England, Northern Ireland and the West of Scotland.
- 4. But ultimately the government wants this mass medication for the whole country to be administered with the full knowledge and co-operation of the medical profession.
- 5. The Green Party wants to prevent this:
  - a. Because it's scientifically, medically and ethically unsound and an infringement of human rights to force medication on people without their consent. And
  - b. Because it is harmful to humans, animals, and plant and aquatic life.
- 6. The British Dental Association has criticised the Green Party for being "alarmist" on the issue of Fluoridation. It says that "there is no scientific basis *whatsoever* to claims that fluoride in water is unsafe". This report sets out the case against fluoridation with reference to concern in the scientific community and evidence that contradicts the BDA's statement. You can decide for yourself.
- 7. The government claims that fluoridation is a "safe and effective" way of reducing inequality in dental health. But this is highly questionable. For example, prominent North American dental researchers have found that many American children ingest too much fluoride that can decay teeth and damage bones. "Current evidence strongly suggests that fluorides work primarily by topical means through direct action on the teeth and dental plaque. Thus ingestion of fluoride is not essential for caries prevention." (Report, Warren and Levy in Dental Clinics of North America, April 2003.) And in England, fluoridated Gateshead suffers the same level of DMFT as non-fluoridated Liverpool. Less than 2% of continental European countries fluoridate so where are all the toothless Europeans?

- 8. In October 2000, the NHS Centre for Reviews and Dissemination at York University published a report on fluoridation, commissioned by the Department of Health in 1999. The York Review was called an "independent review", although it was paid for by the government and carried out by the NHS, a government body that was already committed to fluoridation which is hardly independent. It was called a "scientific" review, although the health secretary who launched it said he wanted a review which would "prove once and for all that fluoridation is safe and effective". In other words, the review's intended conclusion was decided in advance by a politician, which is hardly scientific.
- 9. The York Review's terms of reference were widely criticised for being too narrow and thus excluding much important evidence against fluoridation. For example, exposure to fluoride through the skin (dermal exposure) was ignored, as were all biochemical studies. So was the intake of fluoride through food and beverages, although seafood and tea, for instance, contain very high fluoride concentrations. The review even ignored all results of animal experimentation; which, while pleasing the Green Party (which believes animal experimentation is unethical and often produces inaccurate results), nonetheless prompts the question: why did a government committed to animal experimentation decide, on this occasion, to exclude it? other than the fact that animal experiments with fluoride have shown disastrous effects on the animals concerned, which would not have helped the government's case.
- 10. Despite this narrow brief and contrary to the impression given by New Labour spin-doctors and the well-financed pro-fluoride lobby the study found "little evidence" to show that fluoridation reduced dental health inequalities. Moreover its chair, Professor Sheldon, stated that "the review did not show water fluoridation to be safe". He also noted that: "It is particularly worrying then that *statements which mislead the public* about the review's findings have been made in press releases and briefings by the British Dental Association, British Medical Association, the National Alliance for Equity in Dental Health and the British Fluoridation Society". (Our emphasis. Source: <a href="http://www.npwa.freeserve.co.uk">http://www.npwa.freeserve.co.uk</a>.)
- 11. Professor Sam Epstein, an internationally recognised authority on the the causes and prevention of cancer and toxic effects of pollutants wrote in May 2003 that "Fluoridation of water reflects high receptivity to the fluoride industry, and indifference with significant public health penalties to the UK population."
- 12. We all know that tooth decay is caused by poor dental hygiene and high consumption of refined sugar products. Enforced fluoridation does nothing whatsoever to address either of these problems. If anything, it could even be counter-productive, by diverting people's attention away from the real issues. Indeed, this is something that the UK sugar industry appears to have recognised. Both Tate and Lyle and the Sugar Bureau support fluoridation, with the former claiming that: "The use of fluoride in either toothpaste or drinking water is the single most effective method of reducing tooth decay" (http://www.tate-lyle.co.uk "Sugar and you").
- 13. In any case, medicating everyone on the grounds that this will debatably help a small percentage of the population is simply not logical. It's even worse when we consider the wealth of scientific evidence that fluoride

may have adverse side effects ranging from cancer to cavities in tooth enamel. Fluoride is, in fact, highly toxic, and this report outlines the long list of health problems associated with it. It is a cumulative poison - we only excrete about 50% of what we ingest, and the rest stays in our bodies and accumulates. So the effects of low-dose exposure from this mass medication may not yet be realised. Warnings from the World Health Organisation as early as 1953, and repeated in 1994, that total fluoride levels in people should be determined before any more is added, have been ignored.

- 14. The Green Party is opposed to mass medication. We are opposed to the destruction of consumer choice in a matter so basic as drinking water. We believe the precautionary principle should be applied that if you can't prove conclusively that fluoridation is harmless, then you shouldn't fluoridate. And we believe in strong, sensible measures to improve health.
- 15. The Greens want to improve dental health through education. There is no other viable way that we know of. We will continue to exert ourselves in alerting the public to the full story of fluoridation, and help communities and individuals fight against enforced mass medication.

#### 1. Fluoride is harmful to health

- 1.1 Where does the fluoride, which is added to drinking water, come from? The New Labour government doesn't want you to know the answer. The Green Party does.
- 1.2 "Fluoride" in drinking water is hexafluorosilicic acid a toxic and corrosive industrial waste by-product derived from the scrubbings of the factory chimneys of the super-phosphate fertiliser industry. Fluorides are medically categorised as protoplasmic poisons, which is why they are used in commercial rat poisons.
- 1.3 Fluoridation chemicals are scheduled Part II poisons under the UK Poisons Act 1972. They are untested, unlicensed and therefore prohibited from prescription.
- 1.4 The fluoride added to water is described by its manufacturers' safety data as a "hazardous waste". It is illegal to dump it at sea. One supplier's Safety Data Sheet for hexafluorosilicic acid clearly states: "DO NOT let this chemical enter the environment. Dispose of this product as hazardous waste. Consult the supplier to see if he will take it back. Readily filters into soil. Recover cleaning water and dispose of at a specialist site." (Source: Rhone Poulenc).
- 1.5 Worse still, the hexafluorosilicic acid used is not a pure compound but is itself contaminated with other poisons such as arsenic and cancer-causing heavy metals like cadmium and even mercury. The US Environmental Protection Agency (EPA) has recently admitted that it doesn't fully understand what happens to fluoride when it is added to drinking water.
- 1.6 If fluoride is added to drinking water at 1ppm (part per million), this means that every litre of water you drink will contain 1 milligram (one thousandth of a gram). Fluoride is more toxic than lead and only marginally less poisonous than arsenic. We all know about the efforts to remove lead from drinking water. Table 1 shows that fluoride is more toxic, yet the government forces six million people in fluoridated areas of the UK to drink a cumulative poison more toxic than lead at twenty times the maximum allowable level for lead.
- 1.7 A report in the May 2003 *Journal of the Canadian Dental Association* outlined several negative facts about fluoridation of water. The report conducted by Warren and Levy showed that:
  - a. There has been an increase in the prevalence of fluorosis while cavities in primary teeth are still a problem.
  - With more severe forms of fluorosis caries (cavity) risk increases because of pitting and loss of the outer enamel.
  - c. At low levels of chronic exposure such as with "optimally fluoridated" water, fluoride appears to slightly increase trabecular bone mass.

Table 1. Comparison of toxicity levels of two cumulative poisons, fluoride and lead, with their maximum allowable level in drinking water.

Cumulative poison	Toxicity level	Maximum allowable level (MAL)	
		in drinking water (parts per million)	
Lead	3	0.05	
Fluoride	4	1.00	

(Maximum toxicity on this scale = 6. Source for toxicity data: *Clinical Toxicity of Commercial Products*, Gosselin et al.)

- 1.8 Scientists involved in the government-commissioned York Review have since sent letters to *The Sunday Times* following an announcement that parliament was considering making fluoridation compulsory, if health authorities order it. One of these letters stated that there is no valid reason for the fluoridation of water: "Fluoridation does not reduce inequalities in decay. No drug would be licensed for effectiveness or safety on the present evidence."
- 1.9 Blood fluoride levels rise continuously with prolonged use of fluoridated toothpaste. The amount of fluoride contained in a family-size tube of fluoridated toothpaste is enough to kill a 25-pound child.
- 1.10 A private care home in Workington is distilling drinking water rather than allowing residents to drink fluoridated water as the owner regards it as a slow poison.
- 1.11 Scientific papers have argued that:
  - a. Fluoride exposure disrupts the synthesis of collagen and leads to the breakdown of collagen in bone, tendon, muscle, skin, cartilage, lungs, kidney and trachea.
  - b. Fluoride inhibits antibody formation in the blood.
  - c. Fluorides have a disruptive effect on various tissues in the body.

- d. Fluoride confuses the immune system and causes it to attack the body's own tissues, and increases the tumour growth rate in cancer-prone individuals. A recent study found that in the fluoridated Republic of Ireland, 40% more people contracted bone cancer than in non-fluoridated Northern Ireland.
- e. Fluoride kills red blood cells and damages gastric mucosa, resulting in the symptoms of irritable bowel syndrome (IBS). Even fluoridated toothpaste can cause IBS.
- f. Fluoride is implicated in genetic disorders.
- g. Fluoride is implicated in low IQ levels in children.
- h. Fluoride is implicated in premature ageing.
- Fluorides have been used to modify behaviour and moods of human beings.
- j. Fluoride is implicated in thyroid disorders by displacing iodine in the body.
- k. People who ingest fluoride risk problems as the muscles, connective tissues and bone tissue undergo degenerative changes.
- In conjunction with the alum (aluminium sulphate) used to clarify tap water, fluoride causes serious damage to brain and kidney cells. Fluoride is implicated in pre-senile dementia and Alzheimer's disease.
- m. Fluoride causes fluorosis. A study has found that there is more than double the rate of fluorosis is fluoridated communities than in those that are not fluoridated. 48% of people living in fluoridated areas suffer from dental fluorosis. 12.5% require cosmetic dentistry which they have to pay for as it is not covered by the NHS, the teeth have to be veneered at a cost of around £200 per tooth renewable every six years.
- n. As fluoride consumption by human beings increases, so does the general cancer death rate.
- Calcium levels in the body decrease as fluoride levels rise. Fluoride increases the density of bones but changes their internal architecture. This makes bones more brittle and prone to fracture. (Eight papers published in reputable medical journals have described the increased risk of hip fracture in elderly people living in fluoridated areas.)
- p. Chemicals added to drinking water, including fluoride, promote Irritable Bowel Syndrome.

(For sources see Appendix: The case against fluoride: scientific references).

- 1.12 Artificial fluoridation is not the same as natural fluoride, nor is it just "topping up" "natural levels" of fluoride. Fluoride does occur naturally in some UK water supplies, but in the form of calcium fluoride, and then generally at extremely low levels of around 0.01 to 0.03 ppm. What's more, this is relatively insoluble and passes relatively harmlessly through the gut. Even then, at slightly higher levels it is toxic. In India, where the level of naturally occurring calcium fluoride is from 0.7 to 13.0 ppm, millions of people are disabled by skeletal fluorosis by the time they are 40 years of age. The hexafluorosilicic acid added to drinking water is a considerably more toxic compound which is also more readily absorbed by the body's tissues.
- 1.13 The UK Department of Health tells us that calcium is good for teeth and bones. However the 2000 report *Systematic Review of Public Fluoridation* conducted by York University omitted the word "calcium" from Chapter 4 on Tooth Decay!
- 1.14 Bottle-fed children in fluoridated areas are, of course, taking fluoride from their first day of life onwards. In Ireland, Europe's most heavily fluoridated country, this is now being recognised as a problem: "The Food Safety Authority of Ireland (FSAI) Scientific Committee has confirmed that bottle-fed infants are receiving unsafe fluoride levels. They reported, as long ago as 3rd October 2001, that, 'the assessment indicates that infants below the age of four months are exposed to doses of fluoride that exceed the recognised "no observable effect" level'." The US Academy of General Dentistry has also warned about feeding fluoride to babies. In fluoridated areas, they advise, "it is recommended that parents use low fluoride bottled distilled water (labelled as 'purified' or 'distilled baby water') or tap water with a reverse osmosis home water filtration system attached that removes most of the fluoride." (Source: John Gormley TD, press release 25.2.02, "Gormley accuses government of misleading information in fluoridation debate", srawson@oireachtas.irlgov.ie).
- 1.15 Dr Jennifer Luke studied the effects of fluoride accumulated to high levels in animals. She concluded that this resulted in the reduced production of melatonin (which is produced from the pineal gland in the brain). This spurred an earlier onset of puberty. The results are worrying as they coincide with other studies that show that girls in the USA the world's most heavily fluoridated country are reaching puberty increasingly early.

#### 2. Fluoride doesn't necessarily stop tooth decay

- 2.1 It is now widely thought that the main action of fluoride on teeth is a topical one, ie at the surface of the teeth, and not a systemic one as previously thought. Fluoride is not about children's teeth it's about industry ridding itself of crude hazardous waste products for a profit.
- 2.2 Large-scale studies of the official school dental data of tens of thousands of children in the USA, New Zealand and Canada show that there is no difference in the incidence of decayed, missing and filled teeth (DMFT) between fluoridated and non-fluoridated areas.
- 2.3 The incidence of DMFT is as high in fluoridated Gateshead as in directly comparable, but non-fluoridated, Liverpool. European children don't generally have worse teeth than those in fluoridated parts of Britain.
- 2.4 A recent UNICEF report said: "Fluoride inhibits enzymes that breed acid-producing oral bacteria whose acid eats away tooth enamel. This observation is valid, but some scientists now believe that the harmful impact of fluoride on other useful enzymes far outweighs the beneficial effect on caries prevention".
- 2.5 Table 2, covering 16 European states, illustrates what proportion of their population was fluoridated at given times, compared to their level of DMFT. (Source: NPWA, table compiled by TJ Moore BSc, 1996 using data from World Health Organisation, Non-communicable Disease Division.) Note the following:
  - a. The Republic of Ireland had been fluoridated for 37 years.
  - b. Its DMFT level was worse than four countries which had no fluoridation and one which had only 10% fluoridation.
  - c. Its DMFT level was only very marginally better than non-fluoridated France and Switzerland, where only one city was fluoridated (which incidentally stopped fluoridating in 2003).
  - d. Most countries have experienced major declines in DMFT without fluoridation.
  - e. Several countries have achieved sharper reductions in tooth decay without fluoridation than Ireland has achieved with fluoridation.

Table 2. Comparison of decayed missing and filled teeth (DMFT) in 12-year olds in European countries compared with the Republic of Ireland.

Country	year	DMFT	year	DMFT	fluoridation status (%)
Ireland	1972	5.4	1992	1.9	66
Finland	1975	7.5	1991	1.2	not fluoridated
Denmark	1975	6.4	1992	1.3	not fluoridated
UK (GB&NI)	1973	4.7	1993	1.4	10
Sweden	1977	6.3	1994	1.5	not fluoridated
Holland	1974	6.5-8.2	1991	1.7	not fluoridated
France	1975	3.5	1993	2.1	not fluoridated
Norway	1973	8.4	1991	2.3	not fluoridated
Spain	1968-1969	1.9	1993	2.3	one fluoridation plant
Switzerland	1963-1975	2.3-2.9	1987-1989	2.0	not fluoridated
Germany (E	1973	6.0	1994	2.5	not fluoridated
Germany (W)				2.6	not fluoridated
Belgium	1972	3.1	1991	2.7	not fluoridated
Austria	1973	1.0-3.5	1993	3.0	not fluoridated
Italy	1978-1979	4.0-6.9	1985	3.0	not fluoridated
Portugal	1979	4.6	1989	0.2	not fluoridated

- 2.6 Over a 30-year period Professor Teotia and his team in India have examined the teeth of over 400,000 children. They have found that tooth decay increases as fluoride intake increases and concluded that tooth decay results from a deficiency of calcium and excess of fluoride.
- 2.7 The National Pure Water Association (NPWA) has repeatedly asked the UK Department of Health to cite one scientific or laboratories study from anywhere in the world which proves that fluoridation reduces tooth decay in humans. They have failed to do so. The NPWA comments: "There is not a single scientific or laboratory study from anywhere in the world which proves that fluoridation reduces tooth decay in humans. There are, however, hundreds of published scientific papers which show that water fluoridation is dangerous to human, animal, plant and aquatic life, which is no surprise, since fluoride is more toxic than lead and only marginally less so than arsenic."
- 2.8 "There has been an increase in the prevalence of fluorosis while cavities in primary teeth are still a problem", reports Steven Levy, DDs, Professor, University of Iowa, in the May 2003 Journal of the Canadian Dental Association. "With more severe forms of fluorosis, caries (cavity) risk increases because of pitting and loss of the outer enamel", he writes.

#### 3. Scientific advisors who aren't being scientific

- 3.1 The UK Department of Health insists that "Water fluoridation is safe and effective and no adverse effects have ever been found." In view of the wealth of evidence available from around the world, this is astonishing.
- 3.2 Frank Dobson, the Labour Health Secretary who commissioned the York Review, said he wanted a review that would prove once and for all that fluoride was safe and effective. This was nothing more than concluding in advance what the scientists were intended to find hardly good scientific practice.
- 3.3 However In September 2002 the Medical Research Council, concerned about fluoridation, reported that further studies should be undertaken to determine the prevalence of dental fluorosis and the public's perception of dental fluorosis with particular attention to acceptable and ascetically unacceptable fluorosis.
- 3.4 In fluoridated Birmingham, a recent study found 34% of primary school children showed symptoms of dental fluorosis in other words, damage to their teeth caused by fluoride (Professor Rock, 1997 cited by the NPWA). The Department of Health prefers to dismiss this as merely cosmetic; but in fact it's the first sign of fluoride

poisoning and causes psychological distress. Even the York review found that 48% of people living in fluoridated areas have dental fluorosis, and 12.5% of them have fluorosis, which is sufficiently serious to be a cause for concern. And nearly 50% of all children in the Republic of Ireland now suffer.

- 3.5 Naturally fluoridated water is always hard water, rich in calcium ions and often containing a trace of calcium fluoride. Therefore we would expect a thorough scientific investigation to record the calcium ions and fluoride ions to establish the influence of the two ions upon tooth decay. UK dental health policy has failed to establish the most elementary rules of science, that almost all problems have multiple solutions.
- 3.6 In the United States where 60% of the water is artificially fluoridated the cosmetic dentist industry is booming. The American Dental Association has stated that aesthetic dentistry has evolved into a \$15 \$20 BILLION-dollar market.
- 3.7 Surprising as it may seem, the NHS even lacks a facility for testing fluoride levels in blood and urine. No wonder it doesn't spot the adverse effects of fluoride when it isn't looking for them or perhaps more accurately, is looking the other way.
- 3.8 In 1998 Dr Peter Mansfield, Director of the Templegarth Trust, tested over 200 volunteers from the fluoridated West Midlands. He found that 60% of them were ingesting up to four times the amount of fluoride considered by the government to be safe. He sent the results to the very highest levels at the Department of Health and was ignored. But leading fluoride promoters have attacked him. He commented: "They have no results of their own and are not willing to replicate my tests. It is obvious that the symptoms of joint pain and stiffness suffered by many of these volunteers are mis-diagnosed. This is most serious negligence."
- 3.9 Artificial fluoridation chemicals and fluoridated toothpaste have never been scrutinised by the Medicines Control Agency, and attempts to get them to do so have been rebuffed. Fluoridated toothpastes and mouthwashes come under the auspices of The Cosmetics and Toiletries Association! (For more on official efforts to prevent fluoride being considered as a medicine see: http://www.npwa.freeserve.co.uk/precaution.htm).
- 3.10 The New Labour government has rejected the call for a full public inquiry into the effects of fluoridation, preferring to close its eyes to the evidence.
- 3.12 Meanwhile the government uses taxpayers' money to fund the British Fluoridation Society Ltd, the main mouthpiece of the fluoride lobby. For many years this funding has been in excess of £100,000 a year at a time when the NHS is crumbling for lack of funds.

#### 4. Environmental risks of fluoridation

- 4.1 Artificial water fluoridation is pollution. More than 99.5% of fluoride added to drinking water ends up going down the drain. Even in the case of a small country like Ireland, this amounts to 2000 gallons of hexafluorosilicic acid being released into the environment every day. And this is a chemical which one manufacturer warns us must not be allowed to enter the environment. Sweden rejected water fluoridation on the recommendation of a special Fluoride Commission. Reasons included: "the combined and long-term environmental effects of fluoride are insufficiently known."
- 4.2 To date no environmental impact study of the effects of fluoride in the environment has been done. (In the USA, the Tacoma/Pierce County Health Authority Department in Washington State has recently commissioned a study of the environmental impacts of fluoride before continuing with plans to fluoridate.)
- 4.3 The National Pure Water Association in Britain estimates that if Tony Blair were allowed to fluoridate 85% of UK water supplies, this would lead to an astonishing 45-50,000 tonnes of hexafluorosilicic acid being poured into our environment every year. The dumping of such a large amount of toxic waste would be a serious threat to plant and aquatic life.
- 4.4 Water fluoridation also threatens the organic food industry. Any crops irrigated with fluoridated water would be likely to fail the Soil Association's tests.

#### 5. Widespread opposition to fluoridation

5.1 Only five countries in the world now fluoridate water to any extent. Most European governments oppose fluoridation. Some, like France, which rejected it on the advice of the Pasteur Institute, have never practised it. Many others (see Table 3) have abandoned it after increasing health concerns. Japan too, which began fluoridation in 1952, ceased it in 1972. And in China, fluoridation is banned. In May 2003 Switzerland became the latest European country to totally stop fluoridating when Basel-Stadt ended fluoridation after three decades.

Table 3. European countries which have tried and abandoned fluoridation.

Country	date started	date abandoned
West Germany	1952	1971
Sweden	1952	1971
Holland	1953	1976
Czechoslovakia	1958	1988-1990
Fact Cormany	1050	1000
East Germany	1959	1990
USSR	1960	1990
Finland	1959	1993

(Source: Rudolf Ziegelbecker, Fluoride 31(3), 1998, pp 171-174.)

5.2 In Holland, fluoride was not only abandoned but prohibited by law after doctors discovered the health risks it carried.

5.3 Even in North America, the home of fluoridation, there is a growing revolt against it, with a large number of local authorities turning against it. Between July 1990 and March 2000, no less than 77 American and Canadian cities either rejected fluoridation or abandoned existing schemes, some after several decades. (Source: http://www.nofluoride.com).

5.4 Belgium is going as far as banning the sale of fluoride tablets and chewing gum, which contains fluoride after fears that the chemical may cause brittle bones. The ban is expected to come into force by August 2002. The move comes after a study commissioned by an advisory board revealed that excessive use of fluoride products could cause fluoride poisoning, damage the nervous system and foster osteoporosis. (Source: http://alertwizard.hoovers.com/display.php?repo=newsedge&ipage=1777445&exp).

- 5.5 Although, of course, the fact that so many administrations reject fluoridation does not in itself mean it is unsound, it begs a question: if it is as "safe and effective" as Tony Blair claims, why did they decide to forgo its "benefits"?
- 5.6 Even those working for governments whose official policy is to support fluoridation are becoming increasingly concerned. In 1997, more than 1,000 members of the union working at the Environmental Protection Agency HQ in Washington DC who are directly responsible for the implementation of the US Safe Drinking Water Act voted unanimously to ban water fluoridation. The vice-president of the National Federation of Federal Employees said: "Our members' review of the body of evidence over the last eleven years, including animal and human epidemiological studies, indicate a causal link between fluoride/fluoridation and cancer, genetic damage, neurological impairment and bone pathology. Of particular concern are the recent epidemiological studies linking fluoride exposure to lower IQ in children. As professionals charged with assessing the safety of drinking water, we conclude that the health and welfare of the public is not served by the addition of this substance to the public water supply."
- 5.7 Since 1997 fluoridated toothpaste in the USA has carried the following warning: "If you accidentally swallow more than is needed for brushing [sic] seek professional help or contact a Poisons Control Centre."
- 5.8 The American Dental Association opposed this health warning. They make millions of dollars from accreditation of fluoride products and certainly didn't want to see a poisons warning on their source of income. The British Dental Association and the British Dental Health Foundation also make tens of thousands of pounds annually in accreditation of similar products.
- 5.9 Some academics that previously were advocates of fluoridation have revised their views. Dr Hardy Limeback, Associate Professor and Head of Preventive Dentistry at the University of Toronto, Canada, is one of them. He was a consultant to the pro-fluoride Canadian Dental Association and was often cited by health officials in defence of fluoridation. But in April 1999 he shocked the fluoride lobby by stating that he now opposed fluoridation. A resident of Toronto, whose water is fluoridated, he no longer drinks the local tap water. (His reasons are given in an open letter at: http://www.fluoridealert.org/limeback.html ).
- 5.10 Even the Irish Republic is having doubts on fluoridation. Since 1964, Ireland has had the dubious distinction of being the most heavily fluoridated country in Europe. If fluoridation has the benefits claimed by the fluoride lobby, it might be thought that the Irish would be proud of their record and keen to promote their model of dental health. But instead, doubts are growing in Ireland as well as in Britain and North America. Against the background of a spreading grassroots campaign against fluoridation, a report titled "Hard to Swallow" was broadcast on Ireland's national news program 20/20 on Friday 12 January 2001, raising serious questions about the practice. Shortly afterwards, the country's main opposition party, Fine Gael made a pledge to end fluoridation on health grounds. (For excerpts of the programme see: http://www.fluoridealert.org/2020.htm . The *Irish Independent* report on Fine Gael's decision (15 January 2001) is available at: http://www.unison.ie/ .)

5.11 Fluoridation in the UK is based on the 1985 Water Fluoridation Act. Here is how the Act was passed:

For fluoridation 165

Against fluoridation 82

Abstained 399

- 5.12 That is, only a quarter of MPs actually voted in favour of allowing fluoridation. According to the National Pure Water Association, "Even known anti-fluoridation MPs either voted with the Government, or abstained 'against their consciences in order to keep their beloved offices, cars and salaries' (Hansard, 5 March 1985, column 936)".
- 5.13 It is also interesting to remember just why this bill was "needed". A few years earlier a court case had revealed that for over 20 years, water fluoridation had been carried out in the UK unlawfully. The 1985 Act was passed to legalise an unlawful practice.
- 5.14 Now Tony Blair wants to introduce enforced fluoridation by the back door by "encouraging" local health authorities to request it. He wants to compel water companies to fluoridate when local authorities call for it.

  Needless to say, these local authorities will be under heavy government pressure. They will "consult", and then do what the government tells them to do. Health Authorities must hold a 3-month public consultation before requesting water companies to fluoridate. Consultations have been held across the North of England and Northern Ireland. Councils and local people have massively rejected fluoridation. But Health Authorities have always recommended fluoridation. It is widely believed that current reforms of local government reducing the power of councillors in favour of mayors or narrow cabinets are being carried out to make it easier for the government to control or exert additional influence on local authorities.
- 5.15 Labour doubtlessly hopes to target areas piecemeal in order to avoid a general national debate on the issue. It's the Green Party's wish to push fluoridation up the political agenda the breach of human rights and medical ethics, the health risks and fluoridation's inefficacy in stopping tooth decay to challenge the government's stealth tactics.

#### 6. Fluoridation violates human rights

- 6.1 In English Law medication without consent can only be administered to people sectioned under the Mental Health Act.
- 6.2 It is a standard medical ethic that no person should be forced to take medicine without his or her consent. The only exception is where a court gives such an order, for example under mental health legislation. However the Government's Medicines Control Agency considers that fluoridated drinking water is not a medicine.
- 6.3 It's interesting to note that when the former shadow health secretary David Blunkett was asked about fluoridation in a 1992 TV programme, he said: "I don't believe we should put fluoride in the water supply as mass medication because I don't think that gives us any choice and I think it's a dangerous principle" (source: House of Commons Research Paper No 93/121). Is this just another New Labour U-turn?
- 6.4 It's no defence of fluoridation that alternatives exist, in the form of bottled water from the shops. In the 21<sup>st</sup> century, when we and our parents and grandparents have been accustomed to having safe drinking water on tap throughout our whole lives, it's entirely unacceptable to insist that we should only drink tap water on condition we take medicine with it. In effect, fluoridation is medication by thirst.
- 6.5 If you are convinced of the efficacy of fluoride, (which, if of benefit, is only so until the age of twelve in any case) you can of course buy fluoridated toothpaste. It is readily available and costs no more than fluoride-free toothpaste. You have the right to make that choice. But if New Labour gets its way, you will have no choice but to swallow fluoride repeatedly every day. You will always have to imbibe a cumulative poison every time you drink a glass of water or a cup of tea. There is no freedom to choose because you can't opt out.
- 6.6 Mass medication goes against standard medical practice. As Dr Peter Mansfield, Director of the Templegarth Trust, has said: "No physician in his right senses would prescribe for someone 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 people say that it can reduce tooth decay in children'."
- 6.7 It is a matter of human rights that people should have control over their own bodies. If we believe a substance to be harmful not least on the basis of considerable evidence then no government or health authority should have the right to force it upon us. This isn't a matter of democracy or of majority opinion it's a matter of personal choice.

6.8 It's highly significant that the Labour government has refused to sign the European Convention on Human Rights and Biomedicine, signed by 29 other European countries. This states:

#### "Article 5 - General rule

"An intervention in the health field may only be carried out after the person concerned has given free and informed consent to it.

"This person shall beforehand be given appropriate information as to the purpose and nature of the intervention as well as on its consequences and risks.

"The person concerned may freely withdraw consent at any time."

(Convention for the Protection of Human Rights and Dignity of the Human being with regard to the Application of Biology and Medicine, Council of Europe, 1997).

- 6.9 This, of course, is entirely incompatible with water fluoridation. Who in the UK's fluoridated areas have ever given their "free and informed consent" based on the "appropriate information" for this intervention? And even if the residents of those areas had, how are they supposed to be able to "freely withdraw" that consent now?
- 6.10 The Human Rights Act came into force in the UK in 2000. It allows actions to be taken against public authorities, which includes private organisations like water undertakers when they are carrying out public functions, if they infringe a person's human rights. It is possible that water fluoridation could be challenged under Article 8 of the Act, although water companies are protected from challenge if they act in accordance with UK primary legislation and could not have acted differently (s6 (2) HRA).
- 6.11 Environmental scientist Doug Cross has made a study of Human Rights legislation and concluded that fluoridation not only violates medical ethics but is also illegal in UK law fluoridation legislation notwithstanding because it is classed as a poison under the Poisons Act 1972. His study has been examined and agreed by two barristers.
- 6.12 However, whether water companies can refuse to fluoridate if requested to do so by a health authority has already been considered in a High Court judicial review (R v Northumbrian Water Ltd *ex parte* Newcastle and North Tyneside Health Authority, 1998). It was held that a water company could reject such a request.
- 6.13 Water companies fear that they may be exposed to legal and financial risks in the future if they fluoridate. They have demanded an indemnity clause in new legislation requiring them to fluoridate if the health authority so requests. This constitutes an acknowledge by water companies that there is serious cause for concern.

#### 7. Don't fluoridate - educate

7.1 Poor dental hygiene and excessive consumption of refined sugar products cause tooth decay. Fluoridation won't improve dental hygiene or reduce consumption of sugar. But it will destroy consumer choice and add known poisons to the drinking water of millions, against their will.

#### 7.2 The Green Party wants:

- a. A properly researched strategy for reducing tooth decay, including education of children and adults about dental hygiene, the need for a healthy diet, and the effects of excessive consumption of sugar.
- b. A ban on the fluoridation of drinking water.
- c. A health warning on all sources of fluoride intended for human consumption.

#### 8. What can you do?

- 1. Support the Green Party campaign against fluoridation. Encourage others to do so.
- 2. Write to your MP at the House of Commons, London, SW1 0AA demanding the above. Ask your MP to forward your letter to the Secretary of State for Health, making the same demands.
- 3. Vote Green in local elections. The Green councillors you elect will lead the fight against fluoridation in your local authority. They can be relied upon to do so because they need have no conflict with their own party or their conscience unlike the Tories, who legalised fluoridation, and Labour, whose national policy is to spread it, or the Liberal Democrats, who seem not to have a consistent view on this issue. Even where Greens don't get elected, the more votes you give us, the stronger our voice will be in the campaign against fluoridation; and there's nothing quite as convincing to a Labour, Tory or Liberal Democrat politician as feeling they're losing votes over an issue like this.
- 4. Vote Green in regional, national and European elections. Greens already elected to the European and Scottish Parliaments and the London Assembly will fight for anti-fluoridation policies and legislation. In parliamentary elections under first-past-the-post, where Greens aren't currently being elected but are increasing their vote, a Green vote is still a positive statement for what you believe in, helps put pressure on the bigger parties in the short term, and helps build the longer-term alternative.

#### **Useful contacts**

The Green Party 1a Waterlow Road, London N19 5NJ Tel 020 7272 4474 Fax 020 7272 6653

#### www.greenparty.org.uk

Policy enquiries: policy@greenparty.org.uk

Media callers: 020 7561 0282 media@greenparty.org.uk

National Pure Water Association

Rose Court, 180 Milton Road, Hoyland, Near Barnsley, South Yorkshire S74 9BW Tel 01226 360909.

www.npwa.freeserve.co.uk

#### **Web resources**

www.greenparty.org.uk/campaigns

http://npwa.freeserve.co.uk

http://www.bruha.com/fluoride

http://www.fluoridealert.org

http://homepage.eircom.net/~fluoridefree/

http://www.preventcancer.com

http://www.sonic.net/~kryptox/fluoride.htm

http://www.second-opinions.co.uk

http://www.fluoridedebate.com

http://www.fluoridefree.com

http://www.idof.net

http://www.glenwalker.net

http://www.voice.buz.org

#### **Books**

Barry Groves: Drinking Ourselves to Death? 2001 ISBN: 0-7171-3274-9.

Disclaimer: The above resources outside the Green Party are not necessarily endorsed by the Green Party.

#### **Appendix**

#### The case against fluoride: scientific references

A1 Fluoride exposure disrupts the synthesis of collagen and leads to the breakdown of collagen in bone, tendon, muscle, skin, cartilage, lungs, kidney and trachea.

A.K. Susheela and Mohan Jha, "Effects of Fluoride on Cortical and Cancellous Bone Composition", IRCS Medical Sciences: Library Compendium, Vol 9, No.11, pp.1021-1022 (1981); Y.D. Sharma, "Effect of Sodium Fluoride on Collagen Cross-Link Precursors", Toxicological Letters, Vol.10, pp97-100 (1982); A.K. Susheela and D. Mukerjee, "Fluoride poisoning and the Effect of Collagen Biosynthesis of Osseous and Nonosseous Tissue", Toxicological European Research, Vol 3, No.2, pp. 99-104 (1981); Y.D. Sharma, "Variations in the Metabolism and Maturation of Collagen after Fluoride Ingestion", Biochemica et Biophysica Acta, Vol 715, pp.137-141 (1982); Marian Drozdz et al., "Studies on the Influence of Fluoride Compounds upon Connective Tissue Metabolism in Growing Rats" and "Effect of Sodium Fluoride With and Without Simultaneous Exposure to Hydrogen Fluoride on Collagen Metabolism", Journal of Toxicological Medicine, Vol. 4, pp.151-157(1984).

A2 "Fluorides are general protoplasma poisons, with the capacity to modify the metabolism of cells by inhibiting certain enzymes. Sources of fluoride intoxication include drinking water containing 1ppm or more of fluorine."

Journal of the American Medical Association, September 18, 1943.

(Editorial. Chronic fluorine intoxication. JAMA 1943; 123: 150)

A3 Fluoride stimulates granule formation and oxygen consumption in white blood cells, but inhibits these processes when the white blood cell is challenged by a foreign agent in the blood.

Robert A. Clark, "Neutrophil Iodintion Reaction Induced by Fluoride: Implications for Degranulation and Metabolic Activation," Blood, Vol 57, pp.913-921 (1981).

- A4 Fluoride depletes the energy reserves and the ability of white blood cells to properly destroy foreign agents by the process of phagocytosis.
- As little as 0.2 ppm fluoride stimulates superoxide production in resting white blood cells, virtually abolishing phagocytosis. Even micro-molar amounts of fluoride, below 1ppm, may seriously depress the ability of white blood cells to destroy pathogenic agents.

John Curnette, et al, "Fluoride-mediated Activation of the Respiratory Burst in Human Neutrophils", Journal of Clinical Investigation, Vol 63, pp.637-647 (1979); W.L. Gabler and P.A. Leong, ., "Fluoride Inhibition of Polymorphonuclear Leukocytes", Journal of Dental Research, Vo. 48, No. 9, pp.1933-1939 (1979); W.L. Gabler, et al., "Effect of Fluoride on the

Kinetics of Superoxide Generation by Fluoride", Journal of Dental Research, Vol. 64, p.281 (1985); A.S. Kozlyuk, et al., "Immune Status of Children in Chemically Contaminated Environments", Zdravookhranenie, Issue 3, pp.69 (1987);

## A6 Fluoride confuses the immune system and causes it to attack the body's own tissues, and increases the tumour growth rate in cancer prone individuals.

Alfred Taylor and Nell C. Taylor, "Effect of Sodium Fluoride on Tumour Growth", Proceedings of the Society for Experimental Biology and Medicine, Vol 119,p.252(1965)

Sheila Gibson, "Effects of Fluoride on Immune System Function", Complementary Medical Research, Vol 6, pp.111-113 (1992); Peter Wilkinson, "Inhibition of the Immune System With Low Levels of Fluorides", Testimony before the Scottish High Court in Edinburgh in the Case of McColl vs. Strathclyde Regional Council, pp. 17723-18150, 19328-19492, and Exhibit 636, (1982); D.W. Allman and M.Benac, "Effect of Inorganic Fluoride Salts on Urine and Cyclic AMP Concentration in Vivo", Journal of Dental Research, Vol 55 (Supplement B), p.523 (1976); S. Jaouni and D.W. Allman, "Effect of Sodium Fluoride and Aluminium on Adenylate Cyclase and Phosphodiesterase Activity", Journal of Dental Research, Vol.64, p.201 (1985)

#### A7 Fluoride inhibits antibody formation in the blood.

S.K. Jain and A.K. Susheela, "Effect of Sodium Fluoride on Antibody Formation in Rabbits", Environmental Research, Vol.44, pp.117-125 (1987).

#### A8 Fluoride depresses thyroid activity.

Viktor Gorlitzer Von Mundy, "Influence of Fluorine and Iodine on the Metabolism, Particularly on the Thyroid Gland," Muenchener Medizinische Wochenschrift, Vol 105, pp182-186 (1963); A. Benagiano, "The Effect of Sodium Fluoride on Thyroid Enzymes and Basal Metabolism in the Rat", Annali Di Stomatologia, Vol 14, pp.601-619n (1965); Donald Hillman, et al., "Hypothyroidism and Anemia Related to Fluoride in Dairy Cattle," Journal of Dairy Science, Vol 62, No.3, pp.416-423 (1979); V. Stole and J. Podoba, "Effect of Fluoride on the Biogenesis of Thyroid Hormones", Nature, Vol 188, No.4753, pp.855-856 (1960); Pierre Galleti and Gustave Joyet, "Effect of

Fluorine on Thyroid Iodine Metabolism and Hyperthyroidism", Journal of Clinical Endocrinology and Metabolism, Vol. 18, pp.1102-1110 (1958).

#### A9 Fluorides have a disruptive effect on various tissues in the body.

T.Takamorim "The Heart Changes in Growing Albino Rats Fed on Varied Contents of Fluorine," The Toxicology of Fluorine, Symposium, Bern, Switzerland, Oct 1962, pp.125-129; Vilber A.O. Bello and Hillel J. Gitelman, "High Fluoride Exposure in Hemodialysis Patients", American Journal of Kidney Diseases, Vol. 15, pp.320-324 (1990); Y.Yoshisa, "Experimental Studies on Chronic Fluorine Poisoning", Japanese Journal of Industrial Health, Vol 1, pp.683-690 (1959).

#### A10 Fluoride promotes development of bone cancer.

J.K. Mauer, et al., "Two-year carcinogenicity study of sodium fluoride in rats", Journal of the National Cancer Institute, Vol 82, pp1118-1126 (1990); Proctor and Gamble "Carcinogencity studies with Sodium Fluoride in rats" National Institute of Environmental Health Sciences Presentation, July 27, 1985; S.E. Hurdley et al., "Drinking Water Fluoridation and Osteosarcoma" Canadian Journal of Public Health, Vol 81, pp.415-416 (1990); P.D. Cohn, "A Brief Report on the Association of Drinking Water Fluoridation and Incidence of Osteosarcoma in Young Males", New Jersey Department of Health, Trenton, New Jersey, Nov 1992; M.C. Mahoney et al., "Bone Cancer Incidence Rates in New York", American Journal of Public Health, Vol 81, pp.81, 475 (1991); Irwin Herskowitz and Isabel Norton, "Increased Incidence of Melanotic Tumors Following Treatment with Sodium Fluoride", Genetics Vol 48, pp.307-310 (1963); J.A. Disney, et al., "A Case Study in Testing the Conventional Wisdom; School-Based Fluoride Mouthrinse Programs in the USA" Community Dentistry and Oral Epidemiology, Vol 18, pp.46-56 (1990); D.J. Newell, "Fluoridation of Water Supplies and Cancer - an association?", Applied Statistics, Vol 26, No.2, pp.125-135 (1977). See also http://home.iae.nl/users/lightnet/health/fluoridenewyork.htm .

"In point of fact, fluoride causes more human cancer death, and causes it faster, than any other chemical": Dean Burk, Chief Chemist Emeritus, US National Cancer Institute, cit http://www.second-opinions.co.uk/fluoride.html .

#### A11 Fluorides cause premature aging of the human body.

Nicholas Leone, et al., "Medical Aspects of Excessive Fluoride in a Water Supply", Public Health Reports, Vol 69, pp.925-936 (1954); J. David Erikson, "Mortality of Selected Cities with Fluoridated and Non-Fluoridated Water Supplies", New England Journal of Medicine, Vol. 298, pp.1112-1116 (1978); "The Village Where People are Old Before their Time", Stern

Magazine, Vol 30, pp.107-108,111-112 (1978)

A12 Fluoride ingestion from mouth rinses and dentifrices in children is extremely hazardous to biological development, life span and general health.

Yngve Ericsson and Britta Forsman, "Fluoride retained from mouth rinses and dentifrices in preschool children", Caries Research, Vol.3, pp.290-299 (1969); W.L. Augenstein, et al., "Fluoride ingestion in children: a review of 87 cases", Pediatrics, Vol 88, pp.907-912, (1991); Charles Wax, "Field Investigation report", State of Maryland Department of Health and Mental Hygiene, March 19, 1980, 67pp; George Waldbott, "Mass Intoxication from Over-Fluoridation in Drinking Water", Clinical Toxicology, Vol 18, No.5, pp.531-541 (1981).

A13 Fluorides diminish the intelligence capability of the human brain.

X.S.Li et al, Fluoride, Vol 26, No.4, pp.189-192, 1995, "Effect of Fluoride Exposure on Intelligence In Children". Presented to the 20th Conference of the International Society for Fluoride Research, Beijing, China, September 5-9, 1994.

A14 Fluoride studies in rats may be indicative of a potential for motor disruption, intelligence deficits and learning disabilities in humans.

A15 Humans are exposed to plasma levels of fluoride as high as those in rat studies. Fluoride involves interruption of normal brain development. Fluoride affects the hippocampus in the brain, which integrates inputs from the environment, memory, and motivational stimuli, to produce behavioural decisions and modify memory. Experience with other developmental neurotoxicants prompts expectations that changes in behavioural functions will be comparable across species, especially humans and rats.

Neurotoxicology and Teratology, Vol 17, No,2, p.176, "Neurotoxicity of Sodium Fluoride in Rats", Muellenix, Denbesten, Schunior, Kernan, 1995.

A16 Fluorides accumulate in the brain over time to reach neurologically harmful levels.

Neurotoxicology and Teratology, Vol 17, No,2, p.176, "Neurotoxicity of Sodium Fluoride in Rats", Muellenix, Denbesten, Schunior, Kernan, 1995.

A17 "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, October 1, 1944.

A18 The contents of a family-size tube of fluoridated toothpaste is enough to kill a 25-pound child.

In 1991, the Akron (Ohio) Regional Poison Center reported that "death has been reported following ingestion of 16mg/kg of fluoride. Only 1/10 of an ounce of fluoride could kill a 100 pound adult. According to the centre, "fluoride toothpaste contains up to 1mg/gram of fluoride." Even Proctor and Gamble, the makers of Crest, acknowledge that a family-sized tube "theoretically contains enough fluoride to kill a small child." (National Pure Water Association, UK).

#### A19 Fluorides have been used to modify behaviour and mood of human beings.

"It is a little known fact that fluoride compounds were added to the drinking water of prisoners to keep them docile and inhibit questioning of authority, both in Nazi prison camps in World War 2 and in the Soviet gulags in Siberia." (National Pure Water Association, UK).

### A20 Fluorides are medically categorized as protoplasmic poisons, which is why they are used to kill rodents.

The Journal of the American Medical Association on September 18, 1943, states, "fluorides are general protoplasmic poisons, changing the permeability of the cell membrane by inhibiting certain enzymes. The exact mechanism of such actions are obscure."

(Editorial. Chronic fluorine intoxication JAMA 1943; 123: 150)

#### A21 Fluoride consumption by human beings increases the general cancer death rate.

In 1975 Dr John Yiamouyiannis published a preliminary survey which showed that people in fluoridated areas have a higher cancer death rate than those in non-fluoridated areas. The National Cancer Institute attempted to refute the studies. Later in 1975, Yiamouyiannis joined with Dr Dean Burk, chief chemist of the National Cancer Institute (1939-1974) in performing other studies which were then included in the Congressional Record by Congressman Delaney, who was the original author of the Delaney Amendment, which prohibited the addition of cancer-causing substances to food used for human consumption.

Both reports confirmed the existence of a link between fluoridation and cancer. (Note: Obviously Dr Burk felt free to agree with scientific findings only after his tenure at NCI ended, since his job depended on toeing the party line).

Research carried out at Boston University School of Public Health, using data from the Irish National Cancer Registry and its Northern Ireland equivalent, found 40% more people suffer from the rare bone cancer osteosarcoma in the heavily-fluoridated Irish Republic than in Northern Ireland, where water is not fluoridated. See <a href="http://www.online.ie/news/irish\_examiner/viewer.adp?article=1629801">http://www.online.ie/news/irish\_examiner/viewer.adp?article=1629801</a>.

#### A22 Fluorides have little or no effect on decay prevention in humans.

In 1990 Dr John Colquhoun was forced into early requirement in New Zealand after he conducted a study on 60,000 school children and found no difference in tooth decay between fluoridated and non-fluoridated areas. He additionally found that a substantial number of children in fluoridated areas suffered from dental fluorosis. He made the study public. In 1998 he summarised the reasons for opposition to fluoridation. You can read them at: http://www.fluoride-journal.com/98-31-2/312103.htm or in FLUORIDE 31(2), 1998, pp 103-118.

A23 "It has long been known that excessive fluoride intake carries serious toxic effects. But scientists are now debating whether fluoride confers any benefit at all. ... Fluoride inhibits enzymes that breed acid-producing oral bacteria whose acid eats away tooth enamel. This observation is valid, but some scientists now believe that the harmful impact of fluoride on other useful enzymes far outweighs the beneficial effect on caries prevention."

UNICEF, http://www.unicef.org/programme/wes/info/fluor.htm .

In 1989 a study by Hildebolt et al on 6,000 school children contradicted any alleged benefit from the use of sodium fluorides.

In 1990 a study by Dr. John Yiamouyiannis on 39,000 school children contradicted any alleged benefits from the use of sodium fluorides.

In 1992 Michael Perrone, a legislative assistant in New Jersey, contacted the FDA requesting all information regarding the safety and effectiveness of fluoride tablets and drops. After 6 months of stalling, the FDA admitted they had no data to show that fluoride tablets or drops were either safe or effective. They informed Perrone that they would "probably have to pull the tablets and drops off the market."

(Hildebolt CF, Elvin-Lewis M., Molnar S, et al. Caries prevelances among geochemical regions of Missouri. Am J Physical Anthropol 1989; 78: 79-92)

(Yiamouyiannis. J. Water fluoridation and tooth decay: Results from the 1986-1987 national survey of U.S. school children. Fluoride 1990; 23: 55-67)

# A24 The fact that fluoride toothpastes and school-based mouth rinses are packaged in aluminium accentuates the effect on the body.

In 1976, Dr DW Allman and co-workers from Indiana University School of Medicine fed animals 1 part per million (ppm) of fluoride and found that in the presence of aluminium in a concentration as small as 20 parts per billion,

(like in a toothpaste tube, using aluminium pans to boil water, or drinking beverages in aluminium cans), fluoride was able to cause an even larger increase in cyclic AMP levels.

Cyclic AMP inhibits the migration rate of white blood cells, as well as the ability of the white blood cell to destroy pathogenic organisms. Ref: Journal of Dental Research, Vol 55, Sup B, p523, 1976, "Effect of Inorganic Fluoride Salts on Urine and Tissue Cyclic AMP Concentration in Vivo".

#### A25 "Fluoridation is the greatest case of scientific fraud of this century, if not of all time."

Robert Carton, Ph.D., former U.S. EPA scientist, on "Marketplace" Canadian Broadcast Company Nov 24, 1992.

A26 "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"

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

#### A27 Fluoride interacts with alum in drinking water to cause brain and kidney damage.

"Chronic administration of aluminium-fluoride or sodium-fluoride to rats in drinking water: alterations in neuronal and cerebrovascular integrity": Varner, J.A., Jensen, K.F., Horvath, W. And Isaacson, R.L. Brain Research 784 284-298 (1998) and cited in Fluoride Journal, FLUORIDE 31(2), 1998, pp 91-95.

#### A28Chemicals added to water, including fluoride, cause Irritable Bowel Syndrome.

Professor A.K. Susheela and her scientific colleagues at the Fluorosis Research and Rural Development Foundation found that Irritable Bowel Syndrome, also known as non-ulcer dyspepsia, colitis, 'spastic colon' or Crohn's Disease can be caused (or exacerbated) by intake of chemically treated drinking water. Biopsy results of the adverse effects on gastric cells are shown in surprisingly detailed electron micrographs. Professor Susheela and her co-workers discovered that chemically-induced IBS can be successfully reversed without medication simply by avoiding water and products containing the chemical. (See http://www.npwa.freeserve.co.uk/IBS.html ).

## A29 'The effects of calcium deficiency include stunted growth, poor quality bones and teeth and bone malformation'

May 2003 Safe Upper Levels for Vitamins and Minerals by FSA expert group on Vitamins and minerals P 266 (see http://www.foodstandards.gov.uk/multimedia/pdfs/vitmin2003.pdf

In 1960 Professor Teotia started a 30 year study into bone health with a 100 percent tooth decay measurement.200,000 randomly selected 10 year olds were given a one gram of calcium tablet and a further

200,000 children were given a placebo for 5 years. At 15 years old those children given the calcium supplements had improved bone density and 30% less tooth decay than the children taking the placebo. (See Teotia study at <a href="https://www.fluoride.org.uk/papers/teotia.htm">www.fluoride.org.uk/papers/teotia.htm</a>)

A30 Swallowed fluoride is not essential to prevent cavities and has no nutritional need. Many American children ingest too much fluoride that can decay teeth and damage bones. Fluoride can create discoloured teeth. With optimally fluoridated water fluoride appears to slightly increase trabecular bone mass.

- (1) "Current and future role of fluoride in nutrition", Warren & Levy, Dental Clinics of North America 47(2003) <a href="http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=Pub">http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=Pub</a> Med&list uids=12699229&dopt=Abstract
- (2) "An Update on Fluorides and Fluorosis," Levy, Journal of the Canadian Dental Association, May 2003 <a href="http://www.cda-adc.ca/jcda/vol-69/issue-5/286.pdf">http://www.cda-adc.ca/jcda/vol-69/issue-5/286.pdf</a>
- (3) News Release "Iowa Fluoride Study marks 10 years of studying children's dental health," Dec. 11, 200l <a href="http://www.uiowa.edu/~ournews/2001/december/1211fluoride-study.html">http://www.uiowa.edu/~ournews/2001/december/1211fluoride-study.html</a>
- (4) http://www.slweb.org/fluoride-bone.html
- (5) <a href="http://www.oehha.ca.gov/water/phg/referenced">http://www.oehha.ca.gov/water/phg/referenced</a> docs/fluor c.html <a href="http://www.epa.gov/waterscience/drinking/standards/dwstandards.pd">http://www.oehha.ca.gov/water/phg/referenced</a> docs/fluor c.html <a href="http://www.epa.gov/waterscience/drinking/standards/dwstandards.pd">http://www.oehha.ca.gov/water/phg/referenced</a> docs/fluor c.html <a href="http://www.epa.gov/waterscience/drinking/standards/dwstandards.pd">http://www.epa.gov/waterscience/drinking/standards/dwstandards.pd</a>