

Water Under the Bridge
The Damning Case Against Fluoridation
"During times of universal deceit, telling the truth
becomes a revolutionary act." - George Orwell

by Phillip Day

The most pressing three battles we fight as citizens for our good health today are for the right to drink clean, uncontaminated water, to eat clean, uncontaminated food and to breathe clean, uncontaminated air. In our sophisticated Western world today, which allegedly focuses so much on the rights of its citizens, why are these three fundamental, 'unalienable' rights being wilfully trampled? Why, in a society which can do so much technologically for its citizens, can't we address these three fundamentals of life and progress towards good health and longevity, rather than racing away from them?

This article deals with the subject of water and fluoridation, and these two deserve their own chapter, simply because of the importance of the subject. Author Harvey Diamond puts it this way:

"As an absolute prerequisite to life, water is right up there with food and air. From the moment you are born until you leave this planet, your body instinctively craves food, air and water for your survival. You know what happens to a plant when it is deprived of water. It wilts and dies. The same would happen to your body if it were deprived of water. Its importance is clear."

Bringing water to the public is a complicated and responsible business. If you get it wrong, and bacteria afflict the masses, you can definitely lose your pension. Some of the worst scourges mankind has faced have come about as a result of contaminated water supplies, infested with microbes that bring on the feared cholera, typhoid, dysentery and other fatal syndromes that still afflict many Third World nations today. In the past, the bubonic yersinia pestis decimated over a quarter of Europe during the medieval ages with rat-borne contaminants that could easily be passed to others through touching, kissing and other close-quarters contact. Mankind though has largely forgotten the major health disasters it has suffered in the past. Much water, if you'll forgive the pun, has gone under the bridge, and we like to think that problems linked to matters so basic as those concerning water supply are simply gremlins suffered by the less developed nations - not us. This false sense of security we enjoy in the First World though has not prevented governments and water authorities from rising to the challenge of delivering clean, fresh, bug-free water to the public as safely and as cheaply as possible, using some... well, shall we say, quite unique methods.

The halogen element chlorine is often added to the public drinking water to kill germs. When I am in the United States, waiters and waitresses will bring me a glass of iced water with my meal, which in many areas is quite undrinkable due to its high chlorine content. Most of the American public has become used to this type of water, and most are prepared to drink it, cook with it, shower with it and wallow around for half an hour in a bath with it. Prolonged chlorine exposure over the years though has been found to desiccate the skin, causing premature wrinkling, dandruff and baldness, and dysbiosis - bacterial/fungal overgrowths in the bowel.

Concerns over the long-term effects of bad-tasting chlorinated water fuelled a water filter boom in the early 1990s, which has never ended. For a few dollars, you can obtain a carbon filter that will screw onto the faucet and strip off the chlorine, delivering what the public believes is clean, uncontaminated H₂O.

But there's another halogen element, which some governments sanction to be put into water supplies, that has caused increasing fear over the past fifty years. Indeed very few public outcries

have been as consistent and vigorous as the public's reaction to the fluoridation of water and toothpastes:

"Controversy surrounding the fluoridation experiment has persisted for half a century. Japan and all of continental Europe have rejected the idea for reasons of safety and medical ethics. Experiments in poor countries produced such harmful results that they were quickly halted. Why does fluoridation continue to receive vigorous government and professional backing in the English-speaking nations?" - Health Action Network

Janet Nagel has authored several studies on the subject and explains how the idea of adding fluoride compounds to the public drinking water supply gained public support through the promotion of this controversial measure by industry and government over sixty years ago:

"In the 1940s and 50s, a vigorous corporate and government promotional campaign convinced large numbers of people that fluorides reduced susceptibility to tooth decay. In 1985, over 90% of all toothpastes sold in the US contained high concentrations of intentionally added fluorine compounds. Close to 60% of the US population consumed water containing 1.0 to 4.0 parts per million of fluoride compounds. Nearly all major US cities, and many smaller ones, intentionally add fluorine compounds to their water supplies."

So what is 'fluoride' and why exactly is this chemical added to food, water and other products we consume on a daily basis?

The term 'fluoride' is often used to describe fluorine-based chemical additives that have been put into the public water supply or into toothpastes and foods. 'Fluoride' tablets are also prescribed to youngsters apparently to assist in the protection and development of their teeth. In repeatedly hearing the one term, 'fluoride', the public has been cleverly coerced into thinking that there is just one substance that has been made available to us by caring government and industry to maintain and promote healthy teeth and gums. The reality is, as we will see, the term 'fluoride' has been found to encompass everything from sodium, calcium and potassium fluorides through to the highly dangerous liquid toxic waste product hexa- (in the US - hydro) -fluorasilicic acid and the toxic powder sodium silicofluoride, both of which are dumped into the public water supply by industry with no detoxification procedures and refinement carried out beforehand.

Fluorine is an extremely reactive, electronegative element that is never found alone in nature. Thus there are many kinds of fluorides, such as calcium fluoride, which is found naturally in water, lead fluoride, aluminium fluoride, and so on. The solitary term 'fluoride', so often used, even by activists, is meaningless and misleading as it fails to describe other elements with which the promiscuous fluorine has combined. These other elements often make the difference in toxicity of the resulting compound.

Pure fluorine is gaseous and is described as "a non-metallic halogen element that is isolated as a pale yellowish flammable irritating toxic diatomic gas" (Webster's Ninth New Collegiate Dictionary, 1991). Fluorine was used to great effect as a battlefield gas by the militaries during World War 1. Fluoride compounds today are used in pesticides, aluminium smelting, etching metals and glass, aerosol propellants and refrigerants. Sodium fluoride, the same compound that is added to toothpastes under the admiring eye of the world's dental associations, is a chief component of Sarin nerve gas. It's also the main ingredient in rat poison, as any pest control expert will tell you.

The debate surrounding the pros and cons of fluoride additives has raged for half a century. The main areas of contention, which we will examine, are as follows:

- 1) Do fluoride compounds prevent dental caries (cavities) and assist in the development and health maintenance of teeth?
- 2) Are fluoride compounds dangerous to public health?
- 3) Are governments and industry mass-medicating their populations without consent?

DO FLUORIDE COMPOUNDS REDUCE DENTAL CARIES (CAVITIES)?

The belief that fluoride compounds reduce the incidence of tooth decay is dental religion today, in spite of the fact that fluoride's original champion, H Trendley Dean, DDS, admitted under oath 40 years ago that his data purporting to prove the efficacy of fluoridation for dental health were not valid.

In June 1993, New Jersey State Assemblyman John V Kelly publicised the disturbing fact that fluoride compounds used in toothpastes and the water supply have never received approval by the American Food & Drug Administration and are officially classified as 'an unapproved new drug'. Kelly's research also uncovered that neither the FDA nor the Institute of Dental Research (NIDR) nor the American Academy of Pediatric Dentistry could furnish any proof of fluoride compound safety or effectiveness, as required by law as part of the FDA drug approval process. Which means of course that in the US, almost every American is receiving treatment every day from a drug which is unapproved by the FDA. This in turn means that doctors and dentists prescribing fluoride compounds to patients are committing an illegal act and that the fluoridation of public water supplies is medical experimentation without the target population's consent. If fluoride compounds are, as their proponents exhort, the greatest things to hit the teeth of humanity since fresh water, then why hasn't the FDA approved these 'valuable' compounds? We'll find out as we proceed.

THE GRAND RAPIDS/MUSKEGON FLUORIDE TRIALS

One of the first trials carried out in an attempt to prove fluoridation's effectiveness in reducing dental decay occurred in America in 1945 and involved the cities of Grand Rapids and Muskegon, Michigan. Grand Rapids' public water supply was fluoridated and Muskegon's was left alone to serve as the control. Within a couple of years, pro-fluoride advocates were clamouring that fluoridation was producing a 60% drop in dental caries in Grand Rapids when compared with those occurring in the city of Muskegon. The results were apparently so conclusive that this ten-year trial was halted after just five years when the authorities fluoridated Muskegon's water supplies.

Later however, the results of the trials were to reveal disturbing inconsistencies in the collection and reporting of the data. One graph shows that within one year, dental decay had declined 70.5% among six-year-olds in Grand Rapids, when studies were made of all 79 schools in the trial area. The reality is that the data used to start the trial included dental decay rates for all 79 schools, but from 1946 onwards, only the children from 25 hand-selected schools in the trial area were examined, giving rise to an apparent drop in decay rates. During the next three years, the dental decay rates actually rose by 65.2% among the 25 schools, indicating that fluoridation was having no effect in spite of the children (selectively chosen) having the apparent benefit of more years of fluoridation. The only 'reduction' in decay rates had occurred during the year of the selection process.

THE KINGSTON/NEWBURGH TRIAL

A similar US study was conducted with the cities of Kingston and Newburgh, located in New York State along the Hudson River. Newburgh was to be the fluoridated township and Kingston the unfluoridated control. Within ten years of the study inception in 1945, Public Health fluoridation supporters were claiming a 60% decline in dental decay occurring in Newburgh. Not revealed however was the fact that Newburgh parents and their children received free consultations on dental hygiene, advice on the boycotting of sweets and dental visits to remove dental plaque. Someone

somewhere wanted Newburgh to succeed. Kingston however was completely ignored and received no such advantages. Later it became apparent that not all the Newburgh children had been selected. Another bout of selective reporting had occurred.

After announcing their victory with fluoridation however, the Public Health Service proponents of fluoridation received a major slap in the face. For, during the tenth year of Newburgh's fluoridation, an independent study of the two townships had been underway, carried out by Dr John A Forst, Professor at the University of the State of New York and chief of the State Bureau of Health Services. He too studied both sets of school children and his results painted a disturbingly different picture:

Kingston Newburgh
Enrolled 5403 5119
Pupils Inspected 5303 (98%) 4959 (97%)
Pupils with Dental Defects 2209 (41.6%) 3139 (63.2%)
Pupils under Dental Treatment 1551 (29.2%) 2072 (41.7%)

These shocking results were too clear to be ignored. After ten years of fluoridation and when nearly all the children of both townships were examined, it was evident that Newburgh contained more children with dental defects and more children undergoing dental treatment than in Kingston, a township left to its own water devices. To this day, Kingston remains unfluoridated, having vigorously rejected fluoridation at the conclusion of the trials. Later, a follow-up study in 1989 would show that after almost four decades of fluoridation, schoolchildren in Newburgh had no less dental decay than in unfluoridated Kingston.

Research by the UK's Safe Water Society yielded similar research results:

1. A US trial studying 50,000 inhabitants across 68 US cities in 1986-7 showed that fluoride increased tooth decay.
2. 400,000 children were studied in India and calcium and fluoride levels were measured. The study found that fluoride increases tooth decay while calcium reduces caries.
3. 21,000 Japanese children were studied in 1972. Fluoride was found to increase tooth decay.
4. After 20 years of water fluoridation in Seattle, Washington State, authorities reported an unprecedented dental crisis in the north-western American city.
5. 22,000 children were studied in Tucson, Arizona. Fluoride was found to increase tooth decay.
6. In 1987, Alan S Gray, DDS, FRCD(C), Director of the Division of Dental Health Services or the British Columbia Ministry of Health, called for a re-examination of the relevance of fluoride compounds in the Canadian public water supply when it was learned that tooth decay rates in British Columbia (where only 11% of the population use fluoridated water) were lower than those of other Canadian provinces with fluoridation rates of 40%-70%.
7. In December 1993, a Canadian Dental Association committee, known as the Canadian Workshop on the Evaluation of Current Recommendations Concerning Fluorides, concluded that consuming fluoride does not prevent tooth decay or reduce its incidence. The panel also found that children exposed to fluoride compounds risked dental fluorosis.

Leading fluoridation opponent John R Lee MD states that the trial results the dental and chemical industries invariably use are always misreported and techniques employed to give the public false impressions of fluoridation's supposed efficacy and harmlessness. These tactics include the 'percent reduction' method instead of 'rate of change of decay'. This data-manipulation strategy was exposed in the Rand Corporation report of 1981, in which author Craig B Foch states that fluoride studies "suffer from poor experimental design and from analysis plans that largely ignore the possible effects of other factors in tooth decay."

Lee reports that doctors and researchers are often in for a bumpy ride if they question fluoride's efficacy and challenge its alleged safety and cost-effectiveness:

"When one looks in the dental literature for evidence that fluoridation reduces dental costs, the results are equally dismal. In all studies in which selection bias is not evident [i.e. where the data hasn't been fudged], no reduction in dental costs is found. When Dr Gray, a dental health officer in Vancouver, BC, Canada, examined [the records of] all schoolchildren in British Columbia, he found no dental benefit from fluoridation. Upon reporting this, he was demoted and obliged to desist in making any comment about it."

Delivering the target dose of 1.0mg fluoride compounds to each citizen every day costs money - and for what benefit, against what risk? Even supposing one believes in the efficacy of fluorides for dental health, against all reason and scientific evidence, why fluoridate the water supply? Why not just pass out the tablets? In other words, why deliberately spend more? According to one public water supply co-ordinator, the annual projected budget for fluoridating the water supply of Tacoma, Washington State was estimated to be \$125,000 in 1991. The cost of supplying fluoride tablets to the under 12s would be a mere \$1.20 per thousand 1.0mg tablets in comparison. So why the fixation on medicating the water supplies? We will examine the reasons in the conclusion of this report.

In May 1992, Dr William Marcus, the senior science advisor and chief toxicologist with the United States Environmental Protection Agency, was fired from his post after publicly disclosing his frank comments concerning mass medicating the public without its consent and the appalling hazards of fluoridation. Marcus was concerned that the results of US Government studies on fluoridation, completed in 1984 and a second in 1987, were kept from the American public. After a long fight, Dr Marcus was reinstated on 28th February 1995. "If this were any other chemical but fluoride," Marcus commented, "there would be a call for the immediate cessation of its use. It shows potential for great harm."

ARE FLUORIDE COMPOUNDS DANGEROUS TO PUBLIC HEALTH?

The evidence shows that fluoride compounds, especially those examined in this chapter, are harmful to humanity over the long-term. Undeniably fluorides used in the drinking water supplies are a toxic, non-biodegradable, environmental pollutant, officially classified as a contaminant by the US Environmental Protection Agency. The two main culprits, as mentioned, are hexa(hydro)fluorosilicic acid and sodium silicofluoride. Shocking though it may be to contemplate, the reality is, these chemicals are simply hazardous industrial waste - a by-product from the manufacture of phosphate fertilisers, gleaned from this industry's pollution scrubbers - which is largely disposed of in our public water supply. Hexafluorosilicic acid, the most commonly used fluoridation additive, contains other toxic substances including lead, beryllium, mercury, cadmium and arsenic. Sodium fluoride, beloved of toothpaste manufacturers, is a hazardous waste compound from the aluminium smelting process, and is also used in water fluoridation schemes, although less frequently than the previously mentioned two compounds. Sodium fluoride is often given to children in tablet or liquid form and is almost always added to toothpastes in concentrations of between 500-1500 ppm.

Interestingly, Proctor and Gamble, the manufacturers of Crest toothpaste and an ardent supporter of sodium fluoride, were reported to have admitted that a family size tube of their world famous toothpaste contained enough sodium fluoride to kill a 20-30lb child if ingested. Warning labels appear on American toothpaste packaging advising that in the event of ingestion, the victim should seek a poisons control centre immediately. This ridiculous notice is made more of a sham by the fact that you don't have to swallow poisons like this for them to become absorbed, IF THEY'RE

EVEN UNDER THE TONGUE, THEY'RE IN THE BLOODSTREAM.

This author has met several elderly gentlemen in the UK who recalled one way conscripts used to attempt to dodge the National Service draft in the 1950s. They would consume half a tube of toothpaste, which subsequently made the recruit extremely ill and unfit to serve.

Government and industry have long denied that fluoride additives are toxic waste from industry, preferring to paint a picture of sanitised, benevolent chemicals guarding our teeth day and night administered through the 'safe' water we drink. The reality is, even those within government ranks have broken cover and confirmed the source of these chemicals. Tom Reeves, for example, a water engineer with America's Centers for Disease Control (CDC), controversially admitted in January 2001 that these fluoride additives were waste emissions from heavy industry:

"All of the fluoride chemicals used in the U.S. for water fluoridation - sodium fluoride, sodium fluorosilicate, and fluorosilicic acid - are by-products of the phosphate fertilizer industry. The manufacturing process produces two by-products: (1) a solid, calcium sulphate (sheetrock, CaSO_4); and (2) the gases, hydrofluoric acid (HF) and silicon tetrafluoride (SiF_4). A simplified explanation of this manufacturing process follows: Apatite rock, a calcium mineral found in central Florida, is ground up and treated with sulfuric acid, producing phosphoric acid and the two by-products, calcium sulphate and the two gas emissions. Those gases are captured by product recovery units (scrubbers) and condensed into 23% fluorosilicic acid (H_2SiF_6). Sodium fluoride and sodium fluorosilicate are made from this acid."

Research highlighting the adverse effects of fluoride compounds on human beings is troublingly abundant. Fluoride's beastliness was summed up in a terse statement issued by Dr Dean Burk of the National Cancer Institute: "Fluoride causes more human cancer death, and causes it faster than any other chemical." As far back as October of 1944, the Journal of the American Medical Association published an editorial stating: "... that the use of drinking water containing as little as 1.2 to 3 parts per million of fluoride will cause such developmental disturbances in bones as osteosclerosis, spondylosis, and osteoporosis, as well as goitre." The Safe Water Foundation filed Freedom of Information Act requests to obtain the results of government studies. Dr John Yiamouyiannis (president of the Safe Water Foundation) said "All tests came out positive." (establishing a fluoride-cancer link)

Dr John Lee, who was chairman of the Environmental Health Committee of his local medical association in Marin County, California, went head-to-head with authorities on the fluoride issue. According to Lee, the county had continually pushed water fluoridation on the local ballot until it passed by a slim margin of one per cent. Lee states: "[Fluoride] is a toxic waste product of many types of industry; for instance, glass production, phosphate fertilizer production and many others. They would have no way to dispose of the tons of fluoride waste they produce unless they could find some use for it, so they made up this story about it being good for dental health. Then they can pass it through everyone's bodies and into the sewer."

Lee's comments on their own would be shocking and dismissive. The problem is, hundreds of specialists, doctors and biochemists have been saying the same thing for years. And sure enough, when the curtains were finally pulled back and the veil of secrecy lifted, federal research indeed discovered that fluoride caused cancer in humans and animals. NCI's Dr Burk stated: "It is concluded that artificial fluoridation appears to cause or induce about 20-30 excess cancer deaths for every 100,000 persons exposed per year after about 15-20 years." Incredibly to this day, not only is fluoridation of the water supply and toothpaste still permitted, US federal goals require mandatory fluoridation of the water supply in 75% of all US cities by the close of the year 2000! Yet....

* Fluoride accumulates in the body like lead, inflicting its damage over long periods of time. Fluoride is more toxic than lead, and just slightly less toxic than arsenic. Lead is given a toxicity rating of 3, whereas fluoride's level is 4. Under US law, administered and enforced by the Environmental Protection Agency, the maximum allowable lead in drinking water is 0.015mg/litre. With fluoride however it is 4.0mg/litre, **OVER 350 TIMES THE PERMITTED LEAD LEVEL.**

* Fluoride compounds initially cause dental fluorosis, a chalky mottling of the tooth enamel, leading to brittle and vulnerable teeth. Fluorosis is a permanent malformation of tooth enamel indicating an alteration in bone growth. Further symptoms of chronic fluoride poisoning may include constipation, excess gas and other gastrointestinal disturbances, chronic boils or rashes, peeling, shrivelled skin between your toes or brittle, easy-to-break nails. Symptoms of extreme fluoride poisoning may include chronic fatigue syndrome, skin problems, bleeding gums, excess saliva, hair loss, edema swelling in the lower extremities, mental problems, kidney disease, cancer and death.

* "The fluoride dose prescribed by doctors and the dose administered without prescription to everyone in community drinking water is EXPECTED to cause dental fluorosis in 10% of children. Actual Public Health Service figures show that 30% of children in fluoridated localities have dental fluorosis, and 10% of children in non-fluoridated areas now have fluorosis." Even citizens living in non-fluoridated areas are expected to ingest amounts in excess of 1.0mg fluoride compounds per day through toothpaste use and consumption of food products manufactured with fluoridated water. Citizens living in fluoridated communities may expect to be exposed to 5.0mg a day or more.

* Medical research shows that hip fractures are 20-40% higher in fluoridated communities.

* Fluorides are used in laboratory work to inhibit enzyme activity. Fluoride compounds have the same effect in the human body, accumulating in the skeleton structure over long periods of time. Fluoride poisoning is long-term and progressive.

* The chemicals injected into public water supplies to elevate fluoride levels are raw industrial waste. The two most commonly used additives are hexafluorosilicic acid and sodium silicofluoride, toxic by-products of aluminium smelting and phosphate fertiliser production.

* Fluoridated water increases corrosion and leaching of lead from water mains and plumbing.

* About 1% of the fluoridated water used from public supplies is actually ingested by the public. The remainder is used for sewage, washing, industry and agriculture. This had led to the belief by industry that fluoridated industrial waste may be safely disposed of in this manner with little or no harm to the public. However, fluoride levels in the sewer effluent of fluoridated water systems are not monitored or controlled. Fish have been found to be poisoned by fluoride emissions at and below the 'acceptable' levels emitted by sewer effluent.

The American Medical Association (AMA) issued a news release entitled "Study Links Fluoride to Rare Bone Cancer" on 8th December 1993. This study also showed that hip fractures were 27% higher in women, and 41% higher in men in the fluoridated city featured in the tests. Hip fractures (potentially fatal to the elderly) are linked to fluoridated water.

In 1984, Japanese researchers began to close in on fluoride's ability to cause cellular damage, thus compelling the body to commence a healing process, possibly resulting in non-terminating stem-cell trophoblast, or cancer. Dr Takeki Tsutsui of the Nippon Dental College stated that "fluoride caused not only genetic damage but was also capable of transforming normal cells into cancer cells." Research journalist Val Valerian sums up the disturbing conclusions of Tsutsui's studies:

"In Dr Tsutsui's study, the level of fluoride used was the same level that the US National Cancer Institute (NCI) suggested should be used in a study to determine whether fluoridation of public water supplies causes cancer. The level of fluoride deemed 'safe' in the United States, 1 part per

million (ppm), was found by Tsutsui to produce cancer in cells."

Research completed in 1989 by the National Toxicology Program (NTP), an agency of the US Public Health Service, found a statistically significant dose-related increase of osteosarcoma (bone cancer) in male rats. Thyroid and liver cancers were also found.

Amazingly, while the evidence of fluoride's ability to harm continued to mount, so too did the American Dental Association and the National Research Council's continued endorsement of fluoride's overwhelming 'benefits' to society, the latter even denying that fluoride was carcinogenic to laboratory animals. Four years later in 1992 however, the New Jersey State Department of Health published the results of a trial in which six times the incidence of bone cancers were being found in fluoridated communities.

TROUBLE AT THE WELL

Notwithstanding the shiny, happy faces at the ADA and NIDR over fluoride's 'incalculable' contribution to humanity's health, malfunctions in the mechanics of city water fluoridation routinely cause predictable mayhem and tragedy. In 1992, fluoride feed machinery operating on one of two community wells failed in the township of Hooper Bay, Alaska, resulting in the death of one man and the poisoning of 296 other citizens. On 16th July 1993, a water filter failed to remove the fluoride compounds in Chicago's drinking water before it was used in the treatment of three kidney dialysis patients at the University of Chicago Hospital. All three patients died. Six others suffered acute toxicity reactions after undergoing dialysis with fluoridated water. On November 16th 1993, lethal levels of fluoride compounds up to 70 ppm were found in the public water system of Middletown, Maryland.

FLUORIDATION

MASS-MEDICATION WITHOUT CONSENT?

Water fluoridation has been described as the widest mass-medication program in the history of humanity. That this procedure is occurring without the informed consent of the citizenry is the chief ethical issue that has driven opposition to fluoridation since World War 2. Researcher Janet Nagel summarises:

"That nearly all physicians, dentists and other members of the dominant health professions have come to hold such uncritical faith in fluoride as a tooth decay remedy raises serious questions about the content and quality of their training as scientists and practitioners. That so many professional leaders and government officials have been willing to falsify or obscure scientific data in their zeal to maintain the fluoridation pretense raises concerns that are even more far-reaching."

During the first four decades of the 1900s, global industrial output rose dramatically. During two world wars, industry raised its production profile many orders of magnitude in order to satisfy the unique demand for munitions, armaments, tanks and aircraft with heavy industrial production. Agriculture too was honed to a knife-edge. All available hands were put to the land in order to ensure the continuance of food output to beleaguered nations.

Both heavy manufacturing and the agro-chemical industries produce large quantities of fluoride compounds as toxic waste products. During the course of these activities, as early as the 1930s, fluoride in industrial emissions was increasingly regarded as a major pollutant. After the war, the major industrial nations began exporting fertilisers and heavy industrial goods to lesser-developed countries resulting in their gross national output expanding exponentially. By 1965, President Lyndon Johnson's Science Advisory Committee was naming fluoride compounds as one of America's four leading pollutants.

Ironically, since water fluoridation was proposed in the 1940s, very little has been heard from the establishment regarding fluoride as an environmental pollutant. Clearly, the chemical and heavy manufacturing industries had a growing problem on their hands with raw toxic fluoride wastes, which also contained many metals harmful to human and animal health, such as cadmium, beryllium, lead, mercury and aluminium. Industry, faced with millions of dollars in operating costs to dispose of raw toxic waste in an acceptable manner, found themselves considering ways in which the problem could be dissolved, a little at a time, with little or no cost to their margins. Janet Nagel remarks:

"Laws controlling the disposal of toxic wastes do not permit the industries creating these fluorides to release them into the environment. However, the 'laundering' process of fluoridation allows these same toxins to be spread indiscriminately on lawns and gardens, incorporated into processed foods, and released by the ton into water and air, in sewer effluent and sludge.

The original promotion of fluoridation as a remedy for tooth decay was funded by the aluminum industry. Andrew Mellon, former Chairman of the Aluminum Corporation of America (ALCOA), was Secretary of the Treasury when the US Public Health Service was an agency of the Treasury Department. The research purporting to demonstrate fluoride effectiveness and safety was funded by ALCOA, Reynolds Metals, and other heavy fluoride emitters."

The 1970s produced other quandaries for the fluoridation problem. Research was now clearly stating a long-term harmful link which few could deny. Water suppliers were becoming concerned at the high costs they would incur in having to remove fluorides from the water they supplied to the citizenry. Fluorides are not easily removed from water. Charcoal/carbon filters remove chlorine but not fluorides. Reverse osmosis or distillation procedures are required effectively to strip the water of fluoride contaminants. To overcome this problem of cost facing suppliers, the US Environmental Protection Agency in 1988 actually made the decision to increase the Maximum Contaminant Level (MCL) for fluorides from 2.0ppm to 4.0ppm.

The charge of mass medication of the population can justifiably be made since fluoride is, by the admission of its proponents, pharmacologically active in supposedly preventing dental caries. Many of the trials quoted in this chapter demonstrate quite inarguably that fluoride compounds are also pharmacologically active in doing human and animal systems harm. Even the Food & Drug Administration wishes the whole fluoride embarrassment would quietly go away, having classified water fluoride compounds as 'unapproved new drugs' and obstinately left it at that. On the 16th March 1979, a surreptitious changing of the Federal Register occurred on page 16006. All paragraphs stating that fluoride compounds were 'essential or probably essential' were deleted by the FDA.

There are not many who will dispute the fact that fluoride compounds in amounts of 1.0 ppm (as advocated by fluoride proponents) do not produce changes in tooth enamel structure and bone formation. The point being made by fluoride opponents is that the citizens themselves should have the right to decide whether or not to take fluoride supplementation. At the present time, there is no regulation as to how much fluoride any given individual is taking in, due to varied water consumption, age, occupation, diet and lifestyle. This has led to obvious concerns over health risks which have failed to disperse over the last fifty years, which only serve to underline more forcibly the unassailable conclusion that there are no known essential uses for fluoride compounds in medicine or dentistry.

As one last example of how even experts in the field of chemistry and medicine have become divided on this issue over the years, the following Nobel Prize winners have either expressed reservations about fluoridation, or have outright opposed it. They are:

Adolf Butenandt (Chemistry, 1939)
Arvid Carlsson (Chemistry, 2000)
Hans von Euler-Chelpin (Chemistry, 1929)
Walter Rudolf Hess (Medicine, 1949)
Corneille Jean-François Heymans (Medicine, 1938)
Sir Cyril Norman Hinshelwood (Chemistry, 1956)
Joshua Lederberg (Medicine, 1958)
William P. Murphy (Medicine, 1934)
Giulio Natta (Chemistry 1963)
Sir Robert Robinson (Chemistry, 1947)
Nikolai Semenov (Chemistry, 1956)
James B. Sumner (Chemistry, 1946)
Hugo Theorell (Medicine, 1955)
Artturi Virtanen (Chemistry, 1945)

NOTEPAD

Let us finish this chapter by listing the conclusions of one of fluoride's long-time antagonists, Dr John Lee:

FACT 1

Fluoridation is cancer-causing, cancer-promoting, and is linked to increased cancer rates in humans.

FACT 2

Hip fracture rates are substantially higher in people residing in fluoridated communities.

FACT 3

Dental fluorosis, the first visible sign of fluoride poisoning, affects from 8% to 51% of the children drinking fluoridated water.

FACT 4

All of the recent large-scale studies on fluoridation and tooth decay show that fluoridation does not reduce tooth decay.

FACT 5

Fluoride drops and tablets are not approved by the US Food & Drug Administration as safe and effective. On the contrary, fluoride tablets and drops have been shown to be ineffective in reducing tooth decay and to cause skin eruptions, gastric distress, headache and weakness, which disappear when fluoride use is discontinued. Dental fluorosis on the other hand, is a permanent disfigurement.