Infodoc 01 | PDF

The story of water fluoridation began at the beginning of the 20th century but it was not until much later that the disputes, claims, arguments and accusations that have been made about this foul practice, have been made transparent to the public at large.

Fluoridation presented a new opportunity to industries which produced toxic fluoride waste products. Rather than be seen as 'villains of the peace', they could now transform the disposal of their 'by-products' into something perhaps never experienced before - a public health measure. "Garbage into gold" is the expression most commonly used to describe this transformation.

There is also no doubt that the promoters of fluoridation have had a very healthy head start on their opponents inasmuch that they were able to influence and control early research, as well as infiltrate and manipulate government bodies. And by manipulating political institutions and science, by using the 'hard sell' approach to con subordinates, the unconvinced and the sceptical, by the use of propaganda and fear of the establishment, the proponents of fluoridation built up a powerful movement which was to sweep away virtually all opposition. But even with the support that the proponents have built up either through fear, corruption or simple blinkered and unwavering trust, it is not enough to keep the bandwagon rolling.

Today we have the more information at our fingertips than we could ever have dreamed of just a few decades ago.

And despite the reluctance of some official Government departments, agencies or bodies to release information, there is certainly more openness and more access to valuable and meaningful data. As a consequence, the proponents of fluoridation can no longer hide behind bad science, one-sided propaganda and the control or corruptibility of public servants, scientists or important and influential institutions. Accountability is now the name of the game.

You do not have to be an Einstein to understand simple science. You do not need a degree in law to understand the obvious breach of human rights. You do not need to be told again and again how devious, dishonest, stupid or egotistical some of our politicians are.

Fluoridation and its consequences should be made honestly, openly and in clear language so that everyone can understand the implications and risks involved.

But the establishment will still not give way. The proponents of fluoridation still to this day use trickery, and deception, and all with the blessing, financial support and approval of political, scientific and industrial institutions.

This is why yet another site dedicated to exposing some of the darker and lesser known facts of fluoridation has been created. And as a consequence of what has gone before, and because of the hard lessons learned, this site will be dedicated to speaking openly about fluoridation.

Sometimes the language will be uncompromising, brutal and implicit. No apologies are made for adopting this approach because it is necessary to do so in the face of an establishment which has lost the right to be treated with respect.

Infodoc 02 | PDF

What is fluoride? (Main source of info.: Infopedia, v2.0)

It is unusual to find someone who has not heard of fluoride. Conversely, it is equally unusual to find someone who can explain precisely what fluoride is. It is an indictment of our educational system that we are not told more about a chemical which threatens to have an enormous impact on our lives. So what exactly is fluoride?

Firstly, a lesson in geology. The earth consists of five parts: the atmosphere (gaseous [air]), the hydrosphere (liquid [water]) and the third, fourth, and fifth, the lithosphere, mantle, and core. The lithosphere, consists mainly rocky crust of the earth, and extends to depths of 100 km. The lithosphere comprises two shells - the crust and upper mantle and are divided into tectonic plates.

The rocks of the lithosphere are almost entirely made up of 11 elements, which together account for about 99.5% of its mass. The most abundant is oxygen (about 46.60% of the total), followed by silicon (about 27.72%), aluminium (8.13%), iron (5.0%), calcium (3.63%), sodium (2.83%), potassium (2.59%), magnesium (2.09%) and titanium, hydrogen, and phosphorus (totalling less than 1%). In addition, 11 other elements are present in trace amounts of from 0.1 to 0.02%. These elements, in order of abundance, are carbon, manganese, sulphur, barium, chlorine, chromium, fluorine, zirconium, nickel, strontium, and vanadium. The elements are present in the lithosphere almost entirely in the form of compounds rather than in their free state. These compounds exist almost entirely in the crystalline state, so each is, by definition, a mineral.

Fluorine (From the Latin fluo, meaning "flow")

Fluorine is a member of the chemical family called the halogens, also composed of elements: chlorine, bromine, iodine and astatine. A non-metallic element, fluorine (Symbol F) is a pale yellowish flammable irritating toxic diatomic gas which is slightly heavier than air. It is also poisonous, corrosive and the most chemically ‘active’ of all the non-metallic elements (and the most electronegative and reactive of all elements). It was discovered in 1771 by the Swedish chemist Carl Wilhelm Scheele and was isolated in 1886 by the French chemist Henri Moissan.

Fluorine occurs naturally in the combined form as fluorite (or fluorspar), cryolite and apatite. Apatite (from the Greek ‘apate’ meaning “deception”), which is made up mainly of phosphate of lime, is a crystal which was once used in the preparation of fertilizer.

NB. Phosphate rock is now used in place of mineral phosphates of lime.

Fluorine also occurs as fluorides in seawater, rivers, and mineral springs, in the stems of certain grasses, and in the bones and teeth of animals.

Fluoride

Fluoride (*ion) is fluorine plus the addition of an extra electron taken from another element. One element which reacts easily with fluorine is calcium. When these two elements react with each other, the result is calcium fluoride. Reaction is caused by the sharing or exchange of electrons. In the case of fluorine and calcium, fluorine is 'deficient' of one electron and calcium has a 'surplus' of two. For the purpose of this exercise, 'deficiency' and 'surplus' are defined by the number of electrons in the outer shell in these elements.

*Depending on what fluoride reacts with, fluoride can appear as a single fluoride ion or it can be bound to another element such as calcium.

What is an atom?

Atoms are made of protons, neutrons (the nucleus) and electrons. Electrons are arranged in 'shells' around the nucleus. The nearest shell never contains more than 2 electrons. 2nd and 3rd shells can contain a maximum of eight electrons. The 4th shell has a potential to contain 18 electrons. The maximum number of electrons which can appear in each element defines the 'period' of the respective element. Hence, an element which has a maximum of 2 electrons will appear in the first period. Those elements which have up to eight electrons in their second shell will appear in the second period. Other elements are arranged according to the number of electrons in their shells.

Show me the Periodic table (hyperlink to external site)

Fluorine (hyperlink to external site)

Fluorine has an arrangement of 2-7 electrons (a 'deficiency' of 1 electron in the second shell) and calcium has an arrangement of 2-8-8-2 electrons (a 'surplus' of two electrons in the fourth shell). In the case of fluorine, it is 'easier' for this element to 'gain' one extra electron rather than 'lose' seven. Conversely, it is 'easier' for calcium to give up two electrons.

Therefore, when reacting, two atoms of fluorine will each 'steal' one electron from each of the two electrons that are 'surplus' in calcium. Ergo, calcium fluoride is one atom of calcium and two of fluorine (CaF2).

Fluorine compounds

Apart from naturally occurring fluorides, such as calcium fluoride which is found in 'naturally fluoridated' water supplies, there are also 'artificially manufactured' compounds of fluoride. Some of these are described below.

Hydrofluoric acid

Hydrofluoric acid (hydrogen fluoride, HF or H2F2), one of the most important fluorine compounds, is prepared by heating calcium fluoride in sulphuric acid. The aqueous solution of this acid, generally used commercially, is obtained by passing the anhydrous hydrogen fluoride vapours into a leaden receiver containing distilled water, thus yielding the acid in dilute form. Hydrofluoric acid is extremely corrosive and must be preserved in lead or steel containers. Hydrofluoric acid has the property of dissolving glass, and this property is used in a common test for the presence of a fluoride; hydrofluoric acid is also used extensively in various forms of glass etching, such as the marking of divisions on thermometer tubes and the etching of designs on glassware, and in other forms of ceramic etching, such as pottery decoration.

Silicofluorides

Another fluorine compound, *hydrofluosilicic acid, combines with such bases as sodium and potassium to form salts called fluosilicates or silicofluorides. Fluorine and many fluorides, such as hydrogen fluoride and sodium fluoride, are extremely poisonous.

*Also known as hexafluorosilicic acid (H2SiF6), which is used to fluoridate water supplies.

Potassium Fluoride (KF)

Used for fluoridated table salt (source: Laporte Chemicals)

Differences between natural and artificial fluorides

The best way to describe the differences between natural and artificially manufactured fluorides is to examine the solubility and toxicity of each type. This will be the subject of the next document in this series (2. Solubility and toxicity of different fluorides).

What else can be found in artificial fluorides?

There are many background contaminants in artificial fluorides. The following picture (from Ireland) will give the reader some idea of the toxic chemicals (such as lead, arsenic, mercury) that are present in fluorosilicates:

CAL
Limited
95 Merrion Square
Dublin 2 Ireland
Tel: Dublin + 353 1 661 3033
Fax: Dublin + 353 1 661 3399

CHEMICAL ANALYSIS CONFIDENTIAL REPORT No. W8158

Report Number	W8158
Invoice Number	10858
Laboratory Number(s)	23034
Your Order Number	
Number of Samples	1
Sample Description	Hydrofluorosilicic Acid
Date Reported	14/08/00

TEST	RESULT
Calcium	51 ppm
Magnesium	23.9 ppm
Sodium	33.6 ppm
Potassium	6.2 ppm
Aluminium	2.1 ppm
Boron	14 ppb
Manganese	571 ppb
Copper	90 ppb
Zinc	523 ppb
Phosphorus	26187 ppm
Barium	168 ppb
Iron	11.85 ppm
Sulphur	134.9 ppm
Arsenic	4826 ppb
Cadmium	4 ppb
Chromium	3763 ppb
Mercury	5 ppb
Nickel	1742 ppb
Lead	15 ppb
Selenium	2401 ppb
Thallium	<2 ppb
Antimony	14 ppb
Tin	4 ppb
Cobalt	56 ppb
Strontium	88 ppb
Molybdenum	490 ppb
Beryllium	<2 ppb
Vanadium	87 ppb

Infodoc 03 | PDF

Solubility and toxicity of different fluorides

Consumption of fluoride cannot be avoided. It appears in so many different forms and in so many different environments (in our water supplies, our food, the air we breath, etc.). Therefore, it is important to know exactly how toxic each type of fluoride is and how much is considered safe when exposed to this chemical.

Toxicity is related to solubility. If a compound of fluoride (fluorine + one or more other elements) is very soluble, the fluoride ion is made more readily available. In 1971, former Aston University chemist Malcolm Harris investigated some fluoride compounds and determined the following table of solubility (solubility: "... a critical aspect of toxicity");-

Solubility

Calcium fluoride [natural] 16 ppm at 18ºc and 17 ppm at 26ºC

Sodium Fluoride [artificial] 42,200 ppm at 18ºC

Sodium fluosilicate [artificial] 6,520 ppm at 17ºC

Hydrofluorosilic acid [artificial] miscible liquid

It can be clearly seen that sodium-fluoride compounds are far more soluble than calcium fluoride. Hydrofluorosilic acid (used to fluoridate water supplies in the UK and [extensively] in the USA) is a "miscible" liquid. A miscible liquid means something which can be mixed (in this instance, with water).

By definition, hydrofluorosilic acid has 6 atoms of fluorine (H_2SiF_6). Of these six atoms, it is sometimes assumed that all six will become simple fluoride ions. However, there is no known published to demonstrate this actually happens. In fact, the best available knowledge suggests that only four of these atoms will become fluoride ions and the remaining two will form more 'exotic' complexes (depending on the quality of water the compound is mixed with).

More information on solubility:

Lanthanum Fluoride (LaF_3) Insoluble in water

Magnesium Fluoride (MgF_2) 0.0002g/100g water

Calcium Fluoride (CaF_2) 0.0017gm/100gm water at 20Â°C

Strontium Fluoride (SrF_2) 0.012g/100g water at 27Â°C

Barium Fluoride (BaF_2) 0.17g/100g water at 23Â°C

Lithium Fluoride (LiF) 0.27g/100g water at 20Â°C

Sodium Fluoride (NaF) 4.22g/100g water at 18Â°C

Source: www.crystran.co.uk

Considering that solubility is "... a critical aspect of toxicity", it is now prudent to examine another table which shows different types of fluoride. Professor Kaj Roholm's table of toxicity gives three categories of inorganic fluorine compounds (it should be noted that Prof. Roholm is the author of the first and most comprehensive monograph on fluorine toxicity);-

Extremely Toxic

Hydrogen Fluoride (anhydrous)

Silicon Tetrafluoride

Hydrofluoric Acid

Hydrofluorosilicic Acid

Potassium Fluorosilicate

Ammonium Fluorosilicate

Very Toxic (Easily soluble fluorides and fluorosilicates)

Sodium Fluoride

Potassium Fluoride

Ammonium Fluoride

Sodium Fluorosilicate

Moderately Toxic (Poorly soluble fluorides)

Cryolite

Calcium Fluoride

Hydrofluoric acid and hydrofluorosilicic acid are classified as being extremely toxic. Hydrofluorosilicic acid is used to fluoridate UK water supplies. The similarly dangerous hydrofluoric acid carries the following warning issued by the Health & Safety Executive (2001);-

Hydrofluoric acid poisoning

Recommendations on first aid procedures. Health & Safety Executive: http://www.hse.gov.uk

Information contained within this document is accurate as of 1/1/2001

IMPORTANT. ALWAYS contact the HSE for advice. See Disclaimer (below).

This leaflet is aimed at employers and employees in industries where hydrofluoric acid is used. It provides information on:

- health effects;
- precautions to be taken when working with hydrofluoric acid;
- first aid procedures to be followed in cases of hydrofluoric acid poisoning;
- first aid training.

DISCLAIMER

[1] THE INFORMATION PROVIDED ON THIS WEB-PAGE IS PURELY FOR THE PURPOSE OF HIGHLIGHTING THE DANGERS OF HYDROFLUORIC ACID.

[2] ANYONE WHO WORKS WITH HYDROFLUORIC ACID SHOULD ENSURE THAT THEIR EMPLOYER HAS THE APPROPRIATE MEASURES TO DEAL WITH ANY INCIDENT RELATING TO THE USE OF THIS CHEMICAL.

Health Effects

Hydrofluoric acid is corrosive. It can cause severe burns to the skin and eyes. If it comes into contact with skin, you may not feel pain at once Hydrofluoric acid is also highly irritating to the respiratory system and very toxic if swallowed.

Precautions

The Control of Substances Hazardous to Health Regulations 1999 (COSHH) apply. A COSHH assessment should be completed. Consider the use of safer alternatives. If there are no suitable alternatives, the assessment should detail appropriate precautions to be taken when using hydrofluoric acid, which include using a safe system of work. Employers should ensure that employees are given adequate information and training on the hazards to health posed by hydrofluoric acid, and the precautions to take to avoid them.

Employers should:

- always use the protections provided;
- always wash gloves and other impervious clothing before removing them;
- test gloves for pinholes using a method advised by the manufacturers (this might be done by filling them with water, before drying and putting them away for use again), discarding gloves that are not sound;
- always wash their hands before leaving the work area

First aid:

- Urgent action is required. Obtain immediate medical attention.
- When giving first aid, protect yourself and the casualty from further exposure.
- Casualties should be sent to hospital as soon as possible (see opposite). In all cases, the hospital should be informed of the cause of injury.

Skin contact

- Remove contaminated clothing while protecting your hands with suitable gloves.
- Flood the skin with plenty of water for at least 5-10 minutes.
- Apply calcium gluconate gel on and around the affected area and continuously massage into the skin for at least 15 minutes after pain is relieved. Cover the area with a dressing soaked in the gel and lightly bandage. these procedures can be continued during transit to hospital.
- Send to the Accident and Emergency Department.

Eye contact:

- Flush the eye with water for at least 20 minutes. This can be continued during transit to the hospital.
- Send the casualty to the Accident & Emergency Department or local Eye Casualty Department.

Gassing:

- Remove the casualty from the contaminated area and place in fresh air.
- If necessary, resuscitate the casualty.
- If suitably trained, give oxygen.
- Send to the Accident & Emergency Department.

Swallowing:

- Never attempt to induce vomiting.
- If the casualty is conscious, rinse out their mouth with water.
- Send to Accident & Emergency Department.

Obviously, hydrogen-related fluorine compounds are extremely dangerous. While hydrofluorosilicic acid breaks down in water, the raw material poses a significant threat to those who come into contact with it.

Some Early History

It was our intention to write something about the origins of water fluoridation. However, the subject has been admirably covered in Parts 1 through 3 by Joel Griffiths (et al).

Joel covers the story from the Atom Bomb through to the propaganda stage, and ends with a conference held in 1951. We really need say no more beyond this

And so the story begins ...

Atom Bomb

FLUORIDE, TEETH AND THE ATOMIC BOMB

Part 1 of a series on the early history of fluoride, by Joel Griffiths and Chris Bryson

How it all began.

Some fifty years after the United States began adding fluoride to public water supplies to reduce cavities in children's teeth, declassified government documents are shedding new light on the roots of that still-controversial public health measure, revealing a surprising connection between fluoride and the dawning of the nuclear age.

Today, two thirds of U.S. public drinking water is fluoridated. Many municipalities still resist the practice, disbelieving the government's assurances of safety.

Since the days of World War II, when this nation prevailed by building the world's first atomic bomb, U.S. public health leaders have maintained that low doses of fluoride are safe for people, and good for children's teeth.

That safety verdict should now be re-examined in the light of hundreds of once-secret WWII documents obtained by Griffiths and Bryson - including declassified papers of the Manhattan Project, the U.S. military group that built the atomic bomb.

Fluoride was the key chemical in atomic bomb production, according to the documents. Massive quantities of fluoride - millions of tons - were essential for the manufacture of bomb-grade uranium and plutonium for nuclear weapons throughout the Cold War. One of the most toxic chemicals known, fluoride rapidly emerged as the leading chemical health hazard of the U.S atomic bomb program - both for workers and for nearby communities, the documents reveal.

Other revelations include:

- Much of the original proof that fluoride is safe for humans in low doses was generated by A-bomb program scientists, who had been secretly ordered to provide *"evidence useful in litigation"* against defense contractors for fluoride injury to citizens. The first lawsuits against the U.S. A-bomb program were not over radiation, but over fluoride damage, the documents show.

- Human studies were required. Bomb program researchers played a leading role in the design and implementation of the most extensive U.S. study of the health effects of fluoridating public drinking water - conducted in Newburgh, New York from 1945 to 1956. Then, in a classified operation code-named *"Program F,"* they secretly gathered and analyzed blood and tissue samples from Newburgh citizens, with the cooperation of State Health Department personnel.
- The original secret version - obtained by these reporters - of a 1948 study published by Program F scientists in the Journal of the American Dental Association shows that evidence of adverse health effects from fluoride was censored by the U.S. Atomic Energy Commission (AEC) - considered the most powerful of Cold War agencies - for reasons of national security.
- The bomb program's fluoride safety studies were conducted at the University of Rochester, site of one of the most notorious human radiation experiments of the Cold War, in which unsuspecting hospital patients were injected with toxic doses of radioactive plutonium. The fluoride studies were conducted with the same ethical mind-set, in which "national security" was paramount.
- The U.S. government's conflict of interest--and its motive to prove fluoride *"safe"* - has not until now been made clear to the general public in the furious debate over water fluoridation since the 1950's, nor to civilian researchers and health professionals, or journalists.

The declassified documents resonate with a growing body of scientific evidence, and a chorus of questions, about the health effects of fluoride in the environment.

Human exposure to fluoride has mushroomed since World War II, due not only to fluoridated water and toothpaste, but to environmental pollution by major industries from aluminum to pesticides: fluoride is a critical industrial chemical.

The impact can be seen, literally, in the smiles of our children. Large numbers of U.S. young people - up to 80 percent in some cities - now have dental fluorosis, the first visible sign of excessive fluoride exposure, according to the U.S. National Research Council. (The signs are whitish flecks or spots, particularly on the front teeth, or dark spots or stripes in more severe cases.)

Less-known to the public is that fluoride also accumulates in bones - *"The teeth are windows to what's happening in the bones,"* explains Paul Connett, Professor of Chemistry at St. Lawrence University (N.Y.). In recent years, pediatric bone specialists have expressed alarm about an increase in stress fractures among U.S. young people. Connett and other scientists are concerned that fluoride - linked to bone damage by studies since the 1930's - may be a contributing factor. The declassified documents add urgency: much of the original proof that low-dose fluoride is safe for children's bones came from U.S. bomb program scientists, according to this investigation.

Now, researchers who have reviewed these declassified documents fear that Cold War national security considerations may have prevented objective scientific evaluation of vital public health questions concerning fluoride.

"Information was buried," concludes Dr. Phyllis Mullenix, former head of toxicology at Forsyth Dental Center in Boston, and now a critic of fluoridation. Animal studies Mullenix and co-workers conducted at Forsyth in the early 1990's indicated that fluoride was a powerful central nervous system (CNS) toxin, and might adversely affect human brain functioning, even at low doses. (New epidemiological evidence from China adds support, showing a correlation between low-dose fluoride exposure and diminished I.Q. in children.) Mullenix's results were published in 1995, in a reputable peer-reviewed scientific journal.

During her investigation, Mullenix was astonished to discover there had been virtually no previous U.S. studies of fluoride's effects on the human brain. Then, her application for a grant to continue her CNS research was turned down by the U.S. National Institutes of Health (NIH), where an NIH panel, she says, flatly told her that *"fluoride does not have central nervous system effects."*

Declassified documents of the U.S. atomic-bomb program indicate otherwise. An April 29, 1944 Manhattan Project memo reports: *"Clinical evidence suggests that uranium hexafluoride may have a rather marked central nervous system effect ... it seems most likely that the F [code for fluoride] component rather than the T [code for uranium] is the causative factor."*

The memo - stamped *"secret"* - is addressed to the head of the Manhattan Project's Medical Section, Colonel Stafford Warren. Colonel Warren is asked to approve a program of animal research on CNS effects: *"Since work with these compounds is essential, it will be necessary to know in advance what mental effects may occur after exposure...This is important not only to protect a given individual, but also to prevent a confused workman from injuring others by improperly performing his duties."*

On the same day, Colonel Warren approved the CNS research program. This was in 1944, at the height of the Second World War and the nation's race to build the world's first atomic bomb. For research on fluoride's CNS effects to be approved at such a momentous time, the supporting evidence set forth in the proposal forwarded along with the memo must have been persuasive.

The proposal, however, is missing from the files of the U.S. National Archives. *"If you find the memos, but the document they refer to is missing, its probably still classified,"* said Charles Reeves, chief librarian at the Atlanta branch of the U.S. National Archives and Records Administration, where the memos were found. Similarly, no results of the Manhattan Project's fluoride CNS research could be found in the files.

After reviewing the memos, Mullenix declared herself *"flabbergasted."* She went on, *"How could I be told by NIH that fluoride has no central nervous system effects when these documents were sitting there all the time?"* She reasons that the Manhattan Project did do fluoride CNS studies - *"that kind of warning, that fluoride workers might be a danger to the bomb program by improperly performing their duties - I can't imagine that would be ignored"* - but that the results were buried because they might create a difficult legal and public relations problem for the government.

The author of the 1944 CNS research proposal was Dr. Harold C. Hodge, at the time chief of fluoride toxicology studies for the University of Rochester division of the Manhattan Project. Nearly fifty years later at the Forsyth Dental Center in Boston, Dr. Mullenix was introduced to a gently ambling elderly man brought in to serve as a consultant on her CNS research - Harold C. Hodge. By then Hodge had achieved status emeritus as a world authority on fluoride safety. *"But even though he was supposed to be helping me,"* says Mullenix, *"he never once mentioned the CNS work he had done for the Manhattan Project."*

The *"black hole"* in fluoride CNS research since the days of the Manhattan Project is unacceptable to Mullenix, who refuses to abandon the issue. *"There is so much fluoride exposure now, and we simply do not know what it is doing,"* she says. *"You can't just walk away from this."*

Dr. Antonio Noronha, an NIH scientific review advisor familiar with Dr. Mullenix's grant request, says her proposal was rejected by a scientific peer-review group. He terms her claim of institutional bias against fluoride CNS research *"farfetched."* He adds, *"We strive very hard at NIH to make sure politics does not enter the picture."*

Fluoride and National Security

The documentary trail begins at the height of WW2, in 1944, when a severe pollution incident occurred downwind of the E.I. du Pont du Nemours Company chemical factory in Deepwater, New Jersey. The factory was then producing millions of pounds of fluoride for the Manhattan project, the ultra-secret U.S. military program racing to produce the world's first atomic bomb.

The farms downwind in Gloucester and Salem counties were famous for their high-quality produce - their peaches went directly to the Waldorf Astoria Hotel in New York. Their tomatoes were bought up by Campbell's Soup.

But in the summer of 1943, the farmers began to report that their crops were blighted, and that *"something is burning up the peach crops around here."*

Poultry died after an all-night thunderstorm, they reported. Farm workers who ate the produce they had picked sometimes vomited all night and into the next day. *"I remember our horses looked sick and were too stiff to work,"* these reporters were told by Mildred Giordano, who was a teenager at the time. Some cows were so crippled they could not stand up, and grazed by crawling on their bellies.<.p>

The account was confirmed in taped interviews, shortly before he died, with Philip Sadtler of Sadtler Laboratories of Philadelphia, one of the nation's oldest chemical consulting firms. Sadtler had personally conducted the initial investigation of the damage.

Although the farmers did not know it, the attention of the Manhattan Project and the federal government was riveted on the New Jersey incident, according to once-secret documents obtained by these reporters. After the war's end, in a secret Manhattan Project memo dated March 1, 1946, the Project's chief of fluoride toxicology studies, Harold C. Hodge, worriedly wrote to his boss Colonel Stafford L. Warren, Chief of the Medical Division, about *"problems associated with the question of fluoride contamination of the atmosphere in a certain section of New Jersey. There seem to be four distinct (though related) problems,"* continued Hodge:

1. "A question of injury of the peach crop in 1944.";
2. "A report of extraordinary fluoride content of vegetables grown in this area.";
3. "A report of abnormally high fluoride content in the blood of human individuals residing in this area.";
4. "A report raising the question of serious poisoning of horses and cattle in this area."

The New Jersey farmers waited until the war was over, then sued du Pont and the Manhattan Project for fluoride damage - reportedly the first lawsuits against the U.S. A-bomb program.

Although seemingly trivial, the lawsuits shook the government, the secret documents reveal. Under the personal direction of Manhattan Project chief Major General Leslie R.Groves, secret meetings were convened in Washington, with compulsory attendance by scores of scientists and officials from the U.S War Department, the Manhattan Project, the Food and Drug Administration, the Agriculture and Justice Departments, the U.S Army's Chemical Warfare Service and Edgewood Arsenal, the Bureau of Standards, and du Pont lawyers. Declassified memos of the meetings reveal a secret mobilization of the full forces of the government to defeat the New Jersey farmers:

These agencies *"are making scientific investigations to obtain evidence which may be used to protect the interest of the Government at the trial of the suits brought by owners of peach orchards in ... New Jersey,"* stated Manhattan Project Lieutenant Colonel Cooper B. Rhodes, in a memo c.c.'d to General Groves ...

27 August 1945

Subject: Investigation of Crop Damage at Lower Penns Neck, New Jersey

To: The Commanding General, Army Service Forces, Pentagon Building, Washington D.C.

"At the request of the Secretary of War the Department of Agriculture has agreed to cooperate in investigating complaints of crop damage attributed... to fumes from a plant operated in connection with the Manhattan Project."

Signed, L.R. Groves, Major General U.S.A

"The Department of Justice is cooperating in the defense of these suits," wrote General Groves in a Feb. 28, 1946 memo to the Chairman of the U.S. Senate Special Committee on Atomic Energy.

Why the national-security emergency over a few lawsuits by New Jersey farmers? In 1946 the United States had begun full-scale production of atomic bombs. No other nation had yet tested a nuclear weapon, and the A-bomb was seen as crucial for U.S leadership of the postwar world. The New Jersey fluoride lawsuits were a serious roadblock to that strategy.

"The specter of endless lawsuits haunted the military," writes Lansing Lamont in his acclaimed book about the first atomic bomb test, *"Day of Trinity."*

In the case of fluoride, *"If the farmers won, it would open the door to further suits, which might impede the bomb program's ability to use fluoride,"* said Jacqueline Kittrell, a Tennessee public interest lawyer specializing in nuclear cases, who examined the declassified fluoride documents. (Kittrell has represented plaintiffs in several human radiation experiment cases.) She added, *"The reports of human injury were especially threatening, because of the potential for enormous settlements - not to mention the PR problem."*

Indeed, du Pont was particularly concerned about the *"possible psychologic reaction"* to the New Jersey pollution incident, according to a secret 1946 Manhattan Project memo. Facing a threat from th Food and Drug Administration (FDA) to embargo the region's produce because of *"high fluoride content,"* du Pont dispatched its lawyers to the FDA offices in Washington, where an agitated meeting ensued. According to a memo sent next day to General Groves, Du Pont's lawyer argued *"that in view of the pending suits...any action by the Food and Drug Administration... would have a serious effect on the du Pont Company and would create a bad public relations situation."* After the meeting adjourned, Manhattan Project Captain John Davies approached the FDA's Food Division chief and *"impressed upon Dr. White the substantial interest which the Government had in claims which might arise as a result of action which might be taken by the Food and Drug Administration."*

There was no embargo. Instead, new tests for fluoride in the New Jersey area would be conducted - not by the Department of Agriculture - but by the U.S. Army's Chemical Warfare Service because *"work done by the Chemical Warfare Service would carry the greatest weight as evidence if ... lawsuits are started by the complainants."* The memo was signed by General Groves.

Meanwhile, the public relations problem remained unresolved - local citizens were in a panic about fluoride.

The farmer's spokesman, Willard B. Kille, was personally invited to dine with General Groves - then known as *"the man who built the atomic bomb"* - at his office at the War Department on March 26, 1946. Although he had been diagnosed with fluoride poisoning by his doctor, Kille departed the luncheon convinced of the government's good faith. The next day he wrote to the general, wishing the other farmers could have been present, he said, so *"they too could come away with the feeling that their interests in this particular matter were being safeguarded by men of the very highest type whose integrity they could not question."*

In a subsequent secret Manhattan project memo, a broader solution to the public relations problem was suggested by chief fluoride toxicologist Harold C. Hodge. He wrote to the Medical Section chief, Col. Warren: *"Would there be any use in making attempts to counteract the local fear of fluoride on the part of residents of Salem and Gloucester counties through lectures on F toxicology and perhaps the usefulness of F in tooth health?"* Such lectures were indeed given, not only to New Jersey citizens but to the rest of the nation throughout the Cold War.

The New Jersey farmers' lawsuits were ultimately stymied by the government's refusal to reveal the key piece of information that would have settled the case - how much fluoride du Pont had vented into the atmosphere during the war. *"Disclosure... would be injurious to the military security of the United States,"* wrote Manhattan Project Major C.A Taney, Jr. The farmers were pacified with token financial settlements, according to interviews with descendants still living in the area.

"All we knew is that du Pont released some chemical that burned up all the peach trees around here," recalls Angelo Giordano, whose father James was one of the original plaintiffs. *"The trees were no good after that, so we had to give up on the peaches."* Their horses and cows, too, acted stiff and walked stiff, recalls his sister Mildred. *"Could any of that have been the fluoride?"* she asked. (The symptoms she detailed to the authors are cardinal signs of fluoride toxicity, according to veterinary toxicologists.)

The Giordano family, too, has been plagued by bone and joint problems, Mildred adds. Recalling the settlement received by the Giordanos, Angelo told these reporters that *"my father said he got about $200."*

The farmers were stonewalled in their search for information, and their complaints have long since been forgotten. But they unknowingly left their imprint on history - their claims of injury to their health reverberated through the corridors of power in Washington, and triggered intensive secret bomb-program research on the health effects of fluoride. A secret 1945 memo from Manhattan Project Lt. Col. Rhodes to General Groves stated: *"Because of complaints that animals and humans have been injured by hydrogen fluoride fumes in [the New Jersey] area, although there are no pending suits involving such claims, the University of Rochester is conducting experiments to determine the toxic effect of fluoride."*

Much of the proof of fluoride's safety in low doses rests on the postwar work performed by the University of Rochester, in anticipation of lawsuits against the bomb program for human injury.

Fluoride and the Cold War.

Delegating fluoride safety studies to the University of Rochester was not surprising. During WWII the federal government had become involved, for the first time, in large-scale funding of scientific research at government-owned labs and private colleges. Those early spending priorities were shaped by the nation's often-secret military needs.

The prestigious upstate New York college, in particular, had housed a key wartime division of the Manhattan Project, studying the health effects of the new *"special materials,"* such as uranium, plutonium, beryllium and fluoride, being used to make the atomic bomb. That work continued after the war, with millions of dollars flowing from the Manhattan Project and its successor organization, the Atomic Energy Commission (AEC). (Indeed, the bomb left an indelible imprint on all U.S. science in the late 1940's and 50's. Up to 90% of federal funds for university research came from either the Defense Department or the AEC in this period, according to Noam Chomsky's 1996 book *"The Cold War and the University.")*

The University of Rochester medical school became a revolving door for senior bomb program scientists. Postwar faculty included Stafford Warren, the top medical officer of the Manhattan Project, and Harold Hodge, chief of fluoride research for the bomb program.

But this marriage of military secrecy and medical science bore deformed offspring. The University of Rochester's classified fluoride studies - code- named Program F - were conducted at its Atomic Energy Project (AEP), a top-secret facility funded by the AEC and housed in Strong Memorial Hospital. It was there that one of the most notorious human radiation experiments of the Cold War took place, in which unsuspecting hospital patients were injected with toxic doses of radioactive plutonium. Revelation of this experiment in a Pulitzer prize-winning account by Eileen Welsome led to a 1995 U.S. Presidential investigation, and a multimillion-dollar cash settlement for victims. (Read Eileen Welsome's account of the U. of Rochester's Medical Experimentation)

Program F was not about children's teeth. It grew directly out of litigation against the bomb program and its main purpose was to furnish scientific ammunition which the government and its nuclear contractors could use to defeat lawsuits for human injury. Program F's director was none other than Harold C. Hodge, who had led the Manhattan Project investigation of alleged human injury in the New Jersey fluoride-pollution incident.

Program F's purpose is spelled out in a classified 1948 report. It reads: *"To supply evidence useful in the litigation arising from an alleged loss of a fruit crop several years ago, a number of problems have been opened. Since excessive blood fluoride levels were reported in human residents of the same area, our principal effort has been devoted to describing the relationship of blood fluorides to toxic effects."*

The litigation referred to, of course, and the claims of human injury were against the bomb program and its contractors. Thus, the purpose of Program F was to obtain evidence useful in litigation against the bomb program. The research was being conducted by the defendants.

The potential conflict of interest is clear. If lower dose ranges were found hazardous by Program F, it might have opened the bomb program and its contractors to lawsuits for injury to human health, as well as public outcry.

Comments lawyer Kittrell: *"This and other documents indicate that the University of Rochester's fluoride research grew out of the New Jersey lawsuits and was performed in anticipation of lawsuits against the bomb program for human injury. Studies undertaken for litigation purposes by the defendants would not be considered scientifically acceptable today,"* adds Kittrell, *"because of their inherent bias to prove the chemical safe."*

Unfortunately, much of the proof of fluoride's safety rests on the work performed by Program F Scientists at the University of Rochester. During the postwar period that university emerged as the leading academic center for establishing the safety of fluoride, as well as its effectiveness in reducing tooth decay, according to Dental School spokesperson William H. Bowen, MD. The key figure in this research, Bowen said, was Harold C. Hodge - who also became a leading national proponent of fluoridating public drinking water. Program F's interest in water fluoridation was not just 'to counteract the local fear of fluoride on the part of residents,' as Hodge had earlier written. The bomb program needed human studies, as they had needed human studies for plutonium, and adding fluoride to public water supplies provided one opportunity.

The A-Bomb Program and Water Fluoridation

Bomb-program scientists played a prominent - if unpublicized - role in the nation's first-planned water fluoridation experiment, in Newburgh, New York. The Newburgh Demonstration Project is considered the most extensive study of the health effects of fluoridation, supplying much of the evidence that low doses are safe for children's bones, and good for their teeth.

Planning began in 1943 with the appointment of a special New York State Health Department committee to study the advisability of adding fluoride to Newburgh's drinking water. The chairman of the committee was Dr. Hodge, then chief of fluoride toxicity studies for the Manhattan Project.

Subsequent members included Henry L. Barnett, a captain in the Project's Medical section, and John W. Fertig, in 1944 with the office of Scientific Research and Development, the Pentagon group which sired the Manhattan Project. Their military affiliations were kept secret: Hodge was described as a pharmacologist, Barnett as a pediatrician. Placed in charge of the Newburgh project was David B. Ast, chief dental officer of the State Health Department. Ast had participated in a key secret wartime conference on fluoride held by the Manhattan Project, and later worked with Dr. Hodge on the Project's investigation of human injury in the New Jersey incident, according to once-secret memos.

The committee recommended that Newburgh be fluoridated. It also selected the types of medical studies to be done, and *"provided expert guidance"* for the duration of the experiment. The key question to be answered was: *"Are there any cumulative effects - beneficial or otherwise, on tissues and organs other than the teeth - of long-continued ingestion of such small concentrations ...?"* According to the declassified documents, this was also key information sought by the bomb program, which would require long-continued exposure of workers and communities to fluoride throughout the Cold War.

In May 1945, Newburgh's water was fluoridated, and over the next ten years its residents were studied by the State Health Department. In tandem, Program F conducted its own secret studies, focusing on the amounts of fluoride Newburgh citizens retained in their blood and tissues - key information sought by the bomb program: *"Possible toxic effects of fluoride were in the forefront of consideration,"* the advisory committee stated. Health Department personnel cooperated, shipping blood and placenta samples to the Program F team at the University of Rochester. The samples were collected by Dr. David B. Overton, the Department's chief of pediatric studies at Newburgh.

The final report of the Newburgh Demonstration Project, published in 1956 in the Journal of the American Dental Association, concluded that *"small concentrations"* of fluoride were safe for U.S.citizens. The biological proof - *"based on work performed ... at the University of Rochester Atomic Energy Project"* - was delivered by Dr. Hodge.

Today, news that scientists from the atomic bomb program secretly shaped and guided the Newburgh fluoridation experiment, and studied the citizen's blood and tissue samples, is greeted with incredulity.

"I'm shocked -- beyond words," said present-day Newburgh Mayor Audrey Carey, commenting on these reporters' findings. *"It reminds me of the Tuskegee experiment that was done on syphilis patients down in Alabama."*

As a child in the early 1950's, Mayor Carey was taken to the old firehouse on Broadway in Newburgh, which housed the Public Health Clinic. There, doctors from the Newburgh fluoridation project studied her teeth, and a peculiar fusion of two finger bones on her left hand she had been born with. Today, adds Carey, her granddaughter has white dental-fluorosis marks on her front teeth.

Mayor Carey wants answers from the government about the secret history of fluoride, and the Newburgh fluoridation experiment. *"I absolutely want to pursue it,"* she said. *"It is appalling to do any kind of experimentation and study without people's knowledge and permission."*

Contacted by these reporters, the director of the Newburgh experiment, David B. Ast, says he was unaware Manhattan Project scientists were involved. *"If I had known, I would have been certainly investigating why, and what the connection was,"* he said. Did he know that blood and placenta samples from Newburgh were being sent to bomb program researchers at the University of Rochester? *"I was not aware of it,"* Ast replied. Did he recall participating in the Manhattan Project's secret wartime conference on fluoride in January 1944, or going to New Jersey with Dr. Hodge to investigate human injury in the du Pont case - as secret memos state? He told the reporters he had no recollection of these events.

A spokesperson for the University of Rochester Medical Center, Bob Loeb, confirmed that blood and tissue samples from Newburgh had been tested by the University's Dr. Hodge. On the ethics of secretly studying U.S citizens to obtain information useful in litigation against the A-bomb program, he said, *"that's a question we cannot answer."* He referred inquiries to the U.S. Department of Energy (DOE), successor to the Atomic Energy Commission.

A spokesperson for the DOE in Washington, Jayne Brady, confirmed that a review of DOE files indicated that a *"significant reason"* for fluoride experiments conducted at the University of Rochester after the war was *"impending litigation between the du Pont company and residents of New Jersey areas."* However, she added, *"DOE has found no documents to indicate that fluoride research was done to protect the Manhattan Project or its contractors from lawsuits."*

On Manhattan Project involvement in Newburgh, the spokesperson stated, *"Nothing that we have suggests that the DOE or predecessor agencies - especially the Manhattan Project - authorized fluoride experiments to be performed on children in the 1940's."*

When told that the reporters had several documents that directly tied the Manhattan Project's successor agency at the University of Rochester, the AEP, to the Newburgh experiment, the DOE spokesperson later conceded her study was confined to *"the available universe"* of documents. Two days later spokesperson Jayne Brady faxed a statement for clarification: *"My search only involved the documents that we collected as part of our human radiation experiments project - fluoride was not part of our research effort."*

"Most significantly," the statement continued, relevant documents may be in a classified collection at the DOE Oak Ridge National Laboratory known as the Records Holding Task Group. *"This collection consists entirely of classified documents removed from other files for the purpose of classified document accountability many years ago,"* and was *"a rich source of documents for the human radiation experiments project,"* she said.

The crucial question arising from this investigation is: Were adverse health findings from Newburgh and other bomb-program fluoride studies suppressed? All AEC-funded studies had to be declassified before publication in civilian medical and dental journals. Where are the original classified versions?

The transcript of one of the major secret scientific conferences of WW2 - on *"fluoride metabolism"* - is missing from the files of the U.S. National Archives. Participants in the conference included key figures who promoted the safety of fluoride and water fluoridation to the public after the war - Harold Hodge of the Manhattan Project, David B. Ast of the Newburgh Project, and U.S. Public Health Service dentist H.Trendley Dean, popularly known as the *"father of fluoridation." "If it is missing from the files, it is probably still classified,"* National Archives librarians told these reporters.

A 1944 WW2 Manhattan Project classified report on water fluoridation is missing from the files of the University of Rochester Atomic Energy Project, the U.S. National Archives, and the Nuclear Repository at the University of Tennessee, Knoxville. The next four numerically consecutive documents are also missing, while the remainder of the *"MP-1500* series" is present. *"Either those documents are still classified, or they've been 'disappeared' by the government,"* says Clifford Honicker, Executive Director of the American Environmental Health Studies Project, in Knoxville, Tennessee, which provided key evidence in the public exposure and prosecution of U.S. human radiation experiments.

Seven pages have been cut out of a 1947 Rochester bomb-project notebook entitled *"Du Pont litigation." "Most unusual,"* commented chief medical school archivist Chris Hoolihan.

Similarly, Freedom of Information Act (FOIA) requests by these authors over a year ago with the DOE for hundreds of classified fluoride reports have failed to dislodge any. *"We're behind,"* explained Amy Rothrock, FOIA officer for the Department of Energy at their Oak Ridge operations.

Was information suppressed? These reporters made what appears to be the first discovery of the original classified version of a fluoride safety study by bomb program scientists. A censored version of this study was later published in the August 1948 Journal of the American Dental Association. Comparison of the secret with the published version indicates that the U.S. AEC did censor damaging information on fluoride, to the point of tragicomedy.

This was a study of the dental and physical health of workers in a factory producing fluoride for the A-bomb program, conducted by a team of dentists from the Manhattan Project:

- The secret version reports that most of the men had no teeth left. The published version reports only that the men had fewer cavities.
- The secret version says the men had to wear rubber boots because the fluoride fumes disintegrated the nails in their shoes. The published version does not mention this.
- The secret version says the fluoride may have acted similarly on the men's teeth, contributing to their toothlessness. The published version omits this statement.

The published version concludes that *"the men were unusually healthy, judged from both a medical and dental point of view."*

Asked for comment on the early links of the Manhattan Project to water fluoridation, Dr Harold Slavkin, Director of the National Institute for Dental Research, the U.S. agency which today funds fluoride research, said, *"I wasn't aware of any input from the Atomic Energy Commission."* Nevertheless, he insisted, fluoride's efficacy and safety in the prevention of dental cavities over the last fifty years is well-proved. *"The motivation of a scientist is often different from the outcome,"* he reflected. *"I do not hold a prejudice about where the knowledge comes from."*

After comparing the secret and published versions of the censored study, toxicologist Phyllis Mullenix commented, *"This makes me ashamed to be a scientist."* Of other Cold War-era fluoride safety studies, she asks, *"Were they all done like this?"*

About the authors:

Archival research by Clifford Honicker.

Joel Griffiths is a medical writer in New York City, author of a book on radiation hazards and numerous articles for medical and popular publications.

Chris Bryson holds a Masters degree from the Columbia University Graduate School of Journalism, and has worked for the British Broadcasting Corporation, The Manchester Guardian, The Christian Science Monitor and Public Television.

Commie Plot

FLUORIDE: COMMIE PLOT OR CAPITALIST PLOY?

Part 2 of a series on the early history of fluoride, by Joel Griffiths

Cows crawled around the pasture on their bellies, ...

... inching along like giant snails. So crippled by bone disease they could not stand up. this was the only way they could graze. Some died kneeling after giving birth to stunted calves. Others kept on crawling until no longer able to chew because their teeth had crumbled down to the nerves, they began to starve ...[1]

These were the cattle of the Mohawk Indians on the New York-Canadian St. Regis Reservation during the period 1960-75, when industrial pollution devastated the herd; and along with it, the Mohawks' way of life. Crops and trees withered, birds and bees fled from this remnant of land the Mohawk still call Akwesasne, "the land where the partridge drums." Today, nets cast into the St. Lawrence River by Mohawk fishers bring up ulcerated fish with spinal deformities. Mohawk children, too, have shown signs of damage to bones and teeth.[2]

In 1980, the Mohawks filed a $150 million lawsuit for damage to themselves and their property against the companies responsible for the pollution: the Reynolds Metals Co. and the Aluminum Co. of America (ALCOA). But five years of legal costs bankrupted the tribe and they settled for $650,000 in damages to their cows;[3] the court, however, left the door open for a future Mohawk suit for damage to their own health. After all, commented human rights lawyer Robert Pritchard, *"What judge wants to go down in history as being the judge who approved the annihilation of the Indians by fluoride emissions?"*[4]

Fluoride emissions? Fluoride, as in toothpaste? Well, yes. Fluoride was the pollutant primarily responsible for the Akwesasne devastation.[5]

For nearly 50 years, the U.S. government and media have been telling the public that fluoride is safe and beneficial; it is supposed to reduce cavities, especially in children. Manufacturers add it to toothpaste, municipalities put it in the public's drinking water. The only people who question the safety of fluoride, says the government, are quacks and lunatics; particularly of the far-right-wing variety.

But fluoride has another side the government never mentions. It is a toxic industrial pollutant; one of the oldest and biggest of them all. For decades, U.S. industrial plants have rained heavy doses of waste fluoride on people, such as the Mohawks. The nation, however, has been successfully conditioned to think of fluoride solely as a benevolent substance and to dismiss as a crackpot, anyone who claims otherwise.

In recent years, because of rampant environmental damage, some of the worst fluoride pollution plants; such as those at Akwesasne; have been forced to reduce their emissions, but not terminate them. At Akwesasne, cows still live only half their normal lifespan.[6] Nationwide, fluoride remains one of industry's largest pollutants. By the Environmental Protection Agency's (EPA) last estimate, at least 155,000 tons a year were being released into the air by U.S. industrial plants.[7]

Emissions into water; lakes, rivers, and oceans; have been estimated to be as high as 500,000 tons a year

While people living near and/or working in heavy fluoride-emitting industrial plants have received the highest doses, the general population has not been spared either. Fluoride is not biodegradable; whatever comes around stays around, gradually accumulating in the environment, in the food chain, and in people's bodies, where it settles in bones and teeth.[8] If this general increase in fluoride dose were proved harmful to humans, the impact on industry which pollutes both air and water would be major. The nation's air is contaminated by fluoride emissions from the production of iron, steel, aluminum, copper, lead and zinc; phosphates (essential for the manufacture of all agricultural fertilizers); plastics; gasoline; brick, cement, glass, ceramics, and the multitudinous other products made from clay; electrical power generation and all other coal combustion; and uranium processing.

[9]

As for water, the leading industrial fluoride polluters are the producers and processors of glass, pesticides and fertilizers, steel and aluminum, chemicals, and metals.[10] The metal processing industries include copper and brass, as well as titanium, super alloys, and refractory metals for military use.[11]

The list of polluters extends across industry from basic to strategic. Industry and government have long had a powerful motive for claiming an increased dose of fluoride is safe for the population. Maintaining this position has not been easy because, of industry's largest pollutants, fluoride is by far the most toxic to vegetation, animals, and humans.[12] In fact, it's one of the most toxic substances known.[13]

"Airborne fluorides," reports the U.S. Department of Agriculture, *"have caused more worldwide damage to domestic animals than any other air pollutant."*[14] As for vegetation, as early as 1901, studies *"found that fluoride compounds are much more toxic than the other compounds that are of significance in the industrial smoke problem."*[14]

Fluoride pollution has caused aquatic damage of similar magnitude.[16] In other words, there have been many Akwesasnes.

"Man [sic] is much more sensitive than domestic animals to fluoride intoxication the medical term for poisoning]."[17]

"It might be economically feasible to reduce industrial fluoride emissions further," says Fred L. Metz of the EPA's Office of Toxic Substances, *"but eliminating them would probably be impossible."*[18]

Of the highly toxic elements that are naturally present throughout the earth's crust; such as arsenic, mercury and lead; fluoride is by far the largest in quantity.[19] Normally, only minute amounts of these elements are found on the earth's surface, but industry mines its basic raw materials from deep in the earth and brings up vast tonnages; none in greater quantity than fluoride.

Historically, perhaps no other pollutant has posed a greater threat to industrial expansion. As early as 1850, fluoride emissions from the iron and copper industries poisoned crops, livestock, and people. By the turn of the century, consequent lawsuits and burdensome regulations threatened the existence of these industries in Germany and England.[20] They saved themselves by introducing the tall smokestacks which reduced damage by dispersing the fluorides and other toxins into the upper air.

In twentieth century America, however, enormous industrial plants and new technologies increased fluoride emissions so that even tall stacks could not prevent gross damage for miles around. Following the period of explosive industrial expansion known as *"industry's roaring 20s"*, the magnitude of industry's fluoride dilemma became starkly apparent.

International reports of fluoride damage mushroomed in 1933 when the world's first major air pollution disaster struck Belgium's Meuse Valley: several thousand people became violently ill and 60 died. The cause was disputed, but investigations by prominent scientists, including Kaj Roholm, the world's leading authority on fluoride hazards, placed the blame on fluoride.[21],/p>

Here and abroad, health scientists were beginning to regard fluoride as a poison, pure and simple. The trend toward its removal from the environment was potentially disastrous from industry's point of view. *"Only recently, that is, within the last ten years, has the serious nature of fluoride toxicity been realized,"* wrote Lloyd DeEds, senior toxicologist with the U.S. Department of Agriculture (USDA) in 1933. *"It is a well established fact that chronic intoxication [poisoning] may manifest itself in man as recognized abnormalities only after constant, or at least frequent, exposure over many years ... The possibility of fluoride hazard should ... be recognized in industry ... where this element is discharged into the air as an apparently worthless by-product."*[22]

It was abundantly clear to both industry and government that spectacular U.S. industrial expansion; and the economic and military power and vast profits it promised; would necessitate releasing millions of tons of waste fluoride into the environment. Furthermore, two large new industries would be adding to the dose: fluorocarbon chemicals (the aerosol propellants and refrigerants now depleting the ozone layer) and aluminum, slated for a crucial economic and military role during the upcoming Second World War. By 1938 the aluminum industry, which then consisted solely of ALCOA, had been placed on a wartime schedule. And fluoride was the aluminum industry's most devastating pollutant.[23]

U.S. future industrial expansion, then, would be accompanied by complaints and lawsuits over fluoride damage on an unprecedented scale; the most threatening aspect of which was harm to human health. Damage to animals and the environment might be tolerated and easily paid off; if, however, serious injury to people were established, lawsuits alone could prove devastating to companies, while public outcry could force industry-wide government regulations, billions in pollution control costs, and even mandatory changes in high-fluoride raw materials and profitable technologies.

This inter-war period saw the birth of the military-industrial complex, with its concomitant public disinformation campaigns. It also saw a federal blitz campaign to convince the public fluoride was safe and good for them. The kick-off was the 1939 announcement by Alcoa-funded scientist Gerald J. Cox: *"The present trend toward complete removal of fluoride from water and food may need some reversal."*[24]

New evidence of fluoride's safety began emerging from research centers plied with industry 's largess. Notable among these was the University of Cincinnati's Kettering Laboratory, whose specialty was investigating the hazards of industrial chemicals. Funded largely by top fluoride-emitters such as ALCOA, the Kettering Lab quickly dominated fluoride safety research. A book by Kettering scientist and Reynolds Metals consultant E.J. Largent, for example, written in part to *"aid industry in lawsuits arising from fluoride damage,"* became a basic international reference work.[25]

The big news in Cox's announcement was that this *"apparently worthless by-product"* had not only been proved safe (in low doses), but actually beneficial: it might reduce cavities in children. A proposal was in the air to add fluoride to the entire nation's drinking water. While the dose to each individual would be low, *"fluoridation"* on a national scale would require the annual addition of hundreds of thousands of tons of fluoride to the country's drinking water.

Government and industry; especially ALCOA; strongly supported intentional water fluoridation. Undoubtedly, most proponents were sincere in their belief that the procedure was safe and beneficial. At the same time, it might be noted that fluoridation made possible a master public relations stroke; one that could keep scientists and the public off fluoride's case for years to come. If the leaders of dentistry, medicine, and public health could be persuaded to endorse fluoride in the public's drinking water, proclaiming to the nation that there was a *"wide margin of safety,"* how were they going to turn around later and say industry's fluoride pollution was dangerous?

As for the public, if fluoride could be introduced as a health enhancing substance that should be added to the environment for the children's sake, those opposing it would look like quacks and lunatics. The public would question attempts to point out its toxicity or its unsavory industrial connections.

With such a powerful spin operating, fluoride might become a virtually *"protected pollutant,"* as writer Elise Jerard later termed it.[26] One thing is certain, the name of the company with the biggest stake in fluoride's safety was ALCOA; whose name is stamped all over the early history of water fluoridation.

Throughout industry's *"roaring 20s"*, the U.S. Public Health Service was under the jurisdiction of Treasury Secretary Andrew W. Mellon, a founder and major stockholder of ALCOA. In 1931, the year Mellon stepped down, a Public Health Service dentist named H. Trendley Dean was dispatched to certain remote towns in the West where drinking water wells contained high concentrations of natural fluoride from deep in the earth's crust. Dean's mission was to determine how much fluoride people could tolerate without obvious damage to their teeth; a matter of considerable concern to Alcoa. Dean found that teeth in these high fluoride towns were open discolored and eroded, but he also reported that they appeared to have fewer cavities than average. He cautiously recommended further studies to determine whether a lower level of fluoride in drinking water might reduce cavities without simultaneously damaging bones and teeth, where fluoride settles in humans and other animals.

Back at the Mellon Institute, Alcoa's Pittsburgh industrial research lab, this news was galvanic. ALCOA-sponsored biochemist Gerald J. Cox[27] immediately fluoridated some lab rats in a study and concluded that fluoride reduced cavities and that: *"The case should be regarded as proved."*[28] In a historic moment in 1939, the first public proposal that the U.S. should fluoridate its water supplies was made; not by a doctor, or dentist, but by Cox, an industry scientist working for a company threatened by fluoride damage claims.[29] Cox began touring the country, stumping for fluoridation.

Initially, many doctors, dentists, and scientists were cautious and skeptical, but then came World War II, during which industry's fluoride pollution increased sharply because of stepped-up production and the extensive use of ALCOA aluminum in aircraft manufacture.

Following the war, as expected, hundreds of fluoride damage suits were filed around the country against producers of aluminum, iron and steel, phosphates, chemicals, and other major polluters.[30] The cases settled in court involved only damage to livestock or vegetation.

Many others were settled out of court, including those claiming damage to human health, thus avoiding legal precedents. In one case, for the first time in the U.S. an Oregon federal court found in Paul M. and Verla Martin v. Reynolds Metals (1955) that the couple had sustained *"serious injury to their livers, kidneys and digestive functions"* from eating *"farm produce contaminated by [fluoride] fumes"* from a nearby Reynolds aluminum plant.[31] Soon thereafter, no less than the Aluminum Company of America (ALCOA) and six other metals and chemical companies joined with Reynolds as *"friends of the court"* to get the decision reversed. According to a local paper, a Reynolds attorney *"contended that if allowed to stand, the verdict would become a ruling case, making every aluminum and chemical plant liable to damage claims simply by operating [emphasis added]."*[32] Despite extensive medical testimony for Reynolds from Kettering Lab scientists, the Martins kept on winning. Finally, in a time-honored corporate solution, Reynolds mooted the case by buying the Martins' ranch for a hefty price.

The postwar casualties of industrial fluoride pollution were many; from forests to livestock to farmers to smog-stricken urban residents; but they received little more than local notice. National attention had been diverted by fluoride's heavily publicized new image. In 1945, shortly before the war's end, water fluoridation abruptly emerged with the full force of the federal government behind it. In that year, two Michigan cities were selected for an official *"15-year"* comparison study to determine if fluoride could safely reduce cavities in children, and fluoride was pumped into the drinking water of Grand Rapids.

Other early experiments were performed, not only without publicity, but without the knowledge of the subjects. The scientific value of these experiments; and their ethics; were dubious in the extreme. In Massachusetts and Connecticut, for example, the first fluoridation experiments (1945-46) were conducted on indigent, mentally retarded children at state-run schools. According to the 1954 congressional testimony of Florence Birmingham, a trustee of the Wrentham (Massachusetts) State School for Feebleminded Children, her school's administration learned only by accident that fluoride was being put in the drinking water.[33]

The trustees immediately voted to stop the fluoridation, Birmingham testified, *"but to my shocked surprise, we were told by the [Massachusetts Department of Health] that it was not an experiment and the fluoridation continued on. ... I found in the files a letter revealing that [a health department representative] had come to the institution school and in a conference with administration officials warned them that there should be no publicity on the fluoride program there ..."*

The federally sanctioned experimenters did not seem concerned that these children might accidentally receive a toxic overdose of fluoride. *"The method used in putting fluoride in the water,"* said the president of the school employees' union, *"... is enough to cause panic at the institution ... A boy patient does it ...He knows what it is for he said, 'Come up with me and I can show you how I can take care of you if I get mad at you.'"*[34]

Meanwhile, in 1946, despite the fact that the official 15-year experiment in Michigan had barely begun, six more U.S. cities were allowed to fluoridate their water. The fluoridation bandwagon had begun to roll.

At this juncture, Oscar R. Ewing, a long-time ALCOA lawyer who had recently been named the company's chief counsel; with fees in the then-astronomical range of $750,000 a year[35]; arrived in Washington. Ewing was presumably well aware of ALCOA'S fluoride litigation problem. He had handled the company's negotiations with the government for the building of its wartime plants.[36]

In 1947, Ewing was appointed head of the Federal Security Agency (later HEW), a position that placed him in charge of the Public Health Service (PHS). l Under him, a national water fluoridation campaign rapidly materialized, spearheaded by the PHS. Over the next three years, additional cities were fluoridated including the control city in the original two-city Michigan experiment, thus wiping out the most scientifically objective test of safety and benefit before it was half over.

The government's official reason for this unscientific haste was *"popular demand."* And indeed, these 87 cities had become so wild for fluoridation that the government claimed it wasn't fair to deny them the benefits. By then, in fact, much of the nation was clamoring for fluoridation. This enthusiasm was not really surprising, considering Oscar Ewing's public relations strategist for the water fluoridation campaign was none other than Sigmund Freud's nephew Edward L. Bernays,[37] *"The Original Spin Doctor"*, as a Washington Post headline recently termed him.[38] Bernays, also known as the father of public relations, *"pioneered the application of his uncle's theories to advertising and government propaganda. The government's fluoridation campaign was one of his most stunning and enduring successes.*

In his 1928 book Propaganda, Bernays explained *"the structure of the mechanism which controls the public mind, and how it is manipulated by the special pleader [i.e., public relations counsel] who seeks to create public acceptance for a particular idea or commodity ...*[39] *Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country ... our minds are molded, our tastes formed, our ideas suggested, largely by men we have never heard of."*

"If you can influence the [group] leaders," wrote Bernays who had many confidential industrial clients, "either with or without their conscious cooperation [emphasis added], you automatically influence the group which they sway..."[40]

Describing how, as PR man for the Beech-nut Bacon Company, he influenced leaders of the medical profession to promote sales, Bernays wrote, *"The new salesman [would] suggest to physicians to say publicly that it is wholesome to eat bacon. He knows as a mathematical certainty that large numbers of persons will follow the advice of their doctors because he understands the psychological relationship of dependence of men on their physicians."*[41]

Substitute *"dentists"* for *"physicians"* and *"fluoride"* for *"bacon"* and the similarities are apparent. Almost overnight, under Bernays' mass mind-molding, the popular image of fluoride; which at the time was being widely sold as rat and bug poison; became that of a beneficial provider of gleaming smiles, absolutely safe, and good for children, bestowed by a benevolent paternal government. Its opponents were permanently engraved on the public mind as crackpots and right-wing loonies.

Fluoridation attracted opponents from every point on the continuum of politics and sanity. The prospect of the government mass-medicating the water supplies with a well-known rat poison to prevent a non-lethal disease flipped the switches of delusionals across the country; as well as generating concern among responsible scientists, doctors, and citizens.

Moreover, by a fortuitous twist of circumstances, fluoride's natural opponents on the left were alienated from the rest of the opposition. Oscar Ewing, as Federal Security Agency administrator, was a Truman *"fair dealer"* who pushed many progressive programs such as nationalized medicine. Fluoridation was lumped with his proposals. Inevitably, it was attacked by conservatives AS a manifestation of *"creeping socialism"*, while the left rallied to its support. Later during the McCarthy era, the left was further alienated from the opposition when extreme right-wing groups, including the John Birch Society and the Ku Klux Klan, raved that fluoridation was a plot by the Soviet Union and/or communists in the government to poison America's brain cells.

It was a simple task for promoters, under the guidance of the *"original spin-doctor"*, to paint all opponents as deranged; and they played this angle to the hilt. For example, one widely distributed dossier on opponents *"listed in alphabetical order reputable scientists, convicted felons, food faddists, scientific organizations, and the Ku Klux Klan."*[42]

Actually, many of the strongest opponents originally started out as proponents, but changed their minds after a close look at the evidence. And many opponents came to view fluoridation not as a communist plot, but simply as a capitalist-style con job of epic proportions. Some could be termed early environmentalists, such as the physicians George L. Waldbott and Frederick B. Exner, who first documented government-industry complicity in hiding the hazards of fluoride pollution from the public. Waldbott and Exner risked their careers in a clash with fluoride defenders, only to see their cause buried in toothpaste ads.

Exner's voluminous files were a source of pivotal evidence in lawsuits decided against industry and against fluoridation promoters. In 1978, following his death, his files were destroyed in a mysterious fire.[43]

But all the opponents, credible and cracked alike, were run over by the fluoridation bandwagon. In 1950 the Public Health Service, along with leaders of dentistry, medicine, and practically everything else, officially endorsed fluoridation, and the transformation of fluoride's image was complete. Since then, two thirds of the nation's reservoirs have been fluoridated, and about 143,000 tons of fluoride are pumped in yearly to keep them that way.[44] Meanwhile, the government continues to campaign for *"universal fluoridation."*

Which brings us to the last benefit to industry from fluoridation: Companies forced to reduce their emission can recoup some of the expense by selling the waste to cities for water fluoridation. And most of the fluoride added to drinking water has been recycled waste, particularly from the fertilizer industry.[45]

Since the 1950s, fluoride as industrial toxin has remained largely unknown to the public, replaced by fluoride as children's friend and creator of beautiful smiles. The 1930s trend toward its removal from the environment has been reversed with a vengeance. For example, in 1972 the newly formed EPA did a survey of atmospheric fluoride polluters. It found that five of the top six typically didn't bother to control their fluoride emissions at all and weren't measuring emissions.[46] The most lax was the iron and steel industry, which, according to the report, was also the biggest fluoride emitter.[47]

And why should these industries worry, as regulatory agencies have maintained; ever since water fluoridation; that industrial fluoride emissions are harmless to humans? As the EPA report stated: *"The fluorides currently emitted [by industry] may damage economic crops, farm animals, and materials of decoration [i.e., flowers and ornamental plants] and construction [i.e. buildings, statuary and glass] ...*

"... However, the potential to cause fluoride effects in man is negligible."[48] Or, as another EPA report puts it, *"It is clear that fluoride emissions from primary aluminum plants have no significant effect on human health. Fluoride emissions, however, do have adverse effects on livestock and vegetation."*[49] In other words, the stuff withers plants, cripples cows, and even eats holes in stone, but it doesn't hurt people. Nature ever surprises.

When it comes to water pollution, of course, industry has even less reason to fear conviction for damage to human health. The government's fluoridation studies have supposedly established beyond a doubt that hundreds of thousands of tons of fluoride a year can be poured directly into the nation's drinking water supplies with a *"wide margin of safety"*[50] for humans. So industrial fluoride emitters only have to worry about the fish when they poison nearby bodies of water. The same concentrations added to human drinking water for cavity prevention can be fatal to freshwater fish.

When new scientific evidence threatens fluoride's protected pollutant status, the government immediately appoints a commission, typically composed of several veteran fluoride defenders and no opponents; usually, these commissions dismiss the new evidence and reaffirm the status quo. When one didn't in 1983, the government simply altered the findings. It's an instructive tale.

In 1983, the Public Health Service convened a panel of World-class experts *"to conduct a pro forma review of safety data on fluoride in drinking water."* A panel transcript of the private deliberations revealed its members discovering that much of the vaunted evidence of fluoride's safety barely existed.[51] The 1983 panel recommended caution, especially in regard to fluoride exposure for children,[52] but its chair, Jay R. Shapiro, then with the National Institutes of Health, was aware that recommendations which conflicted with government fluoride policy might run into trouble. In an attached memo, Shapiro remarked, *"[Because the report deals with sensitive political issues which may or may not be acceptable to the PHS [Public Health Service], it runs the risk of being modified at a higher level ..."*[53]

Shapiro was prescient. When Surgeon General Everett Koop's office released the official report a month later, the panel's most important conclusions and recommendations had been thrown out, apparently without consulting its members. *"When contacted"*, wrote Daniel Grossman, *"...members of the panel assembled by the Public Health Service expressed surprise at their report's conclusions: They never received copies of the final; altered; version."* EPA scientist Edward Ohanian, who observed the panel's deliberations recalled being 'baffled' when the agency received its report."[54]

All the government's alterations were in one direction and any conclusion suggesting low doses of fluoride might be harmful was thrown out. In its place, the government substituted this blanket statement: *"There exists no directly applicable scientific documentation of adverse medical effects at levels of fluoride below 8 ppm [parts per million]."*[55]

This contradicted the panel's final draft, which firmly recommended that *"the fluoride content of drinking water should be no greater than 1.4-2.4 ppm for children up to and including ace 9 because of a lack of information regarding fluoride effect on the skeleton in children (to age 9), and potential cardio toxic effects [heart damage]..."* All that, and more, was tossed out by the government.[56]

To quote from the transcript of the panel's meeting:

Dr. Wallach: *"You would have to have rocks in your head, in my opinion, to allow your child much more than 2 ppm."*

Dr. Rowe: *"I think we all agree on that."*[57]

But in 1985, basing its action on the altered report issued by Surgeon General Koop, EPA raised the amount of fluoride allowed in drinking water from 2 to 4 ppm for children and everybody else.

What are the effects of the decades-long increase in fluoride exposure on the nation's health? The best answer is, given the size and pervasiveness of the motive for bias and the extreme politicization of science on this question, no one knows. Recently, scientists have taken a new look, especially at the most likely place to find fluoride damage: human bones, where it accumulates. In the past two years, eight epidemiological studies by apparently disinterested scientists have suggested that water fluoridation may have increased the rate of bone fractures in females and males of all ages across the U.S.[58]

The latest study published in the Journal of the American Medical Association (JAMA) found that *"low levels of fluoride may increase the risk of hip fracture in the elderly."*[59] These results, if correct, would also implicate industrial fluoride pollution. Another group likely to show damage from fluoride is young males. Since 1957, the bone fracture rate among male children and adolescents has increased sharply in the U.S.

According to the National Center for Health Statistics.[60] The U.S. hip fracture rate is now the highest in the world, reports the National Research Council.[61] *"... Clearly"*, wrote JAMA in an editorial, *"it is now appropriate to revisit the issue of water fluoridation."*[62]

Fluoride and cancer, too, have been linked by the government's own animal carcinogenicity test.[63] Evidence that fluoride is a carcinogen has cropped up since at least the 1940s, but the government has dismissed it all. A 1956 federal study found nearly twice as many bone defects (of a type considered possibly pre-malignant) among young males in the fluoridated city of Newburgh, New York, as compared with the unfluoridated control city of Kingston; this finding, however, was considered spurious and was not followed up.[64] For a long time, the government avoided performing its official animal carcinogenicity test; which, if positive, would require regulatory action against fluoride. It had to be pushed into doing that.

In 1975, John Yiamouyiannis, a biochemist and controversial fluoridation opponent, and Dean Burk, a retired National Cancer Institute (NCI) official, reported a 5 to 10 percent increase in total cancer rates in U.S. cities which had fluoridated their water supplies.[65] Whether scientifically valid or not, the paper did trigger congressional hearings in 1977, at which it was revealed, incredibly, that the government had never cancer tested fluoride. Congress ordered the NCI to begin.

Twelve years later, in 1989, the study was finally completed. It found *"equivocal evidence"* that fluoride caused bone cancer in male rats.[66] The NCI was immediately directed to examine cancer trends in the U.S. population that might be fluoride-related. The NCI found that nationwide evidence *"...of a rising rate of bone and joint cancer at all ages combined, due mainly to trends under the age of 20, was seen in the 'fluoridated' counties but not in the 'non-fluoridated' counties ... The larger increase in males under the age of 20 seen in the aggregate data for all bone and joint cancers is seen only in the 'fluoridated' counties"*[67]

The NCI also did more detailed studies focused on several counties in Washington and Iowa. Once again, *"When restricted to percent under the age of 20, the rates of bone and joint cancer in both sexes rose 47 percent from 1973-80 to 1981-87 in the fluoridated areas of Washington and Iowa and declined 34 percent in the non-high fluoridated areas. For osteosarcomas [bone cancers] in males under 20 [emphasis added], the rate increased 70 percent in the fluoridated areas and decreased four percent in the non-fluoridated areas."*[68] *But after applying sophisticated statistical tests, the NCI concluded that these findings, like those in Newburgh in 1956, were spurious.*

It was commission time again.

The new commission, chaired by venerable fluoridation proponent and U.S. Public Health Service official Frank E. Young, concluded in its final report that *"...its year-long investigation has found no evidence establishing an association between fluoride and cancer in humans."* As for the evidence on bone fractures, the commission merely stated, *"further studies are required."* And finally, as always: *"The U.S. Public Health Service should continue to support optimal fluoridation of drinking water."*[69]

"If fluoride presents any risks to the public at the levels to which the vast majority of us are exposed", intoned U.S. Assistant Secretary for Health, James G. Mason, when releasing the report, *"those risks are so small that they have been impossible to detect. In contrast, the benefits are great and easy to detect. That is, fewer cavities in children."*[70]

There are signs, however, that 50 years of official unanimity on this subject may be disintegrating. Referring to the government's animal study, James Huff, a director of the U.S. National Institute of Environmental Health Sciences, told a 1992 meeting he believes *"that the reason these animals got a few osteosarcomas [bone cancers] was because they were given fluoride ... Bone is the target organ for fluoride."* In other words, the findings were not *"equivocal"* but solid.

"Perhaps we need to learn more about this chemical", said Huff.[71]

Others feel more than enough has already been learned. William Marcus, an EPA senior science adviser and toxicologist was indignant. *"In my opinion"*, he said, *"fluoride is a carcinogen by any standard we use. I believe 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."* Marcus adds that a still-unreleased study by the New Jersey State Health Department has found that the bone cancer rate is six times higher; among young males; in fluoridated communities.

"The level of fluoride the government allows the public is based on scientifically fraudulent information and altered reports",[72] charges Robert Carton, an EPA environmental scientist and past president of its employee union, Local 2050, National Federation of Federal Employees. The EPA union has been campaigning for six years against what it terms the *"politicization of science"* at the agency, citing fluoride as the archetypal case. *"People can be harmed simply by drinking the water"*, Carton warns.[73] A subcommittee headed by Congressman Ted Weiss (NY) is investigating the government's handling of the evidence on fluoride's safety. And there the matter rests; until the next commission.

Does fluoridation reduce cavities in children? Almost everyone feels certain that it does, but only because trusted authorities have told them so, and those authorities in turn received their information from leaders who, as the original spin-doctor noted, must be influenced if you want to make the public believe something.

Actually, over the years, many health professionals; especially abroad, have decided the beneficial effects of fluoride are mostly hokum; but open debate has been stifled; if not strangled. Repeatedly dentists and doctors who were regarded as paragons of professional excellence; when they supported fluoride; have been vilified and professionally ostracized after they changed their minds. During the early 1980s, New Zealand's most prominent fluoridation advocate was John Colquhoun, the country's chief dental officer. Then he decided to gather some results. *"I was an ardent fluoridationist, you see. I wanted to show people how good it was ..." "When as chair of the Fluoridation Promotion Committee, I gathered these statistics ... I observed that ... the percentage of children who were free of dental decay was higher in the unfluoridated part of most health districts in New Zealand"*[74] The national health department refused to allow Colquhoun to publish these findings, and he was encouraged to resign.

Now Colquhoun writes that *"new evidence ... suggests that the harmful effects of water fluoridation are more real than is generally admitted while the claimed dental benefit is negligible."*[75]

A more recent example is Canadian physician Richard G. Foulkes, who is currently being accused by his former colleague, Brent Friesen, chief medical officer of Calgary, B.C., of *"a classical case of manipulation of information and selective use ... to promote the quackery of anti-fluoridationists."* In 1973, as a special consultant to the health minister of British Columbia, Foulkes had authored a report recommending mandatory fluoridation for the province. But, after reviewing the evidence, he has concluded that *"fluoridation of community water supplies can no longer be held to be safe or effective in the reduction of tooth decay ... Even in 1973, we should have known this was a dangerous chemical."*[76] He adds that *"there is, also, a not-too-subtle relationship between the objective [the promotion of fluoridation] and the needs of major industries..."*[72]

"I was conned", Foulkes thinks, *"by a powerful lobby."*[78]

Joel Griffiths is a medical writer who lives in New York city

References (please note that these are from a scanned document and may contain inaccuracies).

1. Janet Raloff, The St Regis Syndromes Science News, July 19, 1980 pp.42-43. The account was verified by F. Henry Lickers, director, environmental division Mohawk council of Akwesasne, Cornwall Ontario, Canada. For primary data on cattle damage at Akwesasne, see Krook, L and Maylin, G. A. Industrial Fluoride Pollution, The Cornell Veterinarian,, Vol. 69, supplement 8 April 1979.

2. The pollution continues today, but at reduced levels; cows survive to about half their normal life-spans.

3. Robert Tomshos Dumping Grounds is Wall Street Journal. November 29 1990.

4. Karen St Hilaire, "St Regis Indians to Settle Fluoride Dispute, 8 Syracuse Post-Standard, January 8, 1985.

5. see also accounts cited above for further documentation.

6. Author's 1992 interview with F. Henry Lickers, Op. cit.

7. Summary Review of Health Effects Associated with Hydrogen Fluoride and Related Compounds EPA Report Number 600$29no2F, December 1988 p. 1-1.

8. John Yiamouviannis, Lifesaver's Guide to Fluoridation (Delaware Ohio: Safe Water Foundation, 1983), p. 1; see also D. Rose and J.R. Maner "Environmental Fluoride," National Research Council of Canada Publication Number NRCC 16081,1977.

9. Engineering and Cost Effectiveness Study of Fluoride Emissions Control, U.S. EPA response, Volume 1, Number SN 16893.000, January 1972, p. 1-3, et seq.

1O Final Draft for the Drinking Water Criteria Document on Fluoride, EPA Response Number PB85-199321, April 1985, p. 11-5.

11. "Treatment and Recovery of Fluoride Industrial Wastes," EPA Response Number PB-234 447, March 1974, p. 5.

12. E. Jerard and J.B. Patrick, "The [?] of Fluoride Exposures," International Journal of Environmental Studies, Volume 3, 1973, p. 143.

13. G.J. Cox, "New Knowledge of Fluoride in Relation to Dental Caries," Journal of American Water Works Association, Volume 31:1926-30, 1939; see also standard toxicology manuals. Tube terms "fluorine" and "fluoride" were used interchangeably in early literature.

14. Air Pollutants Affecting the Performance of Domestic Anima4 U.S. Department of Agriculture Handbook No. 380, August 1970, p. 41.

15. Kaj Roholm. Fluorine Intoxication (London: H.K. Lewis & Co., 1937), pp. 64-65.

16. Jerard and Patrick, op. cit., pp. 149-50.

17. USDA Handbook op. cit., p. 46. Around industrial plants, however, grazing animals such as cows get the highest doses.

18. Author's 1992 interview.

19. Roholm, op. cit., p. 46.

20 H. Ost, "The Fight Against Injurious Industrial Gases", Z Agnew[?], Chem Volume 20,1907, pp. 1689-93. Also Roholm op.cit, pp. 36 41.

21. Kaj Roholm "The Fog Disaster in the Meuse Valley: A Fluoride Intoxications 8 Journal of Industrial Toxicology Vol. 19, 1937, pp. 126-37.

22. Lloyd DeEds, "Chronic Fluoride Intoxication", [?] Vol. 12, 1933, pp. 1 60.

23. R. Burke, et al, Aluminum: Profile of the Industry (New York: McGraw Hill, 1985), p. 5.

24. Cox, op. cit

25. GL Waldbott, et al, Fluoridation: The Great Dilemma (Lawrence, Kans.: Coronado Press. 1978), pp. 304-05, and FB Exner, Economic Motives Behind Fluoridation (monograph) (Toronto: Westlake Press, 1966), pp. 1-2.

26. Elise Jerard[?], The Case of the Protected Pollutant (New York: Independent Phi Beta Kappa Study Group, privately printed, 1969).

27. ALCOA's sponsorship was verified in a 1992 interview by the author with a Mellon Institute public information spokesperson

28. GJ Cox, ' Discussion, " Journal of the American Medical Association Vol. 113, 1938, p. 1753.

29. In his 1939 public address in Johnstown, Pennsylvania. before any safety studies had been conducted, Cox urged that city to fluoridate its water supplies immediately. They turned him down. See Waldbott, op. cit., p. 304.

30. Waldbott, op. cit., pp. 296-301; Exner, op. cit., p. 4. Fluoride has also been the worst pollutant in the phosphate and iron industries (Exner, pp.3, 6) re: iron and steel see, Engineering and Cost, EPA, op. cit., pp.111 5940.

31. "Three in Fume Suit, " The Oregonian (Poland), September 17,1955.

32. 'Seven Enter Fluoride Case," The Oregonian, October 15, 1957.

33. Hearings before the Committee on Interstate and Foreign Commerce, U.S. House of Representatives, 83rd Congress, Second Session on H.R. 2341, May 25 27, 1954, pp. 46-48.

34. Ibid The accuracy of Birmingham's testimony concerning the Wrentham school was confirmed by John Small, Information Specialist, Fluorides and Health, National Institute of Dental Research. Interview with author

35. Birmingham testimony, Op. cit, p. 51. Newspaper accounts from the period also refer to Ewing as At COAX "chief counsel." Later ASIA responding lo charges that it had been behind the fluoridation scheme, claimed that Ewing was just another of its many lawyers and that his fees had been much lower. Undisputed, however, is that Ewing was an extremely wealthy corporate lawyer and that his major client was Alcoa.

36. "Aluminum," November 10,1941.

37. Birmingham testimony, op. [?] [?] [?] by Bernays, at age 100, in a 1991 interview with author.

38. 'The Original Spin Donor. " Washington Post, November '3, 1991, p. B 1.

39. Edward L. Bernays, Propaganda (New York: H. Livenight[?], 1928), p. 18.

40. [?], pp.9, 49.

41. Ibid., p. 53.

42. Bette Hilerman, 'Fluoridation of Water," Chemical and Engineering News, Volume 6[?], August 1,1988, p. 37.

43. Author's interview with Exner's associate Len Greenall, 1992, British Columbia. Canada; more recently a similar case of possible arson involved the files of Greenpeace scientist Pat Costner in 1991 (CAIB, Number 41, Summer 199[?], pp. 42 44).

44. Letter to author from American Water Works Association, Denver Colorado, public information department, 1991.

45. A 1983 letter from an EPA administrator describes the system: "In regard to the use of fluosilicic acid as a source of fluoride for fluoridation, this agency regards such use as an ideal environmental solution to a long-standing problem. By recovering by-product fluosilicic acid from phosphate fertilizer manufacturing, water and air pollution are minimized, and water utilities have a low cost source of fluoride available to them...." (Rebecca Hammer, EPA Deputy assistant administrator for water, March 30, 1983.)

46. "Engineering and Cost...," op. cit., pp. 1-1, II-1, 11-L

47. Ibid., p. 1-3.

48. Ibid, p. 1-2.

49. Primary Aluminum: Draft Guidelines for Control of Fluoride Emissions from Existing Aluminum Plants, EPA report Number Ps2s4s38, 1979, pp. 11-9.

50. Berk, et al, "Aluminum: Profile...," op. cit., p.l48.

51. Joel Griffiths, "83 Transcripts Show Fluoride Disagreements", Medical Tribune, April 10. 1989, p. 1.

52. Joel Griffiths, "Fluoride Report [?]", Medical Tribune, April 27, 1989.

53. Daniel Grossman, "Fluoride's Revenge," The Progressive! December 990 p. 31.

54. Ibid;

55. Griffiths, 'Fluoride...," Op. cit., p. 11.

56. Ibid

57. Griffiths, 83 Transcripts...," Op. Ott.

58. Cooper, et al., Journal of the American Medical Association, Vol. 266 Julv24,1991,pp.513-14.5eealsoSowers.era/., "A Prospective Study of Bone Mineral Content and Fractures in Communities with Different Fluoride Exposure", American Journal of Epidemiology, Vol. 133, No. 7, pp. 49-60. For a summary of the most recent studies and a review of the scientific debate, see "Summary of Workshop on Drinking Water Fluoride Influence on Hip Fracture and Bone Health", Osteoporosis International, Vol. 2, 1992, pp. 109-17.

59. Christa Danielson. et al.. "Hip Fractures and Fluoridation in Utah's Elderly Population", JAMA Vol 268, August 12, 1992, p. 746-4S.

60. Author's 1992 interview with Sharon Ramirez, statistician, National Center for Health Statistics, U.S. Centers for Disease Control. Hyattsville, Md.

61. U.S. National Research Council, Diet and Health (Washington, D.C.: National Academy Press, 1989). p. 121.

62. JAMA, "Hip...." op. cit.

63. Not just anything causes cancer in the government tests. The majority of substances tested; all suspected carcinogens; prove negative, according to the National Cancer Institute. And there's good reason to worry about the few, like asbestos and DES. that do prove positive says the NCI brochure March 1990.

64. U.S. National Research Council. Drinking Water and Health, (Washington, D.C.: National Academy of Sciences, 1977), pp.3S8-S9.

65. John Yiamouyiannis and Dean Burk, "Fluoridation of Public Water Systems and Cancer Death Rates in Humans", presented at the 67th annual meetin of the American Society of Biological Chemists, and published in Fluoride, Volume 10, Number 3; 1977, pp. 102-23. Follow-up studies were conducted here and abroad which claimed to refute this paper and it remains controversial.

66. U.S. Public Health Service, Review of Fluoride Benefits and Risks (Washington D.C.: Department of Health and Human Services, February l991), p. iii.

67. Ibid, p. F-2.

68. Ibid, p. F-3.

69. Ibid, pp. 84-so.

70. HHS press release, February 19,1991.

71. Mark Lowey, "Scientists Question Health Risks of Fluoride", Calgary Herald (Canada), February 28,1992.

72. Author's interview 1992.

73 Author's interview 1992.

74 Legislative Assembly for the Australian Capital Territory, Standing Committee on Social Policy, "Inquiry into Water Fluoridation in the Act [sic]", January 1991, pp. 183-84.

75. John Colquhoun, Community Health Studies, Vol. 14, No. 3, 1990, p. 288.

76. Mark Lowey, "Doctor Warns Fluoride Risky," Calgary Herald, January

77. Richard G. Foulkes, Letter lo Thomas Perry, Minister of Advanced Education, Victoria, British Columbia, March 3, 199[?].

78. Tom Hawthorne "MD Who Pushed Fluoridation Now Opposes Idea," The Province (Vancouver), January 26, 1992.

1951 Conference

A lesson in how to overcome legitimate concerns, defeat arguments and defend the indefensible. A propagandist's guide to forcing your views upon others.

FOURTH ANNUAL CONFERENCE OF STATE DENTAL DIRECTORS WITH THE PUBLIC HEALTH SERVICE AND THE CHILDRENS BUREAU JUNE 6-8, 1951 FEDERAL SECURITY BUILDING WASHINGTON, D.C.

DR. KNUTSON (Assistant Surgeon General & Chief, Divison of Dental Public Health): ... Now we come to what might be called the piece de resistance on the program. I say that because not so long ago I was scheduled to present the piece de resistance on a program in Wisconsin. They invited me our there to tell about recent advances in the prevention of dental caries. Now, out in Wisconsin they started promoting water fluoridation in 1945. Yet they asked me from the Public Health Service to come out there and tell them of recent advances in the prevention of dental caries. As you all know, the Public Health Service didn't get around to approving water fluoridation until five years later, in 1950.

You all know Dr. Frank Bull has appeared before us, this group, and also many dental groups during the past five years, asking the simple questions: What are we waiting for? Why don't we go ahead and fluoridate drinking water supplies? He is not going to do that today, not going to try to sell you on water fluoridation. We have all, a bit late perhaps, come to the conclusion that he was right in 1945. Now what we want is some guidance and help in doing the job, in bringing about water fluoridation. It is going to be a big job, perhaps a bigger job than most of us realize. There are 16,000 community water supplies in this country that we would all like to see fluoridated this year. Most of those water supplies - in fact, over 10,000 - supply people in communities from 500 to 5,000 population. So to give us some guidance, and tell us some of his experiences in actually promoting water fluoridation in communities, we have asked Dr. Frank Bull to come before us again. With that, Frank, will you come forward and proceed.

(Applause)

DR. BULL: Dr Knutson, Dr. Fulton, fellow public health workers, after hearing that introduction I am kind of anxious to hear myself talk.

A lot has happened since the meeting a year ago. Since the State and Territorial dental directors came out with a resolution endorsing fluoridation a year ago, practically all the top level groups have come out with similar recommendations. Of course we in Wisconsin have believed for a long time that this is one of the great all-time public health programs. I hope we are right. I feel sure we are.

But now that all of these recommendations have been made, where does that leave us? Well, it leaves us just about where we started. No recommendation or policy ever helped the public. It is only when a policy or recommendation affects the attitude of the public that we are going to be able to bring about any improvement. I think we should give a little thought to that.

We thought we in Wisconsin had a pretty tough job in promoting fluoridation, but I think you in the other states are going to have just about as tough a job. I think our experiences are going to be repeated all over again, and I think there will be quite a challenge to your promotion of fluoridation. And how you handle this challenge will decide what kind of results you get in your communities.

I think the fact that we are new in public health - it has only been in recent years that we have really had some honest to goodness public health programs - has some bearing on the matter. We haven't had a background of experience in promoting public health programs, and I think that a little review would be in order.

Of we study the history of all public health programs we find certain similarities. One is that they all started at the local level. Public health programs don't start at the national level. They all start at the local level. That is where they should start. John talks about the Public Health Service's being five years late. Well, most public health programs never had national level approval for 15 or 20, or even 30 years. So I don't think we have anything to apologize for on that, John. We needed that waiting period. We have had it, and it hasn't been too long.

If you study these public health programs you will come to another conclusion, and this is this: We have more data based on human experience with our fluoridation program than was ever collected on any public health program in the past. That is a think we should stress, because when people start raising objections to fluoridation, if we cannot handle them with all the data we have on humans, not on guinea pigs, how would we have ever handled any of these programs in the past where you had practically no human experience?

I think there is another thing that comes in, and that is this: All of our past public health programs have been a matter of weighing the good that is in them against the bad. Now, every one that I know of had some bad, and quite a bit of it. Some of our oldest programs, like our immunization programs, are examples of this. Two years ago we really had a mess in Wisconsin with immunization. We had two county nurses that nearly went crazy, because they had so many sick children from an immunization program.

Now, we have never had any public health programs in the past that didn't involve some bad, and it was a matter of weighing it and deciding that there was also much good connected with it. This was the case with penicillin. We still know the trouble we have with penicillin, but the good is great the bad is comparatively little, so the program is promoted.

Well, we are into a program, fluoridating the water, which has absolutely no bad connected with it. If you can't sell that, then you are certainly going to wonder how these other programs were sold in the past.

I think there is another historical factor that is well to remember, and that is that none of these public health programs ever had a hundred percent approval when they were started. None of them even after 30 or 40 years of experience has received 100 percent approval. We still have people in high positions in health work who are against some public health programs, absolutely against them, but does that stop the program? If you let that sort of thing stop your program then you would be acting according to the approval of one-quarter of one percent of the people, and after all, that isn't democracy in action. But those things are from history. If we are going to be able to go out and sell fluoridation, we have got to know what is considered evidence, something like court work. After all, courts take into consideration past decisions when they are making a present-day decision. Well, we have to do that in public health. We dare not let these people write a whole new standard for us when we introduce our dental program. We must not let them say that it has got to have 100 percent approval, or advance as a valid objection the fact that it may possibly have some bad to it.

Well, perhaps that will give us a little more confidence in our approach to the program. I often wonder how these engineers - and it was the engineers, by and large, that sold chlorination of water supplies - did it. If we had one-half as much opposition to the fluoridation program as they had to the chlorination program we wouldn't have a fluoridation program today at all. They did a bang-up job. Here they were selling something that made the water stink, in most cases tasted bad, and had other offensive characteristics. They put it over, and they did one of the greatest pieces of public health work that has ever been done.

Surely in this modern age we should be able to do something with our fluoridation program. But one thing is going to happen to you, just as it happened to us in Wisconsin and is still happening to us. You must be able to answer all of the objections that are brought up to fluoridation. Maybe in your state those objections haven't been brought up as yet, but they are going to be brought up. They will be brought up to test you out.

It is like a ball player who starts getting good and moves up in the leagues a little bit. The higher he gets the more they test him to discover a weak, vulnerable spot. If they find his weakness, that is what they pitch to. And that is exactly what will happen on this fluoridation program. If there is a spot you start to stutter on, that is the spot they are going to work on.

Now, this isn't something new. It has been true of every public health program that has ever been put into use. I can tell you that the state health officer we had for 45 years told me that the toughest program he ever ran into in public health was to discontinue the public drinking cup. You see, each of the programs has gone through pretty much the same thing, and we might just as well know it, because we are going to get it whether we want it or not. What are some of the objections that are brought up on this fluoridation program?

I think the first one that is brought up is: “Isn't fluoride the thing that causes mottled enamel or fluorosis? Are you trying to sell us on the idea of putting that sort of thing in the water?”

What is your answer? You have got to have an answer, and it had better be good. You know, in all public health work it seems to be quite easy to take the negative. They have you the defensive all the time, and you have to be ready with answers.

Now, we tell them this, that at one part per million dental fluorosis brings about the most beautiful looking teeth that anyone ever had. And we show them some pictures of such teeth. We don't try to say that there is no such thing as fluorosis, even at 1.2 parts per million, which we are recommending. But you have got to have an answer. Maybe you have a better one.

They are going to bring up the question of whether fluoride added to the water supply is the same as the natural fluoride. And, incidentally, we never use the term “artificial fluoridation.” There is something about that term that means a phony. The public associates artificial pearls or artificial this or artificial that with things that are not real or genuine. We call it “controlled fluoridation.” In natural fluoridation you take whatever amount of fluoride happens to be in the water on a particular day coming from the ground. In some areas that will vary a great deal from week to week or season to season, but with controlled fluoridation you get just the exact amount you want.

Well, we now have enough evidence from cities that had demonstrations to show that controlled fluoridation has the same effect as natural fluoridation. Incidentally, we never had any “experiments” in Wisconsin. To take a city of 100,000 and say, “We are going to experiment on you, and if you survive we will learn something” - that is kind of rough treatment on the public. In Wisconsin, we set up demonstrations. They weren't experiments. Anyway, there has been enough experience now to show that it doesn't make any difference whether nature puts the fluoride in the water or we do.

Now, in regard to toxicity, I noticed that Dr. Bain used the term “adding sodium fluoride.” We never do that. That is rat poison. You add fluorides. Never mind that sodium fluoride business, because in most instances we are not adding sodium fluoride anyhow. All of those things give the opposition something to pick at, and they have got enough to pick at without our giving them any more. But this toxicity question is a difficult one. I can't give you the answer on it. After all, you know fluoridated water isn't toxic, lout when the other fellows says it is, it is difficult to answer him. I can prove to you that we don't know the answer to that one, because we had a city of 18,000 people which was fluoridating its water for six or eight months. Then a campaign was started by organized opposition on the grounds of toxicity. It ended up in a referendum and they threw out fluoridation. So I would hate to give you advice on that deal. (Laughter) It's tough.

I don't believe you can win approval of any public health program where there is organized opposition, I mean clever, well thought up opposition. I think it is possible to beat almost anything, and I know that is what has happened to us. So when you get the answer on the question of toxicity, please write me at once, because I would like to know. We have answers, but apparently in some places they don't work.

But in that there is a lesson, and it is this: If we had let such things interfere in the promotion of our fluoridation program, we wouldn't be the kind of people that those men who went before us and promoted more difficult public health programs were. We still have good sized communities that will not chlorinate water. They just won't do it. By and large we are getting our water chlorinated, but you will hit spots where even after 30 years you still cannot do anything along certain lines. So we can expect that same kind of problem in fluoridation.

I am sure we have a few communities in Wisconsin that will be the last ones in the United States to fluoridate their public water supplies. Whenever you get a community that talks about the wonderful water it has, look out. (Laughter) You are getting into trouble. You go that community, and you'd swear the only thing the water was any good for was to run under a bridge, but to the people who live there it is wonderful water, and if anyone attempts to add anything to that water - and I am talking about chlorination as well as fluoridation now - you are up against something.

Now, while some of these objections to fluoridation are made by sincere people who want information, there are a lot of people who just throw them out as stumbling blocks to fluoridation.

Another question - the difficulty in maintaining the correct amount of fluorides in your water - is generally a sincere question. People may hesitate just on that thing. They are concerned. Well, you have to reassure those people. The fact that in our small communities that are fluoridating. I am talking about communities of 500 people - they are able to maintain to within one-tenth of one part per million the correct amount of fluorides in the water is a powerful argument. It is an argument not only on that question, but on the belief that you need chemists, and I suppose biochemists and astrologers (Laughter), in order to carry out this program successfully.

Of course we are not trying to belittle the chemist's or the engineer's part in this picture. We want adequate controls, and we have them. We make sure of this by checking them at a higher level, where better and more exact tests can be run. But our experience has been this, that if a community is large enough to have a public water supply, that supply should be fluoridated and can be fluoridated efficiently and economically.

Another charge sometimes made is that you are handling something that is bad, dangerous, and that the workers have to take all kinds of precautions. That isn't so. Of course, we don't want these fellows inhaling the dust, whether it is sodium fluoride dust or whatever it is. We don't want them inhaling the dust 24 hours a day or even for shorter periods. But with ordinary, just ordinary, precautions there is no danger involved in handling fluorides.

Now, the cost is going to be a factor where you go. And on this cost item you have got to know a little bit more than just the cost of fluoridation. You have got to know some other costs, because people are going to talk as if the only thing that costs anything in this community is fluoridation, and its estimated cost sounds like a lot of money to them. That is a stumbling block, you see.

We tell them this: There is only one thing wrong with fluoridation. It is too cheap. And I believe that, I honestly believe that. It has been a drawback to fluoridation. People just can't conceive that for so little money such a great amount of good work can come.

Now, every once in a while, the engineers, and the waterworks men particularly, are really going to give you the business. They will say, “Well, if we can get this reservoir in over here and a new 10-inch line from Padukahville in, and one thing and another, then we will go along with fluoridation.” They have many reasons for stalling, and they are all good. But don't pay a bit of attention to a single one of them. Because if you do the waterworks people will stall you from here to doomsday, and don't think we haven't had that experience and in the form of a postgraduate course. They have got more ways of keeping fluorides out of the water than you will ever imagine, but we simply say this: If your water is good enough for people to drink today, then you should have fluorides in it today.

They are always going to drill another well or change this or that, and then they'd be very happy to consider fluoridation. Well, don't hold still for that. Or they need more installations in their community, which may be a fact. But you see, the fact that a good size community needs several installations shouldn't hold anybody up. The per capita cost, even where several installations are needed, would probably be only 30 cents per capita. We think nothing of going to a community of 400 people and saying, “You should fluoridate your water,” when we know it is going to cost them $50 per capita to get their equipment. So why should we let these big communities stall us?

You know, some of the big cities spend money on things without even thinking about it. There is more money that just trickles through their fingers than the whole fluoridation program costs. For example, Milwaukee usually buys 10,000 tons of salt and sand a year to spread on the icy streets during the winter. That costs money. Well, this year they used 50,000 tons, five times as much as usual, and that means five times the amount of help spreading it on the street, and about 10 times the amount of help to go around and shovel it up afterwards when spring finally came. It cost hundreds of thousands of dollars. Well, they dug up the money for that stuff. Another eight inches of snow costs the town $200,000 or $300,000, or even $400,000. Don't let them try to fool you into thinking they can't afford the money when it comes to health. (Laughter)

One question that a community should ask is the effect of fluoridation on the industrial uses of water. Right here I have got to say something. We might as well face it - we are going to have to live down for quite a while some of the things we have been saying the last three or four years in regard to fluoridation. You heard Dr. Scheele say something about the fact that the Public Health Service's attitude had changed. Well, you know a lot of letters have been going back and forth, and a lot of this stuff is in print, and people are going to show it to you, telling you where this fellow is against fluoridation; it is experimental; it is this, that, or the other thing; or someone has come out with statements that are hard to live down.

I suppose we have all made statements that we'd like to live down, especially that “I do” we all went through. (Laughter) But when you get a state coming out with an official policy that reads something like this, I won't read the first part of it; it is standard - “Since there is some indication, although not of a specific nature at the present time, that some interference may be encountered with industrial processes where fluoride treatment is applied, it is recommended strongly that communities considering the adoption of the practice investigate locally to determine whether or not interference with industrial processes will result because of fluoride treatment.”

I can kill fluoridation with that. Either we know about these things or we don't. Now, naturally we don't know anything about what fluorides are going to do to some industrial processes that are developed 50 years from now. We don't need to know that. We do know that there is no known industrial process - unless you are an antique collector and pick up one of these old ice making machines they use down in Charlotte, North Carolina (Laughter) - there is just no known industrial process that fluoridation has any effect on.

Why not say that to the people? Why, we have had deans of dental schools coming out with the statement, particularly in reference to sodium fluoride, that high pressure boilers would blow up. Some day you have got to live some of those things down.

The question of taste and odor being added to the water is an important thing a community wants to know about, and you have got to assure and reassure the people. We simply tell them that you can't taste 100 parts per million in the water, let alone one. You can rig up a test or demonstration for that quite simply.

You also hear of fluoridation's being wasteful. Some of the engineers will advance that argument. They generally do it in a weak sort of way. If you grab hold of it and squelch them they will forget it. If you don't know quite how to handle it they will pursue that line of argument a little further. Sure, fluoridation is wasteful, just as a lot of things we do are wasteful, but unfortunately we don't know any other way of doing them. We chlorinate all the water in a community - maybe 175 gallons a day per capita - and the individual drinks a quart. You have chlorinated all that other water for no reason. You are going to do the same thing with fluoridation. You are going to fluoridate 175 gallons per capital daily and drink a quart or a quart and a half. If there were any great expense involved, you would be up against a valid argument, but the fact remains that to do all that, to do it the wasteful way as they might call it, will in most communities cost only 10 cents per capita annually.

One thing that is a little hard to handle is the charge that fluoridation [is] not needed. They talk of other methods, and when they get through adding up all the percentages of decay that we can reduce by such methods, we end up in a minus. When they take us at our own word they make awful liars out of us. And that will be brought up. Cut out sugar and do this and that. We simply tell them this: With all that we think we know about the prevention of dental caries, we are having more of it today than we have ever had in the history of mankind. Instead of being on the decrease it is on the increase. And if they want to do something on a mass basis they must go into their urban areas and start fluoridating the water.

Another thing that will be brought up is that all of the dentists, all of the physicians, all of the public health people, and especially research workers, are not for fluoridation. Well, that is correct to say. But you have got to have the answer for it. All of our physicians aren't for immunization, either. And all of our physicians are not for the use of iodine in goiter prevention. We don't have all our physicians in back of any of our public health programs, and we are never going to have all of our dentists for them either. But the great majority of them are for them, and we adopt our policies accordingly.

As far as research workers are concerned, I suppose fluoridation will always be an experiment, at least during our lifetimes. Maybe that is just as well. But there has to be a time, you know, when the research fits into common sense.

If you have any experience with people who are interested in inventions you know they never get them perfected. There is always another thing to be done, and on and on. We would never make any progress if we held still for that. The unfortunate thing is that some of the research workers are going around the country telling the public they cannot recommend fluoridation. That is going to happen in your community. It is happening all over the United States, so you are going to have to combat it. We tell them this, that if the evidence we have on fluoridation isn't sufficient for its general use by the public, then we shouldn't have any public health program. We shouldn't have one, because we have so much more data on fluoridation than on any of the others. Just think of penicillin. How old is penicillin, seven or eight years? Well, we knew a lot about fluoridation seven or eight years ago, too. But they practically brought penicillin up to its peak in seven or eight years.

Medical men are a little more used to public health programs than we are and not quite as afraid of them. People are going to say to you, “Isn't it a fact that you don't know all about fluoridation? Do you know how this thing works?” We say we don't know all about it. But still you want us to try it, they say. That's right. We don't know all about anything. Why, even one of our oldest public health programs, the chlorination of public water supplies, has been undergoing changes. I think in the last couple of years, the engineers have re-evaluated their chlorination techniques and are doing things differently. We aren't to the perfection stage on anything. If you let the people know that, then they will back up, but if they think they have made a point you can't answer, then you are a little bit behind the eight-ball.

Another tough question is that of the liability of the water department. We never had that one until pretty recently, when someone thought it up. Maybe it is an honest thing, too. I wouldn't know. But you are going to have to answer it. The water department will say, “What is our liability in fluoridation?” Well, we say “You are going to look bad if they start suing you because you are not doing it.” (Laughter) You pretty nearly have to turn the thing around. If they get you answering questions for them, then they have you on the defensive, and you are like any salesman, you are sort of up against it.

I think several state attorney generals have ruled that there can be no liability in connection with a thing like fluoridation as long as what the water department is doing is an accepted procedure and it is doing it within accepted standards.

Well, we could go along with this for some time, but I am sure you will have some questions that will be more pertinent than these things I am bringing up.

So you have got along to the stage where you have sold yourself, and after all, if you haven't, then don't start in on this deal. If you are not convinced, if you are not ready to go out and do battle on this thing and maybe be called a few names along the route, you'd better not get in it. But now you have got to the stage where it is the thing to do. The question you will ask is: How am I going to do it?

Of course it would be sort of presumptuous on my part to be telling you how, but I can give you a few of our experiences, and you can take them for what they are worth.

First you need a positive policy by your state dental society and your state board of health. Now, I mean a really positive policy. Don't put any ifs, ands, buts, or maybes in the thing because the minute you do you kill it. You simply give ammunition to the fellow who is against it. Say you recommend fluoridation within limits where there are proper controls that's definite to the public. I could read you some policies that could furnish plenty of ammunition to the opponents of fluoridation. Let's not do that. You have got to get a policy that says “Do it.” That is what the public wants, you know. What kind of public health program is it if you say to the community “If you want to do it.” You have got to go to the public and say “Do something or don't do something,” and make it emphatic. Otherwise they wouldn't need the public health people. What are we here for?

You need a state fluoride committee. In Wisconsin that has been, I believe, the most important thing in our set-up. We have a state committee on fluoridation established by the state dental society. And we have got, outside of myself, I think the best dentists in the state on the committee. Now, that committee is not just a list of names; those fellows really have a job to do.

You need teamwork in your state department of health. You are not going to get any place if your state health director, or your dental director, or the engineers are against it. Between these two groups, your state board of health, with the dental department taking the lead, and the committee of your state dental society, there are a lot of things to do. One is the collection of all the data on fluoridation. Those data should be made available to the component or local dental societies, lay groups, and so forth.

There is a lot of publicity that the local fellows can't handle that must be gotten from the state level. They don't know how to do it, or they are afraid to do it or something. Those are things that can come from the state board of health or the fluoridation committee of the state dental society. And that committee can assist in the pre-fluoridation surveys to be made in a community.

Now, why should we do a pre-fluoridation survey? Is it to find out if fluoridation works? No. We have told the public it works, so we can't got back on that. Then why do we want a pre-fluoridation survey?

Well, gentlemen, what is going to happen five, six, or seven years from now, when we may have a little recession? I mean a lot of people without much cash in their pockets, will be looking around for some way to cut down expenses. The alderman is going to sit on the council and say, “You know my dentist just sent me a bill for 68 bucks for my kids. We have been fluoridating our water, and I don't see that we have done a bit of good. I am still getting these bills. Let's throw fluoridation out.”

How can you counteract this? You want your pre-fluoridation data so three, five, or any year from now you can go back into those same areas and do the same type of survey and show the people what they have got for their money. And we owe it to the public to do that. We have no right to be spending public money unless we can show them that what we have done has done them some good.

Have you had any programs on fluoridation at your state meetings? I don't mean programs on fluoridation - at every annual meeting we have had, and we are going to have it, on our 1952 meeting. You just don't go out and tell dentists, any more than you can go out and tell people, that this is the thing to do and they automatically go ahead and do it. You have got to keep this thing before them, and you have got to make it look important enough so you have it on the state meeting level. And when you have it on that level, don't get somebody on the program who ends up with, “But I don't think you should do it.” (Laughter)

You are laughing now, but in your state someone may come in and say just that. I am talking about June of 1951. I am not talking about 1945. I just came back from a meeting in Seattle, Washington, and a fellow said, when he got through his presentation, “But I couldn't recommend that anybody do this.”

Now, what are we trying to do? Are we trying to promote this thing, or do we want to argue about it? If we want to argue about it, let's get up a debate before our dental organizations and talk the thing out. But when we are inviting the public in and the press in, don't have anybody on the program who is going to go ahead and oppose us because he wants to study it some more. Unfortunately, that is happening right along.

Your local component dental societies also have got to have programs on fluoridation. Who can supply them? The committee from the state society and your state board of health can. When they have the first meeting at the local level, that is the time to get the press in, and as a rule we don't even wait for that. If we are going to present something this evening in a certain community, we get over to the newspaper office this afternoon. They like that. You invite them personally to this meeting. They will want to write about fluoridation. Have a little material. You know that series of articles that was gotten out by the Cleveland Press on fluoridation? That was a terrific piece of publicity. Show the newspaper people some of those things. They get warmed up. They are pleased that you came in. You remind them how the press has been one of the greatest factors in the promotion of public health. You tell them how fluoridation helps the poor devil who can't afford proper dental care, and all that. You will have a pretty sympathetic press. Have them at the first meeting.

And at that meeting you have to have a definite program. There are certain things you have to put over at the local level. I think some of the things you should include are a discussion of the public health aspects of fluoridation, noting that we haven't got enough dentists to take care of the present dental caries, how much dental caries fluoridation prevents, and its economic aspects. That is something they all understand, and is a strong point to make before the lay groups. You can tell the people that after this thing gets going it is probably going to cost $7.00 to fluoridate the water for an individual throughout his entire lifetime. Now, that fellow sitting at the meeting has paid some dental bills. He knows how little he gets for seven bucks, and he can understand that language.

There again is a place to promote or emphasize community responsibility. You have got a program which is ideal. The people can afford it, but nobody can put it in effect but the community. Now, do they want to do something? After all, it is the finest kind of public health education when you get down to where the local fellow can do something for himself, and in most cases they are apt to do it.

You have got to come out of that local meeting with a resolution from your local dental society on fluoridation. You have got one from the state. You have got one from the state board of health, and you have got one nationally, but that doesn't mean much at the local level. The dental authorities in a community are the local dentists. They are the ones who treat the dental ills of the community, and they are the ones that the people have a right to look up to.

Another thing you have got to come out with at the local level is a committee to follow up the fluoridation program. They passed a resolution on it, but again that is just a resolution. It won't help anybody till you get it working. How are you going to get it working? If you don't have a definite group to follow this thing up, then you might just as well have never started, because somewhere along the line it will just die out. So the local committee is a must.

In addition, the state committee and the state director can do a lot before the medical groups. I suppose we have appeared before every medical society in the State of Wisconsin. Now, the local man generally isn't in a position to do that. He is afraid that when he gets before the medical fellows, they will have a lot more knowledge about things than he has. Well, from your state level you can have a man come in who knows how to present fluoridation, and let me tell you this: The medical audience is the easiest audience in the world to present this thing to. They are used to carrying or, public health activities. This worry about toxicity. Toxicity doesn't mean much to them because of all the human experience we have had.

So you come out with a resolution from your county or local medical organization. You do the same thing with your local board of health. In many places the next thing to do is go before the lay groups, service clubs, PTA's, and always invite the public officials, water men, aldermen, mayors, anybody you can get. Have them at as many of those meetings as you have meetings.

Now, this is before any proposal is made to the council to adopt fluoridation. In other words, it is a sort of lobbying procedure you are carrying on, just as if you are going to present a bill before your state legislature. You know there is a special way of doing that if you expect to get it done. You can't walk up to a legislator and say “Here is a bill.” It gets no place. The same way with fluoridation. Have the press at every one of those meetings. Then we have a sample ordinance drawn up, because you can have six months delay just on that. Have one all drawn up, so that all they have got to do is either strike something out, or add what they want, put in the name of the town at the top, and it is an ordinance on fluoridation. Otherwise that thing is going to get lost in the shuffle.

Now you are at the stage to present the ordinance to your city council or your community council. The officials have had an opportunity to listen to this proposal on the way up. They have had an opportunity to hear questions asked about it. They have heard the answers to those questions. They have seen the reaction of the PTA groups, of the service groups, union groups. It doesn't make any difference what groups; public health is everybody's business. It isn't just the physicians, the dentists, and nurses business. It is everybody's business, so talk to anybody that is interested.

Then our technique has been to ask the council for a meeting, and have either a local dentist or a representative from the state health department or the state dental society present. You have one meeting of the community council as a question and answer, explanation session, before they have to vote on the question. They resent being handed a resolution and being asked “How many yes and no.” They don't want that. They want a little time to think this over. They have that meeting. It is explained to them. At the next meeting it is voted on.

We have the representatives from all the groups that we can get to attend the meeting where there is the question and answer period. Why? Because it shows interest. And the local officials are pretty apt to go along if the people show enough interest.

Now, what about the small community where you have one dentist or two dentists or no dentists? After all, because there isn't a dentist in a community, that is no reason you can't fluoridate the water, as long as there is a public water supply. Maybe you will promote a physician if there is one there, or maybe you will just pick out an influential citizen and work through him. Have a meeting at which you explain the program and talk it over.

Now let's get into a couple of don'ts. We have had a little experience on some things to avoid. Don't use the word “artificial,” and don't use sodium fluoride. You don't know what a community is going to end up using as its fluoridating agent. But don't let them raise the question of rat poison if you can help it. And certainly don't use the word “experimental.”

Don't try to promote fluoridation from the state level in the local community. Communities resent that. We made just that error in one of our earlier experiences. We learned a lesson from that. You build a fire under some body at the local. Now, where dentists don't seem to be interested, don't let that stymie you. After all, this is a public health program, and just because some dentist isn't interested, that is no reason why the public should be denied this benefit: What we do in a case like that is to arrange to have the PTA or some group ask for some of us to come in and talk about fluoridation. In this way you get in without forcing yourself, and you can build a fire under the dentist. That is promotional work. It is being done in all kinds of programs. It isn't something we just thought up.

Frequently, after an inquiry from a physician, you can get back to the community and say to the dentist, “Isn't it going to look bad if the physician promotes this program?” You say, “I got a letter from hire, He wants me to come in and see him about fluoridation. I don't like to do that. This is a dental matter and should be kept that way. Well, maybe he will move. If he doesn't, go to the physician. Go to anybody.

If you can guard against the negative approach, you will save yourself some trouble. By that I mean you have got to be positive. If there is anything in your mind that you can't hit directly, then don't say it, because that is not the way to talk to the public on a public health program. If we were to tell the people that maybe they should immunize or if the physicians of the community are in accord they should immunize, what kind of foolishness would that be? It is either a public health program or it isn't.

If it is a fact that some individuals are against fluoridation, you have just got to knock their objections down. The question of toxicity is on the same order. Lay off it altogether. Just pass it over, “We know there is absolutely no effect other than reducing tooth decay,” you say, and go on. If it becomes an issue, then you will have to take it over, but don't bring it up yourself.

Now, there are times when you get the wrong people promoting a program, and that is bad. I know we have had that experience and that we don't know just how to handle it, but we do try to avoid it. You know, sometimes a dentist in a community, no matter how enthusiastic he is about fluoridation, is just the wrong fellow to promote it. Or some civic group or some public-minded citizen may be the wrong one. So you have to get in there and kind of feel your way around, so that you do not create any more obstacles than you are going to have anyway.

And certainly don't stress the cost: It is just too cheap. Even when you are talking to these people, they are going to pay $1.00 or $1.50 per capita to install the equipment. After all, this is health, and let's not minimize the importance of it.

Now, when you go into a local community on any of this promotional work, have a pretty good idea of what the waterworks set-up is there. In other words, if it is in a community that is going to need six or eight installations you should know that before you go in, and you should have a pretty good idea of what these installations are and what they cost and what they look like. Don't think because you have read a couple of articles that you are going to be able to know all the answers, because you aren't. You have got to know what these things look like and what they cost, how complicated they are, and similar details. If you don't have any other place to find out, come on up to Wisconsin and we will show you.

We recently had people from seven states come to Wisconsin to look over some of our outfits. I don't think there was one state out of the seven where the engineer really believed us. So we just took them to several little installations where the village barber is the waterworks man or the hardware man is the waterworks man and turned them over to him, and let the engineers question him, find out what he is doing and how he is doing it. Until they saw that, I don't think they believed us. I don't think some of you are any different from them. It is one of those things you have to see, and I think we should make an effort to see it.

In our large communities we have engineers and chemists, so there are fewer problems. But you have got to sell yourself on the idea that fluoridation can be done and done properly in a small community. Unless you are sold you are going to have a hard time selling anyone else. Now, be sure you get your public officials in on your first meeting. Say it is a local dental society meeting. Invite your alderman and your mayor. Let them hear this thing discussed - not the second and third time it is discussed in a community but the first time. Have your water man there. And don't believe all the water man tells you. They are not going to believe all you say, so why should you be so prejudiced? Those fellows will frequently confuse the issue. For instance, it is not unusual to have one of them get up and say, “We estimate that fluoridation will cost up at $30,000 the first year.” What are you going to say? You are not supposed to know anything about the water department or anything else. The thing to do, if you know what you are talking about, is to say, “Listen, let's leave those jokes to the radio comedians. Let's get down to some common sense. Here is a community 20 miles from you. You need one more installation than they need, and theirs cost them $2,000 or $3,000.”

Well, then the waterworks many says, “We thought we'd have to enlarge the building.” If you are going to invest in big trucks and probably subsidize the railroad for a boxcar in order to bring the stuff up, you can get into some pretty good expense account. But don't let them give you that kind of argument.

How can you stop such talk? By having at least some idea about the expense. You don't have to be a dentist to know that a fellow can get an upper demure for somewhere under $200. Now, when you say you can't get one for less than $2,500, even the man in the street knows you are lying. Some individual may charge that much, but he is the exception. And by and large we can do the same thing about engineering.

Whether a thing is going to cost $500 or $700 isn't a thing for us to be quibbling about, or whether it is going to cost $4,000 or $5,000. But we should have some idea of what the cost will be. And certainly don't fail to push community responsibility. They will let you do this whole business, and you will end up a flop just like we did where we tried to do it ourselves. You have got to get that impressed on them. Your local dental society, the PTA, any of them - this is their baby. If they want to do something for their children, they have to take action. How? They have got to get an ordinance passed.

Let me tell you the PTA is a honey when it comes to fluoridation. Give them all you've got. They will pay you back. We had one community where for a year and a half the council had let this thing be tabled. Then the PTA got together and said, “I wonder what we can do about it.” The local dentist called me up and asked when I was coming through. He said he would get some of the PTA people together.

They said, “What can we do?” We said, “How many of these PTA people can you get down to your council meeting on Monday night?” They didn't think they'd have any trouble getting a couple of hundred. “Well,” I said to this dentist, “How much does that room hold?”

He said, “Fifty.”

I said, “That will be good. Get them down.” They were down. The council pulled it out from underneath the table, put it aboveboard, voted, and they got fluoridation.

Now, Milwaukee has given us the run-around for so long I don't know whether we will ever get fluoridation there. One year they leave the whole business out of the budget. Nobody knows it. The whole budget goes through, and a couple of months later we find we are stuck a year. Nobody was following that thing closely enough.

Then they let the bids. It takes them three months to let the bids. It takes three months to decide who was the lowest bidder. A month later they decide the bids weren't right. They say they just want bids on equipment this time, not the installation. They can install it themselves. This is the kind of thing that happens. You might as well be prepared for it. You may not have it, but we certainly have.

I think one mistake that is made at the local level is in some individual dentist's trying to carry the program alone. That makes the other dentists resent it. It makes the lay groups resent it. So make it a community thing as much as you can. And be sure not to present the ordinance to the city council before you have had an opportunity to really sell them. They will resent it if you do.

If you can - I say if you can, because five times we have not been able to do it - keep fluoridation from going to a referendum. After you have just a little experience you will find you can walk into a mayor's office, and after three sentences you know whether he is for fluoridation or against it. He is never going to say he is for or against it, but you can detect that. It is the same way with the waterworks men. They will say, “Well, if the people want to do it, let them vote for it.” If we get public health by referendum God help us, because I think that on most of these programs you can beat anything that requires money. When a mayor brought that up to me, I said, “How would it be if we submitted a referendum at the same time the question whether your salary should $7,000 a year or $3,000.” I said, “How do you think that referendum would come out!”

He said, “Probably come out $3,000.”

I said, “Sure.”

After all, this isn't a thing you going to try to sell to every individual member of the community. The community elects people or appoints people to carry out certain duties, and they expect them to perform those duties just like with the health set-up in the community. If your health officer is sold on fluoridation, your dentists are sold on it, your medics are sold, you should present it to the council. It is their duty and obligation to either adopt or reject it instead of passing everything to a referendum. If you going to have government by referendum, what do you have the city council for?

Then there is this matter of not trying to make fluoridation your whole dental problem. I think you will find fluoridation much like the topical applications in that it is a good entering wedge for a dental health program. At the same time don't tell the people that you are just starting on the fluoridation program in order to promote something else, because you are never going to promote anything that comes up to fluoridation in an urban community.

I think maybe one of the things about fluoridation is that it's been too big for the whole profession. I don't think the profession yet grasps the significance of fluoridation. When you stop to think that suddenly something has come in the picture that has the possibility of knocking out two-thirds of the dental decay of the urban population, you are talking about the prevention of more decay, gentlemen, than the entire dental profession has been able to repair. This thing is tremendous. Let's not underestimate it. But by the same token, let's not overestimate it. It doesn't do the whole job.

In our small communities, frequently we use this technique when we are trying to get them to fluoridate. We say, “Of course it really isn't necessary for you to fluoridate, because you are only 12 or 15 miles from Padukahville, and they are fluoridating. After all, your people have got to go somewhere and shop, and they can go over t Padukahville and do their shopping and pick up a couple of gallons of water and use it for their children. You mention about their going shopping in another little town 10 miles away, and they hit the ceiling. But you are giving them an alternative, and frequently that is the most effective approach.

We have frequently said this before a city council, if they didn't seem to be very impressed with what was going on: We have got the data here. Of course if you don't care to fluoridate your water, then we had better begin thinking about a program of care, and we have got the thing pretty well figured out. It will cost us about $68,000 a year.” You get into the big brackets, and then they begin to pay attention. If they don't want to do the one you tell them, they are certainly interested in the other. They are not going to say they don't care about dental health. None of them will say that. If you will give them an alternative, sometimes that is a factor in helping things along.

I think I have exhausted what little I know. If you have any questions, maybe we could get more out of them than we could out of further talk.

(Applause)

DR. KNUTSON: Thank you very much. Again you have done a masterful job. As Dr. Bull has indicated, he is willing to answer questions, but before the questions start, let's give Frank a chance to get a drink of water. Let's take five minutes' recess.

Infodoc 06 | PDF

'Requirement'

The next stage of the campaign to promote fluoridation was to create a 'need' for the toxic fluoride wastes. By using propaganda to promote fluoridation was one thing but getting people to drink fluoridated water was another. Just because you have a well-advertised product does not automatically mean that you can sell it to the general public.

Therefore, to give fluorides a helping hand and to ensure disposal of these noxious substances, a new sales tactic had to be employed. The thinking being that if the promoters of fluoridation could not persuade people to purchase fluorides, then it should be forced upon them. Consequently, a public health 'need' for fluoridation was created.

Creating a 'need' for fluoride for medicinal purposes but without referring to it as a medicine has been the challenge for pro-fluoridationists.For example, vaccinations to prevent Mumps, Measles and Rubella are typical demonstrations of medicinal 'need'. Fortifying certain foods with vitamins and minerals, such as bread, is the second type of 'need' and in this instance the added ingredients are commonly recognised as nutrients. In both instances, there is a commonly recognised 'need' to protect society from the scourges of disease / poor nutrition.

The promoters of fluoridation sometimes argue that fluoride is a 'nutrient' while opponents argue that it is a medication. It is commonly understood by the medical and legal profession in general that fluorid is added to water to prevent a disease and therefore is classified as a medication. But the same argument could be made of nutrients, such as folic acid or vitamin D, for example.

Where fluoride differs is that there is no known need for this chemical in our diet (see Table 1) and this is where a subtle distinction has to be made.

A lack of certain vitamins and minerals will lead to an increased risk of certain diseases which are attributable to such deficiencies. However, a lack of fluoride does NOT lead to tooth decay. Tooth decay is caused by the action of cariogenic substances which release acids which then attack tooth enamel.

Another argument put forward by the proponents of fluoridation is that some water supplies are 'deficient' in fluoride. Water, in it's purest from, is simply H2O (hydrogen and oxygen).

Whatever else appears in water is a pollutant, even when it is calcium or magnesium.

Therefore, a water supply cannot be 'deficient' in fluoride - a pollutant. If you do take this line then you could argue that water is also deficient in lead or arsenic, two other very toxic chemicals found in water.

Despite this reasoning, the promoters of fluoridation have pressed on with their claims of a 'need' for fluoridated water. But because fluoride is recognised as being 'unwholesome' in very small amounts, evidence of limited consumption by the population in general had to be 'found' or 'manufactured'.

In 1976 the Royal College of Physicians ("the College") published a report entitled: 'Fluoride, Teeth & Health'. One of it's observations concerns the presence of fluoride in a variety of diets. The following table with limited data (No. 5.1, page 22) made the following claims;-

Table 1: Fluoride per litre of tap water

Key: L-N = Low-Normal intake; Max = Maximum intake; L = Litre(s); C = Cup(s); [N] = Note.

	0.1		**1.0**	
Food type	**L-N**	**Max**	**L-N**	**Max**
Food	0.5	1.0	0.7	1.2
Water	0.1 (1L)	0.6 (6L)	1	6
Tea	0.66 (2C)	6.6 (20C)	1	10
Total	1.26	7.7 [N]	2.7	12.2 [N]

***Note:** Based on a 'Low-Normal' intake of water. Nobody is ever going to argue that some fluoride will be present in a normal diet though the amount you consume will vary - and quite considerably so.

Table 2. Extract from the Ministry of Agriculture, Fisheries and Food AND Department of Health Working Party report on Dietary Supplements and Health Foods, 1991 (table 4, page 16);-

Key: UK = UK Recommended Daily Allowance; US = USA Recommended Daily Allowance; Ch = Chronic Dose; RMD = Recommended Maximum Dose.

Milligrams of mineral per day

Mineral	**UK**	**US**	**Ch**	**RMD**
Fluorine [N]	**NA**	**1.5 - 4**	**10**	**1**

***Note:** This should say 'Fluoride Ion'.

The tables make very interesting reading. The first table shows that the average person consumes some fluoride in their diet, potentially in the range of 1.26 mg to 7.7 mg per day (very low fluoride level in water). However, if you drink a lot of tea made with fluoridated water then you will receive a *chronic dose of fluoride (see second table). The second table also recommends a MAXIMUM daily intake of just 1 mg.

A further indication of the narrow margin of 'safety' when consuming fluoride is given by Colgate. On a bottle of their Fluorigard tablets, the following warning is given;-

"WARNING: Do not use if water supply contains more than 0.7ppm (parts per million) of fluoride."

Table 3. Fluorigard daily dose advice

Key: F in Water = Fluoride in the water supply; ppm = parts per million; Tabs = Tablets.

Daily Dose	**F in Water**	
Age	>0.3ppm	0.3-0.7ppm
2-4	1 tab	0.5 Tab
>4+	2 Tabs	1 Tab

Each tablet provides 0.5mg of fluoride ion. Therefore, Colgate calculate that children over the age of 4 should receive a supplement 1mg of fluoride ion a day where fluoride in water levels is low (up to 0.3ppm). But what about other sources of fluoride? Even if children do not drink tea then the amount of fluoride they would receive each day is going to exceed 1 mg.

The joint MAFF-DoH Working Party appear to be at odds with the College! One also wonders if the College has considered children under the age of two. What is their so-called 'requirement'? It has to be less than a supplement of 0.5mg of fluoride ion which in turn makes the College's recommendation even more outrageous.

Further damning evidence on the 'need' for fluoride is contained within the Department of Health's 'Report on Health and Social Subjects' (No. 41, Dietary Reference Values for Food, Energy and Nutrients, 1994).

The report states that;- "NO ESSENTIAL FUNCTION FOR FLUORIDE HAS BEEN PROVEN IN HUMANS".

This observation is taken from the COMA (Committee On Medical Aspects of Food and Nutrition Policy) report of 1991 (Dietary Reference Values for Food, Energy and Nutrients for the UK). Paragraphs 36.2 and 36.4 (page 187) provide some very lucid reading;-

36.2 Requirements.

"... The possibility exists of high F levels occurring in infant foods, and children appear to retain more ingested F than adults, so an upper limit on intakes of infants and young children of 0.05mg / kg / d [3] was suggested ..."

36.4 Guidance on high intakes.

"... more pronounced changes are seen in children under the age of 12 years receiving an intake of 0.1mg/kg/d. [note, 1] In the USA, infants and children who received F supplements of 0.5 mg / d until three years and 1mg/d thereafter had a 63% incidence of fluorosis by the age of 12 years." [2]

Note: mg/kg/d = milligrams/kilograms of body weight/per day.

Refs: [1] Leverett D H. Fluorides and the changing prevalence of dental caries (Science, 1982; 217: 26-30), [2] Aasendon R, Peebles T C. Affect of fluoride supplementation from birth on dental caries and fluorosis in teenaged children (Arch. Oral Biology, 1978; 23: 111-115).

Table 4. Maximum daily fluoride consumption for infants and young children based on the COMA suggested recommendations and weight of child;-

K	Mg	K	Mg	K	Mg
1	0.05	14	0.70	27	1.35
2	0.10	15	0.75	28	1.40
3	0.15	16	0.80	29	1.45
4	0.20	17	0.85	30	1.50
5	0.25	18	0.90	31	1.55
6	0.30	19	0.95	32	1.60
7	0.35	20	1.00	33	1.65
8	0.40	21	1.05	34	1.70
9	0.45	22	1.10	35	1.75
10	0.50	23	1.15	36	1.80
11	0.55	24	1.20	37	1.85
12	0.60	25	1.25	38	1.90
13	0.65	26	1.30	39	1.95
				40	2.00

At age 5, this amount (0.5mg - given as a supplement) up to the age of 3, and then doubled to 1 mg, led to a 63% incidence of fluososis in exposed children (see above).

At age 20, this is the 'recommended' amount of fluoride (per litre) which is present in some British water supplies.

One wonders if there is anyone 'out there' who can make head or tail of the various quoted recommendations. After all, if the Government is so obsessed with forcing fluoride down our throats, then why can they not produce the following evidence:

[1] A need for fluoride. As yet there is no evidence of 'requirement';

[2] A minimum dosage deemed to be suitable for all persons (after allowing for variations in age, health, gender, ethnicity and the level of nutritional intake that is required to counter the toxicity of fluoride);

[3] As [2], a recognised safety limit / maximum dose.

Until these three points are established and proven beyond a reasonable doubt, the pro-fluoride lobby has not even the right to ask the general public whether or not they want fluoride dumped into their water supply, let alone expose vulnerable communities to this scandalous practice.

Infodoc 07 | PDF

'Statistics'

"There are three kinds of lies: lies, damned lies, and statistics." - Mark Twain , Autobiography (this remark has also been attributed to Disraeli, amongst others)

It has been demonstrated how the pro-fluoride lobby has managed to overcome a number of hurdles in their attempt to dispose of toxic fluoride wastes via public water supplies. They infiltrated and influenced Government, and consolidated. This was followed by using their influence within powerful circles to create a public health 'need' for fluoridated water.

The next stage was to 'produce' statistics based on badly designed studies to underpin their claim that drinking fluoridated water is effective in reducing tooth decay. Much has already been said, and written, about the earliest fluoridation trials and schemes. Despite being trumpeted as 'successes' by the pro-fluoride lobby, such schemes have often come in for severe criticism due to their bad design and assumptive conclusions.

Consider the following letter written by Hubert A Arnold, PhD. and sent to Dr. Newbrun in 1980;-

---

University of California, Davis

Department of Mathematics

Davis, California, 95616

May 28, 1980

Dr. Ernest Newbrun

Medical Sciences Bldg. 653

San Francisco, CA 94132

Dear Dr. Newbrun:

Thank you for your telephone inquiry about my course on statistical frauds, and "The Statistical Frauds Group". It was given in The Experimental College at this campus for a number of years.

In the course of time, "The Statistical Frauds Group" arose from it.

The course and the Group have been dormant for a couple of years, but after my retirement in July 1980, I may revive them. There does seem to be some demand.

We investigated all manner of questionable statements and activities, some qualitative, but most of them quantitative. We conducted interviews and collected published matter, and analyzed all these, using standard statistical procedures.

In addition to deliberate frauds, errors in judgement or method were examined. Often it was difficult to detect if there was a deliberate fraud. We looked over statements by manufacturers or purveyors of consumer goods. But a very copious source was papers in medical research journals. Particularly good examples of blatant statistical misconduct were found in the Public Health Service reports.

The announced opinions and published papers favoring mechanical fluoridation of public drinking water are especially rich in fallacies, improper design, invalid use of statistical methods, omissions of contrary data, and just plain muddleheadedness and hebetude. Many of the blunders were so glaring that I gave them to my beginning freshman classes in statistics at the very first meeting.

The students see through them straightway, and are afforded great amusement. Uproarious laughter frequently ensues. No special statistical equipment is necessary to detect those peccancies. Of course the class and the Group soon tired of those infantilities, and sought and found greater challenge.

By the way, a study by John Yiamouyiannis and Dean Burke on possible connection between cancer and waterborne fluoride was fairly tightly reasoned. The statistical procedures were standard, and much better applied than in much of the Public Health work.

As I pointed out in a letter published in the proceedings of a congressional committee investigating the above connection, the real point is that direct chemical and controlled experimental research by unbiased uncommitted agencies is urgently indicated. Clearly fluoridation should be discontinued everywhere until definitive results on safety are obtained.

In this connection, a great source of entertainment to the Group was the ferocity with which the researchers attacked any criticism. Invariably they violated in their own work the very principles they insisted on in others' work.

The Group found that corrections for age, race, etc. were applied in a most perfunctory and indiscriminate manner, without regard to whether they appertained to the given situation. The Group found over and over that new, unbiased, research was almost impossible to instigate.

The old "Frauds Group" should be revived and reorganized. If funds are forthcoming, I may consider the undertaking. Every campus should have an invulnerable group that punches holes in stuffed shirts and lets the air out.

If I may help further, please let me know.

Sincerely, (Signed) Hubert A. Arnold, Ph.D.

This letter quite literally 'hits the nail on the head'. However, the poor design and manipulation of early fluoridation trials is not amusing considering the way they have been employed to deceive and defraud the public at large.

Another letter which condemns the presentation of dental health data comes from a statistician: Professor J N R Jeffers of Cumbria.

In early 1997, Professor Jeffers received a letter asking for his opinion of 'dental health league tables'. These 'league tables' are produced annually for various age groups and gives the number of decayed, missing and filled teeth, plus the fluoridation status, for each district health authority in the UK. They are normally published by the Government-sponsored pro-fluoridation propaganda machine, the British Fluoridation Society.

Professor Jeffers highlighted the inadequacies of such league tables;-

---

PROFESSOR J N R JEFFERS

Glenside, Oxenholme

Kendal, Cumbria LA9 7RF

19th February 1997

Dear (Name withheld)

Thank you for the two small items that you faxed me the other day.

I was Interested in the league tables for 5-year and 14-year old children that you sent me a few weeks ago, principally because they are excellent examples of how not to present information - unless you are determined to distort that presentation in favour of a particular argument. I often use data sets of this kind as case studies for my students, and you may be interested to see the case study that I have prepared for these particular data.

As you will see, the way in which districts were chosen for fluoridation does not allow of any rational judgement about the effects - beneficial or otherwise - of the effects of fluoridation. There are too many other factors which are confounded with the allocation of districts to treated and untreated groups. The league tables would have you believe otherwise.

Yours sincerely , (Signed) John Jeffers

These two letters demonstrate how the pro-fluoride lobby cannot find any good statistical evidence to prove that water fluoridation is effective.

Another reason why league tables are used is to dupe lay people into thinking that water fluoridation works. The only thing that such league tables prove is that they are totally unreliable and misleading. They serve no other purpose.

Perhaps if there was a modicum of intelligence, self-respect, integrity or honesty in the pro-fluoridation movement, then poor quality statistics would never see the light of day.

But the salient lesson is that league tables do impress the uninitiated. at least the British Dental Association (BDA) appears to think so based on their very poor and inaccurate 'parliamentary constituency league table' published in August 2003.

The information contained within that table was so poor it beggars belief that an allegedly professional organisation like the BDA would want to put their name to it - but they did! So desperate are the pro-fluoride lobby to promote their cause that they would risk everything on such a shoddy piece of work.

But it is not the design of the league table which has duped so many of our politicians, it is the credentials of the BDA which has won support from our very gullible MPs.

The ultimate lesson to be learned is that established bodies like the BDA can print what they like, regardless of the quality of their work, and yet still be given the benefit of the doubt.

Reputation is everything, and the truth suffers as a consequence.

The final word goes to Dr Colquhoun (as quoted by Sir Ivan Lawrence in the House of Commons in 1985), a retired Chief Dental Officer for Auckland, New Zealand, who discovered that his previously held views that fluoridation was effective were not accurate...

I found on my study tour that new better designed research was under way, which I reported to the health department on my return and which I, along with other believers in fluoridation, hoped would finally prove the superiority of fluoridation over other methods of prevention. But the results of this research, though often presented in guarded and ambiguous ways, have not supported the case for fluoridation at all. They show that dental decay rates have dropped dramatically in most developed countries whether they practice fluoridation or not, and in fluoridated countries it dropped in unfluoridated places as well. Also, the European countries which discontinued fluoridation some years ago, there are no reports of an increase in dental decay as a result.

And ...

Statistics from the Greater Auckland region, that is three health districts containing over a quarter of New Zealand's population, show:

[1] where an unfluoridated area is compared with a fluoridated area of similar income level, the percentage of children who are free of decay is consistently higher in the unfluoridated area.

[2] As well as the above, decayed, missing and filled teeth scores show, when socio-economic differences are allowed, child dental health is better in the unfluoridated area.

And AMEN to all of that!

Infodoc 08 | PDF

Water UK and the water companies

Firstly, the position of three water companies on water fluoridation.

1. WELSH WATER (Dwr Cymru)

"Dwr Cymru is committed to enhancing the safety and reliability of water treatment sites so as to reduce the risk to our customers and our employees through accident or incident. Introduction of an additional toxic and potent chemical onto waterworks sites is totally contrary to this policy."

In July 1993, Welsh Water sent the following fax to Professor Green of the British Dental Association;-

"We supply over one million tonnes of water to domestic, commercial and industrial customers each day. As a water undertaking we are licensed to carry out this activity under the provisions of the Water Industry Act 1991. Our primary duties are to supply water which is both "wholesome" and "fit for consumption", and in this regard we are closely regulated by the Drinking Water Inspectorate. Nothing in these provisions prevents us from fluoridating water supplies, but equally we have no duty to do so.

Fluoridation does nothing to improve the "wholesomeness" of water supplies; indeed fluoridation in excess of 1.5 mg to 1 ltr would render the water unwholesome, and would then attract enforcement action by the Secretary of State unless he considered the breach to be "trivial". More seriously, if an accident or incident occurred involving overdosing of fluoride, where customers sought medical attention for any symptom associated with the incident, it is our opinion that the Company, its Directors and employees are at risk of criminal prosecution for supplying water which is "unfit for consumption". This is a new criminal offence, created in 1989 after the experience of the Lowermoor incident where a bulk delivery of aluminium sulphate entered into the water supply.

Fluoridation of the water supplied by Dwr Cymru would require the addition of 1 tonne of fluoride ion per day. Hexafluorosilicic acid is a corrosive and toxic liquid containing 16% fluoride ion. Daily usage would be 6 tonnes per day; an annual offtake of over 2000 tonnes, delivered to and stored at 100 or more water treatment works.

Dwr Cymru is committed to enhancing the safety and reliability of water treatment sites so as to reduce the risk to our customers and our employees through accident or incident. Introduction of an additional toxic and potent chemical onto waterworks sites is totally contrary to this policy.

As regards to the wider interests of Dwr Cymru, our concerns for our customers, our shareholders and the environment are paramount. Despite the advantages claimed for water fluoridation we see widespread opposition amongst our customers, substantial extra risks to our shareholders and largely unknown effects on the environment which will ultimately receive almost all of the fluoride applied.

The Directors of Welsh Water PLC and of Dwr Cymru Cyf. have resolved that it is not in the interests of the company, its customers nor its shareholders to undertake further fluoridation of water supplies."

2. YORKSHIRE WATER

"There would be increased danger of water supplies being rendered unwholesome or unfit for human consumption and this is a risk to which Yorkshire Water is unwilling to expose its customers."

"... the postbag that we've received over several years now, thousands and thousands of letters asking us NOT to fluoridate the water has certainly helped us make our decision,because the thousands that we have received balance up with the letters that can be counted on the fingers of one hand, basically, asking us to fluoridate. So I think we know which way public opinion rides."

On April 12th 1995, the Company issued the following press release:

"YORKSHIRE WATER has decided that it will not agree to add fluoride to water supplies in its region.

The principal reason for this decision is that the Government are not prepared to offer an indemnity acceptable to the Company to cover the risks involved. In addition, fluoride does not enhance drinking water quality and Yorkshire Water is concerned that installing fluoridation plants and storing chemicals at our works would increase the complexity and risk associated with water treatment processes. There would be increased danger of water supplies being rendered unwholesome or unfit for human consumption and this is a risk to which Yorkshire Water is unwilling to expose its customers.

Yorkshire Water has informed Health Authorities and other interested bodies of its decision."

And on April 21st 1995, Yorkshire Water representative, Steve Painter said on Radio 4's 'You & Yours' program:

"Customer opinion is riding high at the moment and as much as anything else that has helped us make a decision. We decided that we'd better come down one way or the other, our customers would expect it of us, and the postbag that we've received over several years now, thousands and thousands of letters asking us not to fluoridate the water has certainly helped us make our decision, because the thousands that we have received balance up with the letters that can be counted on the fingers of one hand, basically, asking us to fluoridate. So I think we know which way public opinion rides."

After the interview, I managed to speak to Steve Painter on the telephone. He confirmed that customer opinion had compelled the Company not to fluoridate.

3. SEVERN TRENT

This water company takes a different attitude to fluoridation. Responsible for the Midlands area of England, Severn Trent fluoridates more water supplies than any other water company.

Most fluoridation schemes in the Midlands commenced before the privatisation of the water industry and Severn Trent inherited such schemes without giving a great deal of interest in the problems that would ensue.

NB. A few schemes have started up since privatisation but they were subject to existing pre-privatisation contracts.

Severn Trent have therefore taken it upon themselves to do one of two things. They could either terminate all their schemes or maintain the status quo. There has been no indication that Severn Trent want to even consider an end to fluoridation and have decided to rely entirely upon propaganda, and their strength as a highly profitable monopoly, to scare off potential litigants.

WATER UK

Quote: "Water UK is the trade association of the UK's water industry. It represents English and Welsh companies and Scottish and Northern Irish water operators."

On the 13th July, 2000, Water UK outlined their views on water fluoridation (my comments in red):

FLUORIDATION: THE INDUSTRY POSITION 13/07/2000 Fluoridation of Water Supplies

Water UK's aim is to ensure that:

- the present legislative position is recognised as unsatisfactory;
- if the Government wishes to promote fluoridation there should be a change through primary legislation such that;
- if the Government, Health Authorities and customers so wish, water companies can be required to increase the fluoride content of the water they supply, and
- Water companies should be more willing to champion the rights of the consumer. Instead they clearly indicate they do not want the responsibility. A clear cut case of cowardice.
- companies positions in respect of their operating arrangements, costs and indemnities are properly safeguarded

  Response: Not only do they want to shirk their moral responsibility towards their customers, they also want to be insured against litigation. If the water companies KNOW there is a risk of litigation, they will also be aware of the risks associated with water fluoridation.

  Fluoride as a health issue

- Water operators have a primary duty to provide a sufficient and wholesome supply of water

  Response: Now they compound their hypocrisy. On one hand they say they have a "primary duty" to supply wholesome water but on the other they say they are willing to take risks with their customers health.

- The decision whether to fluoridate a water supply should be entirely a health issue. Health professionals should be the only people in a position to make a decision about public health measures

  Response: Tooth decay is not strictly a public health issue in the way it is laid out in this argument. If tooth decay was a serious contagion and fluoridating water supplies was considered the best way to stop the spread of this 'disease', then the public health issue would have to be considered. But tooth decay is not contagious, it is the cause of specific individuals having poor diets and not taking sufficient care of their teeth. Public health officials, who are often misinformed or misguided by Government propaganda, should NOT be trusted with this issue. IT IS THE CONSUMER WHO SHOULD HAVE THE FINAL SAY ON WHETHER OR NOT THEY WANT TO BE MEDICATED.

- Water operators are in effect contractors in the arrangement, who can be required to use the water supply network to deliver a product on behalf of the relevant local Health Authorities

  Response: This is confirmation that the water companies are well aware that water supplies will be used to deliver medication to their customers in uncontrolled doses (depending on how much each customer drinks each day).

- The decision whether to fluoridate a water supply should lie with the health authority. The current discretion on water operators whether to accede to an application from a Health Authority should be removed

  Response: This just adds insult to injury.

- However there should be absolute clarity in the decision making process, and the respective roles and responsibilities of the Health Authorities, national Government and water operators

Decision making

- Whilst Health Authorities are the only bodies qualified to decide on the merits of fluoridation schemes we suggest that:

  This is an outrageous assumption. There are much better informed organisations who are naturally better qualified to advise on water fluoridation.

- The decision making process must be absolutely clear
- The process should include improved provision for consulting with the population to be affected
- There should be a model consultation process agreed at the national level. Whilst the water industry should have an input to the design of the model process, (which may also include local government) it should not play a part in the consultation itself

  Rather vague. Having indicated they do not want the responsibility for exposing their customers to water adulterated with toxic residue, the water companies indicate they are concerned enough to want to be involved in the decision making process. But to what degree?

- A parallel consultation between the Health Authority and water operator should take place, to ensure that fluoridation plant installation is to the standards of the water operator
- Subject to the results of the consultation with the water operator the final decision should be taken by the Health Authority in public and in a transparent and understandable way

  The water companies reinforce their contempt for democratic opinion and the right for individuals to refuse to receive medication via their water supply.

- Health Authorities requiring fluoridation schemes should nevertheless be required to liaise with water operators to ensure that the present and future operations of the water operator are not compromised through the fluoridation of the water supply

- **Public Relations**
- The industry requires the support of public relations work led by Government and Health Authorities to make it absolutely clear who 'owns' (the Government, Health Authorities, or both) the issue of fluoridation

  Nobody "owns" the issue of water fluoridation. How stupid and ignorant can you be? 'Ownership' of such an issue implies the willingness of the water companies to accept dictatorship from the State.

- The industry's stance must remain neutral but it will provide information to customers and organisations as appropriate on the technical issues of fluoridating water supplies
- The Health Authorities must take the lead in producing information on areas covered by fluoridation agreements and answering general enquiries and complaints from the public

Indemnity

Health Authorities must be responsible for all costs incurred by water operators as a consequence of the decision to implement a fluoridation scheme including:

- Costs of all works and plant required to fluoridate and the ongoing costs of operating and maintaining plant to nationally agreed standards and monitoring costs
- Costs of management time and lost opportunity costs
- Training of personnel, Health and Safety issues etc
- Full legal indemnity - ie absolute indemnity on civil liability and indemnity on strict criminal liability as far as public policy allows

  Yet further acknowledgement of the risks associated with water fluoridation.

- In the event of bulk supply, common carriage or cross border supply the costs to de-fluoridate should also be recoverable
- Supplying water to customers who cannot for any valid reason drink water which is fluoridated

  Now they admit that some customers cannot tolerate fluoride!

- The action of customers and others opposed to fluoridation (including the costs of debt recovery)

  They also recognise that there is opposition to fluoridation.

- The industry also requires an undertaking from the Department of Health and DETR to provide technical help to resist claims from customers, even though the Health Authorities are primary movers
- Indemnities should remain, even if fluoridation proposals are withdrawn

- **Maintaining operational flexibility**
- Operators are increasingly integrating supply systems to maintain reliable and efficient operations. This makes it increasingly difficult to implement fluoridation on a piecemeal basis
- Operators must maintain the flexibility to supply water from a particular source to different areas as the needs arise. This may entail suspension of fluoridation of supplies in some circumstances
- Operators must be able to supply fluoridated water to normally non-fluoridated areas on the basis of operational contingencies without incurring any liability

  In the section on indemnities, they ask for any costs associated with de-fluoridating "cross-border" water supplies. In this section they ask for permission to fluoridate "normally non-fluoridated areas". Bizarre!

- The introduction of a fluoridation scheme must not operate as a barrier to development of competition in the water industry
- Need a model agreement.

Code of Practice on technical aspects

- The industry needs to be confident that the Code of Practice on the Technical Aspects of Fluoridation of Water Supplies reflects best practice based on up-to-date knowledge
- We suggest that the current code of practice be withdrawn and replaced by:

  i) a DWI/WO/SO guidance letter setting out:

  a) the roles of the different agencies and water operators

  b) chemicals and specifications (linking to current drinking water regulation 25)

  c) dosage and allowable tolerances

  d) monitoring (validation and sampling regime over and above that required in the water quality regulations)

  and

  ii) an industry code of practice setting out principles including:

  a) a commitment to the highest operating levels and the use of failsafe equipment

  b) storage and handling of chemicals

  c) injection process

  d) control of dose

  e) monitoring

  f) maintenance

  g) reporting requirements to Health Authorities

  h) Health and Safety

And there's more ...

Water UK emphasised their determination to sell-out their customers by writing a press release on the 5th October, 2000 - the day BEFORE the publication of the final report of the NHS/CRD review of water fluoridation:

"The new report on fluoridation of public water supplies, published by York University today (6 October), will be read with great interest by the Government, health professionals, pressure groups and the water industry.

Now the question is: will Ministers use the findings to change a law which all sides acknowledge has brought this important issue to a frustrating impasse?

The offending legislation the Water (Fluoridation) Act 1985 made Health Authorities responsible for deciding if water supplies should be fluoridated, but crucially also gave water operators discretion on whether to accept an Authority's application to proceed.

Interestingly, on the Water UK web-site the following day appeared another statement which included the following remark (with reference to the 1985 Water Fluoridation Act):

"There is much to sort out, but the key priority will need to be removing the water company discretion by reforming an Act which has proved itself a classic law of unintended consequences."

Water UK are keen for a change in the law which removes the discretion of water companies to refuse applications for fluoridation schemes. But to use the language "unintended consequences" is a possible misinterpretation of what happened in 1985.

When the Water Fluoridation Bill was rushed through Parliament using "shoddy" tactics in 1985, the Government will have realised that responsibility for water fluoridation should be in part(at least) with the water companies and this is possibly why they were given discretion. In other words, the Government wanted to 'wash their hands' of at least part of the responsibility for poisoning the Nation.

Consequently, if the water companies had the right to refuse new fluoridation schemes BUT did not exercise that discretion, then they became more responsible for their actions. We should therefore assume that the "unintended consequences" were perhaps not 'unintended' after all.

As a further example of the Government's desperation and underhand intentions, an 'inadequate' indemnity was offered to the water industry should any company, or companies, be sued for damages. The water industry was suitably unimpressed by this offer.

Will there ever be a conclusion?

Since 1985, this 'tennis game' has persisted and failed to provide a conclusion. Government presses the water industry to fluoridate. The water industry says it does not want the responsibility. By legally removing the water industry's right to refuse fluoridation means that responsibility for fluoridation is firmly in the hands of the State. But this will not happen, and so the 'game' continues.

As for passing the buck to the Health Authorities, both the water industry and government identify this possibility as a solution to their problems. Sufficiently detached from central government and independent of the water industry, the Health Authorities ultimately become the 'fall guys'. Health Authority officials can take full responsibility for fluoridation and when it all starts to go wrong, then perhaps conveniently resign without being held accountable for their actions. It's happened before, everyone blames everyone else, the issue becomes confused and nobody ends up taking responsibility.

This is possibly why the water industry is keen to nominate Health Authorities. They know the Government will not want to take responsibility for fluoridation and therefore have suggested this 'third way'.

Nobody should be left in any doubt about the fear, confusion and contempt for natural justice which is so apparent in Water UK's statement.

Water UK has shown itself to be a supporter of water fluoridation through it's opinions, and in some cases, the actions of some of it's members. As a consequence, they are not in any position to make any recommendations and especially on behalf of those water companies who have already expressed their opposition to water fluoridation.

Infodoc 09 | PDF

How much does water fluoridation cost?

Between the financial years 1985/86 and 1992/93, the cost to the Treasury was as follows:

NB. Figures are given in multiples of £1,000

Table 1.1

Key: Yr = Year; Nor = Northern; Tre = Trent; NWT = North West Thames; Oxf = Oxford.

Yr	Nor	Tre	NWT	Oxf
86	0	0	0	0
87	3	105	0	14
88	38	0	0	0
89	0	8	0	0
90	55	0	75	0
91	0	245	0	0
92	0	54	0	0
93	113	535	0	0
Tot	209	947	75	14

Table 1.2

Key (cont.): WM = West Midlands; NW = North West; Yk = Yorkshire; Mer = Mersey.

Yr	WM	NW	Yk	Mer
86	0	20	0	0
87	251	0	0	0
88	385	10	0	0
89	936	10	0	0
90	300	0	0	0
91	0	0	0	0
92	0	42	12	0
93	135	11	0	102
Tot	2007	93	12	102

Note: Figures include funding towards feasibility studies, reports and or capital costs of schemes. (Source: Written Answers, Hansard, 13th January 1994).

The total expenditure for this period is **£3,459,000** from the Treasury's 'Central Fund' alone (NB. For a small percentage of the population only).

However, water companies who implement fluoridation schemes obtain full financial reimbursement from the Health Authority responsible for the application. The Health Authorities in turn obtain only part of the funding from central Government. So the question is: what percentage does the above table represent to the total cost of fluoridation?

A clue lies in the letter sent by the Department of Health & Social Security to the West Midlands Regional Health Authority in February 1982.

The letter gives the following table of estimated costs for WOLVERHAMPTON AND WORCESTER schemes;-

Table 2

Key: Yr = Year; PCE = Proposed Capital Expenditure; RHA = Regional Health Authority commitment; GCF = Grant from Central Funds; %CF = Percentage of Central Funds

NB. Figures are given in multiples of £1,000

Yr	PCE	RHA	GCF	%CF
83	350	325	25	7.1
84	740	550	190	25.7
85	821	625	196	23.9
86	315	250	65	20.6
Tot	2226	1750	476	21.4

This table shows that only about a fifth of all costs for fluoridation schemes comes from Central Funding. This in turn means that a total of approximately ***£16 million pounds** would have been spent over an eight year period implementing or maintaining fluoridation schemes (*calculations are based on the first and second tables - £3,459,000 divided by 21.4%).

The next calculation to consider is how much water is used by industry and how much in the home. Estimates on industrial usage can vary significantly.

Industry can take between 40 to 80% of all supply but only the lower figure will be used in the following formula.

Table 3

Key: R = References; Use = Water Usage; Form = Formula used; Res = Result (in Litres); Nt = Notes

References: Dom = Domestic Usage; Ind = Industry; ST = Sub-Total; Con = Physcially consumed; U18 = Children Under 18; FR = Fluoride Retained by the body.

R	Use	Form	Res	Nt
a	Dom	18k/58m	310.3	1
b	Ind	310.3 x 60%	206.9	2
c	ST	a + b	517.2	3
d	Con	a x 2%	6.2	4
e	U18	d x 23%	1.4	5
f	FR	e x 50%	0.7	6

NB. Figures based on 100% fluoridation of a population.

Notes

[1] Water UK states that the water industry provides about 18,000 million litres of water to 58 million people, per day (domestic customers).

[2] The amount of water used by industry (water company claim and using lowest estimate).

[3] Total amount of water provided by water companies.

[4] Water physically consumed (drinking, cooking, etc.) as opposed to other usage (washing machines, washing up, bathing, etc.).

[5] Based on commonly agreed principal that only children are supposed to benefit from drinking fluoridated water. The child population of England & Wales is approximately 23% based on estimates from the Office of National Statistics.

[6] The average amount of fluoride retained by the body.

Conclusion

Of the 517.24136 litres of water provided by water companies each day (based on single user consumption and including industry percentage usage), only 1.42759 litres reaches it's intended target (children under 18).

This simply means that by dividing 517.24136 by 1.42759, the actual percentage of any 'use', is 0.276% of total supply.

Consequently, 99.724% of fluoridated water is wasted (where water is 100% fluoridated).

Alternatively ...

For every £100 spent on fluoridation, only 27.6p worth is physically consumed by children. Of this 27.6p worth, about 13.8p worth will be excreted. Of the remaining 13.8p, only a proportion of this amount will reach developing teeth.

Do you think this is a good way to spend money? Would you be prepared to spend £100 on a product when you knew in advance that at least £99.72 would be wasted?

Question: SO HOW MANY £10's OR £100's MILLIONS OF POUNDS OF TAXPAYER'S MONEY WILL BE SQUANDERED ON THE GOVERNMENT'S PLAN TO INCREASE THE NUMBER OF FLUORIDATION SCHEMES?

Answer: PERHAPS YOU SHOULD ASK THE PHOSPHATE FERTILISER INDUSTRY HOW MUCH IT WOULD COST THEM TO DISPOSE OF THEIR HIGHLY TOXIC DISCHARGES VIA OTHER ROUTES. PERHAPS THE INDUSTRY MAY BE ABLE TO TELL US HOW MUCH MONEY THEY HAVE SAVED THEIR SHAREHOLDERS.

Infodoc 10 | PDF

Dare to think, and speak?

Many people have spoken out about the dangers of fluoride and / or water fluoridation. We present just five of them who put forward their arguments:

---

[1] Charles Eliot Perkins

The 'Perkins' story: myth or reality?

It is the end of World War II and the Allies have control of the German IG Farben factories and all of it's technologies. Enter American Charles Eliot Perkins ("Perkins"). Perkins, so the story goes, was a researcher in chemistry, biochemistry, physiology and pathology. He and other scientists were put in charge of the Farben industries shortly after the cessation of hostilities but it was Perkins who was informed that the German General Staff adopted the plan of using sodium fluoride to make prisoners-of-war more docile and easier to manipulate and control. There is no surviving evidence to suggest the Germans did actually do this though it was well within their doctrine to carry out such a practice. It is also claimed that the ultimate intention of the Nazis was to fluoridate every country that they occupied and this story, which the Pushers are desperate to ridicule, has gained credibility in recent years for a number of reasons.

So what did Perkins do with the information given to him? Like most other scientists who fear for their job, their future or even their lives, he could have kept quiet. Not Perkins. Even as early as the 1940's to 1950's Perkins realised that fluoride could have an undesirable effect on a certain part of the brain - the hippocampus. Before he died, he urged those who would follow him not to let the anti-fluoride cause fail.

This was done in part in 1987 by someone known as Harley Rivers Dickinson (An Australian Liberal MP) who raised the issue of fluoridation and its sinister implications in an "Address in Reply to the Governor's speech in Parliament." The 'Address' forms part of a document compiled by Ian E Stephens and is appropriately entitled the 'Dickinson Statement' ("the Statement"). The main thrust of the Address was as follows:

"At the end of the Second World War, the United States Government sent Charles Eliot Perkins, a research worker in chemistry, biochemistry, physiology and pathology, to take charge of the vast Farben chemical plants in Germany. While there he was told of a scheme which had been worked out by them during the war and adopted by the German General Staff. This was to control the population in any given area through mass medication of drinking water. In this scheme sodium fluoride occupied a prominent place. Repeated doses of infinitesimal amounts of fluoride will in time reduce an individual's power to resist domination by slowly poisoning and narcotisizing a certain area of the brain and will thus make him submissive to the will of those who wish to govern him. Both the Germans and the Russians added sodium fluoride to the drinking water of prisoners-of-war to make them stupid and docile." (Reference: Victorian Hansard of 12th August 1987). Also see Dr Phyllis Mullenix.

The Statement adds to this ...

"Farben was a German chemical manufacturing concern that supplied Chlorine Gas used by Germany during the first World War, but the eventual creation of the huge Farben Cartel began in 1924 when American bankers began to arrange foreign loans in what Professor Carroll Quigley terms 'The Dawes Plan', "largely a J P Morgan production." (J P Morgan: one of the Wall Street élite - Author). In 1928, Henry Ford merged his German assets with Farben to be followed by the American Standard Oil Company who, in concert with Farben, developed the coal to oil hydrogenation process. In a letter to Roosevelt from Berlin in the early thirties, American Ambassador in Germany, William Dodd, said: "At the present, more than a hundred American corporations have subsidiaries here or co-operative understandings. The DuPonts have their allies in Germany that are aiding in the armament business. Their chief ally is the Farben company, a part of the Government which gives 200,000 Marks a year to one propaganda organization operating on American opinion. Standard Oil Company ... sent $2 million here in December 1933 and has made $500,000 a year helping Germans make Ersatz gas (to convert coal to gasoline) for war purposes; but Standard Oil cannot take any of its earnings out of the country except in goods. The International Harvester president told me their business here rose 33% per year but they could not take anything out. Even our airplane people have secret arrangements with Krupps. General Motors and Ford do enormous business here through their subsidiaries and take no profits out."

The Farben assets in America were controlled by a holding company, American IG Farben which listed on its Board of Directors, Edsel Ford, President of the Ford Motor Company, Chas E Mitchell, President of Rockefeller's National City Bank of New York, Walter Teagle, President of Standard Oil in New York, Paul Warburg, Chairman of the Federal Reserve and brother of Max Warburg, financier of Germany's war effort, and Herman Metz, a Director of the Bank of Manhattan, controlled by the Warburgs."

The Statement says of ALCOA:

"In 1939, ALCOA, then probably the world's largest producer of sodium fluoride, transferred its technology to Germany (the Alted Agreement). The Dow Chemical Company transmitted it's experience and technology in that same period." Other Cartel companies mentioned in the Statement include the names of Kellogg and Proctor & Gambol (of Crest toothpaste fame).

NB. None of the Americans that sat on the Board of AIG Farben were prosecuted after the war though three "non-Americans" were tried and convicted as war criminals.

Part 2 of the Statement looks at the roll of 'Foundations':

"In Australia, the Dental Health & Research Foundation, which has such names as Colgate, Kellogg and other ex-Farben associates listed among it's 'governors and contributors', has been irreverently but accurately dubbed "the Fluoride Mafia". Closely allied with this Sydney University 'Foundation', in its printed promotional claims for fluorides and fluoridation, is 'Foundation 41'. Unfortunately, the data of the "thorough investigations" said to have been carried out by the Foundation into fluoride, its benefits and its hazards, have never been made available, despite numerous appeals. A recent ABC Science Show's examination of the scientific integrity of Foundation 41 may explain the elusive data. America is literally bursting at the seams with such Foundations, but amongst the earlier names were the Rockefeller Foundation, the Carnegie Foundation and the Ford Foundation. It is necessary to mention these specifically because they were the first Foundations to make grants in the population (control) field and the Carnegie family merged with the Mellon family Institute to create the Carnegie-Mellon University in Pittsburgh in 1967."

The Statement now returns to the ill-fêted Perkins. "In a letter abstracted from "Fluoridation and Lawlessness" (published by the Committee for Mental Health and National Security) to the Lee Foundation for Nutritional Research, Milwaukee, Wisconsin on October 2nd 1954, Charles Eliot Perkins said:

"We are told by fanatical ideologists who are advocating the fluoridation of the water supplies in this country that their purpose is to reduce the incidence of tooth decay in children, and it is the plausibility of this excuse, plus the gullibility of the public and the cupidity (meaning covetousness - to desire or eagerly wish for) of public officials that is responsible for the present spread of artificial water fluoridation in this country. However, and I want to make this very definite and very positive, the real reason behind water fluoridation is not to benefit children's teeth. If this were the real reason there are many ways in which it could be done that are much easier, cheaper and more effective. The real purpose behind water fluoridation is to reduce the masses to domination and control and loss of liberty... When the Nazis decided to go into Poland ... the German General Staff exchanged scientific and military ideas, plans and personnel and the scheme of mass medication was seized upon by the Russian Communists because it fitted ideally into their plan to communize the world... I say this with all the earnestness and sincerity of a scientist who has spent nearly twenty years research into the chemistry, biochemistry, physiology and pathology of fluorine. Any person who drinks artificially fluoridated water for a period of one year or more will never again be the same person, mentally or physically."

The Russian connection is further enhanced by the statement of Major George Racey Jordan who was in charge of the shipment of sodium fluoride to Russia from Great Falls, Montana, via Alaska. He queried the shipment of considerable amounts of sodium fluoride to Russia and was told "frankly" that it was put into the drinking water in the prisoner-of-war camps to take away their will to resist. As for the CIA, who ultimately come into this story, the Statement further adds that the 'Rockefeller Report' to the United States President on CIA activities said:

"The drug program was part of a much larger CIA program to study possible means of controlling human behaviour."

NB. An earlier part of the Statement revealed that an advisor to the American Government on "hypnotism" or psychological behaviour control, Dr George Estabrooks, later became Chairman of the Department of Psychology at COLGATE UNIVERSITY.

The Statement also lists all the fluoridated tranquillisers that were on the market at the time (and no doubt some still are). Perhaps it is just coincidence, but the first fluoridation trials were about to begin in the USA in 1945, the year *Operation Paperclip commenced (*Operation Paperclip involved the movement of Nazi scientists to the USA). Until 1945, the US Public Health Service ("USPHS") had resisted fluoridation but that was all about to change, and rapidly so. The previous year, one Oscar Ewing was working for ALCOA as an attorney and on an annual salary of $750,000 - an awful lot of money in those days.

Was Ewing happy working for ALCOA and receiving such a substantial wage? If so, why did he decide to leave ALCOA to become Federal Security Administrator in the American Government at a lower income. Ewing is reported to have said that "he wanted to serve his country".

Consider also that the USPHS, just prior to and possibly during, was part of the US Treasury at the time Ewing was employed. And who was the US Treasurer just prior to Ewing's appointment? It was no other than Andrew Mellon, of ALCOA fame. It is more than a coincidence that in his position he could exert his influence over the reluctant USPHS and arrange for 'favourable' research into fluoride to compel the USPHS to reverse its decision. It has certainly been claimed on more than one occasion that past experiments into fluoridation were not well designed - clearly indicating that such research was biased.

The scientists controlling the research programmes, instead of being unbiased, could be carefully selected to produce such favourable results and so the fluoride bandwagon began to roll. Therefore, appointments to influential positions under Ewing's control became a reality. So why did the Government appoint him if he was going to use his position to further the cause of fluoridation? Perhaps President Roosevelt ('Mr Wall Street' and I G Farben investor), also had an interest in fluoride's 'alternative use'.

Extra reading: WALL STREET AND THE RISE OF HITLER Pub. Bloomfield Books, 26 Meadow Lane, Sudbury, Suffolk, CO10 6TD. Tel: 01787 376374.

[2] Dr William Marcus

DOCTOR WILLIAM (BILL) MARCUS. Bill was the victim of one of the most sinister events you will ever hear about. The following story is taken from 'The Fluoride Report', April 1994 edition.

THE FLUORIDE REPORT, APRIL 1994.

VICTORY FOR THE TRUTH: LABOR SECRETARY REICH ORDERS EPA SCIENTIST DR BILL MARCUS REINSTATED. EPA Corruption Exposed.

On February 7, Secretary of Labor Robert B Reich ordered the US Environmental Protection Agency (EPA) to reinstate whistleblower Dr Bill Marcus in his former (or comparable) position at EPA. Almost two years after being fired. Dr Marcus has finally emerged victorious over the unsavory individuals who tried to punish him for challenging the falsehoods propagated by his own agency and the Public Health Service about the safety of fluoride. He will receive back pay, legal expenses and $50,000 in damages.

At a February 10 press conference hosted by the National Whistleblower Center, Dr. Marcus said: "I have finally been vindicated". He expressed his hope that this verdict " will serve as the first, albeit small step in bringing responsible science, science undaunted by fears about job security or other reprisals, back to the US Environmental Protection Agency".

Although Marcus was ordered reinstated by Administrative Law Judge David A Clark, Junior, on December 3, 1992, the EPA appealed the decision to Labor secretary Reich, delaying Dr Marcus' reinstatement for over a year. Mr Reich blasted the EPA's excuses for firing Dr. Marcus. He said, " the true reason for the discharge was retaliation". Specifically, Dr Marcus "authored and disseminated a memorandum criticizing a draft report concerning toxicology and carcinogenesis studies, which the EPA contemplated using in regulating fluoride levels."

Mr. Reich also noted that an EPA investigator was ordered by a superior to shred evidence gathered during the investigation, and that EPA withheld evidence that would have supported Dr. Marcus in court. Because these acts were perpetrated under the jurisdiction of EPA's Inspector General, John C Martin, the National Whistleblower Center has asked President Clinton to remove Martin from office.

Not mentioned by Mr. Reich but recorded in the hearing before Judge Clark, is clear evidence that the EPA tampered with witnesses, threatening EPA employees with dismissal if they testified on Dr. Marcus' behalf. EPA management also forged some of his time cards, and then accused him of misusing his official time. At the press conference Dr Marcus asserted that his boss, Margaret Stasikowski, committed perjury. Her superior, Tudor Davies, Office Director of Science and Technology, who made the final decision to fire Dr Marcus, was accused by Mr Reich of accepting the report of the Inspector General without validating any of the findings, contrary to accepted practice. Dr Marcus noted that all the officials who participated in his firing are still employed by EPA and " making decisions about drinking water that affect public health.

WHY BILL MARCUS WAS FIRED: the "May Day Memo"

As revealed in the decision by Secretary of Labor Robert Reich, the key to the firing of Dr Bill Marcus was the memorandum he wrote on May 1, 1990, to a superior at the EPA. The memo was a detailed analysis of the National Toxicology Program (NTP) Report #393, the long-awaited report of NTP's animal study conducted to determine if fluoride in drinking water causes cancer.

Dr. Marcus called the report "disturbing". Why? Because the NTP termed the results "equivocal", while the actual data indicated a causal relationship between fluoride and bone cancer in male rats, according to Dr Marcus. In his memo, he pointed out that fluoride accumulates in bone, and this is where the cancers occurred. He noted that the rats had less fluoride in their hones than humans would accumulate in their bones at the EPA's approved "safe level" of 4 mg/l. He stated, "This is the first time in my memory that [test] animals have lower concentrations of the carcinogen at the site of adverse effect than do humans". He also criticized the Public Health Service (referenced in the NTP report) for misrepresenting the results of the Yiamouyiannis / Burk study showing 10,000 excess cancer deaths a year from fluoridation.

Animals used as controls are not supposed to receive any of the chemical given to the treated animals, Dr Marcus' memo continued. In the NTP study, however, the control animals were given six to seven times more fluoride than humans receive from fluoridated water. When the number of cancers in the controls were plotted according to the amount of fluoride in their feed, they fitted nearly into the dose response relationships seen in the treated group, adding weight to the claim that fluoride is a probable carcinogen.

Commenting on the genetic toxicology studies included in the back of the NTP report, Dr Marcus stated that "There were three different short-term in vitro tests performed on fluoride and all these tests proved fluoride to be mutagenic. EPA's own guidelines require that in vitro tests be taken into consideration when positive. In this case, the mutagenicity of fluoride supports the conclusion that fluoride is a probable carcinogen". One other study was mentioned, the Ames test, which was negative. Dr Marcus dismissed these results because the inventor of the test, Dr. Bruce Ames, has gone on record stating his test is inappropriate for chemicals such as fluoride.

Dr Marcus then raised the possibility that some of the test results had been altered by a review panel. He cited data showing that a rare liver cancer, hepatocholangiocarcinoma, was found, but then dismissed. There was evidence that other types of tumors were found but were downgraded by a review committee. Consideration of all these factors, Dr Marcus' memo concluded, changes the 'equivocal' findings of the [NTP] board to "at least some evidence, or clear evidence of carcinogenicity". He asked that an independent panel be convened to re-evaluate the raw test data.

Dr. Marcus, a senior science advisor, received no response to his memo from EPA management.

[3] Dr Hans Moolenburgh

Hans is a shrewd and very cool customer. Having spoken to him on the telephone I can also vouch for his very friendly personality and charm. Hans wrote a book ('Fluoride: the Freedom Fight', 1987) about the struggle to defeat the fluoridation campaign in Holland and on this occasion the anti-fluoridation lobby were successful.

The path to glory was littered with difficulties and the tactics employed against Hans and his band of trusty friends were typical of a lobby determined to force through fluoridation at virtually any cost. You will have to read the book for the full story and I recommend any cynic to do so to more fully understand what the anti-fluoridation movement has to put up with.

In the mean time, you can watch a video of Hans talking about his experiences. LINK HERE.

[4] Dr John Yiammouyiannis

"We've got a network of evil in this country that we can't hide from any longer"

John passed away some years ago, but an obituary that appeared in the Australian Fluoridation News summed up John like this:

John Y, as he was known to so many throughout the world, passed away at his home in Ohio, 8th October, 2000. John was a world-class Biochemist with a record of progressive intelligence relating especially to fluoridation, a record difficult to replace, but his scientific work will be well established in present day history.

The fluoridation crusade John followed, captured countless friends world-wide, so many admirers, but unfortunately his superior knowledge also established a distinct government opposition where the lowest form of scientific behaviour was employed to counter him. The pressures under which John worked on fluoridation were enormous. Most of it was of a personal nature, because the fluoride disciples could never match John's ability to debate and present matters of true science compared with the ragtime unscientific opposition from other countries of the world. John visited Australia in 1977 at our request. The main sponsor, Mr Don Heggie of Port Kembla, was concerned about a referendum on fluoridation to be held in his area. John did not take home a very good impression of Australian politicians, doctors, dentists and bureaucrats in general. During his 1977 visit we proposed to those fluoride people to grasp this important opportunity to publicly debate fluoridation with John Y, and discredit both him and our Australian Association supporters and our scientific evidence. The Government hid behind "press releases", but John gave lectures on fluoridation, especially relating to his research with Dean Burk and their Attorney, John Graham. The "unofficial debates" were in Nowra, Canberra, Sydney and Melbourne, where the Government's kindergarten scientific knowledge of fluoridation was exposed. There was a referenda for fluoridation at Nowra, and the Government sent their "top guns" not to debate the subject with John, but to con the public into believing all their fluoridation propaganda. In the Nowra Town Hall we forced a "debate". The "expert" from the Government was Dr William McBride, enough said. We then went to Canberra for a hurried "debate". A professor was John's opponent. The professor opened his address by saying, "I don't know much about fluoridation," and that proved he was telling the truth. Same day John lectured in Sydney, where we had an agreement with the A.D.A. that their President would debate, but at the very last moment, at the start of the meeting, the A.D.A. President refused to come on stage. It was my problem as Chairman of that meeting to (1) quieten the audience who were getting dangerously restless at the delay, and (2) get a speaker on behalf of the A.D.A. fluoridation experts present. Finally, Professor N. Martin agreed to debate. I remember speaking to both men and setting the rules for the debate. Only one followed the arrangement, because they had no evidence to counter John's fluoridation/cancer studies. The same followed in Melbourne, where abuse was the main purpose of the fluoridation supporters who came to the meeting. The kind of abuse by fluoridationists before the lecture caused me to request the presence of police, and just as well. Close to a fight broke out between a dental idiot and one of those who came to hear John Y. The police officer told me he was watching carefully and about to pounce on the dental agitator. How they treasure and guard their fluoride hoax. John Yiamouyiannis is a hero in Australia, a very respected scientist, a man who could not be bent, not uncommon in the fluoridation racket world-wide. At my request he submitted to the Federal Government's N.H. and M.R.C. Fluoride Investigation 1993, a 200 page Submission which was completely ignored. John left a legacy in this country that has stood the test of time through true science. Fortunately, John published his book, "Fluoridation the Ageing Factor" in 1993, but his scientific monument will be forever cast in the legal history of fluoridation, where other scientists and politicians were bought for "30 pieces of silver".

[5] Dr Phyllis Mullenix

January, 1998.

Phyllis Mullenix, Ph.D., formerly of Harvard University experienced the wrath of the industry when she walked blindly into the fluoride fray as part of her research program with Harvard's Department of Neuropathology and Psychiatry. While holding a dual appointment to Harvard and the Forsyth Dental Research Institute, Dr. Mullenix established the Department of Toxicology at Forsyth for the purpose of investigating the environmental impact of substances that were used in dentistry. During that undertaking she was also directed by the institute's head to investigate fluoride toxicity ...

For her toxicology studies Dr. Mullenix designed a computer pattern recognition system that has been described by other scientists as nothing short of elegant in its ability to study fluoride's effects on the neuromotor functions of rats.

THE "MIRACLE OF FLUORIDE" -or- A DIRTY INDUSTRY?

"By about 1990 I had gathered enough data from the test and control animals," Mullenix continues, "to realize that fluoride doesn't look clean." When she reviewed that data she realized that something was seriously affecting her test animals. They had all (except the control group) been administered doses of fluoride sufficient to bring their blood levels up to the same as those that had caused dental fluorosis [a brittleness and staining of the teeth] in thousands of children. Up to this point, Mullenix explained, fluorosis was widely thought to be the only effect of excessive fluoridation.

The scientist's first hint that she may not be navigating friendly waters came when she was ordered to present her findings to the National Institute of Dental Research (NIDR) [a division of NIH, the National Institute of Health]. "That's when the 'fun' started," she said, "I had no idea what I was getting into. I walked into the main corridors there and all over the walls was 'The Miracle of Fluoride'. That was my first real kick-in-the-pants as to what was actually going on." The NIH display, she said, actually made fun of and ridiculed those that were against fluoridation. "I thought, 'Oh great!' Here's the main NIH hospital talking about the 'Miracle of Fluoride' and I'm giving a seminar to the NIDR telling them that fluoride is neurotoxic!"

What Dr. Mullenix presented at the seminar that, in reality, sounded the death knell of her career was that:

"The fluoride pattern of behavioral problems matches up with the same results of administering radiation and chemotherapy [to cancer patients]. All of these really nasty treatments that are used clinically in cancer therapy are well known to cause I.Q. deficits in children. That's one of the best studied effects they know of. The behavioral pattern that results from the use of fluoride matches that produced by cancer treatment that causes a reduction in intelligence."

At a meeting with dental industry representatives immediately following her presentation, Mullenix was bluntly asked if she was saying that their company's products were lowering the I.Q. of children? "And I told them, 'basically, yes.'"

The documents obtained by authors Griffiths and Bryson seem to add yet another voice of corroboration to the reduced intelligence effects of fluoride. "New epidemiological evidence from China adds support", the writers claim, "showing a correlation between low dose fluoride exposure and diminished I.Q. in children."

Then in 1994, after refining her research and findings, Dr. Mullenix presented her results to the Journal of Neurotoxicology and Teratology, considered probably the world's most respected publication in that field. Three days after she joyfully announced to the Forsyth Institute that she had been accepted for publication by the journal, she was dismissed from her position. What followed was a complete evaporation of all grants and funding for any of Mullenix's research. What that means in the left-brain world of scientific research, which is fueled by grants of government and corporate capital, is the equivalent to an academic burial. Her letter of dismissal from the Forsyth Institute stated as their reason for that action that her work was not "dentally related." [Fluoride research - not dentally related?] The institute's director stated, according to Mullenix, "they didn't consider the safety or the toxicity of fluoride as being their kind of science." Of course, a logical question begs itself at this last statement: why was Dr. Mullenix assigned the study of fluoride toxicity in the first place if it was not "their kind of science"?

Subsequently, she was continually hounded by both Forsyth and the NIH as to the identity of the journal in which her research was to be published. She told The WINDS that she refused to disclose that information because she knew the purpose of this continual interrogation was so that they could attempt to quash its publication.

Almost immediately following her dismissal, Dr. Mullenix said, the Forsyth Institute received a quarter-million dollar grant from the Colgate company. Coincidence or reward?

Her findings clearly detailed the developmental effects of fluoride, pre- and postnatal. Doses administered before birth produced marked hyperactivity in offspring. Postnatal administration caused the infant rats to exhibit what Dr. Mullenix calls the "couch potato syndrome" - a malaise or absence of initiative and activity. One need only observe the numerous children being dosed with Ritalin as treatment for their hyperactivity to draw logical correlations.

Following her dismissal, the scientist's equipment and computers, designed specifically for the studies, were mysteriously damaged and destroyed by water leakage before she could remove them from Forsyth. Coincidence?

Dr. Mullenix was then given an unfunded research position at Children's Hospital in Boston, but with no equipment and no money--what for? "The people at Children's Hospital, for heaven's sake, came right out and said they were scared because they knew how important the fluoride issue was," Mullenix said. "Even at Forsyth they told me I was endangering funds for the institution if I published that information." It has become clear to such as Dr. Mullenix et al, that money, not truth, drives science--even at the expense of the health and lives of the nation's citizens.

"I got into science because it was fun," she said, "and I would like to go back and do further studies, but I no longer have any faith in the integrity of the system. I find research is utterly controlled." If one harbors any doubt that large sums of corporate money and political clout can really provide sufficient influence to induce scientists and respected physicians to endorse potentially harmful treatment for their patients, consider the results published in a January 8th article of the New England Journal of Medicine (NEJM). The Journal revealed their survey of doctors in favor of, and against, a particular drug that has been proven harmful (in this case calcium blockers shown to significantly increase the risk of breast cancer in older women). "Our results," the Journal said, "demonstrate a strong association between authors' published positions on the safety of calcium-channel antagonists and their financial relationships with pharmaceutical manufacturers."

When The WINDS asked Dr. Mullenix where she planned to take her research, she said that she is not hopeful that any place exists that isn't "afraid of fluoride or printing the truth."

The end result of the dark odyssey of Phyllis Mullenix, Ph.D., and her journey through the nightmare of the fluoride industry is, essentially, a ruined career of a brilliant scientist because hers was not "their kind of science".

Infodoc 11 | PDF

Politics

"What a rich, endlessly varied and exciting world politics is for those who are addicted to it. And how inextricably woven are the different strands of greed, ambition, cowardice and idealism. No one's motives are pure; certainly not mine." From: Alan Clark Diaries: Into Politics.

What does one say of Parliament and it's inmates that has already not been said? There was a time when the media reported mostly just politics. Scandals were few and far between. Nowadays, it seems there is a scandal for virtually every week that passes. Now commonly referred to as 'sleaze', such scandals have seriously undermined the public's faith in the political system, albeit that such faith was probably misplaced to begin with. One reason this has happened is because of the availability of information is greater now than ever before. And now that the internet can be used to scrutinise the ongoing daily activities of both the House of Lords and the House of Commons, there are few places left for politicians to hide from the glaring eyes of the media and the public alike. But having said this, there are still some impenetrable barriers which we cannot see beyond. Lobby groups are one example. Big business, or those individuals with enough cash, can buy influence within Government. Knowledge of the way Parliament works is another obstacle to the smaller interest groups who cannot afford to pay for someone to lobby on their behalf. They have to know exactly what they can do, and when they can do it, when the opportunity arises. This entails learning the system of Parliament from head to toe. To be a contributor, you have to monitor daily events of Parliament. For example: which Bills are being processed; which committees are meeting; which MPs are planning to debate; etc. You have to be 'on the ball' to take your opportunity lest it pass you by. The money-laden pro-fluoride lobby have influence within Parliament and do take advantage of their opportunities. Conversely, the anti-fluoridation movement is not so well-funded and therefore is nowhere near as effective. Opportunities to influence Government do arise though. One example of a missed opportunity is the Select Committee Report on Health (March, 2001). Although evidence was taken in person from representatives of numerous professional bodies, and some Ministers, evidence was also submitted in the form of memos. One of the subjects discussed by the Select Committee was water fluoridation. Memos were submitted by the pro-fluoride lobby and yet there was not one scrap of evidence was seemingly presented by the anti-fluoridation movement (based on the evidence published in the Report). The Chairman of this particular Select Committee is 'fluoro-sceptic' David Hinchcliffe, MP (Wakefield). Having spoken to Mr Hinchcliffe on his mobile telephone (only briefly), he refused to say why he had not made an effort to ensure the anti-fluoridation movement were represented during the time the Committee discussed fluoridation. Interestingly, he is supposed to be one of the movement's 'allies'. Considering that this Report will be lodged in the House of Commons Library, it is likely that some MPs will use it, along with the other pro-fluoride propaganda in the library, to research the subject prior to any new Bill or statutory device which requires a vote. As a consequence, those MPs will only get a one-sided opinion on fluoridation. Democracy in action? I think not. Useful links More information on the day-to-day business of parliament can be found by using this link: Politics Information on the Water Fluoridation Bill of 1985 can be found by using this link: 1985 Also, an external hyperlink to the Water Bill of 2003 is given to further inform the reader.

Infodoc 12 | PDF

The British Fluoridation Society (BFS)

Funding

House of Lords written answers, 11 Jan 2000: Columns WA107-8.

Lord Stoddart of Swindon asked Her Majesty's Government:

Whether it is a proper use of taxpayers' money to make grants of £154,000 during the past two years to the British Fluoridation Society, in view of the differing views on the moral, commercial and health aspects of water fluoridation; and[HL365]

What scrutiny measures are in place to ensure that the £154,000 of taxpayers' money given to the British Fluoridation Society is under proper financial control; and[HL366]

Whether the British Fluoridation Society (BFS) has supplied them with details of what use has been made and is being made of the £154,000 of taxpayers' money given to them; and what measures are taken to ensure that any information disseminated by the BFS using that money is accurate and impartial.[HL367]

Lord Hunt of Kings Heath:

The British Fluoridation Society (BFS) monitors relevant research, and maintains a database on safety, efficacy and legislative issues arising from the fluoridation of water. Since 1975 successive governments have funded the BFS to help promote and implement their policies on oral health and to provide objective, evidence based advice to all interested parties. Like other recipients of government funds, the BFS works to an annual business plan agreed with the Department of Health and submits audited accounts.

Accountability

In 1999, the NHS/CRD unit at York University was commissioned to carry out a 'scientific' review (review) of water fluoridation. This review has already come in for a great deal of criticism due to its narrow protocol, it's failure to review ALL scientific data, and also it's sometimes shoddy views. Despite these failings, the review did make some observations which the BFS have decided to reinterpret.

But was an reinterpretation required? The review came up with some distinct views on water fluoridation and used plain language to explain what those views were (that is black is black and white is white - no grey areas). However, the BFS, amongst other notorious pro-fluoridation lobby groups, has decided that not only is there grey areas, but in some cases black means white, and vice versa.

Now one would think that an organisation that the Government depends upon for "objective, evidence based advice", would ensure that they would adhere totally to the truth. Not so. It also appears that Health Minister, and ex-corporate BFS member, Lord Hunt is keen to overlook the BFS' lack of "objective, evidence based advice", judging by the BFS' interpretation of the final report of 'scientific' review into fluoridation.

If anyone is still in doubt about how the BFS are prepared to distort the truth to fit their own agenda, they should closely read the following statements.

Professor Sheldon

In a letter sent to the Government on 10 September, 2000, by Professor Sheldon (Chairman, Advisory Group for the systematic review on the effects of water fluoridation), he wrote:

"In my capacity as chair of the Advisory Group for the systematic review on the effects of water fluoridation recently conducted by the NHS Centre for Reviews and Dissemination at the University of York and as its founding director, I am concerned that the results of the review have been widely misrepresented. The review was exceptional in this field in that it was conducted by an independent group to the highest international scientific standards and a summary has been published in the British Medical Journal.

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, the National Alliance for Equity in Dental Health and the British Fluoridation Society. I should like to correct some of these errors."

The points raised in Professor Sheldon's letter, with the *BFS' interpretation, is documented below.

**Source: [1] the press release issued by the BFS on October 6th, 2001 and, [2] a BFS document entitled: York review: Questions and Answers.*

[1] 'Effectiveness'.

Sheldon: "Whilst there is evidence that water fluoridation is effective at reducing caries, the quality of the studies was generally moderate and the size of the estimated benefit, only of the order of 15 per cent., is far from 'massive'."

BFS: "The report confirms that there is clear evidence that fluoridation reduces the average number of decayed missing and filled teeth per child, and increases the proportion of children completely free from tooth decay." And ... "The report confirms that water fluoridation continues to have an effect over and above alternative interventions and strategies. While fluoridated toothpastes have brought about huge improvements in dental health since their introduction in the 1970s, and their continued use remains important, the report does confirm that water fluoridation continues to be effective over and above the use of fluoride toothpastes."

Self: Sheldon makes the claim that there is some (based on moderate) evidence that fluoridation can reduce caries. However, the BFS have even ignored the fact that there is NO good evidence that fluoridation reduces caries and blatantly misrepresents the truth. It is also interesting to note that none of the studies used to determine the figures for reductions in caries, and quoted by the review, adequately controlled for confounding factors. How the BFS can therefore claim that fluoridation is 'confirmed' to work "over and above" the use of fluoride toothpaste is mystifying.

[2] 'Social Inequalities'.

Sheldon: "There was little evidence to show that water fluoridation has reduced social inequalities in dental health."

BFS: "Water fluoridation reduces health inequalities - The report confirms that fluoridation reduces dental health inequalities both between fluoridated and non-fluoridated districts, and, importantly, it significantly narrows the dental health gap between young children living in poverty and their more affluent peers.

Self: "Little evidence" becomes a "confirmation" in the eyes of the BFS.

[3] Natural and artificial fluorides.

Sheldon: "The review could come to no conclusion as to the cost-effectiveness of water fluoridation or whether there are different effects between natural or artificial fluoridation."

BFS: "The review shows no differences in the effects of natural versus artificial fluoridation."

Self: The BFS do not go in for a direct lie, they depend upon spin. The review made no conclusions about the difference between naturally and artificially fluoridated water. However, the BFS prefer to portray this statement as an absolute.

[4] Safety.

Sheldon: "The review did not show fluoridation to be safe. The quality of the research was too poor to establish with confidence whether or not there are potentially important adverse effects in addition to the high levels of fluorosis. The report recommended that more research was needed." And ... "Probably because of the rigour with which this review was conducted, these findings are more cautious and less conclusive than in most previous reviews."

BFS: "The review was set up to establish whether fluoridation is still effective, and whether it is still safe, and the report is unequivocal: water fluoridation is EFFECTIVE and SAFE."

Self: The BFS resort to an outright deception. The review did not find fluoridation to be "safe" and yet the BFS have made a deliberate attempt to mislead the reader, by making a claim which appears to be attributed to the opinions of the review body.

[5] Quality of studies.

Sheldon: "The review team was surprised that in spite of the large number of studies carried out over several decades there is a dearth of reliable evidence with which to inform policy. Until high quality studies are undertaken providing more definite evidence, there will continue to be legitimate scientific controversy over the likely effects and costs of water fluoridation."

BFS: "Research into water fluoridation dates back to the 1930s, so to some extent York were judging studies conducted many years ago, when research methodologies were not so sophisticated, by today's `gold standard'. Nevertheless: [1] on effectiveness, the 24 prospective clinical trials identified by the review as being of being sufficiently high quality to meet their inclusion criteria all showed clear benefits of water fluoridation, [2] on general health, over 100 studies investigating possible negative effects were included."

Self: The BFS return to spin. They say that some of the studies were of "sufficiently high quality". This is a deliberate attempt to persuade the reader that such studies were of good quality. It has already been stated that the quality of work reviewed was not of a good standard. The studies refered to be the BFS were the best of a bad to moderate lot and nothing more - according to the review.

[6] Fluorosis.

Sheldon: "The review found water fluoridation to be significantly associated with high levels of dental fluorosis which was not characterised as 'just a cosmetic issue'."

BFS:"Dental fluorosis is recognised by the York review as a cosmetic issue, not a health problem. Based on these data, projections in the review estimate that fluoridation might be expected to increase the prevalence of dental fluorosis of "aesthetic concern" from a background level of around 6% to around 10%.

Self: According to the review's findings, the incidence of fluorosis that is likely to be seen in a fluoridated community is 48%. The incidence of fluorosis of "aesthetic concern" was given as 12.5%, not the 10% quoted by the BFS.

Benefits

The BFS are not only guilty of misrepresentation, they also like to put out their own one-sided propaganda. Sometimes it is suggestive rather than precise:

"Many thousands of children living in socially deprived, non-fluoridated parts of the UK continue to suffer unacceptably high levels of tooth decay. Only water fluoridation benefits everyone irrespective of personal behaviour or motivation."

They say that fluoridation "benefits everyone irrespective of personal behaviour or motivation." What exactly do they mean by this? And what about people who have false teeth?

Impartiality?

The BFS says this about the review:

"The review was completely impartial. The Department of Health had no control over the process or the protocol for the review. The review is probably unique in terms of openness and inclusivity."

At the outset a web site was established (http://www.york.ac.uk/inst/crd/fluorid.htm) and the public was encouraged to monitor and contribute to the review.

The University of York NHS Centre for Reviews and Dissemination is a highly respected independent centre which aims to bring together the results of health research in order to provide the NHS with clearer evidence on the effectiveness of its treatments.

The review was an independent, rigorous, systematic examination of all the relevant evidence – including that relating to bone health, cancer, Down Syndrome, IQ and infant deaths.

All material identified by the review team, and that submitted or suggested by groups and individuals, was assessed for inclusion using the same criteria to test for relevance and quality.

The criteria for inclusion were agreed at the outset by the Advisory Panel, which included prominent opponents of fluoridation. All studies that met the inclusion criteria were included.

Those that didn't were excluded. This methodology minimises bias and is an important strength of systematic reviews.

The review was not totally impartial. The review panel did have a representation, albeit a weak one, form the anti-fluoridation lobby. However, the number of people sitting on the panel with pro-fluoridation views outnumbered the antis. The review body also was open to bias with one of the Cardiff-based researchers also having pro-fluoridation sympathies.

The question of "inclusivity" is also misleading. The review did not consider large quantities of evidence such as animal studies. As a consequence, the findings of the review were weakened considerably. Some contributions that were made and which were relevant to the review were also ignored - including the Peer reviews which were very critical of the review process and it's findings.

It must also be noted that the review was conducted by the NHS/CRD unit at the Universities of York and Cardiff. The NHS is not independent of the Government.

Infodoc 13 | PDF

Who gains?

[1] The phosphate fertiliser industry

Fluorine Recovery in the Phosphate Industry: a review. Phosphorous & Potassium #103 Sept/Oct 1979, p. 33-39.

"Ponds full of 1.5 billion gallons of acid." ... it costs at least $400,000 a month to operate the plants and keep the pumps running to prevent an environmental catastrophe."

Source: Tampa Tribune, 17/3/2001.

A tanker carrying hexafluorosilicic acid, sneaks it's way down a dark country lane. It's destination is a fluoridation plant where it will deliver it's highly corrosive & toxic payload.

Picture source: Fluoride (part of the BBC Nature series, 1990s).

[2] The sugar producers / end users

The sugar producers should be particularly sensitive about criticism. The WHO have stated that sugars: *"contribute no nutrients and are not essential for human health"* (as reported in the Guardian, 19th April 1991).

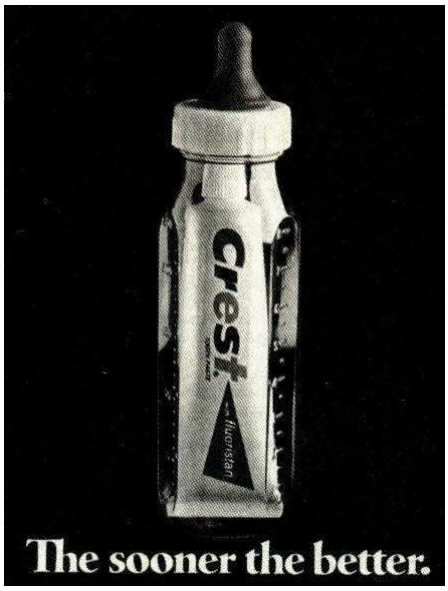
On 16th December 1989 the Grocer, quoting from an official report, stated that sugar was: *"the most important dietary factor in the cause of dental caries."*

Has our sugar consumption gone down since the WHO made their recommendations? It is extremely unlikely because some families are forced to buy 'economy' or plain-wrapped supermarket own-brand products due to lack of income. And you do not get something for nothing and cheap foods are commonly sugar-rich because it is one ingredient that can be produced cheaply. Of course, some brand names also have high levels of sugar (see breakfast cereals).

Ethical Consumer also reported that in 1990, Tate & Lyle and British Sugar launched a £12,000,000 campaign to promote sugar (which included providing 'educational' material for schools). As you may expect, Tate & Lyle are contributors to the Tory Party and have also decided to protect their interests by giving a similar 'sweetener' to the New Labour Party.

[3] The toothpaste manufacturers

Although they have no direct interest in fluoridation, this industry has quite literally 'nailed it's colours to the mast' on the subject of fluoride in general. By relying heavily on the promotion of fluoride in their products, whether it be toothpastes, mouth rinses, etc., they cannot afford a scandal over fluoride. What is worse is that some companies, such as like Colgate, have gone as far as making edible fluoride supplements. This can only increase the desire to protect fluoride's reputation.



An advertisement for Proctor & Gambol's Crest fluoride toothpaste. The motto which appears with the advertisement is *"The sooner the better"*. It is possibly the most irresponsible piece of advertising you are ever likely to come across. Babies should NOT be given fluoride and the portrayal of a tube of toothpaste in a baby's bottle would not be tolerated by today's advertising standards. Picture source: the Ecologist magazine, 1986.

[4] The Dentists and the British Dental Association (BDA)

The BDA likes to make money - just like anyone else with a keen business mind. The BDA's defence of the large sums of money they generate is that such funds are normally used to pay for research. However, how this money is spent by the researchers and who receives it is another matter entirely. An example of how the BDA raises funds is given below:

British Dental Association

64 Wimpole Street, London, W1M 8AL.

Tel: 0171-935 0875 Fax: 0171-487 5232

E-mail (Internet): bdainfo@clus1.ulcc.ac.uk

DX 53835 Oxford Circus North

2 July 1996

Dr Tony Lees

Mill Farm

Preston on Wye

Hereford HR2 0JU

Dear Dr Lees

It was good of you to phone about emergency dental kits.

I said that I would write to you about the possibility of BDA accreditation. The process would involve some experts taking a view of the product, and we would need to pay them realistically for their time. Normally, the charge is £2,500 +VAT, for a panel of four experts. But for this product, we could probably organise something more cheaply - an area for negotiation. Then, in the event of the product being approved, there would be a charge for use of the BDA logo. In the case of toothpaste, this works out at about 1% of sales. For Dentanurse it would be simpler to have a flat sum, I think - again, this would something for discussion.

It is difficult to quote a price, in a small market for a one-off product. But we are keen to build up the BDA logo as a dental quality mark for consumers. And while we do expect companies to pay for accreditation because the logo helps sales, we are also very interested to help the public to choose reliable products. So I think the message is - if you think BDA accreditation would help you, think about what you could pay and talk to us. I'm not doing a hard sell on this, but I don't want us to be ruled out, either!

Yours sincerely

NB. Thanks to Dr Tony Lees for the use of this letter.

So what do the dentists get out of fluoridation? There are three possibilities, depending on your point of view:

a. If fluoridation were effective at reducing tooth decay, then dentists who are poorly rewarded for filling and extracting teeth could spend more time on more expensive procedures. There is also a lot of money to be made by the use of cosmetic treatments to rectify the damage done to teeth by fluoride (fluorosis)

b. If fluoridation does not have an impact on dental decay then the dentists would only benefit from cosmetic treatment (see a.).

c. If fluoridation damaged teeth in other ways, such as making them more brittle and difficult to repair, then more money could be earned from doing such repairs - usually later in life when the adult patient is liable for costs.

In any event, the dentist stands to gain.

[5] Grant-supported / sponsored scientists

Scientists who claim to be independent are not always what they appear to be. Although some may not be the beneficiaries of hefty financial grants from industry, the foundations, institutions, etc., that they work for may be in receipt of such funding. In this situation the the scientist has to dance to the tune of his, or her, employer.

One example of this is the case of Phyllis Mullenix

[6] 'Reward seekers' / social climbers

Some supporters of fluoridation are seemingly independent, basing their opinions on what they have learned from the subject. Some are very naive and don't think there is much wrong with the world we live in. Some are plain gullible and believe the one-sided propaganda they are spoon-fed by the establishment. Some are downright arrogant, refusing to change their minds even after hearing the other side of the story.

Then there are those, who can fit into any of the above categories, but have other incentives to persuade them to support fluoridation. There is an old saying which goes something like this:

"Everyone has their price: and it is those who say they are incorruptible who demand the highest price of all."

This is quite possibly very true. But corruption comes in many forms and is not always recognisable because it does not always come in the form of a financial reward or a similar inducement. Turning a blind eye to a serious crime because you fear for your own safety, your career or some other aspect of your life which may be adversely affected, is a form of corruption. Your reward for silence is that you can escape an act of revenge from those who commit such crimes.

Compromise is another form of corruption. Members of Parliament, for example, are always being warned about being compromised - not that some of them seem to care judging by what we see on television or read in the newspapers.

Other forms of compromise can appear to be quite harmless and there can be no intent to corrupt. In these situations, the individual takes it upon themselves to exploit an opportunity of personal advancement. One example of this is given below. It should be pointed out that this is NOT a suggestion that certain people have been corrupted, or that there was an attempt to corrupt. The letter concerns a meeting at the House of Lords in early March 1996. It was sent to the 'non-attending' District and County Councillors. It will be seen that a combined meeting and dinner at the House of Lords will have provided a backdrop which some may consider 'seductive'.

The British Fluoridation Society

President: The Baroness Fisher of Rednal

Vice Presidents: The Lord Colwyn, Robin Cook, MP, Dame Jill Knight, DBE, MP.

Chairman: Professor M A Lennon, M.D.S., O.P.D., F.D.S.R.C.S.Ed, Head of Department of Clinical Sciences; Information Officer: Mrs Sheila Jones MPH. School of Dentistry PO BOX 147 Liverpool L69 3BX.

Ref: wp3\las\dinner

14th March 1996

Local government Oral Health Forum

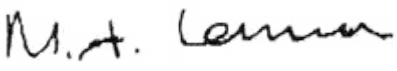
I am sorry that you were unable to attend our meeting and dinner at the House of Lords last week. It was a successful first stage in the process of establishing a forum within which the NHS and local government can work together to ensure that the Oral Health Strategy targets are met.

All present agreed that oral diseases still cause far too much pain and suffering, particularly for children living in socially deprived communities, and that local government has an important role to play in oral health promotion - not least of which is helping to secure water fluoridation for those communities most in need of it.

Lady Farrington kindly offered to approach colleagues in the new Local Government Association about the idea of a Local Government Oral Health Forum. In the meantime, we at BFS are pursuing the possibility of a second meeting, perhaps in Yorkshire in late May or early June, to involve those councillors who were unable to attend last Tuesday.

I will keep you informed of developments regarding a second meeting; in the meantime, enclose, for your information, the notes of last week's meeting.

Yours sincerely



[7] Opinion Pollsters

MORI have demonstrated that as pollsters, they are interest in more than peoples opinions. They have a vested interested in helping their clients improve their business. I quote: "Improve the health of your brand, and your relations with key audiences" is the MORI boast. Being just as much a public relations outfit as an opinion pollster, MORI are sub-contracted to help promote the 'brands' of whoever employs them. If the brand is fluoride - then so be it.

Infodoc 14 | PDF

Endorsements

Contrived, not properly researched and often not worth the paper they are written on.

Endorsements come in two forms. The first is the 'professional' endorsement from scientific institutions and the second comes from those organisations who are not normally associated with the water fluoridation in any capacity whatsoever.

Take for example the British Dental Association (BDA) and MENCAP. The BDA is an organisation which has a professional interest in fluoridation, for obvious reasons. However, MENCAP is a charity which is not associated with water fluoridation - it represents people who are mentally handicapped. Therefore, when the BDA endorse fluoridation it is because of their direct involvement with the effects of fluoridation. MENCAP's endorsement is based on 'scientific' claims made by organisations such as the BDA, amongst others.

It is important to understand the difference between a qualified and an unqualified endorsement. But in the propaganda war, both have an important roll to fill - and I am going to give an example of how they neatly dovetail with each other.

Imagine an upside-down pyramid. Pyramids tend to be very stable structures because of their design. But what happens when one is turned upside-down? The entire structure becomes unbalanced. Endorsements are 'constructed' using similar principles. Take a handful of 'qualified' endorsements from some prominent scientific institutions and then use them to solicit more endorsements from non-qualified organisations. The consequences are that many of the endorsements for fluoridation rely exclusively upon a very narrow and unstable foundation.

What makes it worse for the pro-fluoride lobby is that some (if not all) of the 'qualified' endorsements, which are the cornerstones of the fluoridation campaign, are often unreliable or flawed in some way. This in turn means that the unqualified endorsements that have been made, and based upon such flawed endorsements, are rendered worthless.

A QUALIFIED ENDORSEMENT?

Sometimes, qualified endorsements are not what they appear to be. In fact, they are not endorsements at all. Take for example the British Society for Allergy and Clinical Immunology (BSACI). If this were not such a sorry tale to relate, it would be humorous. The BSACI 'endorsement' of fluoride is one of the most misrepresented pieces of literature.

A study into the possibility of an allergic reaction to the consumption of fluoride has been conducted by BSACI and their view is they do not see any problems with fluoride (what of all the claims to the contrary?). It is unclear exactly what research was carried out because there are no tests available for detecting allergy, apart from the so-called Patch test which is worthless in this situation.

This has not stopped certain promoters of fluoridation wrongly claiming that the BSACI actually endorse water fluoridation. The BSACI have never said they endorse water fluoridation, they were only asked to do some tests - and yet a BSACI member has informed me that there are no tests for fluoride allergy!!

Gerald Malone, former Health Minister, has stated in a written reply (see below) to Alex Carlile, ex-MP, that "validated methods" exist for the detection of fluoride sensitivity. However, the pro-fluoridation Department of Health (DoH) have stated in writing that not one single test exists for the detection of fluoride sensitivity!

To further confuse the issue, a member of the DoH has stated that a 'method' does exist but he can't reveal what it is! If this is not enough to leave you completely confused, then also consider the following.

The BSACI are members of the British Allergy Foundation (BAF) and they have approached myself and National Pure Water Association asking for help with locating a suitable method to detect fluoride allergy / sensitivity (see below)!

To summarise, it appears there is a method for detecting fluoride allergy, but there isn't, but there again there is, and nobody outside of the DoH seems to know what it is! Is that clear?

From: Alex Carlile QC MP

HOUSE OF COMMONS

LONDON SW1A 0AA

14 July 1995

[Name & Address withheld]

Dear -

Thank you for your recent letter and information. Below is a transcript of Mr Carlile's question and reply from the Minister of State, Mr Malone:

14 June 1995

FLUORIDATION

Mr Alex Carlile: To ask the Secretary of State for Health, if her Department will research the practicality of introducing a fluoride sensitivity test: and if she will make a statement.

Mr Malone: Validated methods already exist for the investigation of suspected hypersensitivity. Fluoride is a normal component of food, and there is no evidence of allergy or intolerance to fluoride as used in the fluoridation of community water supplies.

Yours sincerely

Steven Bradford
Parliamentary Researcher to Alex Carlile QC MP.

The British Allergy Foundation says ...

10 January 1996

[Name & Address withheld]

Dear Sir,

I was given your name by a representative of the National Pure Water Association, as as a person who may be able to supply me with information on Fluoride allergy/intolerance.

We at the British Allergy Foundation run a helpline and have received several calls relating to this subject. We have found it difficult to locate any published research on the topic, or to know how best to advise sufferers living with the problem. We would be grateful for any information or advice you could supply.

Thank you in anticipation.

Yours sincerely,

Sarah Gurr

Helpline Co-ordinator

BRITISH SOCIETY FOR ALLERGY AND CLINICAL IMMUNOLOGY REPRESENTATIVES

Professor MK Church PhD DSc Dr Jill A Warner PhD

TRUSTEES

Sir Christopher Booth MD FRCP Professor TJH Clark BSc MD FRCP Professor RJ Davies MA MD FRCP

AN UNQUALIFIED ENDORSEMENT

One way for the Government to bypass democracy and to ensure its policies are carried out without too much interference from local authorities is to set up non-elected local bodies. One example is Worcester Community Health Council (WCHC), who have shown a flagrant disregard to democracy.

In September 1995, a meeting of the WCHC was the most disgraceful, biased and contrived meeting ever witnessed. The meeting was chaired by someone called Jean Eastgate. The entire discussion, and it was a short one, was debated and dominated by individuals who were pro-fluoride.

Nobody was invited to the meeting to give the other point of view and if it were not for a certain member of the committee who noticed someone wanted to make a comment, then there would have been no contribution at all from the an opposing observer.

The response to a very brief statement (the only one allowed) was casually dismissed by Mrs Eastgate.

The meeting itself was made up of the following bodies. There was representation from local Government, from the local and regional Health Authorities, from local NHS trusts and from the local Family Health Services Association. Three members of voluntary organisations were also present on the committee. So how can such a collection of individuals take an impartial view of a subject when the deliberately bar those who can give the other side of the story?

The vote that was taken on fluoridation after this short debate was also contrived. Mrs Eastgate merely asked if anyone on the committee opposed fluoridation, and nobody did oppose it. However, she did not ask the question fairly. Nobody was asked if they wished to abstain so therefore giving the false impression that everyone on the committee was convinced by the debate. Consider also that some of the committee members were only there to make up the numbers. Nearly half of them sat at the table with vacant expressions on their faces - not that it was entirely their fault. It is obvious that not having the opportunity to hear both sides of the story, they were unable to make an informed choice.

Finally, the minutes of the meeting expose the Worcester CHC as being economical with the truth. The mention of Dr McCloskey answering many questions from members was stretching the truth a little but the real howler came at the end of the report which claimed, *"this proposal was supported unanimously"*.

The dictionary definition of the word 'unanimous'. The word means, and I quote, *"... agreeing, one and all, in opinion and will: having the agreement, consent, support, of all"*. The pro-fluoride lobby were certainly unanimous but the rest of the committee were bewildered and did not dare to oppose the motion for fear of being ostracised.

To sum up, this vote on fluoridation was no more than a rubber-stamping exercise and an out-and-out typical example of how a biased minority impose their politics on an unsuspecting community - and certainly not an endorsement of fluoridation.

Infodoc 15 | PDF

The Law (... or lack of it)

After the Water Fluoridation Bill became law a new Act of Parliament was introduced to provide legislation for the privatised water industries. This is known as the *Water Industry Act of 1991. It is this Act which 'subsumed' the Water Fluoridation Act of 1985 (*In 2003, the law is due to change again and more will be said about these changes when they are known).

Prior to the legislation of 1985, there were no clear legal guide lines for the introduction of water fluoridation schemes. This meant that unless there was a legal challenge to such schemes, water authorities could add fluoride to tap-water supplies with the minimum of fuss.

It is no great secret that experiments with fluoridated tap-water have been conducted for some years prior to the 1985 legislation and yet it was not until a legal challenge to the proposed Strathclyde scheme in 1980 that the safety and ethics of fluoridation was discussed in a more impartial environment.

The case ran for two years and the petitioner, Mrs Catherine McColl, a Glasgow resident, won an interdict against Strathclyde Regional Council effectively stopping that particular scheme in its tracks. The presiding Judge in that case was Lord Jauncey. What is disturbing about Jauncey's interpretation of the validity of important evidence plus his summary of the proceedings, is that some very important points were quite literally 'swept underneath the carpet'.

So what did we learn about the Jauncey ruling? The Government provided several key witnesses to aid the defence which included a few members of various Royal Institutions. Admissions were made by some of these witnesses that at least some of the evidence provided by the Petitioner and her witnesses was valid and indisputable!

'Post-Jauncey'

As a consequence of Jauncey's ruling that the proposed Strathclyde fluoridation scheme was 'ultra vires', the Government were compelled to introduce legislation to overcome this obstacle - hence the Water Fluoridation Bill of 1985 which ensured that democratic and moral objections to fluoridation could be swept away.

The way the law stands, allowing for the provisions of the Water Industry Act 1991 and the Medicines Act 1968, the private individual has not a leg to stand on. If you are poisoned by fluoride, you appear to have no legal right to bring a private action. The water companies also have no legal responsibility towards their customers.

Furthermore, anyone promoting fluoride can manipulate the truth to suit their own ends. This contention is supported by the signed affidavit of Dr Brian McCloskey, Director of Public Health for Worcester.

In his (1995) affidavit he states that the legal advice he has received indicates that if he had decided to make misleading statements about the safety and efficacy of fluoride, this would not constitute a justifiable court action.

This is straight from the horses mouth. The pro-fluoride lobby have the right to mislead the general public and get away with it.

So what are the sociological implications of considering the lack of protection for the consumer? Does the consumer readily accept that his or her tap-water exists for the additional purpose of transporting medication inevitably into every home in the country? Does the consumer accept that they have no right in law to demand water that does not make them sick? Is the consumer willing to accept that the Secretary of State can vary the types of fluoride in tap-water, therefore introducing even more poisonous substances (see note)?

Unless the consumer demands the right to a safe supply of water, the consumer will continue to be trampled on. Overall, the introduction of medication via the public water system is a serious erosion of civil liberty and the Government has established a dangerous precedent.

Note: In the United Kingdom, the Water Industry Act makes provision for the additional use of other types of fluoride other than those already in use. Section 87 (4) indicates that only Hex or disodium hexafluorosilicate may currently be used but Section 88 of the Act states:

"(1) The Secretary of State may by order amend section 87 (4) above by - (a) adding another reference of fluorine."

The disturbing revelation is that 'another reference of fluorine' can mean a multitude of things - it is a very ambiguous term. For example, some of the most of the powerful tranquilliser drugs in use today are known as 'Haloes'.

A 'Halo' or halogenated drug is a rather passive drug which has had added to it a halogen. Fluorine is a halogen. By adding fluorine or another suitable halogen to a drug you boost its potency. So is 'another reference of fluorine' an indication that the Secretary of State can allow the addition of powerful halogenated drugs to our water supplies, such as fluorinated tranquillisers?

In a state of emergency, such as during a riot or serious civil unrest, this provision in the Act could be a good excuse for the Home Secretary to request the addition of such tranquillisers to the water supplies.

Infodoc 16 | PDF

Accidents (... and risks)

To list all of the accidents involving fluoride chemicals would be far too cumbersome. Instead, it is more appropriate to give a selection of stories and headlines which gives some idea of the impact of some of the terrible accidents that occurred during the 1990s.

[1] Excerpts from: Final Report: Hooper Bay Waterborne Outbreak - Fluoride. April 12, 1993.

State of Alaska Department of Health and Social Services, Division of Public Health, Section of Epidemiology

Based on fluoride levels of water collected from water system 1, the level during May 21-23 was most likely <150 mg/L.

In order to calculate fluoride doses, we assumed that the fluoride concentration of all water collected during May 21-23 was 150 mg/L.

Using this assumption, fluoride doses ranged from 0.3 to 21.0 mg/kg; the man who died consumed an estimated 17.9 mg/kg.

Among case patients, 10 (16%) had an estimated fluoride dose of <1.0 mg/kg and 21 (34%) had an estimated dose of <2.0 mg/kg; 13 (21%) had an estimated dose of <8.0 mg/kg.

If the actual fluoride concentration in water system 1 was <150 mg/L, the estimated fluoride doses would be smaller. The urine (r=0.81) and serum (r=0.73) fluoride levels and the duration of illness (r=0.57) were linearly related to the estimated fluoride dose.

Assuming that the outbreak was caused by drinking water with a fluoride concentration of 150 mg/L, the minimum estimated fluoride dose which caused illness was 0.3 mg/kg or approximately 28 mg of total fluoride.

This level is lower than other reports (5-7) and 27 times less than than the the 8.0 mg/kg recommended as a maximum safely tolerated dose in another report (4).

Furthermore, for case-patients whose fluoride dose was estimated, 16% consumed <1.0 mg/kg and 34% consumed <2.0 mg/kg. This implies that both acute gastrointestinal symptoms and systemic toxicity may result from doses lower than previously believed.

We found that following acute fluoride poisoning, symptoms and toxic serum levels persisted longer and toxicity occurred at lower doses than previously reported.

[2] Spill snarls traffic, lives. The Orlando Sentinel. September 7, 1994

The acid closed the road into the night, forced 2,300 from homes and sent 50 to hospitals.

By Cory Lancaster OF THE SENTINEL STAFF.

DELTONA - Jeff Carine was driving to Daytona Beach to play golf Tuesday morning when his Toyota Camry hit a mushy, snowlike liquid covering Interstate 4. Carine, a golfer from Windermere, assumed it was a minor chemical spill and kept driving. Six hours later, he returned to the spot after hearing news throughout the day about one of the worst chemical spills in Volusia County's history.

A tanker truck cracked open on I-4 near Deltona shortly before 10 a.m. and released 4,500 gallons of fluorosilicic acid in one big whoosh. Early today, the highway remained closed in both directions, though officials were hopeful it would open by the morning rush hour. About 2,300 people remained in shelters, evacuated from their homes.The spill sent more than 50 people to hospitals with complaints of skin and respiratory irritations, including some hours after the spill. Most, including the driver of the truck, were treated and released. Two police officers were admitted overnight to Central Florida Regional Hospital in Sanford after complaining of headaches and burning in their throats.

Authorities were frustrated In attempts to neutralize the acid with lime and potash, which delayed I-4's reopening. Fumes also were detected late Tuesday in the neighborhood of Deltona Woods, causing emergency workers to conduct a midnight door-to-door evacuation. The Florida Highway Patrol is investigating the spill. A spokesman from Pencco Inc., the Bellville, Texas-based chemical company that owns the tanker, would not comment on the accident late Tuesday.

The tanker truck started out from Fort Meade, south of Lakeland, about 8 a.m. Tuesday, FHP Patrol Lt. Art Brown said. The truck driver, James Parish, 68, said he was eastbound, just west of the Howland Boulevard overpass, when the rear trailer wheels came out from under the truck. The back of the tanker slammed onto the road and spilled the chemical over an area 600 feet long and 60 feet wide, Volusia County Assistant Fire Chief Ron Bateman said.

A stretch of two miles of 14 was closed between Deltona and Orange City. Vehicles were rerouted off the interstate onto Saxon Boulevard from the west and onto State Road 472 from the east. The detour meant at least an hour delay as bumper-to-bumper traffic inched along U.S. Highway 17-92 through Orange City. "I never saw such bad traffic in my life," said Betty Casselman, who was kept from her home in the Country Village Mobile Home Park in Orange City.

Police, firefighters and hazardous waste experts dumped bags of lime over the contaminated area to neutralize the acid and vacuumed the residue with special machines. Fluorosilicic is a highly corrosive acid used in the process of adding fluoride to drinking water hazardous waste experts said. If inhaled, it can cause respiratory difficulty, burning eyes and numbness around the Ups. Upon contact with skin, it creates a burning and tingling sensation. Symptoms can take up to 24 hours to appear, medical experts said. The chemical evaporates quickly and is carried by the wind. Fearing a health hazard, police began evacuating homes within a mile area, including about 1,750 people in Orange City and 500 people In Deltona. Students and teachers at Deltona High School went home early.. Those with symptoms were mostly emergency personnel.

"Most of the people who come in did not have. symptoms," said Dr. Charles Duva, an emergency room doctor at West Volusia Hospital. *"We scrubbed them and washed them down."* Another man was riding In a truck with his arm hanging out the window, Duva said. The man said he experienced burning on his forearm. He also was released.

Bo Poertner, a columnist for The Orlando Sentinel, spent most of the day at West Volusia Hospital. Poertner was driving behind the tanker and changing a cassette tape when he heard a *"big bang."* He looked up and saw the rear trailer wheels bounce and spin in the air. Poertner swerved to avoid the wreckage and drove through 6 inches of thick liquid that he described as wet cement. He pulled over and jumped out to see if the driver was hurt. The driver was fine but seemed worried. *"He had his hand on his chest like he was really nervous"* Poertner said. *"I told him it was OK and not to worry."* Poertner and two other motorists stopped and waited for rescue personnel. Others kept driving.

"There are probably many motorists who drove right through and didn't realize it and some of them might not be being feeling well" Deltona FIre Capt. Chris Nabicht said. Carine, the golfer who drove through the chemical, estimates that as many as 150 cars got through before the highway closed. The chemical left a white film underneath his car that must be professionally decontaminated. *"It looked like dirty, mushy snow, 2 to 3 inches thick"* he said. *"The color ... the feel of the road - it was identical to wet snow."*

Elaine Bennett Purvette Bryant, Lynne Bumpus-Hooper and Derek Catwn of the Sentinel staff contributed to this report.

[3] Middletown Maryland Latest City to Receive Toxic Spill of Fluoride in their Drinking Water

The Townsend Letter for Doctors, October 1994: Report by Robert Carton, Ph.D., & The Truth About Fluoride, Inc.

Officials of Middletown, MD warned residents by radio in November, 1993 not to drink or cook with city water due to high fluoride levels. Malfunctioning fluoridation equipment caused excessive fluoride levels of 70 parts per million (ppm) in the distribution system. This is 70 times the normal level and almost 18 times the level considered safe by EPA. The Maryland State Department of Health stated that they did not plan to do a health survey to determine if any residents experienced symptoms of fluoride poisoning.

Based on other fluoridation accidents, the 70 ppm of fluoride is sufficient to cause vomiting, diarrhea, skin rashes, fever, and other effects. In 1986, a fluoridation accident in New Haven (North Brantford), Connecticut, resulted in the public receiving water with 51 ppm fluoride for twelve hours. A health survey, conducted four days later on 312 persons, determined that 55 of those experienced symptoms of fluoride poisoning which lasted from 1-60 hours.

Robert Carton, Ph.D., local scientist and editor of the newsletter The Fluoride Report, stated that “Quick action by Middletown authorities may have prevented a public health disaster.” Dr. Carton referred to an accident that occurred last year in Hooper Bay, Alaska where 260 were poisoned and one man died. Levels of fluoride in Hooper Bay drinking water were thought to have been 150 ppm or less.

Middletown and state workers stayed up all night flushing out the distribution system. Although the town was warned by radio not to drink the water, many residents did not become aware of the problem until they read their morning paper, or talked to neighbors. Town and state officials had considered calling out the National Guard to go door to door to warn residents of the high fluoride levels. However, Louise Snodgrass, Middletown official, stated that this action was not taken due to concern this step would frighten citizens unnecessarily. The Frederick Post reported that Middletown water is again safe. Fluoridation has not been reinstituted.

Dr. Carton also pointed out that toxic spills of fluoride in drinking water are never publicized by fluoridation promotion agencies, the Public Health Service, the National Institute for Dental Research, and the Center for Disease Control. The following is a partial list of known fluoridation accidents never publicized with a national press release which would alert city councils and the public of the inherent risk in fluoridation:

*August 1993 -- Poplarville, Miss: 40 persons poisoned; 15 sought treatment at hospital. Pizza Inn manager was the first to notify city officials after several customers became ill.

*August 1993 -- Galesburg, Illinois: Tank truck delivering fluoride to water treatment plant leaked 15-20 gallons on city street. Streets barricaded until fire department’s hazardous materials unit could clean up the spill.

*July 1993 -- Chicago, Illinois: see bottom of page.

*May 1993 -- Kodiak, Alaska (Old Harbor): Residents were warned by phone and public radio of high fluoride levels. Officials warned that the more water consumed with elevated fluoride, the worse the danger becomes, and that boiling water could concentrate the fluoride even further. Boiling water in preparing foods always concentrates the fluoride even with 1.0 ppm. The fluoridation equipment appeared to be operating normally; 22-24 ppm fluoride was found when a monthly sample was sent to the Public Health Service lab in Kodiak. Bruce Erickson, DEC environmental manager, said these levels could indicate higher levels were in the system.

*January 1993 -- Sarnia, Ontario: Fluoride at 13 ppm Mayor and public notified after the fact. Sarnia Mayor Bradley stated that the public should have been notified in time so people could choose whether to drink the water or not. And, that those responsible for fluoridating, “shouldn’t be investigating itself.” The fluoridating computer-controlled system had failed to shut down.

*July 1992 -- Marin County, California: Due to a pump malfunction allowing too much fluoride in the Bon Tempe treatment, 2 million gallons of fluoridated were diverted to Phoenix Lake, elevating the lake surface by more than two inches forcing some water over the spillway.

*June 1992 -- Danvers, Illinois: Fluoride pump malfunctioned; level of fluoride not stated in local paper, but warning must have been given. After flushing the water through fire hydrants, the Illinois EPA allowed the city to lift the warning.

*May 1992 -- Hooper Bay, Alaska: see first article.

*February 1992 -- Rice Lake, Wisconsin: Residents vomiting: Centers for Disease Control stated that 150 water consumers potentially at risk. Pump overfed fluoride for two days, thought to have reached 20 ppm. In a domino effect, high winds caused volt lines to connect, causing conductors to burn to ground and a jumper to fail, resulting in failure of the anti-siphoning device, causing fluoride to pour through the pipes. The Wisconsin State Dental Director, stated, “To be harmful, exposure would have to have been about 225 ppm.” This statement cannot be substantiated in any publications documenting the toxicity of fluoride.

*December 1991 -- Benton Harbor, Michigan: Faulty pump allowed approximately 900 gallons of hydrofluosilicic acid to leak into a chemical storage building at the water plant.City Engineer Roland Klockow stated, “the concentrated hydrofluosilicic acid is so corrosive that it ate through more than two inches of concrete in the storage building.”This water did not reach water consumers, but fluoridation was stopped until June 1993. The original equipment was only two years old; Mr. Klockow had hoped to recover the cost of the pump and repair costs to the building.

*September 1991 -- Calgary, Alberta, Canada: Fluoride diffuser problems in six machines. Leak of seven liters (quarts) of fluoride sent two water treatment personnel to the hospital for oxygen after breathing the fluoride fumes. Gary Lamb, engineer, stated that “This product is an acid so we can’t put it through a steel pipe because it corrodes, but plastic isn’t strong enough.”

*September 1991 -- Burlington, North Carolina: 4,000 gallons of a 6,000 gallon fiberglass fluoride tank ruptured. Water plant workers wearing special suits contained the spill to the water treatment plant. Replacement tank was expected to cost $15,000.

*July 1991 -- Portage, Michigan: Approximately 40 children with abdominal pains, sickness, vomiting and diarrhea at an arts and crafts show at school. One of the city’s fluoride injector pumps failed. Fluoride levels not determined at the time, but later tested at 92 ppm.

*November 1990 -- St. Louis, Missouri: 500 gallons of hydrofluosilicic acid leaked from a ruptured pipe at the St. Louis County water works plant. About 12 employees were evacuated. Fireman built sand dikes around the leak, added lime to the spilled fluoride to neutralize it, and plugged the pipe.

*October 1990 -- Westby, Wisconsin: Four families suffered a week of diarrhea, upset stomach and burning throats. Fluoride equipment malfunctioned, causing the fluoride to surge to 150 ppm. The water utility supervisor said he had expected the fluoride to be ten times normal since it had burned his mouth. The fluoride corroded the copper off the pipes in area homes, 70 times higher than the EPA recommended limit. Westby Council stopped fluoridating.

*January 1988 -- Schenectady, New York: Spill of 2,000 gallons of fluoride completely destroyed the fluoridation facility. Over $48,000 spent to clean up the spill and dispose of fluoride in approved dump site. It was estimated that the cost to replace the facility would be $261,000.

*March 1986 -- New Haven (No Branford) Connecticut: Of the 312 persons interviewed four days after the accident, in the 127 households at risk, 18% had symptoms of abdominal cramping, nausea, headache, diarrhea, vomiting, diaphoresis (profuse sweating), and fever. This did not include those with rashes and irritation from bathing and washing dishes. The fluoride peaked at 51 ppm. The acidic fluoride leached copper; the Connecticut State Dental Director chastised water department personnel for not recognizing immediately that public complaints were due to fluoride and not copper. This accident was finally reported two years later in the American Journal of Public Health, June 1988...

*November 1979 -- Annapolis, Maryland: One death in a dialysis patient; other dialysis patients suffered a cardiac arrest (resuscitated), nausea, hypotension, chest pain, diarrhea, itching, flushing vomiting (blood tinged), difficulty breathing, profuse sweating, weakness, numbness, and stomach cramping. Water consumers not on dialysis also reported nausea, headache, cramps, diarrhea and dizziness.

The Evening Capital reported in October 1982 that the wife of the dialysis patient who was brain-injured had sued the City of Annapolis for $480 million; this was settled out of court in 1985. Other patients also sued. Pepsi Cola sued for $1.6 million for damage to product. Waterworks personnel were also sued, demoted, and had payroll deductions.

The Baltimore Sun reported in a November 1979 story on the fluoridation accident that, “Even though state and county health officials learned of the spill nine days after it occurred, no public announcement was made and the City Council was not told of the situation for six more days...” And, quoted a County Health officer stating that the delay in notification was because “We didn’t want to jeopardize the fluoridation program...”

Ironic and tragic, again in Annapolis, the Evening Capitol reported on January 6, 1990 of the death of the executive director of the Association of Area Business Publications, and former Kentucky newspaper publisher. On July 27, 1989, he had asked for a glass of water in a drug store to take a penicillin tablet for a toothache. By mistake, he was given a glass of stannous fluoride. He immediately suffered a cardiac arrest and brain damage, going into a coma. On August 22, the family asked that life support systems be withdrawn.

Much of the information on toxic spills of fluoride that does reach the public is incomplete and inaccurate. In the November issue of Opflow, an American Water Works Association publication for water operators, only seven fluoridation accidents were listed as occurring from 1976-1992. The population at risk for the Annapolis spill is listed as “8” when, in fact, thousands were at risk. Unless a death occurs, Tom Reeves, National Fluoridation Engineer, Centers for Disease Control, refers to fluoridation accidents as “overfeeds,” and has stated that water consumers “cure themselves by vomiting” during fluoridation accidents.

The toxicity and corrosiveness of fluoride compounds the risk of fluoridation equipment malfunction and operator error for all fluoridated water systems.

The above stories are examples of what can go wrong. Another story involves the dangers posed to kidney dialysis patients in an American hospital:

"3 U. of C. kidney patients die". "5 others have allergic reactions to dialysis treatment". Source: Chicago tribune, July 17th, 1993.

"Fluoride blamed in dialysis deaths". Source: Chicago Tribune, July 31st, 1993.

"Fluoride Blamed in 3 Deaths". "Traces Found in Blood of U. of C. Dialysis Patients". Source: Chicago Sun-Times, July 31st, 1993.

Note: U. of C. is the University of Chicago hospital.

Haemodialysis in the UK

In the UK there is a more laid-back attitude to the inherent dangers of overdosing. In 1985, the year the Water Fluoridation Bill was rushed through Parliament, the Department of Health & Social Security issued a Safety Information Bulletin (ref: SIB [85] 2). Item 3 states:

"Where haemodialysis is undertaken with fluoridated water, serum fluoride levels in the patient could be considerably higher than in the case of persons consuming the water in the normal way."

Although Item 4 states that no documented cases of fluoride toxicity have been reported, it goes on to say that ...

"... minimum exposure by this route is desirable." (... not essential???)

Dialysis treatments can use in the region of 120 litres of water. This makes 120 mg of fluoride if the water has been fluoridated. However a manufacturer of water purification systems for hospitals has told me that while he has never been officially requested to provide a system to remove fluoride from water, his company's equipment would in fact do the job quite well. What he actually said was that the equipment would remove 95% of all fluoride. This means that 5%, or 6 mg, will remain in 120 litres of treated water.

Responsibility and trust

So what information was gleaned from these stories. That is was just bad luck that these people died? Promoters of fluoridation never seem to be able to cope with the question of the effects of this noxious substance on those unfortunate enough to have a serious medical condition. They are the lost equation. They are never considered because of the propaganda that is put out by 'sponsored' Governments and 'grant-dependent' scientists who repeatedly reassure us that there is nothing wrong with fluoride. Who do they think they are kidding?

We must also not forget the dentists who think that their practices now extend beyond the surgery door and into wild blue yonder. Just try telling a dentist that you do not want medication in your tap-water and see the response you get. And what about the water companies? The question the reader should now ask themselves is:

- Do I trust my water company when they tell me there is no danger of over-dosing?
- Do I trust them to tell the truth if there is an accident?
- What if the accident is considered to be 'trivial' - will they still own up?
- Will they be ready to accept the consequences?
- If they appear to be somewhat blasé towards the issue of leaking water mains, then what importance will they attach to faulty or leaking fluoridation machinery?

There are still a lot of unanswered questions when it comes to the issue of safety and possible accidents.

Although legislation exists to compensate those unfortunate enough to suffer from 'over-exposure' to this volatile chemical, will the Government honour their indemnities or will they try to wriggle off the hook?

It can take years to be compensated, if you are lucky, and all just for being a victim of someone else's irresponsibility.

Infodoc 17 (Part 1) | PDF

'CONSPIRACIES' AND SECRET SOCIETIES.

This is where it gets weird! But never forget that hey sometimes say the truth is stranger than fiction. What follows is but one example ...

I have split this Infodoc into two parts. This is because we need to understand the mentality of supreme authority and what lengths they will consider going to to achieve their aims.

PART 1

Tentative connections. Suspicious links and dubious cross-references? Do you live an ordinary life, go to work, watch television, accept everything that the establishment tells you, etc.? Then you will be an excellent candidate to be fed disinformation by those who think they can control your life by opening and closing doors in the 'rat maze' that is your everyday existence.

Then there is the extreme opposite. As much as one's life can be simplistic, there are those who will try to 'enlighten' you be revealling lot so hidden secrets, conspiracies, theories, etc.

Between these two worlds lays the truth. But it is easy to be driven to distraction by all the claims 'out there', and some which can drive you plain crazy trying to work out and understand.

OK! This is not attempt to propound any theory about a conspiracy to rule the world using fluoride in tap-water. I just wnat to bring to your attention some interesting links and let you decide upon any posible connections.

The information I provide is based upon either personal experiences, facts and truths (as we understand the word). Some of my links are fanciful, but do have some grounding. That is the sole reason they are included. It is also because we need to understand the type of people we are dealing with when challenging the subject of fluoride, and water fluoridation.

In my series of 'Infodocs', we have seen how the truth has not so much manipulated by those who wish to poison our water, as mauled to death in an attempt for us to give up all hope and that we are powerless to fight against all the lies and corruption that underpins water fluoridation.

So, some of my 'fanciful' links suddenly look less dubious and more believable. After all, if a group of people are so intensely evil to poison our water supplies, then where do they stop?

If you remain suspicious of my links after you have finished reading this publication, then please return to Infodoc 10. Also visit our ethics section to see more evidence of the evil that some people will resort to.

It's you choice. I'm not asking you to believe anything that you think is too far-fetched. All I recommend is that you keep an open mind. This is because a closed mind is the greatest ally of the ultimate conspiracy - to manipulate humanity to the point where you cease to exist as a human being. In other words, until you realise what is happening all around you, and you remain hiding in the shell of your limited life, you will be no more than a statistic, a pawn in the greatest game of chess of all - life.

Are you sitting comfortably? If you are, prepare to feel a little restless ...

DELTA SIGMA DELTA - Dentistry's secret society

Secret societies have existed for thousands of years. Some are mythical, some shrouded in mystery, and some are established realities. Members of secret societies do not have to be Masons. The rituals, practices and principles of each individual society will indicate whether or not they are true, or pertaining to be true, Masonic orders. Delta Sigma Delta (DSD) are a 'Masonic' movement - the symbols on their insignia have Masonic origins:

History of DSD

November 15, 1882. Seven dental students met and founded the first dental fraternity in the world. The letters of the DDS degree they were to receive were transposed to DSD (DSD). The first Chapter of DSD became known as Alpha Chapter. *"A good scholastic average is an important criterion for membership"*, according to the DSD web-site. Although DSD was devised by dental students, it also created a *"Supreme Chapter"* which brought into it's ranks *"outstanding teachers and practitioners"*.

"Undergraduate Chapters are located in dental schools and Graduate Chapters are located throughout the United States of America, as well as Europe and Australasia. The Supreme Council is designated as the administrative or governing body of the fraternity." **[1]**

So what is the influence of Masonry within the ranks of DSD? It really depends on the motives of it's senior members who work under a cloak of secrecy - hardly a recommendation for trusting them.

DSD may well have started out as a harmless venture. However, with "30,000 members", the creation of the Supreme Chapter, and the design of the insignia raise serious questions about the motives of this secretive Society.

DSD in Australia

The January 1989 (Volume 31-1) edition of the Probe carried a story of a 'fraternity' known as Delta Sigma Delta. The story was penned by a (self-proclaimed) former MI6 agent, Dr Geoffrey Smith of South Yarra, Melbourne, Australia. Here is what he said ...

Dentistry's Secret Society

Frankly, I'm not the sort of person who joins clubs or societies. Like Groucho Marx, I would be wary of belonging to a club which would consider me for membership. Nevertheless, it came as quite a shock to find, after 30 years in the profession, that there existed a world-wide secret society of dentists, namely: Delta Sigma Delta (DSD).

Fraternities, sometimes referred to as Greek-letter societies, are usually associated with colleges and universities in North America. DSD, founded in 1882 at the University of Michigan, was the first specifically dental fraternity. In the same year, and at the same university, the first fraternity for medical students - Nu Sigma Nu - was established.

Unlike most college fraternities, and apparently in the 1920s, DSD went international: but it confined most of it's recruiting to English-speaking dentists. Today, DSD has about 26,000 members worldwide, with the great majority coming from the United States and Canada. But particularly active DSD Chapters have been established in Australia, The United Kingdom, New Zealand, Singapore, Holland, Sweden, South Africa, Hong Kong and the Republic of Ireland.

Males Only

DSD membership is restricted to male dentists **[2]**, and some of it's ritual has Freemasonry connotations. Each Chapter is led by a Grand-Master and all members are required to take a strict oath of secrecy. Membership is by invitation only. The society has a monthly newsletter which is difficult for non-members to obtain. It is called Desmos, which in Greek means chain or bond.

In Australia, which has around 7,000 registered dentists, only 270 are members of DSD. Yet, during the past 20 years, all but two presidents of the Australian Dental Association have been members of the society, and three fifths of the dentists on the Federal Executive are members of this exclusive brotherhood. It's members also figure prominently on most Federal and State Councils of the Dental Association as well as State Dental Boards - the watchdogs of professional ethics. In Britain, it seems that there are fewer than 2,000 Delta Sigs, but some of the best known names in dentistry are members of this American secret society.

Dr Ewan Deane, apart from being Registrar of the Victorian State Dental Board, was until recently the Grand Master of the Victorian Chapter of DSD. He described the society as *"... a membership of like-minded men dedicated to advancing dentistry"*. He admits that membership is male only and by invitation, but explains: *"The dentist must have contributed to dentistry or the community. It's in day-to-day life that members have influence over other people. Delta Sigs, by virtue of their prominence and dedication, are leaders in the profession."*

Recently, it seems that New Zealand dentists have been disturbed by the unseen presence of DSD. A spokesman for the Hawkes Bay branch of the New Zealand Dental Association (NZDA) observed: *"As long as membership of this body remains anonymous, it will be suspect and speculations as to it's real aims and objectives will occur within the rank and file of the Association."*

In response to this unease, the Council of the NZDA appointed a committee to investigate whether DSD satisfied the ethics and rules of the NZDA. Their conclusions were that DSD was purely a social organisation. However, some questioned the effectiveness of such an exercise when every Delta Sig has taken an oath of secrecy about the society. It was also rumoured at the time that some of the dentists on the special committee set up to investigate DSD were also members of the society.

Sinister

Is DSD a scholastic dental fraternity as a spokesman for the Michigan Chapter has claimed? Is it just a society? Or could it be something more sinister? Couldn't a closed organisation have the potential to divide the profession? Obviously, such a group could be a powerful lobby to further the interests of a highly organised minority.

Last March, I had a visit from a senior colleague. He left me with a membership list of DSD. It had been printed in the Spring edition of Desmos.

The list is interesting for a number of reasons. First, I had been told that all members were eminent dentists, they must have "contributed to dentistry or the community", to quote Dr Deane. However, the list showed that some members were invited to join DSD in the same year they qualified. How does a dentist establish a reputation is such a short time?

Second, the names of many 'eminent' dentists were missing from the list. For example, the three best known dentists in Victoria (if not Australia) over the past 30 years would be: Sir Arthur Amies, dean of the Melbourne Dental School for 30 years; Paul Pincus **[3]**, a dental scientist of the first rank and well known in London as well as Victoria; and Philip Sutton, who has not only published in dental journals but also in leading scientific journals such as Nature.

Unfortunately, Sir Arthur and Paul Pincus are dead. But remember the list was for 1976, and it seems that Amies, Pincus and Sutton**[4]** were never members of DSD. Indeed, Sutton, who is a personal friend has confirmed this; further, he had never even heard of the society until I mentioned it to him.

I find it hard to understand why members of the healing profession feel this need to belong to an exclusively dental secret society. What have dentists, or rather a group of 'elite' dentists, got to be secret about? What have I been missing? Perhaps some readers could help shed more light on this odd society of dentists.

Symbolism

DSD

1. The crossed keys. Two crossed keys are quite a common charge. *"The two keys are the symbol for St. Peter, gatekeeper of the heaven in the Catholic religion. St. Peter is a very popular saint, hence the two keys are a common charge".* **[5]** NB. The keys on the DSD insignia are pointing downwards whereas they would normally be pointing upwards (based on the observation of numerous heraldic representations). Does this mean that the keys pointing downwards, and considering the other imagery used, refer to the keys to the gates of Hell?

2. The all-seeing eye of God (top right). This is a Masonic symbol and appears, for example, on the insignia of the Illuminati and one-dollar bills. It has also been identified as the eye of Lucifer. More information below.

3. The Chevron (centre). Def.: "chevron \'shev-ren\ n [ME, fr. MF, rafter, chevron, fr. (assumed) VL caprion-, caprio rafter; akin to L caper goat] (14c)".**[6]** It is unclear what the five symbols within the chevron are due to lack of detail.

Also, from the Bible. Matthew, 25:31-41: When the Son of man shall come in his glory, ...he shall set the sheep on his right hand and the goats on his left; then shall the King say unto the sheep, 'Come ye who are blessed of my Father, inherit the kingdom prepared for you from the foundations of the world.' Then shall the Kings say unto the goats on the left; Depart from me, you who are cursed, into everlasting fire prepared for the devil and his angels'.

Another link is the 'Goat of Mendes', which may have given rise to the above quote. See THE GOAT OF MENDES (external link] for more information.

4. Skull & Bones. Usually a danger sign, but with other possible meanings. One is the 'Society of Skull & Bones'. Another reference is possibly the Illuminati's 'Book of Life and Death'. This is especially noted as the 'all-seeing eye of God' is a well-known Illuminati symbol.

The 'all-seeing eye of God' - but which 'God'?

This is the symbol which appears on the back of one-dollar bills. It is the symbol of the New World Order (Novus Ordo Seclorum). At the top of the pyramid is the 'all-seeing eye of God' and at the foot of the pyramid are the roman numerals MDCCLXXVI (which refers to the year *1776). *As well as being the year of Independence for America, it was also the same year the (Bavarian) Illuminati came into being.

Notes:

i. The term 'Annuit Coeptis' means: "He (God) has approved our beginnings." **[7]**

ii. It is said that the above seal first appeared in 1933.

iii. Adolf Hitler became Chancellor of the German Republic at midday, January 30th, 1933. **[8]**

Welcome to Hell: A 'Nine O'Clock' religious rave service (Source: BBC footage). Flashing lights and smoke. The 'God' of the Illuminati is clearly spelled out ...

A cavorting dancer in an animal (goat?) pen is another possible symbol of satanic worship ...

What is the significance of the skull and bones resting upon a book in the DSD insignia? The only prominent reference to skull and bones is the secret society, known as: *"The Order of Skull and Bones"*. It was created at Yale University in the first half of the 19th Century ...

On September 29, 1876, a group calling itself *"The Order of File and Claw"* broke into the Skull and Bones' holy of holies. In the *"tomb"* they found lodge-room 324 *"fitted up in black velvet, even the walls being covered with the material."* Upstairs was lodge-room 322, "the 'sanctum sanctorium' of the temple ... furnished in red velvet" *with a pentagram on the wall. In the hall are "pictures of the founders of Bones at Yale, and of members of the Society in Germany, when the chapter was established here in 1832."* The raiding party found another interesting scene in the parlor next to room 322."

On the west wall, hung among other pictures, an old engraving representing an open burial vault, in which, on a stone slab, rest four human skulls, grouped about a fools cap and bells, an open book, several mathematical instruments, a beggar's scrip, and a royal crown. On the arched wall above the vault are the explanatory words, in Roman letters, 'We War Der Thor, Wer Weiser, Wer Bettler Oder, Kaiser?' and below the vault is engraved, in German characters, the sentence; 'Ob Arm, Ob Beich, im Tode gleich.'

The picture is accompanied by a card on which is written, 'From the German Chapter. Presented by D. C. Gilman of D. 50'.

Skull and crossbones: \-'kros-,bonz\ n, pl skulls and crossbones (1826): a representation of a human skull over crossbones usually used as a warning of danger to life. **[9]**

Considering S&B's suggestive links to the Illuminati, the book upon which the skull and bones rest could be a 'bible' - or may remotely be a reference to the Illuminati's 'Book of Life and Death'.

More Skull & Bones: A nice bunch of guys?

The infamous Totenkopf (Brunswick-style Deaths Head) emblem worn by the Waffen SS. The Waffen SS manned the German concentration camps in WWII.

Definitely NOT a nice bunch of guys ...

Sodium Fluoride (used to fluoridate some American water systems) was also used to manufacture nerve gases such as Sarin. Experiments were conducted on certain 'undesirable' elements though usage on labour camp inmates in general has been disputed. The US government may also be implicated in these abuses and this is currently under investigation.

Endnotes:

[1] DSD web-site

[2] According to information from the USA, DSD has accepted female members for an undefined period of time.

[3] It is not clear if Paul Pincus, described as a "dental scientist", would have been eligible to join DSD.

[4] Sutton, Pincus and Amies have all spoken out about the dangers of fluoridation. *NB. Philip Sutton and Dr Smith have since both died.*

[5] The international Civic Arms

[6] & [7] & [9] Infopedia [UK]

[8] The Rise and Fall of the Third Reich, by William Shire

Go to: PART 2

Infodoc 17 | PDF

'CONSPIRACIES' AND SECRET SOCIETIES.

PART 2

So how bad are the Americans?

Thy wee-bit housie, too, in ruin!

It's silly wa's the win's are strewin!

An' naething, now, to big a new ane,

O' foggage green!

An' bleak December's win's ensuin,

Baith snell an' keen!

From: To a Mouse. A poem written by Robert Burns in 1785

America's foreign policy is notoriously infamous. Since independence, it has always felt the need to interfere with other nations and whatever wars were being fought in other parts of the world.

But how far would they go? What follows is one example of their internation ambitions, their ill-conceived and secretive 'alliance' with the Nazis, and how far they considered going to achieve all they desired.

This last paragraph will possibly have you wondering why someone could possibly say that America was pro-Nazi during the 30s.

It's no great secret that the Americans (and I mean the American establishment) were investing in Germany under Hitler. It is no great secret they were providing some of the technology and materials needed to get Hitler's war machine rolling.

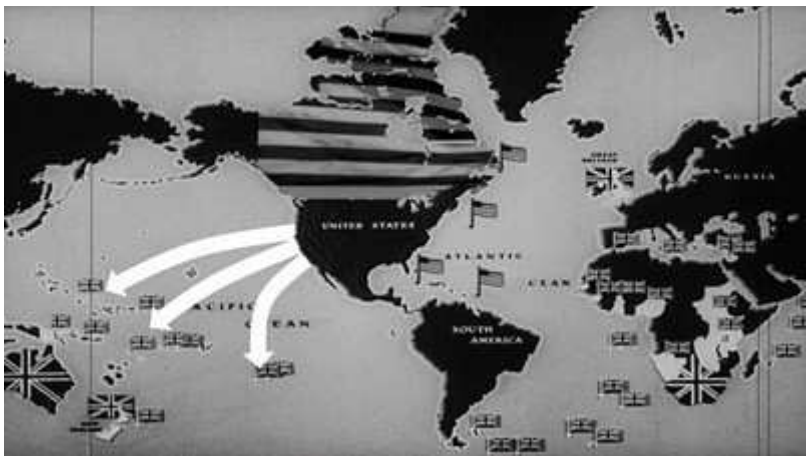
We also know that America is voraciously anti-Communist, and that the threat of the spread of Communism would threaten Europe. Ironic in some ways as it was certain American facilities that helped provide the resources for a Bolshevik Revolution. But the irony is tempered by the fact that the Americans use the rest of the world like a chessboard. Their reasoning is not always transparent, though we do know that they do like to start wars at the proverbial 'drop of a hat'. In other words, if they need to start a war for political purposes, and the environment does not exist to start one, than first create the enviroment which can be 'festered' - until the conditions are ideal to start a war.

Anyway, and as with the conspiracy to promote fluoride and water fluoridation globally, the Americans had global ambitions which were kept secret for a very long time.

One such conspiracy was to attack British interests around the world. It was named 'War Plan Red' ("WPR"), and was a plan to (initially) attack British forces in Canada. This 'plan' was contrived during the late 20s and early 30s. Even up to the start of World War II, WPR was kept 'on the backburner'.

So, here we have a country (America) which is giving the impression that it is not actively supporting the Nazis, but providing them with what they needed.

"The war plan outlined those actions that would be necessary to initiate war between Britain and the United States."



A clear indication that support for the Nazies was very much alive in America

More about WPR can be read here: WAR PLAN RED

To summarise so far ...

It's quite obvious that the Americans were not exactly our friends in the run-up to World War II. In fact, if the bombing raid on Pearl Harbour had not been contrived and implemented, then the Americans may still have continued to support the Nazis throughout the war. Who knows how far they would have let them (the Nazis) advance before we knew what was happening?

NOW HERE ARE MY SALIENT POINTS:

- Powerful people make powerful plans, and then inflict them upon vulnerable minorities. Water fluoridation is but one.
- The truth about water fluoridation is frequently ignored, or concealled, by those in the establishment who refuse to be diverted from whatever plans they have for humanity

- Countless respected and highly qualified professional people, scientists, and even the occasional Nobel Prize winner, can see water fluoridation for what it is. A massive medical fraud.
- The plan to fluoridate water wherever possible, is a war being fought on many battle grounds
- Too many people who are qualified to speak on the issue know what is happening, but their voices are drwoned out by those in the establishment, the toxic waste-producing industries, toothpaste manufacturers, and other well-placed interests whose motives are driven by greed, corruption, or whatever. But the common denominators are usually money and power
- History has many factual accounts of how far some will go to get what they want. Water fluoridation is very much on the agenda of the modern-day misanthropes.
- Your only choices are: [1] To avoid all fluoridated water (very difficult); [2] To be informed and fight as hard as you can to resist it being implemented in your community

That's it, I'm afraid. It is said that evil people succeed because good people do nothing. There are not enoguh good people to fight against the vested interests and all the wealth and power they wield.

But a revolution has to begin somewhere. Honest and decent scientists, who see their profession tainted by the well-paid, sleazy, corrupt and immoral spokespeople, who also dare to call themselves 'scientists', are fighting hard on your behalf. They need your support. It's the angels versus the demons. It's the antis versus the pro-fluoridationists. Sheep on my right hand, goats on my right. Where do you stand?

CONCLUSION?

I'm not pretending to link all of this together as one massive conspriacy involving fluoride, secret societies, the Nazis, etc. But what you should note is that there will always be certain people who will have no respect for human life and see the greater masses merely as a 'pool of experimental sujects'. It's not just fluoride either. Even more recent history is littered with revelations of how innocent and unknowing subjects have been experimented upon without being told exactly what is being done to them.

- Visit our Politics section to learn more. Also visit our Human Radiation Experiments (HREX) section for hard evidence.

So lets be PERFECTLY clear about this: Under a democratic system, everyone has the right to be informed and be given freedom of choice. The reality is that those who think they have power over life and death do not give a stuff about your rights. This is water fluoridation in a nutshell. Our politicians are far too corrupt, or too feeble-minded, to stop this outrageous practice. That is the state of affairs.

Infodoc 18 | PDF

Summary

1.1 The subject of water fluoridation has been debated for many years. However, early biased research has unfairly influenced public opinion.

1.2 Water fluoridation is a victory of propaganda over the truth.

1.3 Water fluoridation can divide communities.

2.1 Fluorine is a pale yellow gas which cannot exist in nature on it's own. It has to react with other elements to form fluoride. This is achieved by 'stealing' an electron from another element. When obtaining an extra electron, fluorine becomes known as fluoride ion.

2.2 Fluorine is also known as the 'devil's element' for good reason. It is poisonous, corrosive and the most chemically ‘active’ of all the non-metallic elements and the most electronegative and reactive of all elements).

2.3 Fluoride is a trace element and appears in the environment in very tiny amounts.

2.4 Phosphate rock is now widely used to produce fertilizer. This is where fluoride (which is added to water) normally comes from. Sodium fluoride has also been provided by the aluminium production industry.

2.5 The fluoride normally used to fluoridate UK water supplies is called hexafluorosilicic acid (or sometimes hydrofluorosilicic acid). It is also referred to as a 'silicofluoride'. These are artificial fluorides.

2.6 Currently, only two types of silicofluoride are allowed to be added to water. Hexafluorosilicic acid (H_2SiF_6) is the first and Disodium Hexafluorosilicate is the other (Na_2SiF_6).

2.7 Fluorosilicates are contaminated with toxic chemicals such as lead, arsenic and mercury.

3.1 Water can contain amounts of natural fluoride usually around 0.1 to 0.2 parts per million (ppm) of volume.

3.2 Artificial fluorides are extremely toxic and very soluble. However, when artificial fluorosilicates are added to water, it is assumed that all the fluorine becomes relatively insoluble fluoride ions. However, there is no published evidence to show that this happens and it is thought that only about two thirds of fluorine in artificial fluorosilicates produce fluoride ions. Other atoms of fluorine may produce more exotic and dangerous fluoride compounds.

3.3 Exposure to fluorosilicates in their raw state can result in either serious injury, or even death.

4.1 River water can contain significant amounts of pesticides, herbicides, fungicides, etc.

4.2 All supplies of water are likely to contain some amounts of aluminium from the water treatment process. Lead from plumbing may also appear. The big question is how does aluminium with fluoride react when water is heated (as in making beverages and cooking)?

5.1 Water fluoridation became a reality when certain industries had to find alternative ways of disposing of their noxious waste products.

5.2 Early history is littered with examples of how 'vested interests' ensured they infiltrated, controlled or manipulated science and politics. As a consequence, toxic fluoride wastes were sold to the people as a public health measure. *"garbage was turned into gold"*

6.1 It has never been proven (in the UK) that there is any essential function for fluoride in the human body.

6.2 Different people consume different amounts of fluoride depending on their diet, regardless of whether or not the their tap-water is fluoridated. Ergo, adding fluoride to water is giving an indeterminate dose of fluoride to everyone who is exposed to it.

6.3 Babies who are exposed to fluoride via baby formula milk powders mixed with tap-water are especially at risk.

7.1 Statistics used by the pro-fluoride lobby to promote water fluoridation are often limited, misleading or dishonest.,/p>

7.2 'League Tables' are considered to be unscientific despite their widespread use.

8.1 Some water companies have previously expressed their concern at adding artificial fluorides to water. This is based, on part, upon the concerns of their customers as well as a desire to protect their employees from unnecessary and dangerous procedures.

8.2 Water UK is a predominantly pro-fluoridation lobby which does not represent the interests of consumers, merely a selection of water companies who do not have the courage to put their customers first.

9.1 Water fluoridation costs more than is admitted. Shoddy statistics based on poor quality evidence has been used to 'deflate' the cost of this procedure.

9.2 Only about 2% of all fluoridated water is physically consumed. Therefore, 98% is completely wasted. The main target of water fluoridation is children. For every £100 spent on fluoridation, it is estimated that less than 28p worth reaches those under the age of 18.

9.3 Other hidden costs include payment by the consumer to cosmetically correct physical damage caused by fluoride to the consumer's teeth.

10.1 There is an element of crime and corruption involved in the promotion of water fluoridation. This has been demonstrated by victimisation of campaigners and scientists in attempt to conceal the dangers of fluorides.

11.1 The Water Fluoridation Act 1985 was an example of how far a government will go to force it's will upon an unsuspecting population. The passage of the Bill was affected by a two-line whip being issued to compel some MPs to vote with the government.

11.2 Many MPs did not vote or attend the debates on water fluoridation in 1985, thus they neglected their moral responsibility to represent their constituents and protect them from exposure to fluoridated water.

11.3 The Water Act 2003. Many MPs have again disregarded the truth about water fluoridation by failing to properly research the subject.

12.1 The British Fluoridation Society (BFS) has received over £1 million of taxpayers money to promote water fluoridation.

12.2 The BFS have not provided an unbiased view on water fluoridation.

12.3 The BFS have been severely criticised for misrepresenting the outcome of the 'York Review' on water fluoridation (1999-2000).

13.1 There are wide-ranging vested interests in water fluoridation. Too much money has been invested in the image of fluoride to let it fail.

13.2 Those with an interest in the promotion of fluoride, or water fluoridation, include the phosphate fertilizer industry, the aluminium production industry, manufacturers of fluoridated toothpaste, career-minded MPs, opinion polling organisations, etc.

14.1 Endorsements of water fluoridation are usually contrived and/or based on limited evidence.

14.2 Some endorsements come from organisations with no experience of water fluoridation.

14.3 Endorsements are sometimes made by different organisations but which list have similar membership lists.

15.1 Water fluoridation is open to numerous legal challenges including those based on human rights.

15.2 In the early 1980s, a Scottish High Court ruling accepted that water fluoridation is a form of medication.

16.1 Fluoride accidents happen. Although they are openly reported in the USA, evidence of accidents in the UK are notoriously absent in the media.

16.2 One danger from fluoridated water is to those with impaired kidneys. A manufacturer of purification equipment for hospitals stated that he had never been asked to ensure that fluoride was removed from water. This is despite recognition of the dangers by the former DHSS.

16.3 Dialysis treatments can use in the region of 120 litres of water. This equates to a 'hit' of 120mg of fluoride in one treatment with water that has not been 'purified'. Even then, the patient will still be exposed to about 6mg of fluoride.

17.1 Dentistry has it's own 'secret society', namely the USA-based Delta Sigma Delta (DSD).

17.2 "Undergraduate Chapters are located in dental schools and Graduate Chapters are located throughout the United States of America, as well as Europe and Australasia. The Supreme Council is designated as the administrative or governing body of the fraternity."

"In Australia, ... during the past 20 years, all but two presidents of the Australian Dental Association have been members of the society, and three fifths of the dentists on the Federal Executive are members of this exclusive brotherhood. It's members also figure prominently on most Federal and State Councils of the Dental Association as well as State Dental Boards - the watchdogs of professional ethics. In Britain, it seems that there are fewer than 2,000 Delta Sigs, but some of the best known names in dentistry are members of this American secret society."