Chapter 13

A Brief History of Water Fluoridation in the UK

After America introduced water fluoridation in the 1950s, other English-speaking countries also started with, Canada, Australia and New Zealand soon becoming heavily fluoridated but, in the UK, there was an element of caution. The health department in the UK, The British Ministry of Health, the BMH, set up their own, water fluoridation trial. The four sites selected to be fluoridated, between 1954 and 1956, were; Watford, Kilmarnock, Andover and part of Anglesey, though the residents of these four towns were not informed. The areas selected as controls were Sutton, Ayr, Winchester and the remaining part of Anglesey. It was officially stated that the trials should include, *"full medical and dental examinations at all ages"*, but no medical examinations were done, and neither short-term nor long-term possible harms were explored.

The study lasted five years and data from five-year-old children collected. No consideration was given to the fact that teeth erupted more slowly into children's mouths in fluoridated areas and, in the time frame of five years, it was not possible to assess the impact that dental fluorosis would have on permanent teeth, or time to assess the possible adverse health effects. Despite the limitation of the trials, the health department concluded that the trials were successful in reducing tooth decay in young children.

In the 1980s, Dr John Yiamouyiannis looked at all the data from these four trials and disputed the findings of the health authority. He said that the trials were not a success and even failed to show a significant reduction in dental decay in the fluoridated towns when children's teeth were assessed in 1967.

Graphs, drawn from data obtained from the BMS, are provided in Yiamouyiannis' book as evidence for his conclusion. (1)

At the present time, none of the towns involved in the WF Trial fluoridate their water supply.

Andover ended fluoridating in 1958. A book has been written about the arguments within Andover Council over this practice before it ended.

Kilmarnock ceased fluoridating in 1962.

Watford ended fluoridation after 1967.

Anglesey ended fluoridating in 1991. It ceased fluoridation on the grounds that the Department of Health would not grant Welsh Water indemnity if a customer sued the company for criminal damage.

A few MPs and Lords were concerned over the speed of the WF trials and the possible roll-out of fluoridation schemes throughout the UK.

Lord Douglas of Barloch, concerned about mass medication being introduced via the public water supply, founded the National Pure Water Association (NPWA), in 1960. This was an independent non-profit organisation funded by members' subscriptions and donations. The NPWA's aim was to campaign for safe, non-fluoridated water, and to oppose the introduction of adding artificial fluoride to public water supplies in the UK. NPWA considered water fluoridation to be forced medication which contravened generally accepted principles of medical ethics, and violated the EU Convention on Human Rights and Biomedicine. If exposed to fluoridated water, vulnerable groups were in danger of ingesting more fluoride than is good for them, examples were babies whose formula feed is mixed with fluoridated water, kidney patients, thyroid patients, allergy sufferers and the elderly.

On March 6th1963, there was a short half-hour Parliamentary debate on the question of water fluoridation at which Mrs Joyce Butler, MP for Wood Green, spoke and addressed her concerns over adding fluoride to drinking water. Health was her main concern. Mr Bernard Braine, the Joint Parliamentary Secretary to the Minister of Health, responded, speaking for the introduction of WF and the benefits to children's teeth, as he understood it, assuring Mrs Butler that there were no harmful effects from ingesting fluoride at the levels proposed. Unfortunately, he quoted from data that Dr Yiamouyiannis found later was incorrect. The transcript for this debate on 6th March 1963 can be obtained from Hansard. (2)

However, after the water fluoridation trials were completed, WF became the responsibility of local councillors and not the government. In 1964, Birmingham's councillors were the first to vote for a fluoridation scheme for their area, with other areas, mainly in the North of England, following the same example, but public opposition was growing fuelled by the efforts of the NPWA.

For many years, the NPWA was instrumental in keeping water fluoridation from being the accepted practice in the UK, and it also helped to spawn other campaigning groups around the country. Jane Jones, Campaign Director for NPWA from1994 until 2004, brought the organisation world-wide recognition and was instrumental, in1996/7, in keeping Northern Ireland fluoride-free.

To combat this growing, organised opposition to water fluoridation, Dick Crossman MP, Secretary of State for Health and Social Services, founded the British Fluoridation Society (BFS), in 1969, and for many years those on the committee received a salary from the government. The BFS's main purpose was to push through water fluoridation schemes in the UK, and it soon became the governments 'think tank', on fluoridation.

But in 1974, only 10% of the population, living in England, were receiving water that had been artificially fluoridated so the Government took the responsibility for water fluoridation away from local councillors and gave it to their newly created Area Health Authorities (AHA). This new organisation was paid to do the government's bidding and with this change in place, a few more WF schemes were implemented and by the mid-1980s, nearly 11% of people in England were receiving fluoride in their water supply.

In Scotland, Mrs Catherine McColl from Glasgow, applied for an interdict, a ban, to restrain the Strathclyde region from being fluoridated. The hearings, held in the Edinburgh Court of Session, commenced on 23rd September 1980 and continued until 26th July 1982. The court sat on 201 days, making it the longest and costliest case in Scottish legal history. Mrs McColl sought to establish that fluoridation would have a large number of adverse side effects, and that it would be ineffective in reducing dental decay.

The Scottish judge, Lord Jauncey, finally pronounced that adding fluoride to drinking water was not the 'wholesome' water which water companies were regulated to provide, and was of no benefit to the toothless. This ruling brought water fluoridation in Scotland to an abrupt halt.

Because of the Scottish ruling, MPs became fearful that water fluoridation may not now be legal, and were concerned about repercussions in England and Wales. Parliamentarians, therefore, requested and subsequently debated, a new Water Act and Bill to make fluoridation 'legal'. There was fierce debate. Sir Ivan Lawrence MP led the view that fluoride should not be added to water supplies. He maintained that fluoride was toxic; adding it to water supplies was mass medication and not ethical, while adverse health effects had already been recorded by scientists. Sir Lawrence defended this position with scientific evidence and with strength and skill. His speech on the 5th March 1985, is the longest speech on record and contained arguments which were successful enough to cause doubt in the minds of many MPs who then decided not to vote on the Bill. The final count on the Water (Fluoridation) Bill in 1985 was:

MPs for fluoride – 165;

MPs Against fluoride - 82;

MPs who abstained (did not vote) 399, excluding the four Tellers.

On this count, it is clear that two-thirds of the British people were effectively disenfranchised on that day.

Had those MPs who abstained from voting followed their consciences and voted 'No', WF would have been halted and public water supplies would not have become a vehicle for medicating mass populations – something most people would see as an unethical and immoral practice in a democratic society.

Kenneth Clark MP, assured his fellow MPs that this new fluoridation Water Bill would not signal the start of any campaign to promote fluoridation. However, the Department of Health continued to fund the British Fluoridation Society with taxpayers' money, to promote it.

The new Water Fluoridation Bill, of 1985, stated that,

"Water companies 'may' fluoridate when requested to do so".

And it was the Area Health Authorities (AHAs) that had the power to do the requesting.

However, it was only when the new Water Industry Act of 1991 came into force, that 'hydrofluorosilicic acid', sometimes referred to as 'hexafluorosilicic acid', and 'disodium hexafluorosilicate', was mentioned and became legally, so lawfully, permitted as the fluoridating agent.

Despite the new laws, and the newly privatised water companies, the water companies themselves preferred not to add fluoride, even if 'requested to do so'. They knew that this hazardous chemical was prohibited from being discharged into the atmosphere, into waterways, or being sent to landfill sites because it contained prohibited poisons, later specified under the Deregulation Act, 2015, Schedule 21, Part 4. So, for them to add such a chemical to drinking water seemed paradoxical. They also knew that fluoride was hazardous to handle, caused corrosion to pipes, boilers, and equipment, and was expensive in the long term. (3)

Neither were water companies prepared to be liable for any health damages to their customers because of drinking water which contained these toxic chemicals.

The newly elected Labour Government of 1997, attempted, in 1999, to gain credibility and some semblance of neutrality, regarding the water fluoridation debate, and so commissioned, the University of York, to conduct a systematic review into the 'efficacy and safety' of fluoridating drinking water. The report came to be known as the 'York Review' and the findings were published in October, 2000, but the review was far from conclusive. The Panel selected was seen to be well-balanced for their opinions on fluoride, but with only 214 studies reviewed, and no animal and other important studies omitted, the report concluded that they were,

"Unable to discover any reliable good-quality evidence in the fluoridation literature world-wide.

"The evidence about inequalities in dental health was of poor quality, contradictory and unreliable."

Prof Paul Connett, in his long critique of the report said:

"It is quite a shock to find that a review looking at fluoridation has omitted the largest studies ever conducted on tooth decay: e.g. Teotia and Teotia, 1994, involving over 400,000 children; Colquhoun, 1994, involving over 47,000 children, and Yiamouyiannis' work of 1990, with over 39,000 children and looking at NIDR data"

In spite of this, many groups cite the York Review as evidence that fluoridation is 'safe and effective'. In an attempt to clarify the situation, Professor Sheldon, Chair of the York Review, responded by letter stating that:

"The review did not show that water fluoridation was safe," and, "The review found water fluoridation to be significantly associated with high levels of dental fluorosis, which was not characterised as 'just a cosmetic issue' and, where fluoridation was reported to help reduce tooth decay, this was by only 0.4 of one tooth per child on average, while many countries had found no appreciable difference between fluoridated and non-fluoridated areas."

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

"The review could come to no conclusion as to the cost-effectiveness of water fluoridation."

Professor Shelden, Chair of the York Review 2000.

In order to overcome the 'stalemate' situation, with water companies being reluctant to fluoridate, the health authority was restructured again. In 2002, AHAs were replaced by Strategic Health Authorities (SHAs) and another new Water Bill was debated in Parliament.

MPs were forceful in arguing that local communities should have the final decision regarding fluoridation but the BFS lobbied MPs to amend the bill to force water companies to fluoridate when, and if, asked to do so. Andy Burnham MP, previously a member of the BFS, used MPs' sympathies for local accountability and cleverly moved a motion on 02 December 2002, calling:

"... on the Government to give communities the power to choose water fluoridation (WF) by allowing an amendment to the Water Bill and obliging water companies to fluoridate (water) supplies where clear majority want it."

This motion succeeded and resulted in an important 'word' change in the new Water Act.

However, many MPs, remained worried about using the water supply for medicating the population and tabled the following motion in May 2003:

"That this House considers that the only chemicals which should be added to the public water are those which are essential for its purification for public consumption; believes that the addition of medicines to the public water supplies is a breach of fundamental human rights; and rejects any proposals to amend legislation to permit the addition of fluoride to public water supplies." (4)

This motion was signed by 96 MPs, one of whom was Boris Johnson who later became Prime Minister in July 2019, but the number of MPs voting for this motion was not enough to make a change.

The final outcome of the Water Act 2003 included a word change with an added, cleverly worded clause, on consultations. It stated that Water companies 'must' fluoridate if requested to do so, giving water companies no choice in the matter, and

"... a health authority (SHA) wishing to fluoridate a new area must hold a 'public consultation' exercise and take its outcome into consideration before proceeding with any new fluoridation scheme."

The word 'consideration' was to be the fatal flaw for communities, and was soon to prove difficult for the County of Hampshire.

Still for water companies, this word change from 'may' to 'must' was not enough – they insisted on civil and criminal indemnity if requested to fluoridate. In 2005, Parliament gave water companies absolute civil indemnity "and indemnity on strict criminal liability as far as public policy allows." (5)

The British Fluoridation Society (BFS), the pro-fluoride group, felt that they needed more scientific credibility to get their message across, so devised a plan, which began in 2004, when they received a further grant to set up the National Fluoride Information Centre (NFIC) at the University of Manchester. The aim of this new centre was to provide more information and 'clout' to the Strategic Health Authorities as they engaged with water companies regarding water fluoridation. However, this research centre given £125,000 a year by the DoH, was in fact little more than an unattended telephone-answering machine in a locked room in a stripped out and semi-abandoned building on the university campus, 'unfit for modern science'. NFIC was an empty shell, with maintenance staff having no idea it was supposed to be there. When this fraud was exposed to the government, the NFIC lost credibility and, by 2011, the government had surreptitiously ordered the demolition men in to shut it down, leaving the NFIC to be wiped from the academic landscape. However, the BFS which orchestrated the above deception, still remains, and continues to lobby the government and influence the dental department of the NHS in its effort to bring water fluoridation to all parts of England, but it no longer receives government grants, instead its funding comes from dental institutions and individual donations.

At the same time as the BFS was organising extra fluoride promotion, Hampshire was being targeted for water fluoridation (WF), by its newly appointed Strategic Health Authority (SHA) of 2003. The process officially began in 2008, after the Water Companies were given indemnity. A consultation exercise was undertaken in Hampshire, by both the SHA and by citizens. The people's vote resulted in 72% against WF, which the SHA 'considered' and ignored so a citizens' group took legal advice and went to court in 2011. The Judge ruled in favour of the SHA because the 2003 act stated that SHA only had to 'consider' the vote of the people not uphold it. Not deterred, the citizens' group considered further action.

This was becoming embarrassing for the government so in 2013, the Government decided to, once again, reorganise and restructure the management of the NHS. The Strategic Health Authorities were abolished and replaced by Public Health England (PHE) with – personnel and officers moving from one organisation to the other. The new organisation was given an extra benefit, – rather than having their staff based in hospital buildings, they were now based in rooms within the local council building. This meant that they were now seen as part of the Council, able to communicate with councillors more easily and readily able to better direct NHS policy more effectively. With this change carefully in place, local authorities, councillors, were again given the responsibility for water fluoridation schemes, but with the added clause that residents would be notified of any changes.

The disappearance of the SHAs resulted in Hampshire's court case of 2011, where the Judge ruled in the SHA's favour, becoming redundant and obsolete. Not prepared for another court case, the newly created PHE's dental department decided to stop pursuing fluoridation for Hampshire and instead, went to Hull and the North-East to expand fluoridation schemes and to Cumbria, to start a five year fluoridation project called CATFISH. This study, began in 2013, assessed the dental health of two cohorts of young children over a six/seven year period and again at 11 years. It compared children from fluoridated West Cumbria to children from the rest of Cumbria, which was fluoride-free.

"In West Cumbria, in 2014, the younger cohort were born when water fluoridation had been reintroduced in 2013 (meaning they had the full effect of water fluoridation) from conception. The older cohort was aged around five when fluoride was reintroduced into the water supply, which meant they mainly received the benefit for those teeth already in the mouth." (6)

The new regulation of 2013, caused Bedford Borough Council, fluoridated since 1971/2, to review the practice. The Bedford Scrutiny Committee looked at the issue seriously for two years and finally recommended to the Full Council to end the practice of WF. This recommendation was unanimously voted through in 2016, and the mayor promised that the old fluoridation contract of 1971/2 would officially come to an end to ensure that WF never returned. Bedford Borough no longer fluoridates its water supply though the old fluoridation contract stubbornly remains in place. PHE officials embedded within the Borough Council offices since 2013, and who had been given the responsibility of ending the 'fluoridation contract', are reluctant to end any fluoridation scheme or contract.

Local communities, even with PHE's officers 'snuggly' working inside councils, continued to oppose fluoridation and so on 6th July, 2021, the Government's 'White Paper on Health and Social Care Bill' proposed, in Clauses 128 and 129, (later moved to become Clauses 132 and 133), to bring water fluoridation once again under direct Government control, while promising this time, that local communities must have a 'consultation' before any new areas are fluoridated! However, both Matt Hancock and Sajid Javid, while being Secretary of State for Health, have indicated that these proposals, if passed into law, would ultimately lead to mandatory water fluoridation. Professor Chris Whitty, the Chief Medical Officer (CMO) for England, and the UK Government's Chief Medical Advisor, announced on 23rd September, 2021, in the Mail Online that it was the intention of the Department of Health and Social Care (DHSC) to fluoridate 100% of England and Wales from 2022 onwards.

2021 was to see two more important government changes.

1) On 1st October 2021, as part of a wider Government restructuring, the Office of Health Improvement and Disparities (OHID) was officially launched and Jonathan Marron became its Director General.

2) And on 1st October 2021, Public Health England (PHE) was dissolved. PHE's health protection functions were formally transferred into UK Health Security Agency (UKHSA), while its health improvement functions were transferred to the Office for Health Improvement and Disparities (OHID) at the Department of Health and Social Care (DH. SC), NHS England and NHS Digital.

The government's central fluoridation team from PHE moved into OHID, while the PHE staff working at the local level, within Council Offices, remained there. PHE officers, acting on behalf of the government, had become cleverly assimilated into local politics. They had become employees of their local Council, with the Council paying their wages as they worked on all aspects of health within the community.

In 2021, with the possibility that fluoridation could begin in numerous areas, R.I. Bland and G.M. Bland of Wrea Green, UK, asked the Government to fund training programmes for dentists so that they may recognise the expected increase in dental fluorosis, and to pay for the cosmetic repair work to restore fluorotic teeth. They wrote an article called, 'Fee for Fluorosis', which was published in the British Dental Journal, on 12th November, 2021. It said,

"We are convinced there will be an increase in the number of parents seeking advice and treatment for the condition. We would like to see the Department of Health offer training to practitioners in the diagnosis and treatment of fluorosis, particularly to those dentists and therapists currently operating outside of those areas that have fluoridated water supplies. Many of these practitioners will not have been trained in the minimally invasive techniques that are currently recommended to treat the condition."

and

"Will NHS dental practices be able to offer treatment for dental fluorosis of aesthetic concern? We envisage a potential widening of dental health inequality where those parents who can afford to will pay privately for the treatment of this condition and, for those who cannot, their children will be sadly left untreated."

On January 31st 2022, the House of Lords debated Fluoridation, where Lord Reay spoke against fluoridation. Lord Reay's brilliant and succinct speech ended by requesting that the two short clauses on WF be omitted from the White Paper. (see Appendix 8, to read his speech).

In March 2022, the OHID produced a 'Water Fluoridation Health Monitoring Report for England'. As expected, it supported previous reports and concluded that fluoridation was 'safe and effective', although in the concluding paragraph is the sentence:-

'This report alone does not allow conclusions to be drawn regarding any causative or protective role of fluoride'.

In April 2022, The White Paper, 'The Health and Social Care Bill', completed its passage through Parliament, and the two clauses in the Bill regarding Water Fluoridation were accepted (given Royal Assent) and became law. As proposed, this took the responsibility for fluoridation from local councils and gave it to the Secretary of State for Health while the newly formed OHID became the Secretary of State for Health's 'working arm' on the fluoridation issue.

On 14th November 2022, the CATFISH report was finally published. CATFISH was the name given to the five year, Cumbrian fluoridation project, which began in 2013. Its chief researcher, Michaela Goodwin said, in an interview, prior to its publication,

"The results are surprising in that the researchers concluded that WF is not as 'essential as it was in the 1950s when decay was so much higher. In fact, the reduction in dental decay in the fluoridated area of Cumbria was minimal. Consequently, other interventions to prevent dental decay should be initiated."

Fluoride Action Network (FAN) reported on the CATFISH project as follows;

"At the end of the CATFISH study, 1,444 five-year-olds who were part of the younger cohort and 1,192 eleven-year-olds who were part of the older cohort had taken part.

Dental teams carried out examinations on the children at regular intervals and took images of their teeth, blind to the fluoridation status of each participant to remove bias.

They also collected information about the children's diet, brushing habits and dental attendance. In the younger cohort, 17.4% of the children in fluoridated areas had decayed, filled or missing milk teeth; the number was 21.4% for children in non-fluoridated areas, amounting to a modest 4% reduction in incidence of caries in fluoridated areas.

In the older cohort, 19.1% of the children in fluoridated areas had decayed, filled or missing permanent teeth; with the number being 21.9% for children in non-fluoridated areas. As such there was insufficient evidence to say whether water fluoridation prevents decay in older children with only a minor difference of 2.8% being observed." (7)

However, Dr Chris Neurath, dentist and researcher in the USA, has suggested that: "The small dental and economic benefits found in the study may have actually been due to the disproportionate number of wealthy families in the fluoridated area who enrolled their children compared to in the non-fluoridated area, since it is well documented that wealthier groups have lower tooth rates of decay". "The fluoridated group in the CATFISH study had a much higher proportion of high-income families (40%) than the non-fluoridated (17%), yet income was never adjusted for in any analyses, which could account for the differences in decay between the two areas". (8)

(In the CATFISH project the slow eruption of teeth in fluoridated areas was not considered. The slow eruption of teeth into the mouth in fluoridated areas means that there are less teeth to be seen when dentists check for dental decay at the age of 5 years. The teeth that are slow to develop will have had less time to form decay when checked at a later age. Had the 'slow eruption of teeth' in fluoridated areas been taken into account the differences in decay between the two area could well have reversed.) Author's comment in parentheses.

See: Appendix 8 for Prof Paul Connett's concerns regarding the UK Government's rationale on water fluoridation

One question that still has to be answered, or resolved regarding the law, is the following:

'Is adding hydrofluorosilicic acid, H2SiF6, really lawful', as it contains hydrofluoric acid?

The Water Industry Act 1991, states that,

"Two compounds of fluorine are permitted for adding to drinking water – H2SiF6 and Na2SiF6."

However, fluorine as hydrofluoric acid, is not permitted in Primary Law. Moreover, hydrofluoric acid is a reportable poison (Deregulation Act, Schedule 21, part 4). As hydrofluoric acid is part of H2SiF6, water companies could still be in breach of the law by adding hydrofluorosilicic acid to the water when requested to do so. (9)

Summary of Events

1950s: America introduces water fluoridation and other English-speaking countries start to copy their example. In the UK, a WF trial is set up by the Health Department with four towns selected to start fluoridation and four towns selected as controls. The study lasts five years and data from five-year-old children's teeth is collected. In spite of the severe limitations of the trial, the Department of Health concludes that the trial is successful in reducing tooth decay in young children and proceeds to introduce water fluoridation into England.

1958: Andover ends water fluoridation

1960: Lord Douglas, concerned about mass medication via the public water supply, founds the National Pure Water Association (NPWA) as an independent, non-profit organisation. NPWA becomes a forceful organised opposition to WF.

1962: Kilmarnock stops water fluoridation.

1963, March 6th: There was a short half-hour Parliamentary debate when Mrs Joyce Butler MP spoke and addresses her concerns over the practice of introducing WF schemes and Mr Bernard Braine, the Joint Parliamentary Secretary to the Minister of Health responds, speaking for the introduction of WF.

1967: Watford ends water fluoridation, after1967.

1969: To combat a growing organised opposition to WF, the Labour MP Dick Crossman, Secretary of State for Health and Social Services, found the British Fluoridation Society (BFS) with the committee members, for many years, receiving a salary from Government.

1974: The Health Department is reorganised. Area Health Authorities (AHAs) are created which are to work locally. The AHAs have their staff based in rooms within or attached to the local hospital. This new body assumes the responsibility for WF schemes, not local councillors, as previously.

1983: Scotland fights to stay fluoride free with a Scottish Judge ruling, that adding fluoride to drinking water is not the 'wholesome' water which water companies are regulated to provide and is of no benefit to the toothless. This ruling brings WF in Scotland to an abrupt end, and Wales also remains fluoride free.

1985: Parliament introduces a new Water Bill and Act, which states that: "Water companies may fluoridate when requested to do so." But water companies themselves prefer not to add fluoride even if 'requested to do so'

1991: The Water Industry Act 1991 comes into force. Within this Act, 'hydrofluorosilicic acid', sometimes referred to as 'hexafluorosilicic acid', and 'disodium hexafluorosilicate', are officially, so lawfully, named as the fluoridating agents.

1991: Anglesey ends water fluoridation.

2002: The AHAs are replaced by the Strategic Health Authorities (SHAs), and a Bill starts through Parliament to change the wording of the previous Water Act of 1985. The Bill, in the new Water Act states that: "Water Companies 'must' fluoridate if requested to do so."

2003: The Water Act 2003 is passed into law. For water companies this word change is not enough – they insist on civil and criminal indemnity if requested to fluoridate.

2005: Parliament responds and gives water companies absolute civil indemnity "and indemnity on strict criminal liability as far as public policy allows."

2008 Hampshire is targeted by the SHA to introduce water fluoridation. This is strongly resisted by the local population and ends in a court case with the Judge favouring the SHA in 2011. The Judge says that the SHA only had to note and consider residents opinion, they did not have to be ruled by it - fluoridation could proceed.

2013: SHAs become Public Health England (PHE) and have their staff/officers based in the local council building rather than from a hospital building as previously. Local Councils and councillors, are again given the responsibility for WF schemes. Because of this organisational change, the Hampshire court case becomes obsolete and the newly formed PHE stops pursuing this particular issue.

2013: The CATFISH project in Cumbria commences. This is to be a five-year project to assess children's' teeth for decay between a fluoridated area and a non-fluoridated area. The North-East of England is targeted for fluoridation.

2016: Bedford councillors vote to permanently end their fluoridation scheme.

2021: On 6th July, the White Paper on Health and Social care is introduced to the House of Commons (Parliament). Within this paper are two clauses on 'water fluoridation', giving the responsibility for WF to central government.

2021, 1st October, The Office of Health and Disparities (OHID) is officially created and launched as part of a wider Government restructure. Jonathan Marron becomes the Director General for this Office.

2021, 1st October, Public Health England (PHE) is dissolved. PHE's health protection functions are formally transferred into UK Health Security Agency (UKHSA), while its health improvement functions are transferred to the Office for Health Improvement and Disparities (OHID) at the Department of Health and Social Care (DHSC), NHS England and NHS Digital.

2022: On 21st March, the OHID produces and publishes, a 'Water Fluoridation Health Monitoring Report for England'. As expected, this report concludes that fluoridation is 'safe and effective' although in the concluding paragraph is the sentence,

'This report alone does not allow conclusions to be drawn regarding any causative or protective role of fluoride'.

2022: In April, The White Paper, 'The Health and Social Care Bill' completes its passage through Parliament. The part of the Bill, regarding Water Fluoridation, is accepted and becomes law, which means that, the Secretary of State for Health now has the responsibility for water fluoridation. As the OHID was created the

previous year, this new organisation becomes the 'working arm' for the Secretary of Health, on the fluoridation issue.

2022: On 14th November, the report on the CATFISH project is published as a success for fluoridation. However, its chief researcher, Michaela Goodwin says, in an interview, prior to its publication,

"The results are surprising in that the researchers concluded that WF is not as 'essential as it was in the 1950s when decay was so much higher. In fact, the reduction in dental decay in the fluoridated area of Cumbria was minimal. Consequently, other interventions to prevent dental decay should be initiated."

(When consideration is given to the slow eruption of teeth into the mouth, in fluoridated areas, any 'minimal' reduction found in the CATFISH project would disappear.) Author's parentheses.

Chapter 13 References

(1) (Ref: 'Fluoride the Aging Factor' by J Yiamouyiannis, Pages 123/4).

(2) (Ref: Water Supplies 'fluoridation' Hansard, 6 March 1963).

(3) (Source: G. Waldbott documented the fact that boilers corroded faster in fluoridated areas compared to non-fluoridated areas; see pages 187-188 of his book "A Struggles with Titans").

(4) (An Early Day Motion – Fluoridation of Public Water Supplies EDM 1256: tabled on 20th May 2003).

(5) (Ref: 'One in a Million', Page 53).

(6) (Source: Paul Connett at FAN).

(7) (Source: Fluoride Action Network at www.fluoridealert.org).

(8) (Ref: www.fluoridealert.org).

(9) (Ref: Joy Warren, WMAF.org.- British Standard 12175:2013, p.7: a 3rd compound of fluoride, hydrofluoric acid, is added to drinking water when hexafluorosilicic acid or hydrofluorosilicic acid is used).