

Follow up to the Department of Health's response (21st June 2016) to a communication (19th May 2016) titled the "Constitutional Status of Water Fluoridation" from The National Fluoride Free Towns Project

The communication referred to above was the subject of acknowledgements or referrals to the Department of Health from the Department of An Taoiseach Mr Enda Kenny TD, An Tánaiste and Minister for Justice and Equality Ms Frances Fitzgerald TD, The Minister for Agriculture, Food and Marine Mr Michael Creed TD, The Minister for Children and Youth Affairs Dr. Katherine Zappone TD, The Chief Dental Officer and Assistant National Director – Oral Health Dr Dymphna Kavanagh, The Assistant National Director, Environmental Health Service – HSE Mr David Molloy, The Chief Executive Dental Health Foundation Ms Patricia Gilsean and both The Director of Food Science and Standards, Dr Wayne Anderson and The Chief Executive Officer, Dr Pamela Byrne of the FSAI (Food Safety Authority of Ireland)

The Minister's response though very welcome and appreciated unfortunately didn't either indicate the significant body of evidence presented would be accorded due consideration or indeed provide a referenced response. Moreover, the response and position statement issued by the Department appears to be a misrepresentation of various reports or reviews both The Expert Body on Fluorides and Health and the Department of Health consistently refer to as supporting grounds for the policy's continued sanction in recent years.

In light of the above, I present the following referenced refutation to the Department's position regarding CWF (Community Water Fluoridation) bearing in mind not one other European Union Member State enforces a similar mandatory policy due to health, environmental, legal or ethical concerns in the 21st century;

Preamble

Given Ireland is one of the few countries worldwide where the policy of CWF has been brought before the courts for judicial review^[1] (Ryan v Attorney General 1964), it is then important to accord consideration to legal aspects of the policy from the outset.

Though the legislation was cleared for enactment by the High Court and Supreme Court on appeal, it is important to note Justice Kenny (presiding over Ryan v AG 1964) rightly accepted that the decision of the Court would amount to no more than an appraisal of the evidence presented by the plaintiff and her (Gladys Ryan) legal team at the time whose temporary validity and future constitutional status was not guaranteed or absolute and thus, the Court's decision and the evidence presented would be open to challenge. Justice Kenny stated;

*'The constitutionality of a statute is, in many instances, determinable by a consideration and interpretation of the terms of the statute itself without reference to evidence as to their meaning and effect. Any matters necessary to elucidate its scope in such cases are matters of which the Court can take judicial notice. In the case of this Act, however, the Court is considering a statute which uses scientific terminology, deals with a scientific procedure and requires scientific knowledge to comprehend the effect of its provisions. These are not matters which are presumed to be within the knowledge of the Court, and, accordingly, the unconstitutionality of the Act, if it be unconstitutional, cannot be determined except by reference to the particular evidence which is furnished in the case. Since evidence may differ from case to case as scientific knowledge may increase and views of scientists alter, the Court's determination cannot amount to more than a decision that on the evidence produced the plaintiff has, or has not, discharged the onus of demonstrating that the Act is unconstitutional. **It is of importance that attention should be called at the outset to this aspect of the present case (my emphasis).'***

One of the primary contentions raised in the legal challenge by the plaintiff was that her right and that of her children to bodily integrity would be infringed upon as a result of CWF and in this regard it is important to note two points. Firstly, the right to bodily integrity did not formally exist in Bunreacht na hEireann before the case but consequently, was formally enshrined in the unenumerated Fundamental Rights of the Constitution or Article 40.3.1 which explains why every law student in Ireland would have heard of Ryan v AG 1964 since and secondly, Justice Kenny cleared the legislation for enactment and implementation on what could be deemed as a primary condition, insomuch, that the policy would not present harm or danger to "any" citizen, and if it so did, the legislation would be unconstitutional for which Justice Kenny paraphrased,

"If then the Act of 1960 imposes the consumption of fluoridated water on the citizens and if that is or may, as a matter of probability, be dangerous or harmful to the life or

health of any of the citizens, the plaintiff's right to bodily integrity would be infringed and the legislation would be unconstitutional."

Note: In relation to Justice Kenny's aforementioned statement, the plaintiff's right to bodily integrity was deemed to have been infringed upon not just in a situation where directly affected, but indirectly where any other citizen was affected as well.

Of further relevance to the aforementioned primary condition is that the legislation was also cleared for enactment on a further condition that no children would suffer fluorosis, damage or harm to their teeth which infers fluorosis (dental or skeletal) was deemed to constitute harm or an infringement of the right to bodily integrity.

Unfortunately, the aforementioned guarantees or conditions attached to the legislation have not been adequately monitored and upheld during the 50+ years of CWF in Ireland. The widely accepted and cited York Report[2] (2001) and Cochrane Review[3] (2015) estimate where water fluoride levels attain a concentration of 0.7ppm (below the current maximum permissible levels as legally mandated for in Ireland), some 40-42% of the population will suffer from dental fluorosis and 9-12% will have dental fluorosis with a severity level of "aesthetic concern" (approximately 2 million & 571 thousand citizens respectively according to the 2016 census). The IDA[4] (Irish Dental Association) have in the past reported similar levels of dental fluorosis where data from 2002 suggests approximately 37% of 15 year olds throughout the State suffered from dental fluorosis. Of further concern is that the Department in it's position statement on dental fluorosis, included below, indirectly acknowledges there are a significant proportions of the population suffering from dental fluorosis that do require treatment which directly contravenes conditions attached to the legislation as previously discussed.

Considered in a wider context, the evidence presented in this preamble indicates the legislation was cleared for enactment by the courts on the legal condition that no citizen would be harmed as a result of CWF, a condition that has been grossly infringed upon and overlooked according to prevalence levels of dental fluorosis now present amongst the general population that's directly attributable to fluoride in public water supplies.

Bearing in mind explicit conditions attached to the constitutionality of the Act have been grossly breached, it is clear the outdated and internationally isolated policy of mandatory community water fluoridation continues to be illegally sanctioned by the Irish Government with grave implications for public health and the Constitutional human rights of the People.

Refutation to Department's CWF position.

The following excerpts are sourced directly from the Department of Health's CWF position statement[5], issued (21st June 2016) in response to a communication titled "Constitutional Status of Water Fluoridation"[6] (19th May 2016), as referenced at the beginning of this document.

Dental Fluorosis

Department of Health / Paragraph(s) 1 & 2: Water fluoridation is the adjustment of a naturally occurring element found in water in order to prevent tooth decay. Dental fluorosis is the only known side effect of water fluoridation. At the levels of fluoride present in Ireland's water supplies any occurrence of dental fluorosis in most cases is only detectable by a dentist as faint white flecks on the surface of the teeth. In the majority of cases dental fluorosis generally does not require any treatment. This is in contrast to the treatment of tooth decay which may on occasion require complex interventions.

Fluorosis is an indicator of overall fluoride absorption from all sources. The Department of Health, in addition to monitoring the impact of water fluoridation on dental decay, has also rigorously monitored enamel fluorosis and responded to evidence of change in fluorosis levels. The Department is currently collaborating in a University College Cork-led research project, "Fluoride and Caring for Children's Teeth" or (FACCT). The study is considering the impact of changes on the oral health of children, following policy decisions relating to toothpaste use by infants and young children made in 2002 and the reduction in the level of fluoridation in drinking water in 2007. Early results from the study show that at 5 years of age 60% of children have no caries. While the results are generally positive, there remain oral health differences between fluoridated and non-fluoridated communities.

Refutation: As previously raised, attention must be drawn to the Judgement (Ryan v Ag 1964) where fluorosis was deemed to constitute harm or an infringement to the right of bodily integrity and secondly, that the legislation would be unconstitutional if any damage or harm would be posed to the health of "any" citizen as a result of the legislation.

Contrary to the High Court's position on fluorosis, regulatory authorities currently state "dental fluorosis is a cosmetic or aesthetic condition which refers to the way teeth look; it is not considered to be an adverse health effect." Also at odds with the Department's position is that dental fluorosis in the conclusions of the European Commission sanctioned SCHER Report[7](2011) was identified as an "adverse effect" directly attributable to fluoride exposure during the developmental stages of tooth development which the Report further found occurred in utero (during pregnancy) for the primary dentition and post partum (after birth) for the permanent dentition. Of significance is that in utero fluoride exposure attributable

to the maternal fluoride intake appears to be directly responsible for primary dentition fluorosis which in turn, appears to be a fluoridation induced birth defect. This same point was forwarded to various Government Departments and relevant State Agencies during the Autumn of 2015 for which former Government Ministers gave conflicting responses.

Former Minister for Health, Mr Leo Varadkar TD the 14th December 2015 acknowledged findings of the SCHER Report that suggested primary dentition fluorosis does occur in utero where he stated, “Fluorosis can occur during the developmental phase of the teeth. The SCHER Report refers to 4-6 months in utero as a critical phase in the pre eruptive development of deciduous teeth and a critical phase for dental fluorosis” whilst to the contrary his former counterpart, the former Minister of State at the Department of Health, Ms Kathleen Lynch in responding to a Parliamentary Question[8] rejected claims attributed to the European Commission sanctioned SCHER Report suggesting primary dentition fluorosis was a birth defect.

Notwithstanding the positions adopted by the former Ministers at the Department of Health, it is pertinent that the FSAI (Food Safety Authority of Ireland) have in September 2016 indicated their Scientific Committee are now investigating the effect that in utero fluoride exposure has on the amelogenesis (enamel) formation stage of primary dentition that occurs during foetal development[9] which the Cabinet of the European Commissioner Mr Vytenis Andriukaitis for Health and Food Safety is also considering (October 2016). Given the widely contrasting opinions held in this regard and in light of widespread evidence including findings of the European Commission SCHER Report (2011) amongst other authoritative sources that support the conclusion that primary dentition fluorosis is a fluoridation induced birth defect, to seek clarity, a consensus opinion on the matter has been requested from various representatives of the dental profession in Ireland.

The assertion by the Department that it has “rigorously monitored enamel fluorosis and responded to evidence of change in fluorosis levels,” deserves further scrutiny. According to the FF Report[10] (Irish Fluoridation Forum Report, 2002), the sole purpose for reducing fluoride quantities added to public water supplies in 2007 was to reduce incidence levels of dental fluorosis amongst the general population. Given some 40 – 42% (York Report 2001 and Cochrane Review 2015) of the population will suffer from dental fluorosis where fluoride concentration levels are set at 0.7ppm, it must therefore be asked, what reductions of dental fluorosis prevalence levels amongst the general population were committee members of the Fluoridation Forum (2002), The Expert Body on Fluorides & Health and the Department of Health hoping to achieve bearing in mind the York Report (2001) was published a year before the the FF Report.

In relation to the FACCT Study for which the Department of Health is collaborating with UCC, ethical considerations requiring clarification in relation to the same study arise from what appears to be the intentional practice amongst research teams conducting fieldwork as part of the study handing out free tubes of fluoridated

toothpaste to schoolchildren bearing in mind top dental experts[11] in the country have attributed fluoridated toothpaste as a cause of dental fluorosis amongst “small children”. Requiring further clarification is whether the FACCT study is considering the effect in utero fluoride exposure has on overall incidence levels of dental fluorosis in young children noting authors of the Department of Health supported Cork Study[12] (2005) which found 32% of infants reared in fluoridated areas of Cork City and County had suffered fluorosis to their primary dentition also omitted to consider the effect in utero fluoride exposure has on the amelogenesis stage of dentition formation during foetal development.

In relation to the Department’s initial statement, “(dental fluorosis) in **most** cases is only detectable by a dentist as faint white flecks on the surface of the teeth. In the **majority** of cases dental fluorosis generally does not require any treatment,” some clarity must be sought on what the Department’s position is in relation to those citizens whose dental fluorosis is visible and discernible to an untrained eye or the general public and secondly, to those whose dental fluorosis does require corrective treatment bearing in mind the legislation was implemented on the basis that no citizen would suffer any damage or harm where fluorosis was deemed to constitute harm or an infringement of the right to bodily integrity where in contrast, modern scientific appraisal indicates that at current fluoride levels (York & Cochrane Report / water fluoride concentration 0.7ppm) it is estimated some 42% of the population (2 million citizens / 2016 census) will suffer from dental fluorosis and up to 12% (571 thousand citizens / 2016 census) will suffer from dental fluorosis with a severity level of “aesthetic concern”.

With regards the Department’s statement above in relation to dental decay, “While the results are generally positive, there remain oral health differences between fluoridated and non-fluoridated communities”, it is worth noting the SCHER Report (2011) cited data indicating “*that independent of the fluoridation policies across the EU Member States, there has been a consistent decline over time in tooth decay in 12 year old children from the mid-1970s, regardless of whether drinking water, milk or salt are fluoridated.*”

2 – Fluoride Dosing and Equipment Reliability

Department of Health / Paragraph 3: The legislation on water fluoridation requires that a daily test be carried out at water treatment plants by the local authority water services staff. Monthly fluoride testing is carried out by the HSE and the EPA also carries out testing which requires monitoring of fluoride levels in water supplies. If the fluoride levels are found to be outside the range specified in the legislation, those responsible are notified, prompt adjustments are made to the dosing equipment and a new test carried out.

Refutation: The issue of fluoride dosing equipment reliability is brought into question by the Department's acknowledgement that fluoride concentrations are known to be exceed statutory limits. This same point was raised in the FF Report (2001) where 5% of water supplies were found to be consistently overdosed.

Of further concern is that the FSAI (Food Safety Authority of Ireland) in the FF (Irish Fluoridation Forum) Report (2002) recommended unreliable fluoridation equipment be decommissioned to prevent the risk posed to the general public or vulnerable sub groups of the population suffering from dental fluorosis yet no ameliorative action has been taken by The Expert Body according to responses issued to FOI requests on the matter. The same issue of equipment reliability was also casually raised in the legal challenge of 1964 and was assumed to be reliable yet over half a century later, it appears and as noted in the FF Report, "the technical requirements of staying within this range are very demanding, especially in the case of smaller water treatment plants. The fluoride monitoring results indicate that the levels of fluoride can be higher than desirable from some of these plants."

The Department's position in relation to fluoride dosing equipment appears to omit to consider the legal implications of citizens receiving more than the legally permissible dose due to equipment unreliability which again brings into question the legality of CWF.

3 - Mass Medication / Food Fortification

Department of Health / Paragraph 4: In the case of *Ryan v Attorney General* (1964) the Supreme Court did not accept that the fluoridation of water was, or could be described as, the mass medication or mass administration of "drugs" through water. The Health Products Regulatory Authority (HPRA) is the competent authority for the licensing of human and veterinary medicines and medical devices in Ireland. The HPRA considers that neither drinking water itself nor the fluoride added to drinking water in the form of fluoride salts or silica fluoride, as defined in the Health (Fluoridation of Water Supplies) Act 1960, should be categorised as medicinal products. The HPRA considers that the fluoridation of drinking water should be seen as a measure consistent with general public health management. Fluoridation can be likened to adding vitamin D to milk or folic acid to cereals.

Refutation: The Department's stated conclusion of *Ryan v AG* (1964) does not address the basis for Justice Kenny's position who concluded that referring to fluoridation as "mass medication" as such "was a misuse of words" which was primarily based on the findings of a commission of enquiry set up by the New Zealand Government in the 1950's which advised "fluoride is not a drug but a nutrient and fluoridation is a process of food fortification". To the contrary, the European Commission sanctioned SCHER Report (2011) in addition to other

authoritative sources on the matter have found, *“Fluoride is not an essential element for human growth and development, and for most organisms in the environment”* which renders the Department’s position invalid indicating CWF is now technically the mass administration of drugs or medicine through the country’s public water supplies.

The HPRA’s position on medicinal products to which the Department refers above appears to be invalid and incorrect after consideration of The Nuffield Council on Bioethics Report[9](2007) to which The Expert Body cites on the FAQ section of it’s website. The same Report found,

“The legal situation is that while in principle drinking water is considered a food, the addition of fluoride is not considered a food supplementation process. This is because, from a legal viewpoint, water provided by the local water supply is only considered a food once it emerges from the “taps” that are normally used for human consumption, and because water is not considered a food at the point at which fluoride is added, the process is not considered supplementation of food.” (The relevant European Directives 178/2002[13] and 2001/83[14] are raised below)

Given fluoridation of drinking water supplies at source or a treatment plant cannot be legally considered a process akin to food fortification, the HPRA’s assertion that drinking water with fluoride added to it should not be categorised as a medicinal product needs to be addressed. If therefore, the addition of fluoride to water does not fall under the classification as a food product to which is inferred, it (fluoridated water) can only then be regulated under medicinal products legislation which seems logical as the policy of CWF is explicitly implemented with the express intention of reducing incidence levels of dental caries (a human disease) throughout the State.

Article 1 of EC Directive on Medicinal Products (2001/83) in defining what constitutes a medicinal product states,

2. Medicinal product:

(a)Any substance or combination of substances presented as having properties for treating or preventing disease in human beings;

or

(b)Any substance or combination of substances which may be used in or administered to human beings either with a view to restoring, correcting or modifying physiological functions by exerting a pharmacological, immunological or metabolic action, or to making a medical diagnosis.

Of further relevance is the case “HLH Warenvertriebs GmbH and Orthica BV v Bundesrepublik Deutschland[15] (2005)” where the ECJ (European Court of Justice) provided clarification as to whether a product ought to be defined as a food or

medicinal product and thus set a precedent to be considered where a conflict may arise in the future regarding the interpretation of multiple EU Directives. The ECJ (First Chamber) stated,

“Directive 2001/83 thus provides two definitions of medicinal product: one definition 'by presentation' and another definition 'by function'. A product is a medicinal product if it comes within one or other of those two definitions.”

And,

*“The pharmacological properties of a product are the factor on the basis of which the authorities of the Member States must ascertain, in the light of the potential capacities of the product, whether it may, for the purposes of the second subparagraph of Article 1(2) of Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use, be **administered** (my emphasis) to human beings with a view to making a medical diagnosis or to restoring, correcting or modifying physiological functions in human beings. The **risk** (i.e. dental fluorosis / my emphasis) that the use of a product may entail for health is an autonomous factor that must also be taken into consideration by the competent national authorities in the context of the classification of the product as a medicinal product.”*

In the same case, the ECJ reiterated the point that medicinal products legislation takes precedence over food products legislation by citing Article 2.d (Directive 178/2002) which states,

‘Food’ shall not include: (d) medicinal products within the meaning of Council Directives 65/65/EEC (1) and 92/73/EEC (2) (The aforementioned Directives have now been codified and replaced by EC Directive 2001/83 and as amended by EC Directive 2004/27)

And,

Article 2 of EC Directive 2001/83 which states,

‘In cases of doubt, where, taking into account all its characteristics, a product may fall within the definition of a "medicinal product" and within the definition of a product covered by other Community legislation the provisions of this Directive shall apply.’

To summarise the provisions in relevant legislation that point towards the incorrect legal classification of CWF by regulatory authorities;

1 - Drinking Water Directive 98/83, Article 3.1 exempts waters within the meaning of a medicinal product falling under the remit of the Drinking Water Directive.

2 - The Food Safety Directive 178/2002 is not relevant for the purposes of

classifying artificially fluoridated water as raised by the Nuffield Report.

3 – Artificially fluoridated water, “industrially produced” for the express intention of treating a human disease can only therefore fall within the definition as provided for by the European Medicinal Products Directive 2001/83 Article 1.2 bearing in mind Article 2.1 of the same Directive in providing for a scenario where products may appear to fall under varying definitions, the Medicinal Products Directive shall take precedence.

In light of the above, it’s quite clear the Department’s position in relation to the contentions of “mass medication”, “medicinal products classification” and “food fortification”, relying on at times, the interpretations or opinions of third parties, are a misinterpretation of various judgements, reports and or relative legislation referred to as raised in this aforementioned section.

4 – Human Rights

Department of Health / Paragraph(s) 5 & 6: The Nuffield Council on Bioethics in the United Kingdom, to you refer, published a landmark report on ethical issues in public health in 2007. It recognises the tensions between protecting personal autonomy and promoting the welfare of all. To quote from the report:

“From an ethical and practical standpoint, an important dimension of public health policy is therefore to balance the liberal emphasis on choice and autonomy with the imperative to support those who do not have the opportunities to choose because of, for instance, poverty or dependency.”

Given that fluoridated water does not smell or taste differently from un-fluoridated water, the “freedom of choice” argument is essentially a debate about whether individuals who have a personal preference not to drink water containing 0.6 - 0.8 parts per million of fluoride should be able to prevent the rest of society enjoying the considerable benefits afforded by fluoridation. It is the view of the government that the common good should prevail.

Refutation: The primary human rights implications arising as a consequence of CWF are involuntary medication, the right to bodily integrity or Article 40.3.1 and more recently, the rights of the unborn or Article 40.3.3. These three aforementioned human rights considerations have been raised throughout the “dental fluorosis” and “mass medication” sections of this refutation but to briefly summarise.

In direct contravention of conditions attached to the legislation that no harm would be done to any citizen where fluorosis was deemed to constitute harm or danger, an estimated 2 million citizens of the current population are reckoned to suffer from

dental fluorosis where another 571,000 are estimated to suffer from dental fluorosis with a severity level of “aesthetic concern”. Of further concern is that primary dentition fluorosis appears to be the result of the maternal fluoride intake that crosses the placenta therefore effecting the amelogenesis (enamel) stage of tooth formation that occurs during foetal development, a viewpoint that is backed up by findings of the European Union SCHER Report amongst other authoritative sources further noting the FSAI (Food Safety Authority of Ireland) have now indicated their Scientific Committee and the Cabinet of the European Commissioner Mr Vytenis Andriukaitis for Health and Food Safety are investigating the matter. Additionally to the aforementioned is that the HPRA’s appraisal of fluoridated water in relation to European Union medicinal products legislation appears to be a misinterpretation of various legislation referred to, which the Department relies on in conjunction with the compounded misinterpretation of relevant sections of the Judgement (Ryan v AG 1964), inferring that the fluoridation of drinking water supplies in the 21st century does indeed result in the illegal involuntary medication of the Irish population through the country’s public water supplies and by default, the national food chain.

As a result of the aforementioned, it’s clear that the human rights implications of CWF have not been fully recognised and thoroughly addressed by the Department of Health and that a public health, human rights and Constitutional crisis arises as a result of the policy for failure on behalf of regulatory authorities to adequately assess the judgement (Ryan v AG 1964) and the policy in it’s own right for all risks posed to the general Irish population including the unborn and by simply attempting to pass off the human rights implications of CWF as a “freedom of choice” argument is a questionable derogation of the Department’s responsibility to fully consider the multiple human rights implications of CWF including involuntary medication as well as violation of the right of citizens and the unborn to bodily integrity or Articles 40.3.1 and 40.3.3 of the Irish Constitution as raised in this document and others in the past.

5 – The SCHER Report (2011) & The Precautionary Principle

Department of Health / Paragraph 7: The European Union Scientific Committee on Health and Environmental Risk (SCHER) conducted a review, to which this Department contributed. Its report, published in 2011, concluded that there are no known negative health implications from fluoridating water at levels used in the EU. With regard to the Precautionary Principle, the European Union states that this Principle cannot be used to make simple arbitrary decisions in the manner suggested, but may only apply when three primary criteria are met, concerning the identification of potentially adverse effects, the evaluation of the scientific data available; and the extent of scientific uncertainty. It is noteworthy that, following the SCHER report, neither SCHER nor the EU Commission has stated that the Precautionary Principle should be invoked in relation to water fluoridation.

Refutation: The SCHER Report (2011) as referred to was an important document relating to CWF both in findings and conclusions. The Department's assertion that the Report "concluded that there are no known negative health implications from fluoridating water at levels used in the EU" is blatantly false misleading. No such statement is included in the Report.

The Report does however make 13 conclusions one of which explicitly refers to dental fluorosis as an "adverse effect". In addition to a number of other findings raised in the Report deserving of consideration is the effect that in utero fluoride exposure has on the primary dentition which is addressed and dealt with in detail under the "dental fluorosis" section of this document.

With regards the prerequisites required for the Precautionary Principle to be invoked which the Department raises, namely, that 3 primary criteria must be met including the identification of potentially adverse effects, the evaluation of the scientific data available; the extent of scientific uncertainty, it is noteworthy that in the case of CWF, all 3 criteria are met including;

Potential Adverse Effects – Dental Fluorosis

Scientific Data – Findings in the SCHER Report (2011) amongst other sources indicate primary dentition fluorosis is a fluoridation induced birth defect which the FSAI are now investigating

Scientific Uncertainty – Regarding the scientific (un)certainly surrounding the biological mechanisms through which dental fluorosis occurs, it is noteworthy that the European Union SCHER Report (2011) reported *"Fluorosed enamel is composed of hypomineralized sub-surface enamel covered by well- mineralized enamel. The exact mechanisms of dental fluorosis **development have not been fully elucidated.** It seems that fluoride systemically can affect the ameloblasts, particularly at high fluoride levels, while at lower fluoride levels, the ameloblasts may respond to the effects of fluoride on the mineralizing matrix"* (Bronckers et al. 2009).

In light of the above, it appears there is a clear case for invoking the Precautionary Principle in relation to CWF and immediately repealing the outdated legislation.

6 – The HRB Review (2015)

Department of Health / Paragraph 8: The Department of Health keeps the policy of water fluoridation under constant review. As part of this ongoing work, a review of evidence on the impact of water fluoridation at its current level on the health of the population was conducted by the Health Research Board (HRB) on behalf of the Department. This review was published by the HRB in June 2015. The HRB has

found no definitive evidence that community water fluoridation is associated with negative health effects.

Refutation: The HRB Review[16] (2015) was a very welcome development when announced on behalf of the former Government by former Minister for Agriculture, Food and the Marine, Mr Simon Coveney TD, at Cork County Hall on the 10th March 2014 to County Councillors for which I was also briefed by the Minister. The Review unfortunately fell short in fulfilling the independent brief initially accorded to it. Though the conclusion cited by the Department above is correct, the Report committee members for unknown reasons were explicitly prevented from examining the evidence documenting the effects of CWF on dental health which naturally prevented the issue of dental fluorosis and specifically, primary dentition fluorosis, which looks to be a consequential fluoridation induced birth defect, from being examined. The same omission has been acknowledged by The Expert Body amongst others as previously raised in my letter of 19th May 2016. For obvious reasons this review was therefore not independent or comprehensive in its scope and a second independent review is now warranted given ongoing and continued widespread public and political opposition to the policy. I note The Expert Body have made similar recommendations[17] for an additional review on a number of occasions in 2016 to the Department of Health.

Refutation Conclusion:

The Department of Health's position on the advice and counsel of The Expert Body on Fluorides and Health in relation to mandatory CWF in Ireland has changed very little, if any over the past two to three years for which I and no doubt many others have conveyed a significant body of evidence which appears to be continually disregarded. This is apparent through appraisal of responses issued directly to myself and to public representatives who've been concerned enough and who on their own initiative, have made representations on my behalf to the highest levels of Government regarding the matter.

Moreover, the Department of Health's position statement (June 2016) is quite clearly a partial and subjective misrepresentation of various reports or reviews regularly referred to as supporting grounds for the continued implementation of CWF in Ireland which appears to be the primary source of widespread violations and infringements to the rights of the unborn and individuals to bodily integrity and where applicable, informed medical consent.

Justice Kenny (Ryan v AG 1964) indicated if "any" citizens were harmed for which fluorosis was deemed to constitute harm, then the legislation would be unconstitutional. In 2016, over half a century since the constitutional challenge, it is of serious concern that conditions attached to the legislation fail to be upheld and

implemented which were the primary benchmarks on which the safety of the policy was assumed and as a consequence of this oversight or lack of, some 42% of the population (2million citizens) are estimated to suffer from dental fluorosis noting primary dentition fluorosis appears to be a fluoridation induced birth defect.

The common good in relation to this matter regrettably continues to be undermined and brought into disrepute by the Government's isolated position within Europe of enforcing a mandatory policy aimed at reducing dental caries throughout the State. It is therefore without doubt that the policy of mandatory Community Water Fluoridation in Ireland in 2016 is both illegal and unconstitutional.

I encourage and welcome all critical review and feedback for this referenced refutation.

Yours sincerely,
Owen Boyden

Director: The National Fluoride Free Towns Project

References:

- [1]
<http://www.supremecourt.ie/supremecourt/sclibrary3.nsf/pagecurrent/9FA0AA8E8D261FC48025765C0042F6B3?opendocument&l=en>
- [2] <http://www.nhs.uk/conditions/fluoride/documents/crdreport18.pdf>
- [3] http://www.cochrane.org/CD010856/ORAL_water-fluoridation-prevent-tooth-decay
- [4]
http://www.dentist.ie/_fileupload/JIDA/pdfs%20of%20Journal/2012/2012%20-%2058%20No_%203%20-%20June%20July%20-%20FlourideSupplement.pdf
- [5] Minister for Health's CWF Position issued 21st June 2016
- [6] Correspondence from Fluoride Free Towns titled "Constitutional Status of Water Fluoridation" to relevant Government Ministers and all members of Dail Eireann
- [7]
http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_o_139.pdf
- [8]
<http://oireachtasdebates.oireachtas.ie/debates%20authoring/debateswebpack.nsf/takes/dail2015111700070?opendocument#WRS02000>
- [9] Correspondence received from the FSAI September 2016
- [10]
http://www.fluoridesandhealth.ie/download/documents/fluoridation_forum.pdf
- [11] <http://www.irishtimes.com/opinion/letters/water-fluoridation-1.1951487>
- [12] <http://admin.ejpd.eu/download/2005-03-07.pdf>
- [13] <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32002R0178>
- [14] http://ec.europa.eu/health/files/eudralex/vol-1/dir_2001_83_consol_2012/dir_2001_83_cons_2012_en.pdf
- [15]
<http://curia.europa.eu/juris/showPdf.jsf?jsessionid=9ea7d0f130d5eb685a48efdb4>

[80787218996596bcca7.e34KaxiLc3eQc40LaxqMbN4Pa3qRe0?text=&docid=58348
&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=823614](http://www.hrb.ie/80787218996596bcca7.e34KaxiLc3eQc40LaxqMbN4Pa3qRe0?text=&docid=58348&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=823614)

[16]

http://www.hrb.ie/uploads/tx_hrbpublications/Health_Effects_of_Water_Fluoridation.pdf

[17]

http://fluoridesandhealth.ie/download/pdf/plenary_minutes_november_10th_2015.pdf