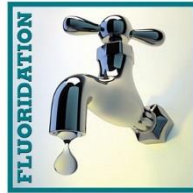


# MCS/ES Info

Water fluoridation has been a controversial topic for many years.



In this enlightening article Sarah Weston explores the history of this chemical and where we are at with the latest government plans.

Water fluoridation is defined as 'the controlled addition of fluoride to a public water supply to reduce tooth decay.'

The target concentration of water fluoridation schemes is 1mg/litre, sometimes expressed as one part per million (1ppm). The World Health Organisation (WHO) recommends a maximum level of 1.5mg of fluoride per litre of water.

The added fluoride is not pharmaceutical grade (unlike that in toothpaste). It is hexafluorosilic acid- an industrial waste product from the phosphate fertilizer industry.

Adding fluoride to water is a controversial issue. There are mixed views as to its value, and much opposition. Currently in the UK, about 10% of the population lives in artificially fluoridated communities, and no areas have been added since the late 1980s.

In 2021, the government put forward a bill which seeks to expand the rollout of water fluoridation throughout the whole of the UK.

To ensure this, the government wants to change the law to cut out Local Authorities from the decision-making process. (Health and Care Bill, 2021, Clauses 163-164).

The argument for fluorinating water by those in favour of it, is that it helps with tooth decay although this is disputed by those that oppose it. There were approximately 37,000 hospital admissions of children to extract decayed teeth in 2019-20. The estimated cost to the NHS of all tooth extractions in children is £50 million per year, most of which were due to avoidable tooth decay.

There is an argument that water fluoridation particularly helps children in poorer communities who have less access to healthcare and good diets. Hospital-based tooth extractions are overwhelmingly based in the most deprived populations, with children in the most deprived quintile over three and a half times more likely to require hospital-based tooth extractions than the least deprived quintile.

However, a review in 2015 by Cochrane found there was 'no strong evidence that fluoridation reduced tooth decay in adults; no strong evidence that tooth decay increased when fluoridation was halted in a community; and, contrary to claims from promoters that fluoridation helps low-income children'; it concluded; 'There is insufficient evidence to determine whether water fluoridation results in a change in disparities in caries levels across socioeconomic status'.

There was also research carried out in the USA by Brunelle and Carlos about the claimed effects

of fluoride on dental decay. They examined 39,000 children aged 5-17 in 84 communities in the USA. One third where water was totally artificially fluorinated, one third where it was partially fluorinated and one third was not fluorinated. They reached the conclusion that artificial fluoridation had saved, at most, 0.6 of tooth surface from decay. This is not statistically significant as there are 128 tooth surfaces in a child's mouth.

There are other programs which have used other methods to prevent tooth decay and which have been very successful. For example, in Scotland, a programme called Childsmile, provides 'early education on both dental hygiene and diet. It involves both school and parents and has proved successful and cost effective. Not only has dental decay been reduced but the overall health in terms of fighting sugar consumption and obesity has been improved.'

97% of western Europe has rejected water fluoridation and fluoride is 'considered a medicine by WHO'.

People who oppose it point to studies which show 'many health issues...dental fluorosis, osteoporosis, depression, hyperthyroidism, IBS, ADHD and others'

In areas where there is water fluoridation. A study in 2015 by Professor Stephen Peckham, showed that incidences of hyperthyroidism are nearly twice as likely to report high prevalence in the West Midlands, which is a fluorinated area, in comparison to Greater Manchester.

There is also an association between increasing levels of fluoride in water and dental fluorosis (Decoloration of teeth) Public Health England's (PHE) 2018 health monitoring report describes a study of children undertaken living in fluoridated and non-fluoridated areas: 'The prevalence of fluorosis was greater in the fluoridated cities (61%) compared to the non-fluoridated cities (37%).'

In his recent speech to the House of Lords in January, Lord Reay stated: 'When it is carried through the water supply, there is no individual choice and the ingested fluoride goes to every tissue in the body, including those of the unborn child. This is particularly important for lower- income families, who cannot take avoidance measures such as bottled water or filters. Moreover, there is no assessment of individual health, size, dose, physical and mental state. Contrary to the direction of modern medicine, whereby treatments are increasingly tailored to the individual, water fluoridation is a crude, one-size -fits-all strategy'.

There is also the argument that adding fluoride to water is harmful to the environment and would further pollute British waters. Lord Reay states that only about '2% of the water supplied by water companies is consumed by domestic users'. The rest re-enters waterways 'with the potential for damaging plant and aquatic life and entering the food chain. Under the EU dangerous substances directive, fluorides are classified as deleterious to the aquatic environment...in addition to the toxicity of itself, contaminants such as lead and arsenic are often present in the industrial-grade fluoridation chemicals used. These frequently derive from the hazardous waste of the phosphate fertiliser industry'.

Water fluoridation is a controversial issue with deeply opposing opinions. If the current government has its way we might all be forced into drinking fluorinated water which may not be the best for our health and the health of our children. MCS-Aware has written to their MP expressing concern about universal enforced, water fluoridation.

Reproduced from Autumn/Winter MSC Aware magazine

