

Foreword by Dr Poul Erik Petersen



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Water fluoridation has been recognised by the World Health Organisation (1) and other international health bodies (2,3) as a safe and effective means of reducing the prevalence and severity of tooth decay across whole populations.

As recently as 2007, the 60th World Health Assembly called on countries that have not yet established fluoridation schemes to consider doing so (4).

Since 2000, three systematic reviews of the worldwide scientific evidence have highlighted the dental benefits of fluoridated water for children (5,6,7). A fourth review demonstrated benefits for adults who have lived all their lives in fluoridated areas (8).

Broadly speaking, tooth decay follows a familiar pattern of many diseases – it affects people from the most socially deprived sections of the community more than those from the most affluent.

Sadly, even in the 21st century, significant oral health inequalities persist in many countries, including the UK. Indeed, it is important in developing appropriate dental health promotion strategies to look beyond national data on tooth decay rates and to focus more on regional and local figures.

Some studies suggest that water fluoridation helps to reduce the inequalities in dental health that are otherwise commonly found in non-fluoridated communities (9, 10, 11, 12, 13). Furthermore, we know that the children who benefit most from this public health initiative are those with the highest rates of tooth decay before it is introduced.

The world's first water fluoridation scheme started 66 years ago in Grand Rapids, Michigan. It was a bold and successful attempt to replicate the dental health benefits observed by public

health researchers in areas where the concentration of naturally occurring fluoride in water supplies was around one part of fluoride per million parts of water.

Since then, thousands of other communities around the world have followed suit. Today, an estimated 370 million people drink artificially fluoridated water. New schemes continue to be implemented.

It is notable that a number of countries where fluoridation has been practised for a very long time, including the United States (14), Brazil (15,16) and Australia (17,18), have seen major extensions of those programmes over recent years. This, I believe, underlines the confidence which their respective governments and public health organisations have in the efficacy and safety of fluoridation.

It is against this background that I am especially pleased to have been invited to write the foreword to this, the third issue of *One in a Million*, which has been researched and written by the British Fluoridation Society.

This publication deals comprehensively and authoritatively with many different aspects of water fluoridation. As readers will see, there are sections covering the evidence base regarding benefits and safety; cost-effectiveness; the extent of fluoridation in the UK and other countries; support for fluoridation from the scientific community and general public; the ethical basis for intervening in this way to help reduce tooth decay; and technical, legal and environmental issues.

I commend *One in a Million* as a valuable source of information for everyone with an interest in improving dental health in their community.

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