

Executive Summary of Appraisal of “*HUMAN TOXICITY, ENVIRONMENTAL IMPACT AND LEGAL IMPLICATIONS OF WATER FLUORIDATION*”

The author of this report, Mr Declan Waugh, contends that fluoridation is harmful to humans and the environment. The report contains a great number of allegations of ill health and potential damaging effects.

The Irish Expert Body on Fluoridation and Health has examined this report and finds that it is not reliable. The main criticisms of this report are:

- The assertion that fluoridation is illegal under European or international law is untrue, and contrary to the views expressed by the European authorities.
- The allegations of ill health effects are based on a misreading of laboratory experiments and human health studies, and also on an unfounded personal theory of the author's.
- There is an absence of reporting of the bulk of the scientific literature which points to the lack of harmful effects from fluoridation.
- The views of authoritative bodies such as the World Health Organisation, the European Commission and others are significantly misrepresented.
- There is a misunderstanding of the evidence of benefits to oral health and with regards to enamel fluorosis.
- The view that there is a build up of fluoride in the environment is unfounded and not supported by the evidence.

The report is expertly produced and is impressive in size and appearance. However, in spite of its presentation, its content is decidedly unscientific.

In the Appraisal, the Expert Body considers the main themes of this report in detail. It has approached the evidence considered by the author and described why this evidence is unreliable.

It is the view of the Expert Body and other authoritative bodies that human epidemiological evidence is greatly superior to laboratory based experimentation in determining questions of health effects. For instance, epidemiological tests in the form of human drug trials are required before new medicines are made available to the public; laboratory tests alone are insufficient. Laboratory tests tend to be used as pointers towards identifying topics for epidemiological investigations.

Drawing conclusions from such types of laboratory experiments requires a leap of faith of the type made by the author of this report. A very large proportion of the author's claims are made based on a misreading of the nature of this evidence.

The EU Scientific Committee on Health and Environmental Risks (SCHER), published its 'Opinion on critical review of any new evidence on the hazard profile, health effects, and human exposure to fluoride and the fluoridating agents of drinking water' – 16 May 2011. The main conclusions of the SCHER report are that there are no known health implications from fluoridating water at levels used in the EU.

Fundamentally the Expert Body maintains that there continues to be overwhelming evidence that water fluoridation significantly benefits dental health and through this, benefits overall health. The Expert Body is satisfied having studied current peer reviewed scientific evidence worldwide that water fluoridation causes no ill effects to the health of adults or children. The recommendations that have been implemented to reduce the level in our water supplies and establish standards across all aspects of its delivery will ensure that water fluoridation continues to be a crucial, beneficial healthcare policy.