

# Four Arguments Against the Fluoridation of Water Supplies

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## 1. Water Fluoridation is Unethical

Fluoridation involves increasing the levels of fluoride in drinking water to a level of about one part per million, which is 5 to 10 times typical natural fluoride levels in most Australian towns and cities. It is not a minor 'adjustment'.

Fluoridation has been discontinued or never implemented in most of Europe and now in only 8 countries of the world are the majority of people forced to drink fluoridated water: USA, Australia, New Zealand, Ireland, Columbia, Singapore, Malaysia and Israel. Sadly, in these countries fluoridation is promoted by unscientific propaganda by dental and medical associations that prematurely endorsed fluoridation decades ago.

Fluoridation is a violation of medical ethics, since it is mass medication with an uncontrolled dose. Fluoridation is a medication because it is used to treat people, not to make the water safer to drink, and because it is not an essential nutrient. The fact that fluoride is a natural substance does not change this situation. Penicillin, aspirin, digitalis and many other medications were originally natural substances.

Medications should be prescribed individually with a daily dose that takes account of your age, gender, exposure to other sources, etc. However, with fluoridation, the dose each of you receives depends upon how much tap water you drink.

Population groups that receive high fluoride doses from fluoridated water include athletes, outdoor workers and people with diabetes insipidus and with kidney disease. Infants who ingest milk formula reconstituted with fluoridated water receive a daily fluoride dose that is 100 times that ingested by breast-fed babies. Nature protects babies from this toxic substance, but pro-fluoridation dentists and doctors think arrogantly that they know better.

## 2. Water Fluoridation is Unsafe

Among the propaganda spread by pro-fluoridationists is their false claim that there are no long-term health hazards from drinking fluoridated water. The truth is that scientific and medical papers in international peer-reviewed journals have reported for decades the high prevalence of the bone disease, skeletal fluorosis, in naturally fluoridated areas of India, China, Persian Gulf countries and Africa. This disease is observed on x-rays as increased bone density, structural damage to bones, and calcification of joints and ligaments.

Some proponents of fluoridation claim falsely that skeletal fluorosis is only seen where there are very high fluoride concentrations in drinking water. However, even the pro-fluoridation Australian National Health & Medical Research Council admits in its 1991 report that skeletal fluorosis occurs at low fluoride concentrations (see Section 6.4, but ignore the misleading Executive Summary).

In its early forms, skeletal fluorosis is indistinguishable from arthritis, a disease which is becoming more prevalent in two of the most extensively fluoridated countries, the USA and Australia. There have been no well-designed scientific studies to detect skeletal fluorosis in these countries.

As we age, the amount of fluoride stored in our bones steadily increases, gradually making them more fragile. Of 19 overseas epidemiological studies, the majority reveal a higher rate of hip fracture in artificially fluoridated areas.

Laboratory experiments in Europe find that fluoride, in the presence of traces of aluminum, disrupts G-proteins, which take part in a wide variety of biological signaling systems, helping to control almost all important life processes. There is also growing evidence from animal experiments that ingesting fluoride may cause brain damage.

Laboratory studies indicate that fluoride is a mutagen (ie, can cause genetic damage). Mutagens have an enhanced risk of being carcinogens. An epidemiological study conducted at Harvard University suggests a possible link between fluoridation and osteosarcoma (bone cancer) in young men. A similar result has been obtained by different researchers for male rats. While these results are not conclusive, they would result in the banning of any newly introduced chemical. As an ‘existing chemical’, fluoride escapes current safety requirements.

### 3. Water Fluoridation is Ineffective

Both proponents and opponents of water fluoridation agree on one fact: that there were large reductions in tooth decay in most western countries in the 1960s and 70s. However, proponents create the false impression that these reductions were due to fluoridation, glossing over the facts that:

- Large reductions also occurred in many unfluoridated regions and in several cases commenced before fluoride toothpaste and tablets became prevalent.
- Nowadays, there are very low levels of tooth decay in many European countries which are unfluoridated. Even within the USA there is negligible difference in tooth decay between 42 fluoridated and 42 unfluoridated cities studied by National Institute of Dental Research.
- Fluoridation proponents, Armfield and Spencer, published a scholarly paper showing that there is no statistically significant difference in tooth decay in permanent teeth between fluoridated and unfluoridated populations in South Australia: see *Community Dentistry & Oral Epidemiol* 32:283-296 (2004). Although the above authors refuse to admit it, their research confirms results obtained by Colquhoun in New Zealand and Diesendorf in Australia.
- Many of the early fluoridation ‘trials’ in North America, Australia and elsewhere, have been discredited as poorly designed and subject to examiner bias. There are no randomized controlled trials on the effectiveness of fluoridation.
- Leading overseas dental researchers now recognize that the mechanisms of action of fluoride on teeth involve surface effects and that there is negligible benefit in actually swallowing fluoride. This last point has been even admitted officially by the US Centers for Disease Control (CDC). But Australian pro-fluoridation campaigners ignore or deny this fact, despite the substantial scientific experimentation that has established it.

So members of the public are being misled by pro-fluoridationists that they have to ingest fluoride.

Fluoride toothpaste, which has 1,000 times the fluoride concentration of fluoridated water, is more appropriate and effective, so long as it is not swallowed. Personally, I would not recommend that children under the age of 5 use fluoride toothpaste. And older children should be supervised when tooth-brushing to ensure that they only use a tiny amount of fluoride toothpaste and spit it out afterwards.

### 4. Fluoridation is pushed by corporate interests

Fluoridation is unethical, unsafe and ineffective. So, who gains from it?

Behind the dental and medical associations, who promote fluoridation with sincere but almost religious fervour, are powerful corporate and political interests:

1. the sugary food industry that benefits from the notion that there is a Magic Bullet that stops tooth decay, whatever sugary food our children eat;
2. the phosphate fertilizer industry that sells its waste silicofluoride, which is contaminated with traces of arsenic and heavy metals, to be put unpurified into our drinking water;
3. the aluminium industry, which had an image problem with the atmospheric fluoride pollution, that it emits from smelters, and funded some of the questionable early research in naturally fluoridated regions of the USA that claimed to show that fluoride was good for teeth;
4. some governments that consider fluoridation to be a cheaper way of addressing tooth decay than running effective dental services for school-children, and politically less risky than tackling the promotion of sugary foods that are the main cause of tooth decay.

Without fluoridation, you can combat tooth decay with fluoride toothpaste and by reducing the sugar content of your family’s foods at home and school.

#### Further information

See the international Fluoride Action Network’s web site, [www.fluoridealert.org](http://www.fluoridealert.org), coordinated by Professor Paul Connett. Revised February 2012