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FLUORIDE: AN ESSENTIAL OR POISON ELEMENT

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One of the most significant developments in modern dentistry has been the use of fluoride salts and its impact on education and dental and medical practice.

The incorporation of 0.7 - 1.2 ppm Fluoride in drinking water has caused a decrease of up to 50% in dental caries. Other delivery methods of fluoride as systemic or topical have added to this beneficial effect.

Fluorine is the most exclusive bone seeking element existing owing to its great affinity for calcium phosphate.

Fluoride doses of above 2 - 3 ppm may cause disturbances of the calcification of enamel. Higher concentrations cause damage to skeletal system (skeletal fluorosis) and interferences with kidney function.

Data on fluoride levels of water of different districts of Israel and in urine of industrial workers who are exposed to fluorine will be presented.