**Water Defluoridation Techniques Applied in Rural Areas over the World**

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**Abstract:** Fluoride is the 13th most abundant chemical element in the Earth's crust which has been widely recognised for its health benefits at low concentration but poses a serious threat to public health at very high doses. The world health organization has set the fluoride guideline limit of 1.5 mg/l in drinking water. Globally, over 260 million people drink water with high fluoride concentrations. Overexposure to fluoride through drinking water is the most widespread water problem in the world, but it has now exacerbated due to rapid population growth rates, adverse climatic changes, and increasing levels of water scarcity. Thus, despite the large amounts of data, which has accrued on mitigation methods of high fluoride is still the primary impediment to drinking water programs among many developing nations. The current review chapter on fluoride mitigation techniques applied world-over is aimed at providing a succinct overview of water defluoridation techniques and strategies being used to combat the impact of human fluoride overexposure.

**Keywords:** Adsorption, drinking water, Fluorosis, Defluoridation, Fluoride, Ion Exchange.

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