



Salt Fluoridation

Case Study

Case Study: Jamaica and South America

In Jamaica a National Salt Fluoridation Program was first introduced in 1987. [1] The program was feasible due to the existence of one supplier of refined salt for the entire island. In 1995 a survey was conducted in Jamaica which showed a decline of 69% in dental caries for 15-year olds and a decline of 87% in dental caries for 6-year olds. [1] Apart from the use of fluoride toothpaste between 1984-1995 fluoridated salt was the only other prevention tool that was significant during this time. Subsequently the Pan American Health Organization (PAHO) launched salt fluoridation programs in Mexico, Costa Rica, Ecuador, Columbia, Peru, Cuba, Bolivia, Venezuela and Uruguay. In an institutional cost-benefit analysis of a salt fluoridation program by PAHO it was concluded that for every one US dollar spent on salt fluoridation the benefit through prevention of caries is \$40.2 Overall the experience in Jamaica has shown that fluoride in salt can reduce dental caries by as much as 84% at a cost of 6 cents per person per year. [2] A challenge with the use of salt fluoridation is the avoidance of water fluoridation of the particular country or region in which the fluoridated salt is sold.³ The combination of both salt and water fluoridation is not recommended. About 200-250 mg fluoride per kg of salt is reported to be equivalent to 0.5-1.2 ppm of fluoride in water. In Germany, a salt fluoride concentration of 250 mg/Kg is used and does not present a risk for fluorosis. Salt fluoridation is inexpensive, effective, safe, and benefits entire populations. [3]



Alliance for a Cavity-Free Future

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An Oral Health Resource

References:

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3. Marthaler T, Petersen P. Salt fluoridation - an alternative in automatic prevention of dental caries. *International Dental Journal* 2005;55:351-358.