

FLUORIDE CONTENT IN BOTTLED WATER AND MINERAL WATER SOLD IN BANGKOK AND ITS VICINITY

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SUMMARY: The aim of this study was to obtain information to help calculate the potential fluoride (F) intake by children in Bangkok, and its vicinity, by assessing the amount of F in the bottled water and mineral water sold in the area. All brands of bottled water and mineral water sold in hypermarkets, supermarkets, and convenience shops in Bangkok, and its vicinity, in 2008, 2009, and 2010, were purchased and the F levels measured at the Dental Health Bureau's laboratory using an F Ion Selective Electrode. For bottled water, 17 brands were purchased and 3 (17.6%) of these had a F content >0.3 ppm, range 0.46–0.67 ppm. For mineral water, 11 brands were purchased and 7 (63.6%) of these had a F content >0.3 ppm, range 0.31–0.70 ppm. Children who use the brands of bottled water and mineral water with a F content of >0.3 mg/L as their main source of water should not receive any additional F supplements in order to avoid the risk of fluorosis. The database showing the F content of the available brands of bottled water and mineral water should be regularly updated so that children can avoid excessive F intake.

Key words: Bottled water; Fluoride; Fluoride supplement use; Mineral water; Thailand.

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