Caries experience and fluorosis prevalence in Chilean children from different socio-economic status

Villa, Alberto E.

Guerrero, Sonia

Caries experience and enamel fluorosis prevalence in 8-year-old children belonging to different socio-economic classes were determined in two Chilean twin cities that are served by optimally fluoridated community water from the same waterworks facility. Low socio-economic status (LSES) children had a higher mean dmft and DMFT indices (P<0.001) than high socioeconomic status (HSES) children. Prevalence of enamel fluorosis in the permanent teeth of LSES children was 0.79, significantly higher (?2 = 9.0; P<0.003) than the value 0.59 found in HSES children. The proportion of Dean's scores 2, 3, 4 and 5 in first molars, mandibular and maxillary incisors in LSES children was higher than in HSES children (P<0.001). Differences in prevalence and severity of enamel fluorosis between both groups are tentatively attributed to a different pattern of tap water and tea consumption at pre-school ages. Suggestions are advanced to minimize the undesirable prevalence and severity of enamel fluorosis. ©