Sugar sweetened beverage is significantly associated with risk of dental caries among school children

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Background & Purpose: According to the results of 2012 national survey in Taiwan, the mean DMFT among 12-year-old school children was 2.50, indicating a significant potential of improvement to be made.

Materials & Method: We used structured questionnaires and standardized oral health check for selected school children to investigate potential risk factors of dental caries, including: caries prevalence, use of fluoride and other prevention measures, caries experience, daily consumption of sugar sweetened food, knowledge and attitude of oral health of main carers, influence of peers, periodic oral health check and self care.

Results: 1856 selected school children of grade 2 and 3 took part in the oral health check, and their parents completed the questionnaires. 965 (51.99%) were boys, mean and SD of age were 8.19 and 0.71 respectively. Those of deft were 4.10±3.21; DMFT 0.90±1.40. The prevalence of caries experience in primary dentition was 82.70%, and permanent dentition 40.84%. Most (1222, 65.84%) of the questionnaires were answered by mothers. 43% of the carers agreed that “water fluoridation is a safe, economic, and effective measure to prevent dental caries”. Similarly, 72% agreed that “fluoride toothpaste is a safe, economic, and effective measure to prevent dental caries”. Multiple regression analysis showed that factors associated with deft of school children were: Gender, age, father’s education, have sugar sweetened drinks, the degree of sweetness of the drinks, and fond of sweets.

Discussion & Suggestions: Our study results showed that most parents had a good understanding for topical fluoridation, and the negative influence of sweets to dental caries. However, only 37% of children used fluoridated toothpaste. There is a gap between what people know and what they do for their children’s oral health. The government, the dental society, and the parents need to take more actions to promote children’s oral health.

Biography
Lin-Yang Chi completed his PhD at the Cambridge University, UK. He is an Associate Professor at National Yang-Ming University, and the Director of Education and Research Department of Taipei City Hospital, Taiwan. He has published more than 50 papers in reputed journals and has been serving as an Editorial Board Member of Journal of Dental Sciences and other reputed professional journals.

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