NUTRITION AND DENTAL HEALTH OF VIETNAMESE CHILDREN IN MARRICKVILLE

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Despite reports of improvements in dental health in Australia over the past 20 years (Carr, 1982), migrant groups have a high prevalence and severity of dental disease. A school dental health screening of children in grades 1, 4 and 6 was undertaken in Marrickville, which is an inner suburb of Sydney. Vietnamese children were shown to have twice the decayed missing filled teeth (DMFT) rate of all other migrant groups. Nursing bottle caries, which was only discernible in grade 1 children (6 year olds), was more common amongst Vietnamese. The lack of fluoridated water in Vietnam was considered a possible reason for the difference however, Vietnamese children born in Australia were shown to have poorer dental health than other Australians. The aim of this study was to determine the nutritional factors which may contribute to their poor dental health.

A 24 hour estimated record of dietary intake was undertaken by 98 Vietnamese and 45 Anglo-Saxon grade 4, 5 and 6 children attending 6 schools in the Marrickville Local Government Area. The children were shown how to keep their food records as a classroom activity and they recorded their intake the following day. Records were checked with each student. A structured questionnaire on infant feeding practices was administered to Vietnamese and Anglo-Saxon parents who attended the Marrickville Early Childhood Centre.

Seventy eight Vietnamese and 43 Anglo-Saxon children completed food records which were used to determine the number and types of eating occasions. Fifty eight Vietnamese and 40 Anglo-Saxon records were used for nutrient intake analysis (DIET 1, Xyris Software). There was no difference in the number of eating occasions per day and the frequency of intake of various types of snacks. Vietnamese children had a higher total carbohydrate intake than the Anglo-Saxons (296 vs 245g, P<0.05), however the average total sugar intake was higher for Anglo-Saxons than Vietnamese (123 vs 92g, P<0.05).

Fifty six Vietnamese and 25 Anglo-Saxon parents were interviewed. Their infants ranged in age from 10 days to 22 months. Compared to the Anglo-Saxons, fewer Vietnamese commenced breastfeeding (68% vs 92%). Of those mothers who had ceased breastfeeding, 80% of Vietnamese mothers did so within the first four months compared with 54% of Anglo-Saxon mothers. A greater proportion of Anglo-Saxon parents considered breastfeeding to be best for their child (80% vs 56%), as opposed to a greater proportion of Vietnamese parents who considered bottle-feeding to be superior (21% vs 4%). A greater proportion of Vietnamese infants had been left with a bottle while resting than Anglo-Saxon infants (21% vs 5%). Of the Vietnamese siblings who were bottle fed, a substantial proportion ceased bottle feeding between the age of 2 and 5 years, with 20% being bottle fed till the age of 5. Anglo-Saxon infants were bottle fed for a shorter duration.

The increased rate of dental caries amongst Vietnamese children could be explained by their practices of prolonged bottle feeding, lower rates and length of breastfeeding, and leaving bottles with infants overnight. The differing rates of caries amongst the school children could not be explained by differences in sugar intake or number of eating occasions.

CARR, L.M. (1982). Aust. Dent. J. 33: 205.

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