## Commentary on: Do school break-time policies influence child dental health and snacking behaviours? An evaluation of a primary school programme

R. Freeman and M. Oliver

## IN BRIEF

- Examines the effectiveness of break-time policies to promote child dental health and healthier snacking behaviours.
- Details the importance of the outside school environment as a source of sugar-containing foods and drinks.
- Points to the futility of dietary interventions based solely within schools and the need for break-time policies to be incorporated into community-based health promotion activities.

**Objective** The aim of the two-year controlled trial was to evaluate the effectiveness of the 'Boosting Better Breaks' (BBB) break-time policy to reduce obvious decay experience and sugar snacking in a cohort of nine-year-old children attending intervention and control primary schools. Study design A matched controlled prospective trial design. Participants Children in Year 5 were invited with their parents/quardians to take part. The children were assessed at baseline and at 24-month follow-up. One hundred and eighty-nine children attended intervention schools and 175 attended control schools which were matched for socio-economic status (SES), school location and co-education status. Method The outcome variables were obvious decay experience and evidence of sugar snacks found in the children's rubbish bags. All children were asked to complete a guestionnaire and keep evidence of the snacks they consumed starting from schooltime break to when they retired for bed in a numbered and coded 'rubbish bag' on a specific collection day at baseline and 24-month follow-up. All children had a dental examination at baseline and 24-month follow-up. Results Sixty percent of children at baseline and all of the children at follow-up had at least one sugar snack in their rubbish bag. The most popular snacks at follow-up were sweets, chocolate, crisps and carbonated drinks. In the school environment children attending BBB policy schools had significantly lower mean scores for sugar snacks scores at baseline but equivalent mean sugar snacks scores at follow-up compared with children attending control schools. In the outside school environment there was no effect of school intervention on sugar snack scores. Decay into dentine at follow-up was predicted by school intervention status and evidence of sugar snacks consumption outside school and at home. Conclusions The BBB breaktime policy did not achieve its health promotion goals of promoting child dental health or encouraging children to adopt healthier dietary habits in school or in the wider environment in which they lived.

## COMMENTARY

The paper by Ruth Freeman and Michele Oliver is a valuable addition to the dental health promotion literature as it carefully tests and evaluates one of the main interventions favoured by many dental health educators, namely school-based dietary advice programmes. At first glance it is obvious that a disease common in childhood and exacerbated by frequent sugary snacks is a prime candidate for health education in the school arena. If only we could change the sugar intake pattern, our children's teeth would not face a hostile oral environment which leads to the initiation and progress of dental caries. Such a thought is brave indeed and seems to ignore

common sense. Children do leave school each day and join the home environment in which they eat, sleep and play. The tenor of children's lives at home is influenced by the community norms of behavior current in a particular society. That will include, amongst other things, views on sugar consumption, dental visiting and the use of fluoride toothpaste. We know for example that in England the map of toothpaste sales matches caries rates – the more paste consumed the less caries.

Freeman and Oliver have really demonstrated that understating health promotion in just one arena is of little value, given the positive sugar norms of behaviour in many homes. Our future strategy will have to be more encompassing, including school and home as well as promoting the wonderful preventive and therapeutic agent fluoride toothpaste.

A. Blinkhorn, Professor and NSW Health Chair, Population Oral Health, University of Sydney, Australia DOI: 10.1038/sj.bdj.2009.531