News Release
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Brushing doesn’t stop effects of snacks on young teeth, study finds

Tooth brushing only partly protects against the effects of sugary snacks on children’s teeth, research suggests.

A study based on a sample of nearly 4000 pre-school children shows snacking habits are most strongly associated with decay.

Researchers found children who snack all day – compared with just eating meals – are far more likely to have dental decay.

They say the study shows relying on tooth brushing alone to ward off dental decay in children under five is not enough.

The study authors add that parental socioeconomic factors, such as mother’s education level, explain more of the difference in children’s dental decay than diet or oral hygiene.

They say that even though primary teeth are temporary, good oral hygiene habits are set in childhood, and this relates both to diet and tooth brushing.

Social scientists from the University of Edinburgh and the University of Glasgow used statistical models and survey data to predict dental decay by age 5.

They used data collected on diet and oral hygiene from repeated observation of children from ages two to five.

Snacking was the factor most strongly associated with decay, with children who snack all day without eating meals having twice the chance of decay compared with those who did not snack at all.

There was an incremental association between lower frequencies of tooth brushing at age two and higher chances of dental decay at age five.

Children who brushed less than once per day or not at all at age two had twice the chance of having dental decay at age five compared with children who brushed their teeth twice per day or more often.

The study is published in the Journal of Public Health.

Lead researcher Dr Valeria Skafida, of the University of Edinburgh’s School of Social and Political and Sciences says restricting sugar intake is desirable both for broader nutritional reasons and for children’s dental health.
Dr Skafida said: “Even with targeted policies that specifically aim to reduce inequalities in children’s dental decay it remains an ongoing challenge to reduce social patterning in dental health outcomes.”

Study co-author, Dr Stephanie Chambers, of the MRC/CSO Social and Public Health Sciences Unit at University of Glasgow said: “Among children eating sweets or chocolate once a day or more, tooth brushing more often – once or twice a day or more - reduced the likelihood of decay compared with less frequent brushing.”

The researchers used data from the Growing Up in Scotland study – a social survey which follows the lives of children from infancy through to their teens.


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