



The 13th European Nutrition Conference, FENS 2019, was held at the Dublin Convention Centre, 15–18 October 2019

Associations between the home environment and children's fruit, vegetable and confectionary/sugary drink intakes

Carolina Bassul¹, Clare A. Corish² and John M Kearney¹

¹*School of Biological and Health Sciences, Technological University Dublin, Dublin, Ireland and*

²*School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin, Ireland*

Abstract

The home environment is acknowledged as an important setting that can shape dietary habits in early childhood. For instance, parents influence their children's dietary intakes through the foods they make available to their children, their own eating habits and their parenting practices. The aim of this cross-sectional study was to determine the associations between home environmental characteristics and children's fruit, vegetable and confectionary/sugary drink intakes. A total of 332 children aged 3–5 years old and their parents/guardians participated in the study. Home environmental characteristics, including mealtimes, child television viewing, parental control feeding practices, food availability and accessibility, were explored using questions from validated questionnaires. Parent and child food consumption was also measured. The data were analysed using bivariate and multivariate binary logistic regression. Independent variables (home environment and parental diet) were included in the multivariate analysis if they were significant in the bivariate analysis. An association between household income and children's fruit intake was observed with children from lower income households being 54% less likely to eat fruit daily (95% CI 0.22–0.96, $p < 0.040$) compared with those from higher income households. Home food availability also influenced children's fruit intake. Greater variety of fruits available in the home increased the likelihood of fruit consumption in children (OR 1.35, 95% CI 1.09–1.68, $p < 0.005$). Watching television for ≥ 1 hour per day had a negative impact on children's diets, decreasing their probability of eating vegetables on a daily basis (OR 0.38 95% CI 0.22–0.72, $p < 0.003$) and increasing by 2.7 times their likelihood of consuming confectionary/sugary drink more than once a week (95% CI 1.11–6.36, $p < 0.027$). Those children whose parents had lower vegetable consumption and higher confectionary intake were 59% less likely to eat vegetables, and 4.42 times more likely to consume confectionary/sugary drinks (OR 0.41, 95% CI 0.21–0.82, $p < 0.012$) and (OR 4.42, 95% CI 1.69–11.59, $p < 0.002$) respectively. Pressure to eat from parents was associated with lower fruit intake only (OR 0.67, 95% CI 0.47–0.96, $p < 0.032$). This study has demonstrated that modifiable home environmental characteristics were significantly associated with decreased fruit and vegetable intake and increased confectionary/sugary drink consumption among children aged 3–5 years. These findings may help in the development of intervention strategies to encourage a healthier diet for this age group.

Conflict of Interest

There is no conflict of interest