

**Early problematic eating behaviours are associated with lower fruit and vegetable intake and less dietary variety at 4–5 years of age. A prospective analysis of three European birth cohorts**

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**ABSTRACT**

Problematic eating behaviours during early childhood could be mediators of poor dietary habits. This study aims to prospectively relate early eating behaviours with fruit and vegetable (F&V) intake and a healthy diet variety score of children aged between 4 and 5 years. Eating behaviours were assessed in three European birth cohorts (Generation XXI from Portugal, ALSPAC from the UK and EDEN from France) at 4-6, 12-15, 24 and 48-54 months of age, based on the child's feeding difficulties, mother's perception of child's poor eating (eating small quantities at each meal, not eating enough or needing to be stimulated to eat), food refusal and difficulties in the establishment of daily food routines. Daily servings of F&V (>1 v. ≤1 serving/d, except in Generation XXI: >3 v. ≤3) and the Healthy Plate Variety Score (categorised by the median score of each sample) were calculated using FFQ. Associations were tested by logistic regressions adjusted for maternal age, education, smoking during pregnancy, any breast-feeding and the child's z-score BMI at 4-5 years of age. Children with more feeding difficulties, poor eating, food refusal/neophobia and difficulties in establishing a daily routine at 12-15, 24 and 48-54 months of age had in general lower F&V intake at 4-5 years of age. The association with vegetables was slightly stronger than with fruits. These early feeding problems were also inversely associated with the variety score at 4-5 years of age, particularly when eating behaviours were reported after 12-15 months of age. A better understanding of these early feeding difficulties may help define strategies to increase the dietary quality in children.