

The influence of early feeding practices on healthy diet variety score among pre-school children in four European birth cohorts

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ABSTRACT

Objective: The present study examined whether maternal diet and early infant feeding experiences relating to being breast-fed and complementary feeding influence the range of healthy foods consumed in later childhood.

Design: Data from four European birth cohorts were studied. Healthy Plate Variety Score (HPVS) was calculated using FFQ. HPVS assesses the variety of healthy foods consumed within and across the five main food groups. The weighted numbers of servings consumed of each food group were summed; the maximum score was 5. Associations between infant feeding experiences, maternal diet and the HPVS were tested using generalized linear models and adjusted for appropriate confounders. Setting The British Avon Longitudinal Study of Parents and Children (ALSPAC), the French Etude des Déterminants pre et postnatals de la santé et du développement de L'Enfant study (EDEN), the Portuguese Generation XXI Birth Cohort and the Greek EuroPrevall cohort.

Subjects: Pre-school children and their mothers.

Results: The mean HPVS for each of the cohorts ranged from 2.3 to 3.8, indicating that the majority of children were not eating a full variety of healthy foods. Never being breast-fed or being breast-fed for a short duration was associated with lower HPVS at 2, 3 and 4 years of age in all cohorts. There was no consistent association between the timing of complementary feeding and HPVS. Mother's HPVS was strongly positively associated with child's HPVS but did not greatly attenuate the relationship with breast-feeding duration.

Conclusions: Results suggest that being breast-fed for a short duration is associated with pre-school children eating a lower variety of healthy foods.