

The influence of early feeding practices on fruit and vegetable intake among preschool children in 4 European birth cohorts

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ABSTRACT

Background: Fruit and vegetable intake in children remains below recommendations in many countries. The long-term effects of early parental feeding practices on fruit and vegetable intake are not clearly established.

Objective: The purpose of the current study was to examine whether early feeding practices influence later fruit and vegetable intake in preschool children.

Design: The study used data from 4 European cohorts: 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, the Portuguese Generation XXI Birth Cohort, and the Greek EuroPrevall study. Fruit and vegetable intake was assessed in each cohort by food-frequency questionnaire. Associations between early feeding practices, such as breastfeeding and timing of complementary feeding, and fruit and/or vegetable intake in 2-4-y-old children were tested by using logistic regressions, separately in each cohort, after adjustment for infant's age and sex and maternal age, educational level, smoking during pregnancy, and maternal fruit and vegetable intake.

Results: Large differences in early feeding practices were highlighted across the 4 European cohorts with longer breastfeeding duration in the Generation XXI Birth Cohort and earlier introduction to complementary foods in ALSPAC. Longer breastfeeding duration was consistently related to higher fruit and vegetable intake in young children, whereas the associations with age of introduction to fruit and vegetable intake were weaker and less consistent across the cohorts. Mothers' fruit and vegetable intake (available in 3 of the cohorts) did not substantially attenuate the relation with breastfeeding duration.

Conclusion: The concordant positive association between breastfeeding duration and fruit and vegetable intake in different cultural contexts favors an independent specific effect.

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