The effect of early feeding practices on growth indices and obesity at preschool children from four European countries and UK schoolchildren and adolescents

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ABSTRACT

Not only healthy growth but also childhood obesity partly originate from early life. The current work aimed to examine the association of feeding practices during infancy with growth and adiposity indices in preschool children from four European countries and in UK schoolchildren and adolescents. Existing data from four European birth cohorts (ALSPAC-UK, EDEN-France, EuroPrevall-Greece and Generation XXI-Portugal) were used. Anthropometrics and body composition indices were collected. Parallel multivariate regression analyses were performed to examine the research hypothesis. Overall, the analyses showed that breastfeeding and timing of complementary feeding were not consistently associated with height z-score, overweight/obesity, and body fat mass in children or adolescents. However, breastfeeding duration for less than 6 months was associated with lower height z-scores in 5-year-old French children ($P < 0.001$) but with higher height z-scores in 4-year-old UK children ($P = 0.006$). Furthermore, introduction of complementary foods earlier than 4 months of age was positively associated with fat mass levels in 5-year-old French children ($P = 0.026$).