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Effect of birth of child in the household on changes over 7 years in dietary intake and weight of adults

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Abstract

Introduction: Over the life course, transitions such as parenthood are described in sociological studies as periods of change in attitudes and health practices. The presence of children has been shown to modify adult dietary practices and daily timing of eating occasions, and that the arrival of a child in the household is perceived by parents to be related to changes in their dietary behaviors. Nevertheless, no epidemiological study has evaluated the impact by a longitudinal approach. The objective of our study was to assess the effect of the birth of a first child in a household on dietary intake and weight of adults over a 7-year follow-up period.

Materials and Methods: This study was conducted in 3955 adults included in the NutriNet-Santé cohort study between 2009 and 2010. At baseline and every year, dietary intakes were assessed using 24 h records. In this sample, 185 individuals experienced the birth of a first child in their household during the 7 years of follow-up. Changes in weight, assessed by self-administered questionnaire each year, were analyzed only in women (n = 115). Repeated measures of dietary intake and weight were analysed using mixed models adjusted for sex, age, education level and energy with random effects of time and period (before and after birth of the child) to assess changes following the life event.

Results: The birth of a first child in the household was associated with a decrease in the score of adherence to French recommendations (PNNS score, β [95% CI] = -0.45 [-0.74; -0.16]), in intakes of fruits and vegetables, meat and processed meat, and vitamin C (respectively, β = -0.30 [-0.43; -0.17]; β = -0.20 [-0.32; -0.17]; β = -0.54 [0.88; -0.19]). The birth of a first child in the household was also associated with an increase in intakes of saturated fatty acids and sodium (respectively, β = 1.49 [0.51, 2.45]; β = 0.31 [0.20; 0.43]). The birth of a first child was associated with weight gain in women (β = 1.70 [1.07, 2.33]).

Conclusion: Our study has shown that the birth of a first child in the household was associated with rather unhealthy dietary changes. These results could be used to guide public health interventions by focusing on this specific life transition.

Conflict of Interest

There is no conflict of interest