

Maternal diet during pregnancy is not linked to childhood wheezing or atopic eczema

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Abstract

Background: Several recent studies have investigated the association between maternal diet during pregnancy and asthma in children. However, whether a specific dietary pattern during pregnancy protects children from asthma remains unclear. This study investigated the association between a healthy diet, dietary inflammation potential during pregnancy, and the risk for wheezing and atopic eczema in children. **Methods:** This study included 1330 mother-child pairs who attended the Kuopio Birth Cohort (KuBiCo) study and had dietary information during the last trimester and information on children's health in the first year of life. The Alternative Healthy Eating Index for Pregnancy (AHEI-P) and Dietary Inflammatory Index (DII) indicate a healthy diet and dietary inflammation potential during pregnancy. The AHEI-P and DII were compared with reported wheezing and doctor-diagnosed atopic eczema in children during the first year of life. **Results:** Neither the AHEI-P nor the DII was associated with wheezing or atopic eczema in children when analyzed by continuous variables or tertiles. The odds ratio for AHEI-P and wheezing was 0.99 (0.98–1.01); for AHEI-P and atopic eczema was 1.01 (0.99–1.02); for DII and wheezing was 1.02 (0.95–1.09), and for DII and atopic eczema was 0.97 (0.91–1.04). **Conclusion:** In this cohort study, a maternal healthy or anti-inflammatory diet during pregnancy was not associated with wheezing or atopic eczema in the first year of life. Interventions in the overall dietary pattern during pregnancy might not effectively prevent atopic diseases in children.

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