OBJECTIVE: The goal was to examine the relationship between age at the introduction of solid foods during the first year of life and allergic sensitization in 5-year-old children. METHODS: We analyzed data from the Finnish Type 1 Diabetes Prediction and Prevention nutrition study, a prospective, birth cohort study. We studied 994 children with HLA-conferred susceptibility to type 1 diabetes mellitus for whom information on breastfeeding, age at the introduction of solid foods, and allergen-specific immunoglobulin E levels at 5 years was available. The association between age at the introduction of solid foods and allergic sensitization was analyzed by using logistic regression. RESULTS: The median duration of exclusive breastfeeding was 1.8 months (range: 0-10 months). After adjustment for potential confounders, late introduction of potatoes (>4 months), oats (>5 months), rye (>7 months), wheat (>6 months), meat (>5.5 months), fish (>8.2 months), and eggs (>10.5 months) was significantly directly associated with sensitization to food allergens. Late introduction of potatoes, rye, meat, and fish was significantly associated with sensitization to any inhalant allergen. In models that included all solid foods that were significantly related to the end points, eggs, oats, and wheat remained the most important foods related to sensitization to food allergens, whereas potatoes and fish were the most important foods associated with inhalant allergic sensitization. We found no evidence of reverse causality, taking into account parental allergic rhinitis and asthma. CONCLUSION: Late introduction of solid foods was associated with increased risk of allergic sensitization to food and inhalant allergens.

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