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Parent-reported offering of allergen foods to infants during complementary feeding: an observational study

J. Medemblik[1], C. Conlon[1], J. Haszard[2], A-L. Heath[3], R. Taylor[4], P. von Hurst[1], K. Beck[1], L. Te Morenga[5] and L. Daniels[4]

[1]*School of Sport Exercise and Nutrition, Massey University, Auckland 0745, New Zealand*
[2]*Biostatistics Centre, University of Otago, Dunedin 9054, New Zealand*
[3]*Department of Human Nutrition, University of Otago, Dunedin 9054, New Zealand*
[4]*Department of Medicine, University of Otago, Dunedin 9054, New Zealand*
[5]*Research Centre for Hauora and Health, Massey University, Wellington 6140, New Zealand*

The prevalence of food allergies in New Zealand infants is unknown; however, it is thought to be similar to Australia, where the prevalence is over 10% of 1-year-olds(1). Current New Zealand recommendations for reducing the risk of food allergies are to: offer all infants major food allergens (age appropriate texture) at the start of complementary feeding (around 6 months); ensure major allergens are given to all infants before 1 year; once a major allergen is tolerated, maintain tolerance by regularly (approximately twice a week) offering the allergen food; and continue breastfeeding while introducing complementary foods(2). To our knowledge, there is no research investigating whether parents follow these recommendations. Therefore, this study aimed to explore parental offering of major food allergens to infants during complementary feeding and parental-reported food allergies. The cross-sectional study included 625 parent-infant dyads from the multi-centred (Auckland and Dunedin) First Foods New Zealand study. Infants were 7-10 months of age and participants were recruited in 2020-2022. This secondary analysis included the use of a study questionnaire and 24-hour diet recall data. The questionnaire included determining whether the infant was currently breastfed, whether major food allergens were offered to the infant, whether parents intended to avoid any foods during the first year of life, whether the infant had any known food allergies, and if so, how they were diagnosed. For assessing consumers of major food allergens, 24-hour diet recall data was used (2 days per infant). The questionnaire was used to determine that all major food allergens were offered to 17% of infants aged 9-10 months. On the diet recall days, dairy (94.4%) and wheat (91.2%) were the most common major food allergens consumed. Breastfed infants (n = 414) were more likely to consume sesame than non-breastfed infants (n = 211) (48.8% vs 33.7%, $p \leq 0.001$). Overall, 12.6% of infants had a parental-reported food allergy, with egg allergy being the most common (45.6% of the parents who reported a food allergy). A symptomatic response after exposure was the most common diagnostic tool. In conclusion, only 17% of infants were offered all major food allergens by 9-10 months of age. More guidance may be required to ensure current recommendations are followed and that all major food allergens are introduced by 1 year of age. These results provide critical insight into parents' current practices, which is essential in determining whether more targeted advice regarding allergy prevention and diagnosis is required.

Keywords: food; allergy; New Zealand; infant

Ethics Declaration

Yes

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