Why Does Australia Appear to Have the Highest Rates of Food Allergy?

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INTRODUCTION

Food allergy appears to have risen in many developed countries around the world but none more so than in Australia.\textsuperscript{1–d} We reported in 2011 that in a population cohort of more than 5000 1-year-old infants, more than 10% had evidence of challenge-proven food allergy.\textsuperscript{1} Although there are now many hypotheses as to why food allergy appears to be rising worldwide, until recently there has been little direct evidence formally linking this to the modern-day lifestyle.

The 3 key hypotheses for the rise in food allergy in the 21st century are currently (1) the hygiene hypothesis (which includes microbial diversity); (2) the dual allergen exposure (or Lack) hypothesis, and (3) the vitamin D hypothesis. There are as yet few published data with regard to other factors pertaining to food allergy as an outcome, although there are many studies in progress.

High rates of food allergy in infants of Asian migrants provide a unique opportunity to explore possible explanations for this modern day phenomenon.

KEYWORDS

- Peanut allergy
- Prevalence
- Hygiene hypothesis
- Microbial exposure
- Migration
- Food allergy
- Vitamin D

KEY POINTS

- Food allergy is on the rise in developed countries and has been well-described in Australia using challenge-proven outcomes. It is believed to be linked to the modern-day lifestyle.
- The 3 key hypotheses for the rise in food allergy in the 21st century are currently (1) the hygiene hypothesis (which includes microbial diversity); (2) the dual allergen exposure (or Lack) hypothesis, and (3) the vitamin D hypothesis. There are as yet few published data with regard to other factors pertaining to food allergy as an outcome, although there are many studies in progress.
- High rates of food allergy in infants of Asian migrants provide a unique opportunity to explore possible explanations for this modern day phenomenon.