

Original Article

An Australian Consensus on Infant Feeding Guidelines to Prevent Food Allergy: Outcomes From the Australian Infant Feeding Summit

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What is already known about this topic? Infant feeding in the first postnatal year of life plays an important role in the risk of developing food allergy. Infant feeding guidelines now actively promote inclusion of common allergens in the early life diet.

What does this article add to our knowledge? We carefully evaluated the synthesized evidence as part of the process of developing consensus Australian infant feeding guidelines to prevent food allergy. Involving a range of key stakeholders will ensure that infant feeding advice reaches a wide consumer audience.

How does this study impact on current management guidelines? Consumers access a range of infant feeding advice that may be contradictory. Use of consensus wording related to infant feeding to reduce food allergy risk will ensure clear and consistent consumer advice, which may improve uptake.

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Abbreviations used

ASCIA- Australasian Society of Clinical Immunology and Allergy

CFAR- Centre for Food and Allergy Research

NHMRC- National Health and Medical Research Council

RCTs- Randomized controlled trials

WHO- World Health Organization

BACKGROUND: Infant feeding in the first postnatal year of life has an important role in an infant's risk of developing food allergy. Consumer infant feeding advice is diverse and lacks consistency.

AIM: The Australian Infant Feeding Summit was held with the aim of achieving national consensus on the wording of guidelines for infant feeding and allergy prevention.

METHODS: Two meetings were hosted by the Centre for Food and Allergy Research, the Australasian Society of Clinical Immunology and Allergy, and the Australian National Allergy Strategy. The first meeting of 30 allergy researchers, clinicians, and consumers assessed the evidence. The second consensus meeting involved 46 expert stakeholders including state and federal health care agencies, consumers, and experts in allergy, infant feeding, and population health.

RESULTS: Partner stakeholders agreed on consensus wording for infant feeding advice:

1. When your infant is ready, at around 6 months, but not before 4 months, start to introduce a variety of solid foods, starting with iron-rich foods, while continuing breast-feeding.
2. All infants should be given allergenic solid foods including peanut butter, cooked egg, dairy, and wheat products in the first year of life. This includes infants at high risk of allergy.
3. Hydrolyzed (partially or extensively) infant formula is not recommended for the prevention of allergic disease.

CONCLUSIONS: Consensus was achieved in a context in which there is a high prevalence of food allergy. Guidelines for other countries are being updated. Provision of consistent wording related to infant feeding to reduce food allergy risk will ensure clear consumer advice. © 2017 American Academy of Allergy, Asthma & Immunology (J Allergy Clin Immunol Pract 2017; ■:■-■)

Key words: *Infant feeding; Clinical guidelines; Food allergy; Evidence-based research; Knowledge translation; Health education*

Internationally there has been a rise in the prevalence of atopic disease, particularly food allergy. The increase has occurred within one generation, too rapidly to be solely due to genetic factors alone. Environmental influences, including the timing and nature of dietary exposures to specific nutrients and allergens in food, are considered to play a role in the development of the immune system and the early onset of allergic disease—particularly food allergy. In response to high-level evidence supporting early introduction of allergens, particularly peanut into the diet to reduce the risk of childhood food allergy, the United States has recently released interim infant feeding guidelines,¹ and updated guidelines are soon to be released. It is important that evidence underpins all infant feeding recommendations for food allergy prevention; however, infant feeding guidelines will need to be individualized to

fit each country's context, as each country has differing allergy prevalence rates and different health care systems.

There is increasing evidence that the way infants are fed in the first postnatal year of life has an important role to play in their risk of developing food allergy and this evidence base has changed significantly in the past 10 years.^{2,3} Avoidance of allergenic solids such as peanut, egg, and cow's milk for at least the first 12 months of life was recommended from the 1990s (in a bid to curb the new and rising rates of food allergy) and featured in most clinical allergy society recommendations around the world.⁴⁻⁶ From 2005 onward, recommendations began to change, based first on observational cohort studies that suggested that delayed introduction of allergenic foods was not associated with reduced food allergy.⁷⁻⁹ Over the last 2 years, these data are now supported by a series of well-conducted randomized controlled trials (RCTs). Most notably, the Learning Early about Peanut Allergy (LEAP) trial reported that delaying the introduction of peanut (5 years vs 4-11 months) significantly increased peanut allergy risk in infants with early-onset eczema, egg allergy, or both.¹⁰ Thus, delaying the introduction of peanut past 11 months in infants at high risk of food allergy (with eczema and egg allergy) is now considered to be associated with increased risk of peanut allergy.^{1,10} Because the rise in allergic disease has occurred across the population and not just in high-risk individuals, there has now been a call by experts to implement changes to infant feeding guidelines for all infants immediately on the basis of this study.¹

Australia has one of the highest incidence of atopic disease, including food allergy in the world.¹¹ However, currently in Australia, there is diverse and sometimes conflicting infant feeding advice relating to the timing of solids and the types of foods to introduce. The reasons for this are multifactorial. In Australia, the National Health and Medical Research Council (NHMRC) is responsible for the development and publication of evidence-based infant feeding guidelines for the whole population. The NHMRC Infant Feeding Guidelines were updated in 2012, with some minor revisions in 2015.¹² Specific infant feeding advice focused on the prevention of food allergies was first published by the Australasian Society of Clinical Immunology and Allergy (ASCIA) in 2008, and was updated in 2010 and then May 2016.¹³ Confusion has arisen because infant feeding guidelines are used and interpreted in varying ways by state health authorities and consumer organizations responsible for writing health educational materials, and this has not always been coordinated. As a result, the recommendations included in consumer education material vary widely in their wording about the timing of introduction to solid foods and when allergenic foods should be introduced into the diet. In addition, there are recognized knowledge gaps in some key elements of infant feeding practices directed at primary prevention of food allergy, which lead to differences in the interpretation of existing evidence.

METHODS

Lead up to the 2016 Australian Infant Feeding Summit

The Centre for Food and Allergy Research (CFAR) is an NHMRC-funded Centre for Research Excellence. CFAR's goals include the synthesis and dissemination of evidence-based research for the development of clinical guidelines and improved public

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