

Excluding allergenic foods in maternal and infant diets

For GPs

The practice of attempting to prevent the development of allergies by excluding common childhood food allergens from an infant's first 12 months of life and/or from the mother's diet during pregnancy and breastfeeding.

RACGP position

Do not exclude allergenic foods from maternal and infant diets in an attempt to prevent allergies. (Refer to '[Common allergenic foods](#)' in '[Overview](#)' below.)

Avoiding allergenic foods in order to prevent allergies is an outdated practice and not supported by current evidence, which indicates that:

- pregnant and breastfeeding mothers should include commonly allergenic foods in their diet^{1,2}
- including these foods in the diet of a breastfeeding mother may support immune tolerance of allergenic foods^{3,4}
- these foods should be introduced into an infant's diet within the first year of life.^{1,2}

Traffic lights

Red – Do not take this action

Maternal diet during pregnancy and breastfeeding

- ⊗ Do not recommend that pregnant or breastfeeding women omit specific foods from their diet (including foods that are commonly allergenic) as a way of preventing infant allergies^{1,2,5}

Infant feeding

- ⊗ Do not recommend partially or extensively hydrolysed infant formula, soy milk formula or goat's milk formula as a means of allergy prevention.
- ⊗ Do not use acid-suppressive therapy, including histamine-2 receptor antagonists (H2RAs) and proton pump inhibitors (PPIs), to treat simple infant reflux. Reasons for not doing this include poor efficacy and an increased risk of food allergy.^{6–8}



Orange – Under specified circumstances, take this action

- ⚠ If an infant has severe eczema or an egg allergy, recommend regular peanut consumption in their first 12 months of life.⁹ (Refer to 'Resources' for the recommended approach to introducing peanut to these infants.)
- ⚠ If there is a family history of egg allergy, recommend introducing cooked egg into the infant's diet before they are aged eight months.¹

Green – Take this action

Maternal diet during pregnancy and breastfeeding

- ✓ With due consideration of any allergies and intolerances the mother has, encourage women who are pregnant or breastfeeding to:
 - follow healthy eating guidelines¹⁰
 - include foods that are common allergens, even if they are breastfeeding an infant with a high risk of allergy or atopy.^{1,2}

Infant feeding

- ✓ If breastfeeding is not possible, recommend that parents start with a standard cow's milk formula.^{1,11}
- ✓ Recommend that parents:
 - introduce commonly allergenic foods (particularly peanut butter, cooked egg, dairy and wheat products) into the infant's diet in the first year of life, even if the infant has a high risk of allergy;^{1,2} studies show that this may reduce the chance of food allergies developing in babies with severe eczema or egg allergy¹²
 - introduce only one commonly allergenic food at each meal so that if there is a reaction, the probable cause of the reaction can be easily identified
 - offer all tolerated foods regularly (eg at least twice weekly), as this may help to reduce the risk of the infant developing an allergy.

Patient harms and risks

- Delaying the introduction of commonly allergenic foods may increase an infant's risk of food allergy, particularly peanut and egg allergy.^{9,13,14}
- Excluding foods from the maternal or infant diet as a way of preventing allergies needlessly eliminates important energy sources and micronutrients, and puts both the mother and child at risk of adverse outcomes. These adverse outcomes include intrauterine growth retardation, low birth weight, reduced motivation to breastfeed, nutrient deficiency, growth deceleration, infant feeding difficulties and fussy eating.^{3,15,16}

Overview

Allergy or intolerance?

A food allergy is an adverse reaction to a specific food driven by a reproducible immune response. It is different to a food intolerance, which is a non-immune-mediated reaction.¹⁷

Common allergenic foods

Common allergenic foods include egg, peanut, cow's milk (and dairy products), tree nuts (such as cashew or almond paste), soy, sesame, wheat, fish and other seafood.¹²

Prevalence of allergies in Western populations

Food allergies are common in Western populations, and the prevalence has increased rapidly over the past two decades.¹⁷ Data from food challenges indicate that food allergies occur in 2–8% of children, and an Australian study reported a rate as high as 10%.^{17–19}

Causes of food allergies

The aetiology of food allergy is complex, but evidence suggests that maternal diet is not the cause of allergies.

Diets for pregnant and breastfeeding mothers, and infants aged <12 months

Strong evidence indicates that avoidance diets during pregnancy and breastfeeding do not prevent food allergies. As a result, guidelines that once advocated avoidance diets have been amended.^{1,5} Consuming allergenic foods during breastfeeding, and introducing them as solids to the infant, may in fact promote tolerance of those foods in the infant;^{3,4} however a systematic review has not shown a specific protective effect of breastfeeding.¹¹

Introducing peanut and egg within the first 12 months of life is associated with a lower risk of food allergy.^{9,14} The optimal timing for other foods is unknown, but there is no benefit from delaying their introduction beyond 12 months.¹³ Best practice is to recommend that allergenic foods (including peanut, egg, dairy, wheat, soy, tree nuts, sesame, fish and shellfish) be introduced to infants when they are ready to start solids (usually at age 4–6 months) and before they are 12 months old.¹

Importantly, foods should be in a form appropriate for age (eg smooth peanut butter and ground nuts, rather than whole nuts; eggs that are fully cooked). After a food has been introduced, it should be offered regularly – about twice a week – to promote ongoing tolerance.²⁰

Avoiding peanut allergy

A randomised control trial showed that regular peanut intake before age 12 months in infants with severe eczema and/or egg allergy reduces the risk of developing peanut allergy.⁹

Avoiding egg allergy

The risk of egg allergy may be reduced by introducing egg into an infant's diet before age 8 months. This also helps to reduce eczema.¹⁴

Avoiding cow's milk allergy

A systematic review has found no benefit from using infant formulas based on hydrolysed cow's milk protein, and such formulas are no longer recommended for the prevention of cow's milk allergy.²¹ Where breastfeeding is not possible, formula feeding can begin with regular cow's milk-based formula.¹²

The role of probiotics in preventing allergies

No specific recommendation can be given for the use of probiotics during pregnancy and breastfeeding for the purpose of reducing the child's risk of food allergies.^{12,21}

Use of acid-suppressive therapy

Acid-suppressive therapy (including H2RAs and PPIs) are not recommended for the treatment of simple infant reflux for several reasons, including poor efficacy and an increased risk of food allergy.^{6,7,8}

Red flags

There is an increased risk of food allergy with the use of acid-suppression therapy PPIs in infants.^{6,7,8}

Alternatives: What can I do for the patient?

- Inform parents that avoidance diets do not prevent allergies, and that delaying introduction of these foods has been shown to increase the chance of developing food allergy. Recommend that they offer their baby well-cooked egg and smooth peanut butter/paste regularly (twice weekly), starting before age 12 months, as delaying the introduction of these foods has been shown to increase the chance of developing food allergies.
- Give the parent resources that support including commonly allergenic foods in the mother's and child's diets.

Resources and information for patients

Allergy & Anaphylaxis Australia

Australasian Society of Clinical Immunology and Allergy, [Allergy prevention](#)

Australasian Society of Clinical Immunology and Allergy, [Allergy prevention – Frequently asked questions \(FAQ\)](#)

Australasian Society of Clinical Immunology and Allergy, [How to introduce solid foods to babies for allergy prevention – Frequently asked questions \(FAQ\)](#)

eatforhealth.gov.au, [The Australian dietary guidelines](#)

National Allergy Council, [Food allergy prevention \[resources\]](#)

National Allergy Council, [Nip allergies in the bub](#)

The Royal Australian College of General Practitioners, First do no harm: Avoiding food allergies in babies – Information for patients and carers

Resources for GPs

Australasian Society of Clinical Immunology and Allergy, [Guide for introduction of peanut to infants with severe eczema and/or food allergy](#)

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