Allergy Education

How should nut allergy be identified and managed?

The cases of food allergies have doubled and the number of hospitalisations caused by severe allergic reactions has increased 7-fold in the last decade.[1]

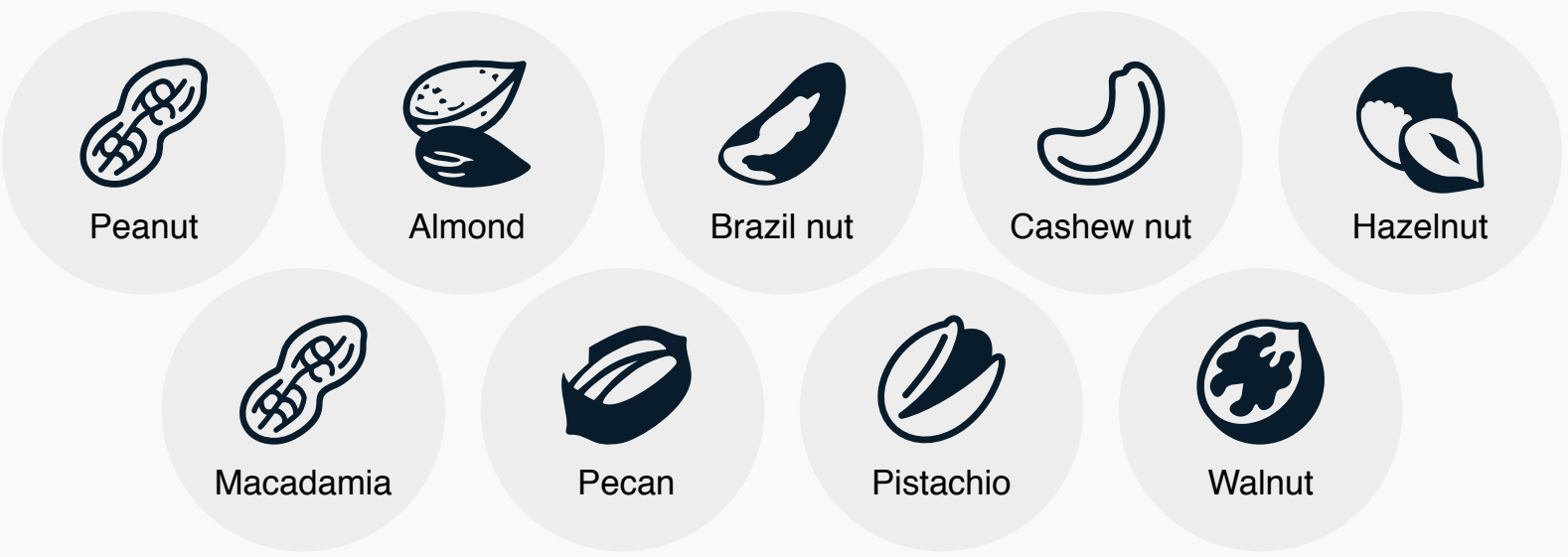
Peanuts and tree nuts together account for 70-90% of reported fatal food-induced anaphylaxis; tree nuts account for 18-40%.[2]

WHAT'S THE BURDEN OF NUT ALLERGY?

- Tree nut and peanut allergies are usually lifelong[2]
- IgE-mediated food allergy reactions can occur within minutes after ingestion of very small amounts of peanut and/or tree nut; symptoms can include hives, angioedema or vomiting, and can be life threatening[2]
- 20-30% of people with a peanut allergy are also allergic to one or more tree nuts[2]
- 30% of people with a tree nut allergy will have at least one additional tree nut allergy[2]
- Children with peanut allergy have higher anxiety levels, and impaired quality of life to a greater extent, than children suffering from insulin-dependent diabetes mellitus[3]

WHICH NUTS?

- Almond and walnut are the most commonly reported tree nuts in the UK[2]



IS THERE A LINK BETWEEN ASTHMA AND NUT ALLERGY?

Patients with asthma, plus allergy to peanuts or tree nuts, are at an increased risk of fatal anaphylaxis.[4,5]

IS NUT ALLERGY ALWAYS NUT ALLERGY?

Allergic reactions to both peanut and tree nuts can result from primary IgE-mediated mechanisms or, alternatively, via secondary cross-reactivity mechanisms to pollen.[3] This is called pollen-food allergy syndrome (PFAS); **for more information on PFAS click here**.

HOW CAN ALLERGY BE DIAGNOSED IN PRIMARY CARE?

The NICE Food allergy guidelines recommend that:

1 HISTORY

If food allergy is suspected, a healthcare professional with the appropriate competencies should take an allergy-focused clinical history[6]

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2 TESTING

If the patient history suggests an IgE-mediated allergy conduct a blood test (allergen-specific IgE), or by trained, competent clinical staff in a clinical environment with sufficient clinical support and facilities to manage anaphylaxis, a skin prick test can be performed.[6]

Specific IgE (also known as ImmunoCAP and, as a previous technology, known as RAST) is no different, in terms of venipuncture, to many other blood tests. It is the gold-standard quantitative IgE test and has an excellent clinical performance (sensitivity 84-95% and specificity 85-94% depending on the allergen). It is available from your local pathology laboratory and a 1 ml sample of blood in a serum tube is sufficient to test for up to 10 allergens.

3 MANAGEMENT

A result of ≥0.1 kU_A/L is indicative of sensitivity
Results should always be read in conjunction with the clinical history
The NICE Guidelines (2011) and the NICE Quality standard (2016) offer clear advice on the diagnosis and management of food allergy.[6,7]
Most patients, i.e. those with a clear diagnosis and mild but persistent symptoms, should be managed in primary care, but some will require referral and management to secondary care.[6]

The child or young person should be referred to secondary care, if they have:[6]

- Faltering growth in combination with one or more gastrointestinal symptoms (see NICE for list of symptoms)
- Not responded to a single-allergen elimination diet
- Had one or more acute systemic reactions
- Had one or more severe delayed reactions
- Confirmed IgE-mediated food allergy and concurrent asthma
- Significant atopic eczema where multiple or cross-reactive food allergies are suspected by the parent or carer

Or, there is:[6]

- Persisting parental suspicion of food allergy (especially in children or young people with difficult or perplexing symptoms) despite a lack of supporting history
- Strong clinical suspicion of IgE-mediated food allergy but allergy test results are negative
- Clinical suspicion of multiple food allergies

References

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5. Simpson AB, *et al. J Pediatr* 2010; 156: 777-781.
6. National Institute for Health and Care Excellence. Food allergy in children and young people (CG116). 2011. London: National Institute for Health and Care Excellence.
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