EDITORIAL

A Food-Focused Approach is Needed to Progress Food Allergy and Hypersensitivity Diagnosis and Management in Adults

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Introduction

The symptoms of adverse food reactions often overlap and involve multiple organ systems, regardless of the underlying mechanism. This explains why patients with such reactions frequently consult multiple clinical specialties, often simultaneously. Whilst clinical specialisations bring significant improvements in patient outcomes through focused expertise, they also risk creating fragmented care since specialists, often limited to their specific organ or system, may overlook broader or common causative factors outside their field.

This is particularly evident in food allergy and hypersensitivity. Consequently, patients may have undergone numerous tests and procedures, received contradictory advice from healthcare professionals, or sought guidance from unverified sources, such as social media or acquaintances in their quest for a diagnosis and management plan. A food-focused diagnostic approach—starting with the suspected food(s) rather than the potential mechanism—enables a more holistic evaluation of symptoms and management strategies. This is particularly crucial for adults who may exhibit concurrent IgE-mediated, non-IgE-mediated, or non-immune-mediated reactions. Such cases require a personalised dietary approach to address the interplay of mechanisms effectively.

Classification for Food Allergy and Hypersensitivity

The classification of allergy and hypersensitivity reactions has evolved over time, reflecting advances in knowledge and understanding. These developments are detailed in the latest position paper by the European Academy of Allergy and Clinical Immunology (EAACI) (1). This document redefines hypersensitivity as an “undesirable, uncomfortable, or damaging response that arises from tissue cell dysfunction or immune system over-reaction.” Allergy is considered a subset of hypersensitivity, specifically involving the immune system (1).

Mechanistically, food allergy can be subdivided into immunoglobulin E (IgE) mediated, non–IgE mediated, or cell mediated (1, 2). Many adult allergy services limit their focus to IgE-mediated food allergies, often triaging and rejecting referrals that do not meet strict diagnostic criteria. However, patients not meeting the criteria for IgE mediated food allergy usually do have reproducible symptoms related to food ingestion. These may include immunologically mediated conditions such as eosinophilic diseases and food protein-induced enterocolitis syndrome (FPIES). Reactions not involving the immune system, classified as non-immune-mediated food hypersensitivities, are often termed “intolerances” and may result from metabolic issues (e.g., lactose intolerance) or the pharmacological properties of food components (e.g., histamine).

Food-Focused Approach

Due to fragmented care, patients may not previously have had all their symptoms considered in a food focused way. An allergy-focused diet history for adult patients can rectify this. This process is detailed elsewhere (3), and comprises of three main components: questioning and linking, interpretation of history, and tests and diagnosis. After which a treatment plan is developed and/or an onward referral for additional investigations. Pre-appointment tools, such as food and symptom diaries or questionnaires, can streamline the process. After gathering a detailed diet history, provisional diagnoses can usually be made and confirmed through investigations, such as specific IgE tests, skin prick tests, endoscopy or elimination diets followed by symptom monitoring.

The development of a treatment plan often requires multiple consultations. Many patients arrive at their first appointment having already adopted overly restrictive diets. The initial consultation typically focuses on reviewing and revising current food eliminations based on the allergy-focused diet history. This approach facilitates the reintroduction of foods unnecessarily avoided.

When devising elimination diets, careful consideration must be given to potential nutrient deficiencies (Table 1). Most elimination diets should be time-limited; for example, a low-histamine diet is optimally limited to three to four weeks.

Table 1: Common Exclusion Diets and Associated Nutrients at Risk

Subsequent appointments assess the extent the patient was able to follow the food focussed management plan, the effectiveness of elimination on symptom relief, whether foods can be safely reintroduced to a level of tolerance, and importantly, how easily the patient feels they can maintain the diet in the long term to manage their symptoms.

Nutritional adequacy remains a priority throughout this process. Particular attention should be given to protein, water-soluble vitamins, and minerals such as iron, zinc, calcium, and iodine. Individuals with pre-existing food allergies, disordered eating, following vegetarian or vegan diets, or managing additional conditions such as coeliac disease are at heightened risk of nutritional deficiencies and require thorough dietary assessments.

Consideration must also be given to the psychological effects of restrictive diets. Hypervigilance of symptoms can lead to heightened fear and anxiety around eating, further compounding dietary restrictions and reducing nutritional intake. A food-focused approach enables these behaviours to be identified and considered in the development of the food management plan. Where additional support is required onward referral to appropriate psychological services can be made.

A Call for Change in Adult Allergy Management

To implement a food-focused approach effectively, healthcare professionals must possess specialised knowledge in both nutrition and the immunological mechanisms of hypersensitivity. These professionals often act as a bridge between various clinical specialties involved in a patient's care.

This role could be filled by dietitians or clinical nutritionists specialising in allergy and food hypersensitivity or by other healthcare professionals (e.g., allergy specialist nurses, physicians, or pharmacists) with additional nutrition training. Such professionals require a broad skill set to deliver accurate, practical advice for managing food reactions regardless of their underlying mechanisms. This is vital, as dietary avoidance—if not properly managed—can result in significant nutritional deficiencies and health consequences.

As nutritional understanding expands, the focus has shifted from solely addressing low BMI to emphasising the importance of a diverse diet. This is particularly relevant in the context of immune-supportive nutrition (4). A holistic approach, delivered by specialists capable of working across disciplines, is essential to support adults debilitated by adverse reactions to food who often lack access to specialist allergy services since referrals suggesting non-IgE-mediated reactions frequently lead to service exclusion, further exacerbating patient distress and care gaps.

Nutritional management in food hypersensitivity should also address broader quality-of-life concerns. Key steps include identifying sources of the causative food; nutrients contained within these foods and suitable substitutes; identifying dietary alternatives for favourite foods which can no longer be eaten and where they can be sourced. Other important input is; ensuring diet diversity; providing practical support for cooking and eating out including signposting to useful websites and consideration of factors affecting dietary choice including social, cultural and financial circumstances and original food preferences. These actions aim to minimise the impact of dietary restrictions on the patient's quality of life, ensuring they maintain adequate nutrition while managing their symptoms effectively.

Conclusion

By adopting a food-focused methodology, healthcare professionals can bridge service gaps and improve diagnostic accuracy and management for individuals with diverse food-related symptoms. This multi-disciplinary, multi-specialism approach is commonly seen within paediatrics, but not within adult services.

Adults with food allergy and hypersensitivity deserve the same level of care as children, particularly those who do not have IgE-mediated conditions, with care pathways drawing from experiences from the paediatric setting. Tailored food plans addressing individual symptoms and promoting long-term health are central to managing adverse food reactions, irrespective of their mechanism. By considering both the nutritional and psychological impacts of restrictive diets, a holistic, food-focused approach can deliver improved outcomes and enhance quality of life for individuals navigating the complexities of food hypersensitivity.

References

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