

Letters to the Editors

Letter: dietary therapy in eosinophilic oesophagitis – do not test, just eliminate and reintroduce the most common food triggers

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doi:10.1111/apt.13742

SIRS, We read with great interest the study by Dr Philpott *et al.* evaluating the accuracy of multiple allergy skin and blood tests (either designed to detect immediate

or delayed hypersensitivity responses) to diagnose offending foods in adult eosinophilic oesophagitis (EoE) patients.¹ No allergy test could accurately predict potential food triggers, as compared with the gold standard of identifying offending foods through food challenge with histological reassessment. A six-food elimination diet followed by individual food reintroduction identified milk, wheat and eggs as the more common food triggers for EoE in Australia.

Coupled with previous studies, several key points can be drawn from this important study. The data re-emphasise previous findings in two European adult series, in which the efficacy of elimination diets based on multiple skin² (26%) and blood³ (7%) food allergy testing was quite poor. Of note, allergy testing-guided diet was mostly effective when milk, wheat or eggs were eliminated. Results in children are only slightly better, but

Table 1 | Similar number and type of food triggers for EoE after response to empiric elimination diets, identified through individual food reintroduction and histological assessment, in prospective studies conducted in USA, Spain and Australia

First author, year of publication, country	Diet population	Number of culprit foods identified through individual reintroduction of either six or four-food groups			Most common food triggers identified through individual food reintroduction
		1	2	>2	
Kagalwalla, 2011, USA ⁷	SFED Children	72%	8%	8%	Milk 74% Wheat 26% Eggs 17%
Gonsalves, 2012, USA ⁸	SFED Adults	85%	15%		Wheat 60% Milk 50%
Lucendo, 2013, Spain ⁹	SFED Adults	36%	31%	33%	Milk 62% Wheat 29% Eggs 26% Legumes 24%
Molina-Infante, 2014, Spain ¹⁰	FFED Adults	45%	45%	0%	Milk 50% Eggs 36% Wheat 31% Legumes 18%
Philpott, 2016, Australia ¹	SFED Adults	56%	17%	13%	Milk 43% Wheat 43% Eggs 34%

SFED, six-food elimination diet; FFED, four-food elimination diet.

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there are concerns about methodology and lack of replication of large previous studies.⁴

EoE is a unique form of food allergy, distinct from IgE-mediated food allergy.⁵ The pathophysiology of EoE is complex, likely dependent on a balance between a predominant IgG4-, and a less predominant IgE-, associated disease.⁶ EoE is a global disease, with the same main triggering foods (milk, wheat, eggs) prospectively identified in either paediatric or adult patients from developed countries, either in the Northern or Southern Hemisphere (Table 1).^{1, 7–10} It is important to note that milk, wheat and eggs are staple foods in the USA, Spain, and Australia. Legumes played a minor role in Australia, whereas they seem to be more important in the USA and especially Spain. Accordingly, regional variations in food consumption may account for discrepancies in triggering foods. In any case, highly restrictive diets (e.g. elemental diet, six-food elimination diet) are all cumbersome in clinical practice.

Optimised schemes, like a four-food elimination diet (excluding milk, wheat, eggs and legumes), may enhance patient willingness to undergo dietary therapy. Whether two- or three-food elimination diets will still lead to good results should be evaluated in prospective studies.

For any EoE patient willing to try dietary therapy, the most effective and realistic approach currently is empiric avoidance of the most common food triggers for EoE, with subsequent individual reintroduction followed by endoscopy. Noteworthy, the majority of responders have been found to have just 1 or 2 food triggers with this strategy (see Table 1). As such, maintenance dietary therapy can be easily implemented in this subset of patients by avoidance of culprit foods in the long run, whereas nontriggering foods should be reintroduced.

On account of all of these considerations, food allergy testing for adult EoE patients should be discouraged in clinical practice if they are intended to identify culprit foods, as their efficacy has been repeatedly proven to be suboptimal and both patients and GI clinicians may become confused about which foods need to be avoided.

Letter: dietary therapy in eosinophilic oesophagitis – do not test, just eliminate and reintroduce the most common food triggers. Authors' reply

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However, allergists and immunologists remain critical for understanding EoE aetiology and pathophysiology, and developing novel and effective food allergy testing for this challenging disease.

ACKNOWLEDGEMENT

Declaration of personal and funding interests: None.

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doi:10.1111/apt.13787

DEAR SIRs, We thank Molina-Infante *et al.* for their interest in our paper, and their useful table summarising food