

Our changing foods:

Implications for food hypersensitive consumers

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@Allergyaction

May 27th 2021





New Pollen cross-reactivities

Ragweed growing in more northerly countries changing cross-reactive food allergies eg peach, lentil



Reducing food waste

Maintaining integrity
Food information
Used for food packaging

Closing the loop in chocolate: Barry Callebaut collaborates on 'ground-breaking' process to turn hazelnut shells into vanillin

Upcycling shrimp waste to make 'tasteful alternative' to food flavourings

Lactips is a Milk-Based Biodegradable and Water-Soluble Packaging

New diets, new uses,
new allergies

eg jackfruit, buckwheat, regional
allergies changing



Gene editing foods

Risk assessment for allergenicity



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Food

The underlying principles underpinning Novel Food in the European Union are that Novel Foods must be:

- Safe for consumers
- Properly labelled, so as not to mislead consumers
- If novel food is intended to replace another food, it must not differ in a way that the consumption of the Novel Food would be nutritionally disadvantageous for the consumer.



General

Novel Food Assessments

Last updated: 11 January 2021

What is a Novel Food?

A Novel Food is defined as food that had not been consumed to a significant degree by humans in the UK before 15 May 1997, as defined by [UK legislation](#). Such foods are subject to a pre-market safety assessment before a decision is made on UK-wide authorisation.

Ingredient processing - Isolates

Isolats de blé : Méfiez-vous des préparations industrielles !



Jambon, cordon bleu, pizza, choucroute, saucisse-lentilles... Méfiez-vous des préparations industrielles contenant des isolats de blé ! Elles peuvent entraîner des allergies –certes rares- mais parfois sévères...



Insect and other new food sources

Risk assessment for allergenicity

Clinical Communications

Shellfish allergy is a risk factor for cricket anaphylaxis

Lucy Duan, MD^a, Jennifer A. Hoang, HBSc^b, Akash Kothari^b, Thomas Eiwegger, MD^a, and Peter Vadas, MD, PhD^c

Clinical Implications

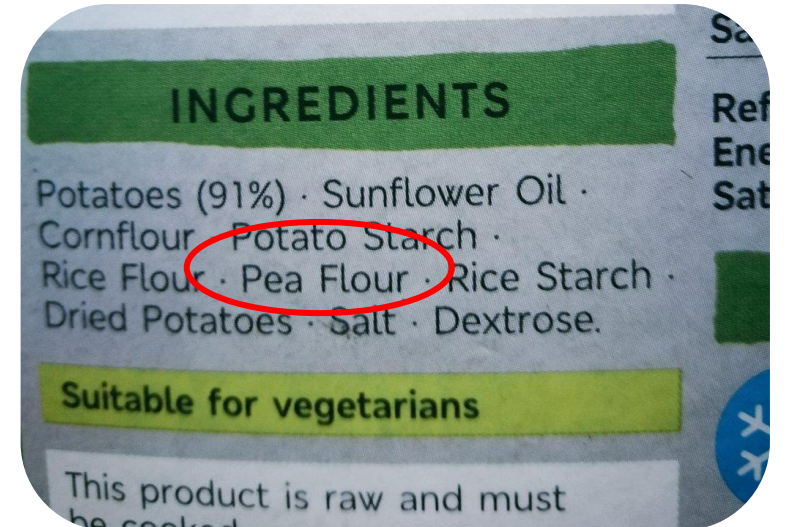
- The risk of life-threatening anaphylaxis after ingestion of crickets in individuals with preexisting crustacean shellfish allergy is not widely recognized. As insects are increasingly promoted as a source of protein worldwide, physicians need to educate patients about this risk.



Beyond #14allergens



#StupidPeas



Plant-based foods

**Allergenic ingredients?
Misleading FH consumers?
Nutrition**

Pea protein trend sparks allergy warning

Brave new 'animal-free' world: When animal products are no longer made from animals, what do we call them? (And are they vegan?)

1 in 4 meat substitutes 'do not contain enough protein to be considered a source of protein'

What do 'plant-based' and 'vegan' mean to people with food hypersensitivity?



Anaphylaxis Campaign @Anaphylaxiscoms · 57m

...

We have been alerted by Asda that they are recalling their Plant Based Loaded Potato Skins from sale because a small number of packs with use-by 12th November 2020 may contain milk which is not correctly declared on the ingredient label.

Read more: ow.ly/enre50CjBqL



Plant-based foods – ‘Vegan’



BBQ Jack Fruit Burger

136 word Ingredient list

- Jackfruit
- Kidney beans
- Buckwheat
- Black Turtle Bean
- Butter Beans

May contain: Tree Nuts,
Peanuts and Sesame
seeds

Lookalike 'meat'



Bioavailability of nutrients



Prof Chris Elliott OBE @QUBFoodProf · 2h

There is a massive difference in the bioavailability of micronutrients from natural sources and those added as products often sourced from the Indian and Chinese chemical industries.



Diet restrictions and nutrition

Veganism and paediatric food allergy: two increasingly prevalent dietary issues that are challenging when co-occurring

Jennifer L P Protudjer ^{1 2 3 4 5}, Andrea Mikkelsen ^{6 7 8}



- Risk of nutritional deficiencies, particularly during childhood
- Comorbid diseases eg **asthma** may actually increase **energy and nutrient requirements**
- Diet restrictions – both food allergy and vegan **limit** sources of important nutrients
- Need for dietary variety and/or increased consumption due to **reduced bioavailability**
- Blood serum iodine, iron, zinc, calcium, Vitamins B12, D, B2, and A, selected n-3 fatty acids and protein
- **Nutrients** all more **abundant in animal vs plant foods**

Mystery reactions

Food-Induced Anaphylaxis: Role of Hidden Allergens and Cofactors

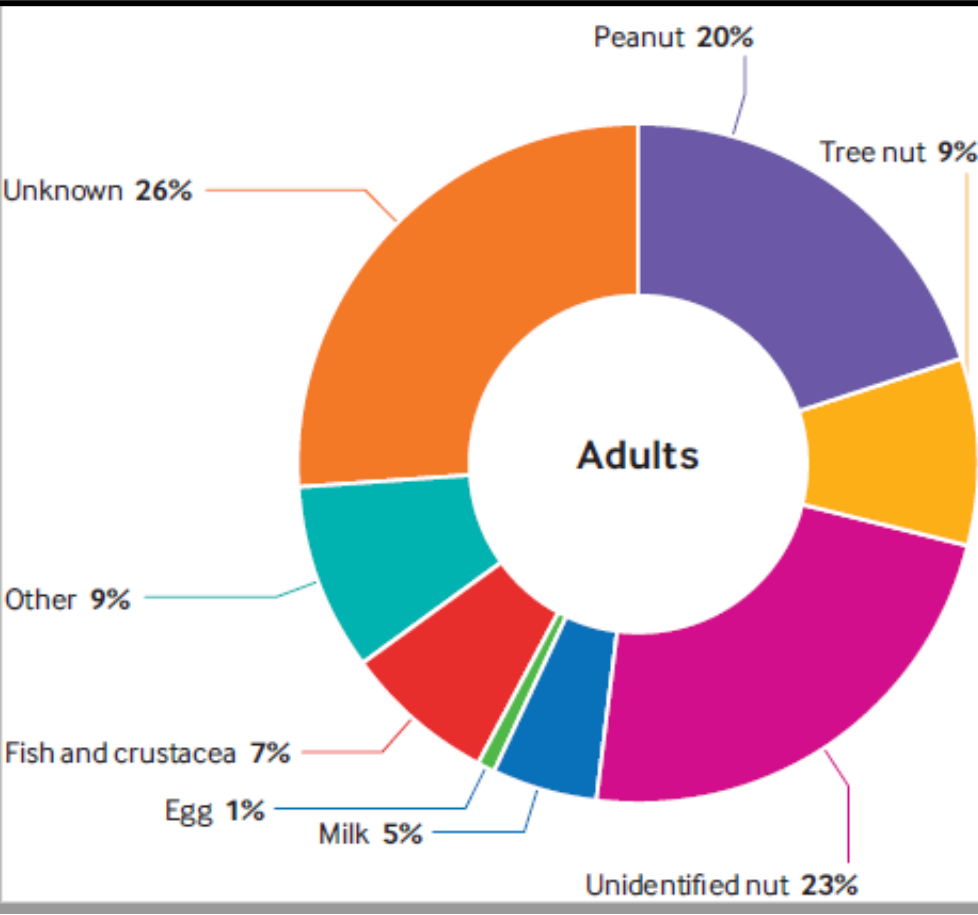
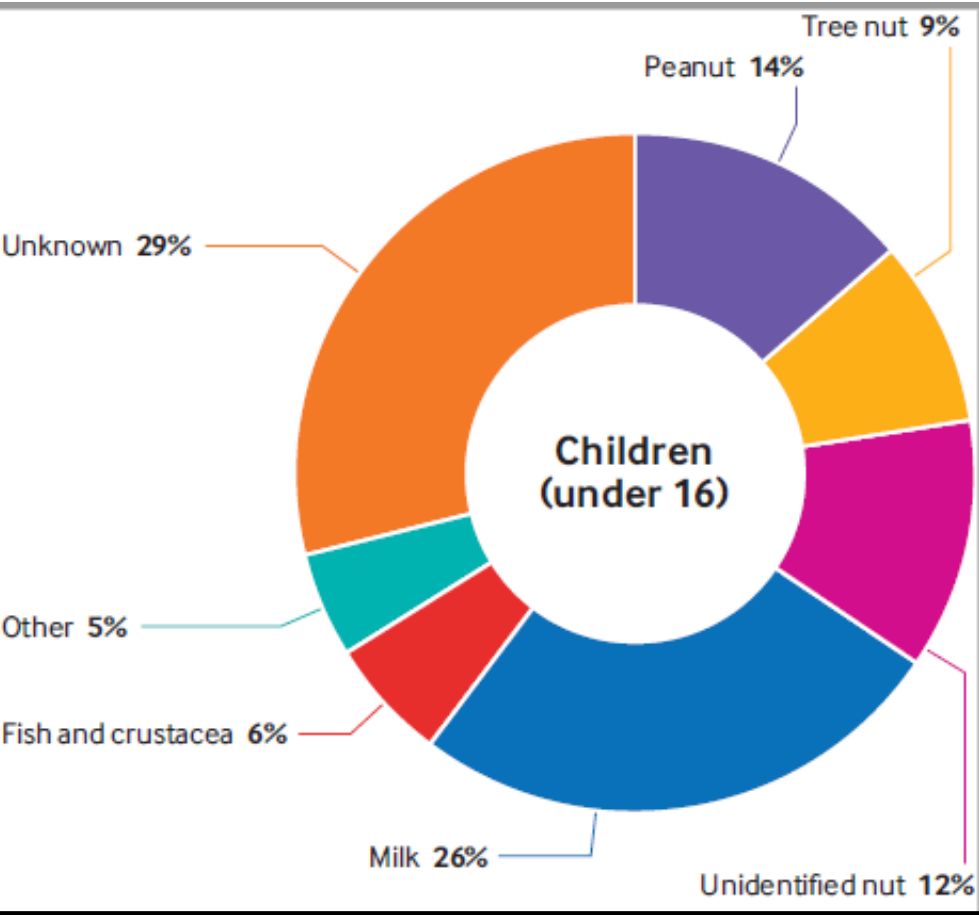
*Isabel J. Skypala**

*Department of Allergy and Clinical Immunology, Imperial College, Royal Brompton and Harefield NHS Foundation Trust,
London, United Kingdom*



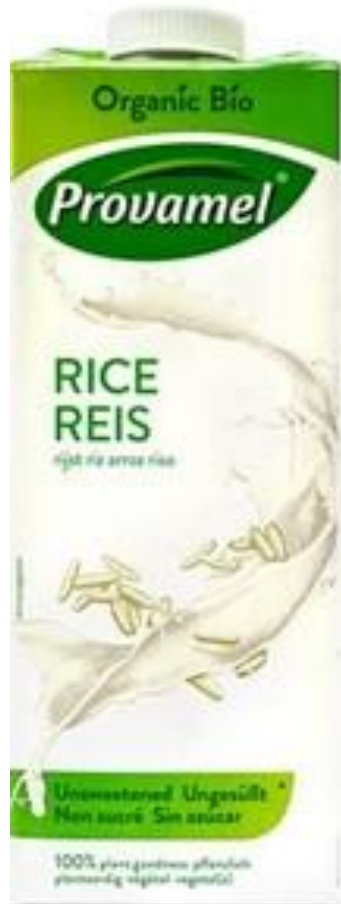
- Food anaphylaxis associated with popular concepts of health and fitness
- Food and exercise culture: promotion and marketing, health-giving properties
- Eg meat substitutes, wheat substitutes, supplements
- Some ingredients confirmed as cause of allergic reactions
- Co-factors eg exercise?

Cause of fatal food induced anaphylaxis by trigger in children (younger than 16) and adults, 1992-2018



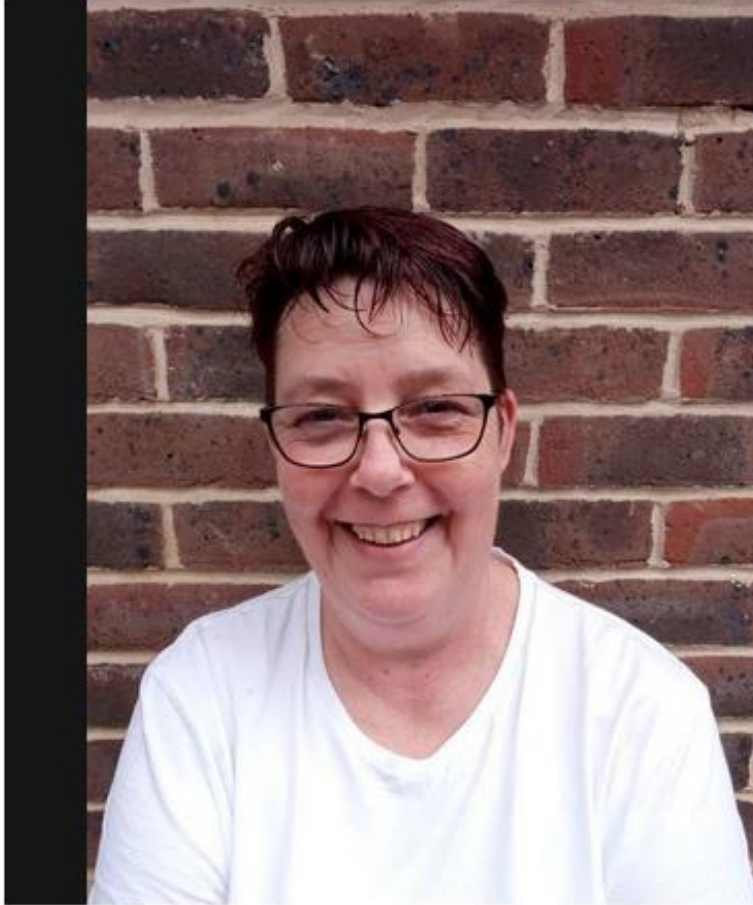
Baseggio-Conrado, A., Ierodiakonou, D., Gowland, M. H., Boyle, R. J., Turner, P. J., (2021) Food anaphylaxis in the United Kingdom: analysis of national data, 1998-2018. British Medical Journal, Manuscript accepted December 16th, 2020. DOI: 10.1136/bmj.n251

Plant-based alternatives to milk



15th May

Chef with rare honey allergy went into anaphylactic shock



Reducing water use

Impact on washing, cleaning,
general hygiene and PAL 'May
contain' labelling





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