

# Understanding the food choice of nut allergic consumers

Area of research interest: [Food hypersensitivity](#)

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Project code: T07058

Conducted by: University of Surrey

## Background

Peanuts and other nuts are an increasingly common cause of food allergy and are the most frequent cause of severe and fatal food allergic reactions. Avoidance of these trigger foods is therefore essential for those affected by nut allergies. This requires constant vigilance and can be difficult to achieve as the presence of nut allergens may not always be obvious and information about them may potentially be confusing to consumers.

At present, there are relatively few studies that have looked into the behaviour and decision making processes food allergic consumers tend to adopt to help them avoid food allergens that they are sensitive to, and how difficult they find this to achieve. In particular, little work has been carried out on what sources of information food allergic consumers find useful in making food purchasing decisions and how they use and interpret food labels and other information in the decision making process. Such research is needed by us to help provide the UK food allergic consumer accurate and useful information to allow them to make safe and informed food choices.

This study investigated how people with peanut and tree nut allergies use food labels and the types of strategies they adopt when selecting foods to minimise the risk of triggering an allergic reaction.

## Research Approach

Thirty-two adult volunteers with a diagnosed peanut and/or tree nut allergy were recruited to the study. Each participant took part in three tasks which were designed to gather qualitative information on how food allergic consumers make their food choices and food purchasing decisions. These tasks were:

1. An accompanied shop in their usual supermarket where participants were asked to talk aloud about what they were thinking when they chose each food product
2. An in-depth semi-structured interview which followed on from the accompanied shop and was conducted in each participants own home
3. A Product Choice Reasoning Task (PCRT) designed specifically for this study. Each participant was given 13 potentially problematic food products and asked to 'think aloud' and say if they would be happy to buy the product and how they reached their decision. The results from each of the above methods were recorded, transcribed and analysed considering key themes to identify patterns of behaviour and key factors involved in food purchasing decisions.

## Results

The researchers found participants used a wide range of strategies to make choices about what foods to eat and buy when food shopping and eating out:-

### **Strategies used when food shopping**

- Food labels were used along with other non-packet based strategies such as previous experience of eating a product. The brand name and supermarket were important rules of thumb for participants when they considered whether to eat a product or not. They trusted the labelling of certain food companies over others often because of assumptions about a company's policies or the quality of their products.
- The ingredients list was used by many as a reliable source of information about allergen content. However, most people said they relied on the allergy advice box over and above the ingredients list. Most participants did not understand the voluntary nature of allergen advice boxes and some incorrectly assumed the absence of an advice box indicated the product did not contain the main allergens and was therefore safe for them to eat.
- Precautionary nut ('may contain') warnings are used by food manufacturers to indicate possible cross-contamination with a food allergen. Many participants thought that this labelling was not credible or desirable, some ignored it, whilst a few claimed they avoided eating these products. However, the majority of participants felt that it was almost impossible to avoid eating all products with 'may contain' type labelling as doing so would result in a very limited diet.

### **Strategies used when eating out**

- Nut allergic individuals tended to adopt an avoidance and communication strategy to manage the risk of triggering an allergic reaction when eating outside the home. They often avoided certain types of restaurants (particularly Thai, Chinese and Indian restaurants), main courses or particular foods.
- Participants generally asked restaurant staff whether a dish contained nuts or not or asked them to inform the chef they had a nut allergy. However, the need to check whether the food on offer may contain nuts was a source of social embarrassment for some which led to increased risk taking. They often chose not to mention they had a nut allergy as they feared it would further limit their food choices.

This research has helped us to better understand the patterns of food consumption by food allergic consumers. This information is being used to inform our dietary advice to consumers with nut allergies, feed into ongoing European discussions on general food labelling legislation (including allergen labelling) and will help steer the development of food allergy labelling policy.

### **Additional Info**

We have a number of resources available to help people make safe food choices these include:-

1. A consumer leaflet which offers advice to people with a food allergy/intolerance on the suitable foods to choose when food shopping and eating out
2. An allergy advice leaflet for catering establishments (cafes/restaurants) that sell foods which are unpackaged/loose for direct sale to consumers
3. An Allergy Alert system which informs consumers when foods have been withdrawn or recalled from direct sale. Consumers can subscribe to the email alert system and receive automatic messages when an Allergy Alert is issued
4. A food allergy webpage that provides information on the current food allergen labelling rules
5. The NHS Choices food allergy webpage provides useful information on how to manage and treat a food allergy

## Published Papers

1. Barnett, J., Leftwich, J., Muncer, K., Grimshaw, K., Shepherd, R., Raats, M. M., Gowland, M. H. & Lucas, J. S. (2011) How do peanut and nut-allergic consumers use information on the packaging to avoid allergens? *Allergy*, 66, published online doi: 10.1111/j.1398-9995.2011.02563.x
2. Leftwich, J., Barnett, J., Muncer, K., Shepherd, R., Raats, M. M., Gowland, M. H. & Lucas, J. S. (2011) The challenges for nut-allergic consumers of eating out. *Clinical & Experimental Allergy*, 41, 243–249, published online (2010) doi: 10.1111/j.1365-2222.2010.03649.x
3. Barnett, J., Botting, N., Gowland, H., Lucas, J. (2012). The strategies that peanut and nut-allergic consumers employ to remain safe when travelling abroad. *Clinical and Translational Allergy*, 2 (12). doi: 10.1186/2045-7022-2-12
4. Barnett, J., Vasileiou, K., Gowland, H.; et al. (2013). Beyond Labelling: What Strategies Do Nut Allergic Individuals Employ to Make Food Choices? A Qualitative Study. *PLoS ONE*, 8 (1). doi: 10.1371/journal.pone.0055293

## Research report

### England, Northern Ireland and Wales

PDF

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