

# P1044 Plain English Allergen Labelling (PEAL)

May 2018

The Dietitians Association of Australia (DAA) is the national association of the dietetic profession with over 6000 members, and branches in each state and territory. DAA is a leader in nutrition and advocates for food and nutrition for healthier people and healthier nations. DAA appreciates the opportunity to provide feedback on P1044 Plain English Allergen Labelling (PEAL) by Food Standards Australia New Zealand.

## Contact Person:

Position: Practice Support Dietitian

Organisation: Dietitians Association of Australia Address: 1/8 Phipps Close, Deakin ACT 2600

Telephone: 02 6189 1203 Facsimile: 02 6282 9888

Email: practicesupport@daa.asn.au.au

#### DAA interest in this consultation

DAA is the peak professional body for dietitians in Australia and responsible for the Accredited Practising Dietitian (APD) program as the basis for self-regulation of the profession.

DAA advocates for a safe and nutritious food supply in which the community has confidence and which meets the nutritional needs of all Australians, including groups with special needs.

As experts in nutrition, APDs assist the general population and groups with special dietary needs, such as those with food allergy and intolerance, to meet their nutritional requirements. APDs also assist with the translation of food labels and nutrition content claims. APDs working within the food industry also assist companies to develop new products and food labels, including those relevant to allergy aware customers.

#### Recommendations

DAA supports clear and consistent plain English labelling of allergens on food products and supports Option B) that the Code prescribes the terms that must be used for each type of allergen declaration. More specifically, DAA recommends:

- The presence of fish, molluscs and crustacea be separately declared on the label and also to specify the individual type of fish, mollusc and crustacea used.
- The word 'Fish' in preference to 'Finfish' in allergen declarations as it is clearer English.
- The nine individual tree nuts associated with allergy be specifically and individually declared on labels, and consider adding coconut to the list of tree nut declarations.
- Clarification be included that wheat and its hybrids should be declared irrespective of the gluten content in a food. Additionally, that a 'contains gluten' statement be required.
- 'Contains' statements should summarise any allergens in a plain English term that is recognisable not only to allergen affected consumers, but people in their community and the food preparation workforce.
- Food labels are designed in ways that make finding allergen information easy and clear with a consistent location for allergen statements.

#### Discussion

1. <u>Do you agree there should be a separate declaration requirement in Standard 1.2.3</u> for molluscs?

DAA supports a separate declaration for molluscs in section 1.2.3-4 of the Code. DAA's position is based on Australasian Society of Clinical Immunology (ASCIA) findings that mollusc allergy is clinically significant in Australia, molluscs and crustacea are allergenically different from finfish and that cross-reactivity between molluscs and crustacea is relatively low.

DAA notes that molluscs can be an unexpected ingredient in common food products, such as the use of oyster sauce in Asian style ready meals and sauces. Greater clarity in allergen labelling would facilitate the provision of clear and accurate dietary advice to patients with mollusc allergy. Additionally, for individuals who know they have an allergy to molluscs only, a separate declaration would reduce unnecessary avoidance of foods that are in fact non-allergenic for these patients and support informed food choices.

Mollusc allergen labelling requirements in the European Union, USA and Canada are not consistent, in part because molluscs are not considered a major food allergen in the USA. On balance, the inconsistent international approaches, combined with the clinical significance of mollusc allergy in Australia lead DAA to support the separate declaration of molluscs in section 1.2.3-4.

2. How should finfish be declared on food labels? Should Standard 1.2.3 require a declaration of 'fish' or 'finfish'?

DAA supports a plain English approach to allergen labelling and consistent with that approach DAA supports the use of the word 'fish' rather than 'finfish' for declarations required by Standard 1.2.3. The word 'finfish' does not appear as standard Australian usage in the Macquarie Dictionary. Co-opting the word 'finfish' to Standard 1.2.3 would be inconsistent with a plain English approach. Mandatory labelling of allergens (Standard 1.2.3) is critical for the health and safety of those with allergies. DAA notes that ASCIA does not use the word 'finfish' in its information for consumers with a fish allergy.

As noted below in question 3, this approach would require clarification that the Standard 1.1.2 definition of fish does not apply to Standard 1.2.3 and Schedule 10.

Accordingly, DAA supports Standard 1.2.3 requiring separate declarations for fish, molluscs and crustacea. DAA notes this is generally consistent with the approaches taken in the USA and Canada. It gives clarity to consumers with allergies and regulatory certainty to the food industry.

Additionally, DAA considers that the type of fish, mollusc or crustacea should be specified. This is consistent with the need for specification under the food regulatory regimes in the EU, USA and Canada. This approach also facilitates consumers following FSANZ advice on fish consumption and mercury.¹ Being aware of which specific fish contain high levels of mercury is critical for pregnant women and young children in particular, but also important for other members of the general public who may choose to eat fish on a regular basis.

3. What amendments should be made to Section S10-2 of Schedule 10 (if any) to prevent inconsistencies between ingredient labelling requirements and allergen declaration requirements for finfish, crustacea and molluscs? Please provide reasons for your answer.

DAA strongly supports clear drafting of the relevant provisions because drafting inconsistencies have the potential to endanger the health of consumers with allergies.

DAA notes the current use of the generic 'fish' name in S10-2 of Schedule 10 leads to undesirable uncertainty and confusion for manufacturers and consumers since the current drafting states that fish includes crustacea.

DAA's preferred drafting approach is to separately list fish, molluscs and crustacea as generic names in Section 10-2 of Schedule 10. As noted above, this would require clarification that the Standard 1.1.2 definition of fish does not apply to Standard 1.2.3 and Schedule 10. Consistent with DAA's preference to specify the type of fish, mollusc or crustacea used, DAA recommends that S10-2 of Schedule 10 require that the specific name of the fish, mollusc or crustacea be declared.

4. <u>Do you agree with FSANZ's preliminary view that the nine individual tree nuts associated with food allergy should be required to be specifically declared?</u>

DAA supports that the nine individual tree nuts (almond, brazil nut, cashew, hazelnut, macadamia, pecan, pine nut, pistachio and walnut) should be specifically declared on labels to be consistent with overseas requirements and to make it easier for those allergic to specific nuts to buy appropriate products while avoiding others.

Research has found that many nut allergic consumers are unable to identify specific tree nuts so clearly labelling products containing specific nuts will help with identification.<sup>2</sup>

Where once allergy specialists would recommend someone with nut allergy avoid all nuts they are now often recommending patients consume nuts they are not allergic to as part of their treatment.<sup>3,4</sup> Again, clearly labelling what specific tree

nuts are in products will help these patients identify and choose appropriate products.

In addition, consideration should be given to adding coconut to the list of tree nut declarations since sensitisation to tree nut is correlated with coconut.<sup>5-8</sup>

There are many nut ingredients that go by other names so a clearly defined list of allergens in the Code will ensure these ingredients are properly labelled for allergens. A list of these nut-based ingredients can be found at Allergy & Anaphylaxis Australia.<sup>9</sup>

• What would be the impacts of this requirement for industry (e.g. costs and trade considerations) and consumers?

## Impacts for Industry

The size of the packaging particularly for nut packers is a key consideration. Many nut/dried fruit/seed mix packers label with stickers on the top and bottom or front and back of clear plastic packaging/rewind. Extensive allergen labelling may be difficult due to space limitations. Although individual tree nuts will already be declared in the ingredients list.

For food manufacturers using nuts as ingredients in other products e.g. breakfast cereals, muesli bars etc. their packaging has more space for additional allergen labelling.

For any company exporting products, consistent allergen labelling will be of benefit across jurisdictions and hence reduce the number of specific packaging's required.

For food service companies, clear direction will also help them produce and deliver appropriately labelled products to their nut allergic customers.

## **Impacts for Consumers**

A consistent approach to labelling and clear identification of specific tree nuts will make choosing products easier for nut allergic consumers and their families, friends, colleagues etc. Consumers travelling overseas will also benefit from a more consistent labelling approach.<sup>10</sup>

• Would this approach offer sufficient clarity in the Code with regard to which tree nuts/nuts should be declared?

Yes, a list of specific nuts in the Code would provide sufficient clarity on the issue. Guidance on ingredients/names which also contain nuts may also be of use to food service. This information could be provided on the FSANZ website.

5. Do you support the approach of clarifying the original intent of Standard 1.2.3 by requiring wheat and its hybrids to always be declared irrespective of the gluten content in a food?

DAA supports the approach of clarifying the original intent of Standard 1.2.3 by requiring wheat and its hybrids to always be declared irrespective of the gluten content in a food. The rationale for DAA's recommendations is outlined below:

- While allergic responses to food allergens with barley, rye and /or oats have been identified, wheat is the most common food allergen among the gluten containing cereals.<sup>11</sup> It is generally agreed that hybrid strains of wheat and other cereals such as triticale share antigenic potential with wheat,<sup>11,12</sup> and patients with a wheat allergy are advised to avoid hybrids of wheat.
- Approximately 20% of individuals with a wheat allergy may be allergic to other gluten containing cereals.<sup>13,14</sup> Differentiating wheat and its hybrids from other gluten containing cereals allows individuals who are allergic to wheat only, to consume other gluten containing cereals. This will provide a wider range of grain foods to individuals with wheat allergy only at both the individual level as well as in the institutional food service sector.
- Clinical advice to patients with allergy to rye, barley or oats would generally be to avoid foods containing gluten, therefore, in order to simplify the labelling a specific declaration for each of these cereals is not necessary.
- This approach is also aligned with Canada, 15 US16 and UK17 where wheat and its hybrids are required to be declared on the food label.
- 6. Would clarifying the intent of Standard 1.2.3, so that individual sources of glutencontaining cereals are declared provide adequate information about the presence of gluten in a food for gluten intolerant consumers?
  - Declaration of individual sources of gluten-containing cereals does not necessarily provide adequate information about the presence of gluten in a food for gluten intolerant consumers. While individuals with gluten intolerance or Coeliac disease

are more aware of the gluten containing cereals, care givers or extended family members, or food service providers may be less knowledgeable in recognising gluten containing cereals. Furthermore, some products may contain a variety of wheat like 'spelt', 'khorasan' and 'kamut' and wheat hybrids or compound ingredients containing gluten which are less recognisable. Therefore, a specific declaration of 'contains gluten' would be helpful to individuals with Coeliac disease, gluten intolerant consumers and food service providers.

7. Are there other approaches (if any) that could be used for declaring 'cereals containing gluten', which would provide information for both wheat allergic and gluten intolerant consumers?

Based on Question 5 and Question 6, allergen labelling needs to differentiate wheat and gluten, and both allergens are important to be declared on food labels. DAA recommends including both wheat and gluten under the 'Contains' statement, e.g. 'Contains gluten (wheat)' if wheat is the only gluten containing cereal, or 'Contains gluten including wheat' if there are other gluten containing cereals present. Creating a list of standard terms to be used for each of the allergens and the mandatory inclusion of the 'Contains' statement will help consumers identify relevant allergens. This not only benefits individuals affected but also their caregivers and food service providers. DAA also recommends that the location of the 'Contains' statement should be standardised for ease of locating the statement. A logical place for the statement would be straight after the Ingredient list in line with the Canada<sup>15</sup> and UK<sup>17</sup> regulations.

Consultation with organisations such as Coeliac Australia and the George Institute that have Ingredient List apps/ booklets which outline gluten and wheat ingredients would ensure consistent advice is shared.

8. What evidence can you provide on how food allergen sensitive consumers use food labels to identify allergens?

DAA members who practice in the area of food allergy advise that in practice, clinics that specialise in allergy have created handouts for each of the food allergens with specific label reading advice for that allergen. Dietitians in private practice often use the resources from ASCIA, Anaphylaxis Australia and Coeliac Australia to teach label reading to clients with allergies and their care givers.

A challenge with this approach is that the resources need to be present whenever food is bought so that they can cross check ingredient names, due to the multiple names of some allergens. Resources such as smartphone apps can be useful in such situations. Further, the need to quickly identify allergens is not restricted to clients. It is essential their parents, siblings, extended family, child care, school, friends and their families, and food service providers are also able to identify

allergens. A clear and simple approach is essential to allergen labelling; not only for the affected consumer, but the community around them.

## • Where on the label do they look to determine whether an allergen is present?

If those with allergies are consulting an Accredited Practising Dietitian (APD), the patient and their care givers are generally taught to look at the ingredients list in conjunction with any 'contains' statement.

While the mandatory identification of allergens is helping those with allergies the voluntary use of different forms of Precautionary Allergen Labelling (PAL) to warn of potential cross contamination during production is causing consumer confusion, anxiety and affecting quality of life.<sup>18</sup> PAL statements are those such as 'May contain traces of XXX', 'Made on the same line as XXX' statements.

Many allergic consumers ignore these PAL statements increasing their risk of a reaction. A survey of 1355 supermarket products in Australia, found 65% of items included a precautionary statement of some sort. PREsearchers affiliated with three Melbourne based universities and research centres studied PAL and reported that interpretive labels (using graphics, symbols, or colours) were better understood than the traditional forms of PAL. They also investigated the use of a symbol, mobile phone application and a toll-free number and found all three were considered useful. Page 20-22

Zurzolo et al found parents of children with anaphylaxis thought there was a gradient in risk with some precautionary allergy labelling statements, however the researchers did not assess the difference between the information in ingredients list and 'contains' statements.<sup>23</sup>

A UK study assessed how nut allergic consumers used product packaging to determine if they should buy the product.<sup>24</sup> The results showed some participants used the ingredients list as their primary check for allergens, however most used the allergy advice box.<sup>24</sup> Images and product names were also used.<sup>24</sup> This study group also reviewed nut allergic consumer use and interpretation of 'May Contain' statements which was interpreted in the light of consumer judgements about the product, producer and previous personal experience.<sup>25</sup> The researchers also studied what other tools consumers with allergies employ to assess food products – quality of the product, country of origin and previous experience.<sup>26</sup>

A study by Yazar et al looked at readability of cosmetic labels for allergens by tracking the eye movements of study participants as they read labels. They found designs for ingredients lists that were alternate to the original were more effective.<sup>27</sup>

There is wide variability in where consumers with allergies may look to determine whether an allergen is present, as well is in consumer understanding of labelling and packaging.

• What types of terminology in allergen declarations are the most meaningful to consumers?

DAA is not aware of any consumer market research identifying the preferred terminology in allergen declarations. Although the experience and knowledge of APDs working in the area of food allergy is that plain English language words to clearly identify allergens is preferred.

• Do you have any evidence on the importance of the source allergen in a declaration (e.g. 'milk' versus 'sodium caseinate' in the statement of ingredients)?

Based on feedback and experience from APDs working in the area of food allergy and intolerance, DAA strongly believes that 'contains' statements should summarise any allergens in a plain English term that is recognisable not only to allergen affected consumers, but people in their community and the food preparation workforce. The language of the 'contains' statement should meet the needs of people from non-English speaking backgrounds and those with lower literacy levels. For example, a bread that contains spelt, oats and malt flour should have a statement that identifies it 'contains gluten' and identify its sources in the ingredients list. Likewise, a product that contains albumin should have a statement that identifies egg.

The preferred format is to have an Allergy Advice box similar to the UK under the ingredients list where a 'Contains' statement is present in simple English terms identifying the source allergen. The ingredients list would then be used to identify the specific ingredient that contains that allergen. The box is for quick identification of an allergen and the ingredients list to provide the specific detail. An example is below:

Ingredients: sugar, cocoa, maltodextrin (corn), **milk** solids, mineral (calcium), emulsifier (**soy** lecithin), spice cinnamon.

Contains: milk and soy

This format is straight forward however when the product is made on the same line as a gluten containing product and cross contamination may have occurred during production this becomes more complicated. Hence why Precautionary Allergen Labelling statements such as 'may contains traces of gluten' exist due to uncertainty by food manufacturers.

The Australian voluntary VITAL system<sup>28</sup> for identifying risks of cross contact can assist food industry to make more accurate precautionary allergen statements in a consistent approach. DAA suggest that this could be considered as a mandatory tool by FSANZ. Consumer research using VITAL has been investigated by teams in Melbourne with results showing the use of graphics, symbols, or colours are better understood than traditional forms.<sup>20</sup>

9. What evidence can you provide about consumers' awareness that some allergen labelling formats are currently provided voluntarily (e.g. the 'contains' statement), and therefore may not always be present on all products?

A recent study assessing US and Canadian consumer awareness of precautionary allergen statements found almost half of consumers falsely believed that PAL was required by law.<sup>29</sup> While DAA is not aware of any similar Australian research, DAA is aware that Australian consumers are complacent when it comes to these statements and many precautionary allergen labelling statements are being disregarded due to a lack of trust in the system.<sup>22,23</sup>

10. Is there any evidence of consumers being confused when the terminology used for declaring allergens differs between the statement of ingredients and a 'contains' statement? How important to food allergen sensitive consumers is consistency in the terms used for declaring allergens across different labelling elements?

DAA strongly supports consistency and simplicity in the declaration of allergens. As noted above, allergen declarations are read not only by consumers with allergies but their care givers and their broader community. DAA notes that people with lower English literacy levels struggle to remember the multiple names attributed to the same ingredient for example the nut list highlighted in question 4 above.

11. Where do food allergen sensitive consumers obtain information about how allergens are labelled? For example, GP, friend or family member, a support group, the Internet etc. What is the nature and quality of information provided from these sources?

Dietary information in the management of food allergies should be individualised and patient-specific.<sup>30</sup> APDs play a key role in educating allergic patients with individual advice about how to read labels and choose food products.

As noted in response to question 8, the DAA members who practice in the area of food allergy advise that in practice, clinics that specialise in allergy have created

handouts for each of the food allergens with specific label reading advice for that allergen. Dietitians in private practice often use the resources from the organisations listed below to teach label reading to clients with allergies and their care givers. Smart phone apps are useful as they are available at the point of purchase when shopping.

- Australasian Society of Clinical Immunology and Allergy (ASCIA)
- Allergy & Anaphylaxis Australia
- Coeliac Australia
- The George Institute
- FSANZ
- 13. Which of the proposed approaches outlined for applying PEAL to allergen declarations (if any) would you support? Please explain your reasons.
  - a) The Code requires the specific source of an allergen to be declared but the terminology is not prescribed.
  - b) The Code prescribes the terms that must be used for each type of allergen declaration.

DAA supports option b) that <u>The Code prescribes the terms that must be used for each type of allergen declaration.</u>

Reasons FOR this proposed approach

- Consistent plain English words prescribed by the Code and listed behind allergens in the ingredients list, such as 'sodium caseinate (milk)' and in an Allergy Advice box 'Contains allergen: milk' below the ingredients list will reduce the confusion around the source of allergens in food products.
- A consistent plain English approach would assist clients with lower literacy levels or where English is a second language and be more straightforward for the community supporting people with food allergies.
- The use of prescribed terms would facilitate client education about the identification of allergens.
- Shopping would be quicker and easier for those with food allergy as they will be able to identify appropriate foods more easily and the range of foods available to them may increase, improving quality of life.
- There will need to be an education campaign on this approach to raise awareness of the changes to the existing approaches taken.
- A consistent approach globally will help businesses that export and also for allergic consumers when travelling overseas.

### Reasons AGAINST this proposed approach

- DAA cannot identify any reason why a prescribed list of allergens should not be used given the high proportion of Australian children with a food allergy<sup>31,32</sup> and the risk of anaphylaxis by those with food allergy.
- 14. Should the location of the allergen declaration(s) be mandated on the label (e.g. in a separate 'contains' statement or in the statement of ingredients)? If so, where on the label should this information be located? (please give your reasons why)
  - DAA recommends providing a consistent location for allergen statements on a label to make reading labels easier for consumers with allergies, their care givers and own community. If allergy information was written simply and found consistently in the same location on a label, this would take the guess work out, and make shopping easier. This information should be located in a dedicated box underneath the ingredients list. An Australian study of parents of children with anaphylaxis found that about half of participants use the ingredients list to find allergens.<sup>23</sup>
- 15. If the location is not mandated, do you think the use of PEAL in at least one label element would provide sufficient information for consumers to make an informed choice?
  - Should the system be voluntary, DAA recommends policy guidelines that include using prescribed plain English terms for allergens in a dedicated box underneath the ingredients list, as well as identifying the source of the allergen in the ingredients list. A review and evaluation of the policy could occur after 3 years to decide if mandating is needed. The Health Star Rating model sets a precedence for a voluntary system as does the Country of Origin Labelling model for a mandated one.

#### References

- Food Standards Australia New Zealand (FSANZ). Mercury in Fish. FSANZ; 2011. (Available from: <a href="http://www.foodstandards.gov.au/consumer/chemicals/mercury/Pages/default.as">http://www.foodstandards.gov.au/consumer/chemicals/mercury/Pages/default.as</a> px, accessed 31 March 2018).
- 2. Hostetler TL, Hostetler SG, Phillips G, Martin BL. The ability of adults and children to visually identify peanuts and tree nuts. *Ann Allergy Asthma Immunol* 2012; 108(1):25-9.

- 3. Venter C, Groetch M, Netting M, Meyer R. A patient-specific approach to develop an exclusion diet to manage food allergy in infants and children. *Clin Exp Allergy* 2018; 48(2):121-137.
- 4. Norman M, South C, Quinn P et al. Does providing written dietary advice improve the ingestion of non-allergic nuts in children with existing nut allergies? A randomized controlled trial. Clin Exp Allergy 2016; 46(5):741-8.
- 5. Polk BI, Dinakarpandian D, Nanda M, Barnes C, Dinakar C. Association of tree nut and coconut sensitizations. *Ann Allergy Asthma Immunol* 2016; 117(4):412-416.
- 6. Nguyen SA, More DR, Whisman BA, Hagan LL. Cross-reactivity between coconut and hazelnut proteins in a patient with coconut anaphylaxis. *Ann Allergy Asthma Immunol* 2004; 92(2):281-4.
- 7. Teuber SS, Peterson WR. Systemic allergic reaction to coconut (Cocos nucifera) in 2 subjects with hypersensitivity to tree nut and demonstration of cross-reactivity to legumin-like seed storage proteins: new coconut and walnut food allergens. *J Allergy Clin Immunol* 1999; 103(6):1180-5.
- 8. Stutius LM, Sheehan WJ, Rangsithienchai P et al. Characterizing the relationship between sesame, coconut, and nut allergy in children. *Pediatr Allergy Immunol* 2010; 21(8):1114-8.
- 9. Allergy & Anaphylaxis Australia. Tree Nut; 2017. (Available from: <a href="https://allergyfacts.org.au/allergy-anaphylaxis/food-allergens/tree-nut">https://allergyfacts.org.au/allergy-anaphylaxis/food-allergens/tree-nut</a>).
- 10. Barnett J, Botting N, Gowland MH, Lucas JS. The strategies that peanut and nutallergic consumers employ to remain safe when travelling abroad. *Clin Transl Allergy* 2012; 2(1):12.
- 11. EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA). Scientific opinion on the evaluation of allergenic foods and food ingredients for labelling purposes. EFSA Journal 2014; 12(11):3894
- 12. Skoczowski A, Obtułowicz K, Czarnobilska E et al. Antibody reactivity in patients with IgE-mediated wheat allergy to various subunits and fractions of gluten and non-gluten proteins from  $\omega$ -gliadin-free wheat genotypes. Ann Agric Environ Med 2017; 24(2):229-236.
- 13. Jones SM, Magnolfi CF, Cooke SK, Sampson HA. Immunologic cross-reactivity among cereal grains and grasses in children with food hypersensitivity. *J Allergy Clin Immunol* 1995; 96(3):341-51.
- 14. Australasian Society of Clinical Immunology and Allergy (ASCIA). Information for patients, consumers and carers: Dietary avoidance wheat allergy. ASCIA; 2014. (Available from: <a href="https://www.allergy.org.au/images/pcc/ASCIA\_PCC\_Dietary\_avoidance\_wheat\_2014.pdf">https://www.allergy.org.au/images/pcc/ASCIA\_PCC\_Dietary\_avoidance\_wheat\_2014.pdf</a>, accessed 24 April 2018).
- 15. Canadian Food Inspection Agency (CFIA). List of Ingredients and Allergens Manner of Declaring. CFIA; 2011. (Available from: <a href="http://inspection.gc.ca/food/labelling/food-labelling-for-industry/list-of-">http://inspection.gc.ca/food/labelling/food-labelling-for-industry/list-of-</a>

- ingredients-and-allergens/eng/1383612857522/1383612932341?chap=2#s7c2, accessed 31 March 2018).
- 16. Food and Drug Administration (FDA). Food Allergen Labelling and Consumer Protection Act of 2004 (FALCPA). FDA; 2017. (Available from: <a href="https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/Allergens/ucm106187.htm">https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/Allergens/ucm106187.htm</a>, accessed 31 March 2018).
- 17. Food Standard Agency. Guidance on allergen and miscellaneous labelling provisions. Food Standards Agency; 2011. (Available from: <a href="https://www.food.gov.uk/sites/default/files/multimedia/pdfs/publication/allergenlabelguidanceog.pdf">https://www.food.gov.uk/sites/default/files/multimedia/pdfs/publication/allergenlabelguidanceog.pdf</a>, accessed 31 March 2018).
- 18. Allen KJ, Taylor SL. The consequences of precautionary allergen labeling: Safe haven or unjustifiable burden? *J Allergy Clin Immunol Pract* 2018; 6(2):400-407.
- 19. Allen KJ, Turner PJ, Pawankar R et al. Precautionary labelling of foods for allergen content: are we ready for a global framework? World Allergy Organ J 2014; 7(1):10.
- 20. Zurzolo GA, Peters RL, Koplin JJ, de Courten M, Mathal ML, Allen KJ. Are food allergic consumers ready for informative precautionary allergen labelling? *Allergy Asthma Clin Immunol* 2017; 13:42.
- 21. Duncanson K, Burrows T, Collins C. Peer education is a feasible method of disseminating information related to child nutrition and feeding between new mothers. BMC Public Health 2014; 14:1262
- 22. Zurzolo GA, de Courten M, Koplin J, Mathai ML, Allen KJ. Is advising food allergic patients to avoid food with precautionary allergen labelling out of date? Curr Opin Allergy Clin Immunol 2016; 16(3):272-7.
- 23. Zurzolo GA, Koplin JJ, Mathai ML, Tang MK, Allen KJ. Perceptions of precautionary labelling among parents of children with food allergy and anaphylaxis. *Med J Aust* 2013; 198(11):621-3.
- 24. Barnett J, Leftwich J, Muncer K et al. How do peanut and nut-allergic consumers use information on the packaging to avoid allergens? *Allergy* 2011; 66(7):969-78.
- 25. Barnett J, Muncer K, Leftwich J et al. Using 'may contain' labelling to inform food choice: a qualitative study of nut allergic consumers. *BMC Public Health* 2011; 11:734.
- 26. Barnett J, Vasileiou K, Gowland MH, Raats MM, Lucas JS. Beyond labelling: what strategies do nut allergic individuals employ to make food choices? A qualitative study. *PLoS One* 2013; 8(1):e55293.
- 27. Yazar K, Seimyr GÖ, Novak JA, White IR, Lidén C. Readability of product ingredient labels can be improved by simple means: an experimental study. *Contact Dermatitis* 2014; 71(4):233-41.
- 28. Taylor SB, Christensen G, Grinter K, Sherlock R, Warren L. The Allergen Bureau VITAL Program. *J AOAC Int* 2018; 101(1):77-82.
- 29. Marchisotto MJ, Harada L, Kamdar O. Food Allergen Labeling and Purchasing Habits in the United States and Canada. *J Allergy Clin Immunol Pract* 2017; 5(2):345-351.e2.

- 30. Venter C, Groetch M, Netting M, Meyer R. A patient-specific approach to develop an exclusion diet to manage food allergy in infants and children. *Clin Exp Allergy* 2018; 48(2):121-137.
- 31. Sasaki M, Koplin JJ, Dharmage SC et al. Prevalence of clinic-defined food allergy in early adolescence: The SchoolNuts study. *J Allergy Clin Immunol* 2018; 141(1):391-398.e4.
- 32. Peters RL, Koplin JJ, Gurrin LC et al. The prevalence of food allergy and other allergic diseases in early childhood in a population-based study: HealthNuts age 4-year follow-up. *J Allergy Clin Immunol* 2017; 140(1):145-153.e8.