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**[40-18]**

## **Supporting Document 2**

### **Proposal P1044 – Plain English Allergen Labelling**

Consumer understanding, attitudes and behaviour in relation to food allergen labelling

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## **Executive summary**

This supporting document provides an overview of FSANZ's current evidence base on consumer understanding, attitudes and behaviours with respect to food allergen labelling. It highlights issues that allergen-sensitive consumers may experience with current labelling, which inform the risk management considerations in the Call for Submissions report. This supporting document primarily draws upon findings from consumer research about allergen labelling commissioned by FSANZ in 2003 and 2008-09, as well as a rapid evidence assessment conducted in 2015 drawing on Australian and New Zealand literature. Following the first round of public comment, it is anticipated that FSANZ will prepare a broader literature review to expand this evidence base. Gaps in the literature are highlighted throughout and questions to submitters are provided in the Call for Submissions report.

FSANZ currently has limited evidence about how allergen-sensitive consumers use food labels to identify allergens. As would be expected, findings suggest that allergen-sensitive individuals read food labels more frequently than the general population. Similarly, use of the ingredients list to check for allergens is low in the general population, but the majority of allergen-sensitive consumers use the ingredients list (or other parts of the label) to check for allergens. In addition, the time spent reading food labels to check for allergens depends on experience and the novelty of the product.

We currently have limited understanding about how allergen-sensitive individuals are educated about using food labels to identify allergens. In one (low quality) study, almost two thirds of the sample with formally diagnosed food allergens reported that they were never shown how to read and understand food labels at the time of their diagnosis.

Consumer confidence and certainty in allergen labelling practices appears to have increased between the FSANZ 2003 benchmark and 2008-09 follow up studies on allergen labelling. However, one fifth of the 2008-09 respondents still reported being often or always unsure about food items or particular ingredients when reading food labels because of concerns about allergens.

Consumers' perceived ease of using food labels to identify allergens appears to have remained stable from the 2003 to 2008-09 surveys. Within the 2008-09 survey, the most commonly reported problems encountered by participants were that they found it hard to find the location of ingredients, or that the 'allergen warning' was hard to find/ non-existent.

These surveys and other FSANZ reviews also highlighted possible issues with the 'contains' statement and consumer understanding of terminology across labelling elements. These problems may arise because of unfamiliar or ambiguous terminology. For example, instances were found in the 2008-09 survey where the primary grocery buyers for allergen-sensitive individuals were unable to correctly identify some ingredients likely to be allergens. Alternatively, this could potentially stem from a lack of standardisation across allergen declarations and, although a FSANZ label survey suggests that this practice is infrequent, it may create doubt and confusion over whether the food contains the particular allergen or not.

The main limitations of the literature presented in this supporting document relate to representativeness, comprehensiveness and the length of time since the research was conducted. The rapid evidence assessment on consumer understanding, attitudes and behaviour with respect to food allergen labelling was conducted recently (2015), but only included Australia and New Zealand research. This approach was used to obtain a preliminary understanding of the research area and means that relevant literature published in other countries was not assessed. In addition, a number of the studies included samples of formally diagnosed allergen-sensitive individuals or allergen-sensitive individuals recruited through clinics or allergy support groups. This may limit the generalisability of findings to consumers with self-diagnosed allergies. It may also miss important insights from allergen-sensitive individuals who have less serious allergic reactions as these individuals tend to interact less frequently with clinics and allergy support groups. Stakeholder opinions from the targeted stakeholder consultation for the FSANZ review titled *W1070 – Plain English Allergen Labelling* are interspersed throughout this report. It is important to note that these consultations were targeted and only represent the opinions expressed by submitters to the W1070 Review.

This supporting document provides an overview of the limited evidence FSANZ currently has in terms of consumer understanding and use of allergen labels on food. In addition, it highlights some issues allergen-sensitive consumers may be experiencing with currently labelling. Following the first round of public comment, it is anticipated that FSANZ will prepare a broader literature review to expand this evidence base that will also include overseas literature.

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# 1 Introduction

FSANZ recently conducted a review into how terminology was being used to declare allergens on Australian and New Zealand food products. This review was titled *W1070 – Plain English Allergen Labelling* (the W1070 Review), and it highlighted instances where allergens are being declared on foods in ways that may be confusing to consumers (e.g. Food Standards Australia New Zealand 2016a, 2016b). This includes the use of terms that may be unfamiliar to consumers, as well as the use of different terms in the ingredient list and ‘contains’ statements. This creates a risk of severe health consequences if allergen-sensitive individuals, their parents/carers or someone who is responsible for feeding them is unable to correctly identify the presence of a food allergen.

This supporting document aims to provide an overview of FSANZ’s current evidence base on consumer understanding, attitudes and behaviour with respect to food allergen labelling. Please note that the evidence presented is primarily drawn from previous reviews and research conducted (or commissioned) by FSANZ. It is anticipated that FSANZ will prepare a literature review on consumer use and understanding of terminology in allergen labelling to expand this evidence base.

The structure of this supporting document is based on three themes, these include:

- How do consumers use food labels to identify allergens?
- What level of confidence and certainty do consumers have in current allergen labelling practices?
- What challenges do consumers face when identifying allergens on food labels?

## 1.1 Mandatory allergen declaration requirements and voluntary labelling elements

*Standard 1.2.3 – Information requirements – warning statements, advisory statements and declarations* sets out the mandatory declarations that must be made when certain substances are present in food, for example, egg, peanuts, milk and cereals containing gluten. There is no requirement for how declarations are to be made, but in practice manufacturers often choose to declare these in the ingredients list. Another place for food allergen declarations is in a ‘contains’ statement. ‘Contains’ statements are statements listing the allergens present in the food separate from the ingredient list; e.g. ‘*contains allergen x, allergen y...*’. The voluntary use of a ‘contains’ statement has become a common method for declaring allergens on food labels (in addition to the ingredients list) but because of its voluntary nature it is not always present on food labels. In addition, the allergens declared in ‘contains’ statements do not always match those declared in the ingredient list. Examples of this practice are provided in Section 4.5 of this supporting document.

Other labelling elements that often display food allergen information include voluntary precautionary allergen labelling (PAL) and voluntary nutrition content claims relating to certain substances. This labelling information is not in scope for this proposal. PAL is the use of voluntary statements relating to the unintended presence of an allergen through cross-contamination. An example of PAL is the statement ‘*May be present: allergen x, allergen y...*’. Nutrition content claims relating to gluten may also appear on food labels, for example ‘gluten free’.

## 1.2 Previous FSANZ research and reviews

The analysis presented below has a particular focus on two consumer surveys commissioned by FSANZ on food allergen labelling:

- The 2003 'Qualitative consumer survey on food allergen labelling: Benchmark survey' (NFO Donovan Research 2004)
- The 2008 'Consumer study on food allergen labelling: Follow-on survey' (TNS Social Research 2009)

These surveys are the focus of this supporting document as they contain a large number of pertinent questions on food allergen labelling and used Australian and New Zealand samples. Findings from these studies are interspersed with findings from an Rapid Evidence Assessment (REA) (similar to a literature review) undertaken in 2015 as a supporting document to FSANZ's technical evaluation for labelling recommendations 6 and 47 (Food Standards Australia New Zealand 2015). The primary objective of the 2015 literature review was to investigate and characterise the issues associated with consumer understanding, attitudes and behaviour with respect to current food allergen labelling practices, taking into account formatting and presentation. The review was limited to Australian and New Zealand research to gain awareness of the literature before going out for targeted consultation.

In addition, this supporting document draws upon findings from the W1070 Review and the supplementary qualitative survey of food labels undertaken by FSANZ in 2015 for this review.

Brief methodological overviews of the FSANZ research and reviews drawn upon in this supporting document are located in Appendix A.

## 2 How do consumers use food labels to identify allergens?

### 2.1 Consumer understanding about the location of allergy declarations

Henderson (2003) examined general Australian consumer awareness of where allergens are declared on food labels<sup>1</sup>. Thirty nine per cent of respondents reported that food allergens were declared in the ingredient list. Thirty six per cent reported that they were on the front of a food label, and one third (33 per cent) thought that they were located with the nutrition information panel. No response category was included for 'contains' statements (or their equivalent). It is not clear whether the respondents understood what constitutes an 'allergen declaration'. It is possible that some assumed this meant statements such as 'nut free', which do commonly appear on the front of the food label rather than in or near the ingredient list.

In addition, FSANZ currently has very little understanding about the food label advice that health care professionals provide when someone is diagnosed with a food allergy. Henderson (2003) found that of those respondents with diagnosed allergies, 63 per cent reported that they were not shown how to read and understand a food label at the time of their diagnosis. In addition, only 75 per cent reported that they were shown how to identify the ingredients in the ingredients list that trigger their own or their child's allergy.

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<sup>1</sup> The Code does not stipulate where allergens must be declared on the food label. In practice, many manufacturers declare them in the ingredient list or in allergen summary statements placed close to the ingredient list.

## 2.2 Frequency of reading allergy labelling

As would be expected, research suggests that allergen-sensitive populations read allergen labelling more frequently than the general population. Henderson (2003) found that all surveyed respondents with formally diagnosed food allergies read food labels prior to purchase (100 per cent), and 57 per cent read food labels prior to using a food. The primary reason provided was to check for allergens. However, of the general consumer group (i.e. non-allergen sensitive individuals), 89 per cent reported reading food labels prior to purchase and 29 per cent prior to use. This group were most likely to read food labels because of dietary reasons and for determining product value.

General consumer use of the ingredients list to check for allergens appears to be low. An online survey of participants recruited through a randomly selected national panel (i.e. not exclusively allergen-sensitive individuals) found that 16 per cent of respondents use the ingredient list to identify food allergens when they are deciding whether to buy a packaged food or beverage (Population Research Laboratory 2009). A further 4 per cent of respondents reported looking for 'nut free' labels and 13 per cent for 'Gluten free' labels. Reported use of the ingredients list appears to be higher in allergen-sensitive samples. In the FSANZ consumer attitudes survey, 23 per cent of Australians and 17 per cent of New Zealanders reported usually looking for 'information about food allergens, such as in ingredient list or statement on package' (Food Standards Australia New Zealand 2008, pp.50) when purchasing a food product for the first time.

The majority of allergens sensitive individuals (or their parents/ carers) use the ingredients list (or other parts of the food label) to check for allergens. Zurzolo et al. (2013) undertook a survey to better understand the labelling behaviours and perceptions within a sample of Australian parents of children with medically diagnosed food allergies. Zurzolo et al. (2013) found that 24-25 per cent of respondents checked the ingredients only, 1-2 per cent checked precautionary labelling, 73-74 per cent checked both and 1-2 per cent checked neither.

## 2.3 Time spent searching food labels for food allergens

The time taken for food allergen-sensitive individuals to correctly identify products as safe to eat appears to vary by experience and product familiarity.

Research conducted by Swain (2006) examined the time allergy clinic attendees took to categorise a food as 'free from' or not free from a target food allergen. Each attendee completed four of these tests. Swain found that new patients took longer on average to determine whether a food contained an allergen (21 seconds) compared to follow-up patients (9 seconds). However, no statistical analysis was conducted to determine whether the difference in performance was statistically significant. Even among follow-up patients with more experience using food labels to identify allergens, the time taken to complete the task ranged from 1 to 43 seconds.

Likewise, Henderson (2003) found that it takes longer for allergen-sensitive individuals to read food labels for new products compared to regularly purchased products. The majority of allergy sensitive individuals in Henderson's research reported that reading the label of a regularly purchased product took 19 seconds or less. In contrast, for new products the majority of respondents took 30 seconds or more.

FSANZ does not currently have any evidence about whether the amount of time varies for different labelling approaches. For example, it is not known whether allergen labelling that is consistent in location and format would reduce the time needed to correctly identify whether a food contains a specific allergen or not.

### **3 What level of confidence and certainty do consumers have in current allergen labelling practices?**

For the main grocery buyers of food allergen-sensitive individuals<sup>2</sup>, reported confidence and ability to find information on food labels increased between the FSANZ benchmark survey (conducted in 2003) and the follow-on survey (conducted in 2008-09). Within the respective samples, the proportion of respondents who 'tend to agree' with the statement 'I've always been able to find any information I need on a food or drink label' increased from 32 per cent to 43 per cent (statistically significant) (TNS Social Research 2009, pp. 68; NFO Donovan Research 2004, pp. 52). This was accompanied by a reduction in the proportion of respondents tending to disagree (from 36 to 28 per cent, statistically significant) and strongly disagreeing (from 18 per cent to 11 per cent, statistically significant). Consumer ability to find certain types of information was not assessed.

For this group, trust in the information on food labels also increased between 2003 and 2008-09. The proportion of respondents who indicated they were 'pretty sure I can trust' increased from 57 per cent to 66 per cent (statistically significant), while the proportion indicating 'not sure that I can trust' reduced from 39 per cent to 26 per cent (also statistically significant) (TNS Social Research 2009; NFO Donovan Research 2004).

In addition, the same studies reported uncertainty among consumers about the information presented on food labels. For the question, 'when reading food labels because of concerns about allergens, how often are you unsure about food items or particular ingredients?', the proportion of respondents who were always or often unsure decreased between 2003 and 2008-09 (from 32 per cent to 20 per cent, statistically significant). The proportion who reported they were sometimes unsure increased from 66 per cent to 71 per cent (statistically significant), as did the proportion who said they were never unsure, 2 per cent to 8 per cent (statistically significant). These results suggest that the confidence of people buying food for allergic individuals increased between 2003 and 2008. Themed insights about the reported problems encountered are provided in Section 4.5 of this document.

Within these surveys, respondents were asked about how they would act when they are uncertain about ingredients listed on a product (TNS Social Research 2009; NFO Donovan Research 2004). The most common response in both surveys was to 'avoid using/eating the food', however the percentage of respondents selecting this approach fell from 88% in 2003 to 55% in 2008-09. Worryingly, the percentage of respondents who reported they would try a small amount or give a small amount to the person with the allergy increased from 17% to 20% in 2008-09.

### **4 What challenges do consumers face when identifying allergens on food labels?**

This section presents an overview of the evidence FSANZ currently has on the challenges that consumers encounter when identifying allergens on food labels. It draws upon social science research, targeted stakeholder consultations and the W1070 Review's qualitative label survey. FSANZ recognises that these sources of evidence vary in strength; with the social science research providing the greatest insight into consumer understanding and behaviours.

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<sup>2</sup> The questionnaire targeted the main or joint grocery buyers within households who either themselves had the most serious allergy in their household or who were the parent or guardian of someone under 18 with the most serious food allergy.

## 4.1 Ease of use

In 2008-09, only 39 per cent of the main grocery buyers for allergen-sensitive individuals tended to agree or strongly agreed with the statement, 'generally speaking, it's easy to understand and use the information on food labels' (TNS Social Research 2009). This percentage did not change significantly between 2003 to 2008-09 (NFO Donovan Research 2004). Around 40 per cent tended to disagree or strongly disagreed with this statement in 2008-09.

In the same surveys, the percentage of respondents who answered 'yes' to the question 'while trying to identify foods that are suitable for the person(s) with the allergy, are there any other labelling issues that have caused you concern?', decreased from 66 per cent to 58 per cent. In both surveys, respondents who answered yes to this question were asked to indicate the problems encountered. A selection of themed responses to these parts of the surveys is shown in Table 1. In 2008-09, the most common theme was that the location of ingredients or 'allergen warning'<sup>3</sup> were hard to find. In 2003 the most common theme related to a lack of understanding about what some things meant.

**Table 1: Problems encountered when trying to identify foods that are suitable for the person(s) with the food allergy**

|  | 2003 (%) <sup>*</sup> | 2008-09 (%) <sup>*</sup> |
|--|-----------------------|--------------------------|
|  | n=336                 | n=595                    |
| <b>Location of ingredients or allergen warning hard to find/non-existent</b> | -#                    | 15                       |
| <b>Some ingredients are unlisted</b>   | 10                    | 8                        |
| <b>Do not understand what is meant by some things</b>                        | 19 <sup>b</sup>       | 7 <sup>a</sup>           |
| <b>What is ingredient derived from?</b>                                      | 12 <sup>b</sup>       | 7 <sup>a</sup>           |
| <b>Non-specific terms</b>  | 10 <sup>b</sup>       | 4 <sup>a</sup>           |

Reproduced from: TNS Social Research (2009) *Consumer study on food allergen labelling: Follow-on survey 2008-09*; NFO Donovan Research (2004) *Quantitative consumer survey on allergen labelling: Benchmark survey*.

<sup>\*</sup> Of respondents who responded 'Yes' to the question 'While trying to identify foods that are suitable for the person(s) with the allergy, are there any other labelling issues that have caused you concern?'. Note that only a selection of responses relevant to this Proposal are presented in this table. The full table can be found here:

<http://www.foodstandards.gov.au/publications/pages/evaluationreportseries/consumerstudyonfooda4610.aspx>

NB: Notation <sup>a</sup> and <sup>b</sup> indicates that there was a statistically significant difference (at the 95 per cent confidence level) in responses between the 2003 and 2008-09 surveys for this item. A dash, '-' indicates that there were no responses in the category in the 2003 survey. This maybe because no respondents provided this type of response in 2003, or it may be due to changes in how free text responses were categorised between 2003 and 2008-09.

# In the 2003 benchmark survey 9 per cent of respondents answering this question nominated 'Location of information non-standard' as an issue. However, it appears that responses in this category have not been assigned to any of the categories used for coding the 2008 responses. I.e. those responses do not appear in the 2003 column. 'Location of ingredients or allergen warning hard to find/non-existent' is likely to be the most applicable category for them.

In Allergy and Anaphylaxis Australia's 2003 survey, a third of respondents agreed that ingredient labels 'Are easy to understand' (see Table 2, below). In particular, respondents thought young children and babysitters would find it difficult to understand ingredient lists.

<sup>3</sup> 'Allergen warning' was a collective theme created to summarise similar responses. However as part Standard 1.2.3 – *Information requirements – warning statements, advisory statements and declarations of the Australia New Zealand Food Standards Code* (the Code), these are not 'warning' statements, but rather mandatory declarations of the presence of certain substances in food which can cause severe allergic and other reactions.

**Table 2: I think ingredient labels...**

|  | <b>Agree (%)*</b> | <b>Disagree (%)*</b> | <b>No response (%)*</b> |
|--|-------------------|----------------------|-------------------------|
| <b>Are easy to understand</b>                  | 33                | 65                   | 2                       |
| <b>Are simple enough</b>                       | 33                | 65                   | 2                       |
| <b>Give enough info about allergens</b>        | 11                | 86                   | 3                       |
| <b>Can be understood by a 7 year old child</b> | 5                 | 93                   | 2                       |
| <b>Can be understood by a babysitter</b>       | 14                | 84                   | 2                       |

*Reproduced from: Anaphylaxis Australia Inc (2003) Survey of members on product labelling, history of reactions and severity. <http://www.allergyfacts.org.au/images/pdf/AAI%20Food%20Labelling%20Survey%202003.pdf>, accessed 3 April 2013*

*\*Total sample N=243. Absolute number of respondents who chose each answer is unknown for this study (not included in AAI's summary).*

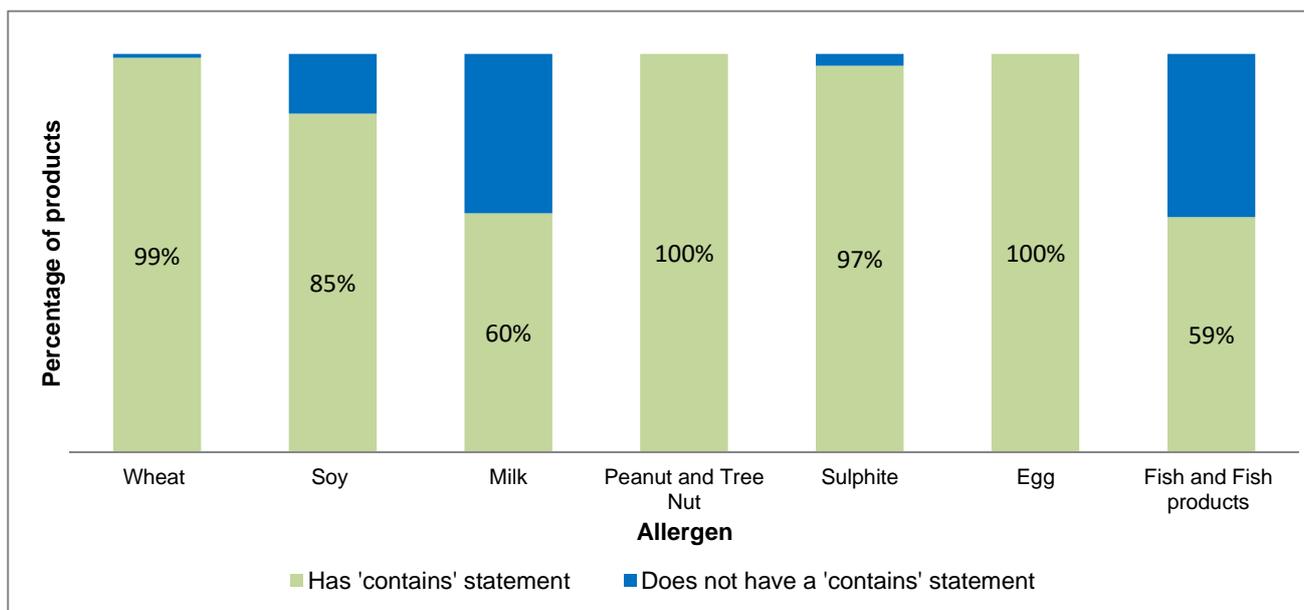
Similar results were found in Zurzolo et al.'s (2013) survey. Only 48 per cent of parents with children who had a history of anaphylaxis said that the ingredient list information on food labels was easy to understand and use.

These results suggest that allergen-sensitive individuals (or grocery buyers for this group) experience some difficulty when using food labels to identify the presence of allergens. This issue is likely to be greater for individuals with less experience (e.g. a babysitter).

## 4.2 'Contains' statements

Challenges with the use of the voluntary 'contains' statement have been cited. Although stakeholders in the targeted consultation for the W1070 Review commented that the 'contains' statement was an effective labelling tool for informing consumers about the presence of allergens in a food, some submissions (from individuals, government, health professional, and allergy support groups) were of the view that there were problems with the current use. For example, one reason provided was that the 'contains' statement is not always used across food products that are declaring allergens in the ingredient list. Results from the W1070 Review's qualitative survey of food labels indicated variable use of the 'contains' statement across foods and food categories. 'Contains' statements were used less often for those products containing milk and fish/fish product allergens (see Figure 1) (Food Standards Australia New Zealand 2016b). Stakeholders consulted as part of the W1070 Review mentioned that this was a common problem, and that it often led to uncertainty and confusion over the presence of an allergen in the food.

**Figure 1: Percentage of products with a 'contains' statement, by type of allergen**



## 4.3 Inconsistent or ambiguous use of terminology across labelling elements

Inconsistencies between the terms used to declare allergens in 'contains' statements (when they are used on a food label) and the ingredients list were highlighted in the targeted stakeholder consultations for the W1070 Review. In particular, issues with the ambiguous nature of some allergy declarations in 'contains' statements was emphasised. For example, submitters to the W1070 Review gave an example where the 'contains' statement sometimes used 'nuts' (which could mean either peanut or tree nuts) that conflicted with the use of the specific name for the nut in the ingredient list. This conflicting information may be confusing for consumers.

FSANZ did not find evidence of the use of ambiguous terms in 'contains' statements from the W1070 Review's qualitative label survey. However, FSANZ cannot discount this practice given the

limitations of the study design. In addition, submitters mentioned (and provided examples) that 'contains' statements on food labels are declaring both 'gluten' as well as 'gluten-containing cereals' rather than the names of specific gluten-containing cereals. Most of the submitters considered that this type of labelling information was not helpful for food allergen-sensitive consumers.

#### **4.4 Use of unfamiliar or technical terminology for allergen ingredients**

The Code does not specify how to declare allergens, meaning that food suppliers can use their own words for mandatory allergen declarations as long as they convey the intended effect. This creates the potential for a lack of standardisation across allergen declarations, which was highlighted by the W1070 Review's qualitative label survey and in submissions received from its targeted stakeholder consultations (Food Standards Australia New Zealand 2016a). The W1070 Review identified few terms being used for allergen declarations that would be considered unfamiliar or unrecognisable to consumers (2016a, 2016b). However, instances were still found where allergens were declared using unrecognisable or unfamiliar terms, or where the terms were presented in such a way that could create doubt and confusion over whether a food contains the allergen or not.

Similar issues were found in a FSANZ door-to-door survey of consumers about labels. In this survey, consumers who purchase foods for allergen sufferers identified that the most common reason for why food allergen declarations were not clear was because of 'the use of scientific language' (NFO Donovan Research 2003).

While such terms appear to be infrequently used, there is a risk of severe health consequences if the presence of an allergen is not correctly identified.

#### **4.5 Examples of problematic allergen declarations**

Respondents in the FSANZ benchmark and follow-on surveys were shown fifteen examples of ingredient lists taken from real life food labels and asked to assess whether the food would be suitable for their household (TNS Social Research 2009; NFO Donovan Research 2004). An understanding of how to identify ingredients of concern in food ingredient lists appeared to be quite high among respondents. For example, among people who shop for people with a milk allergy, over 90 per cent correctly identified foods that contained milk derived ingredients (not just foods that just contain traces of milk, etc.) as foods they would need to avoid. On the other hand, only 79 per cent of people shopping for someone with a soy allergy identified bread containing soy flour as being a product they would need to avoid.

Examples of allergen declarations relating to specific allergens which may be causing consumer confusion are presented below.

##### **4.5.1 Declarations for milk**

The W1070 Review's qualitative survey of food labels identified a number of terms used for the declaration of milk that could be considered as confusing or unclear, including rennet, whey and caseinate (Food Standards Australia New Zealand 2016b). In addition, a FSANZ-commissioned survey found that a number of ingredients are poorly recognised when the source is not included. For example, among respondents who identified milk allergy to be the most serious food allergy in their household, 81 per cent identified lactose, 76 per cent identified butterfat, 73 per cent identified casein and 71 per cent identified whey as words that indicated the presence of ingredients of concern to them (TNS Social Research 2009). This research suggests that consumers may not recognise some ingredients as being derived from milk, and thereby may make unsafe product choices.

In addition, Henderson (2003) asked a group of general consumers and a group of formally diagnosed allergen-sensitive individuals about their preferred terminology for 'milk' in an

ingredients list. The options available for them to choose from were: non-fat milk solids, casein, skim milk, no preference and don't know. Both consumers and allergen-sensitive allergic individuals preferred the use of 'skim milk'. The second most preferred option was 'no preference' for consumers and 'non-fat milk solids' for allergen-sensitive individuals.

#### **4.5.2 Declarations for gluten-containing cereals**

There are potential problems occurring with the use of the terms 'gluten' and 'cereals containing gluten' (as a collective term) in allergen declarations. Specifically, some manufacturers are viewing the use of 'gluten' to be meeting the current requirement to declare the cereals containing gluten. In the W1070 Review's qualitative survey, it was identified that 'gluten' is being used regularly in the 'contains' statement on foods that contain these cereal ingredients, without any additional reference to the individual cereal in the statement and sometimes not even in the ingredient list (e.g. using 'multigrain flakes', 'puff pastry', and 'malt extract' in the ingredients list) (Food Standards Australia New Zealand 2016a). Submitters felt that this labelling practice was unhelpful to those with a cereal-specific allergy (primarily wheat allergy); although a specific declaration of gluten is helpful to individuals with Coeliac disease. The information was considered not to be specific enough to allow consumers with cereal-specific allergies to make informed food choices.

The main grocery buyers for food sensitive individuals were asked about potential ingredients of concern in the FSANZ benchmark and follow-on surveys (TNS Social Research 2009; NFO Donovan Research 2004). Of those who identified wheat to be the most serious food allergy in their household, their ability to identify various ingredients derived from wheat was poor. Fifty eight per cent identified couscous, 52 per cent identified semolina, 61 per cent identified thickener and 49 per cent identified spelt as words that indicated ingredients of concern to them.

## **5 Conclusion**

This supporting document provides only an overview of FSANZ's current evidence base on consumer understanding, attitudes and behaviour with respect to food allergen labelling. Gaps in our current evidence base are highlighted throughout the document and questions are addressed to submitters are located within the main Call for Submissions report. Readers are encouraged to submit responses where they feel they can contribute to our understanding of practices and challenges currently facing consumers, industry, health practitioners, regulators and other stakeholders.

As would be expected, the use of food labels to identify allergens differs between allergen-sensitive individuals and the general population. Research suggests that allergen-sensitive individuals read food labels in general more frequently than the general population. They also read ingredient lists to identify allergens more frequently. The time spent reading food labels to check for allergens depends on experience and the novelty of the product. We currently have limited understanding or evidence about how newly diagnosed allergen-sensitive individuals are educated about reading labels, including which label elements to look at and the different terms that may be used to describe their allergen. One low quality study conducted in 2003 found that almost two thirds of their sample (who were formally diagnosed with food allergens) reported not being shown how to read and understand food labels at the time of their diagnosis.

However, FSANZ commissioned surveys found that trust and confidence in allergen labels increased from 2003 and 2008-09 for allergen-sensitive individuals (or their primary grocery shoppers). Challenges with using allergen labelling have been identified though. In the 2008-09 FSANZ follow-up study, one of the most common themes identified in free text response on the problems encountered was that the location of ingredients or 'allergen warning' were hard to find or non-existent. Other studies have found that the majority of (allergen-sensitive) participants disagree with statements that ingredient labels are 'easy to understand', 'simple enough' and give enough information about allergens'. Further challenges cited in the research literature include issues with use of voluntary allergen labelling elements (e.g. the 'contains' statement), the use of inconsistent or ambiguous terminology across labelling elements and the use of unfamiliar or

technical terminology for allergen ingredients.

The main limitations of the literature presented in this supporting document relate to representativeness, comprehensiveness and the length of time since the research was conducted. The rapid evidence assessment on consumer understanding, attitudes and behaviour with respect to food allergen labelling was conducted 2015, but only included Australia and New Zealand research (Food Standards Australia New Zealand 2015). This means that relevant literature published in other countries was not assessed. In addition, a number of the studies included samples of formally diagnosed allergen-sensitive individuals or allergen-sensitive individuals recruited through clinics or allergy support groups (e.g. Zurzolo et al. 2013; Henderson 2003). This may limit the generalisability of findings to consumers with self-diagnosed allergies. It also misses potentially important insights from allergen-sensitive individuals who have less serious allergic reactions as these individuals tend to interact less frequently with clinics and allergy support groups. Stakeholder opinions from the targeted stakeholder consultation for the FSANZ review titled *W1070 – Plain English Allergen Labelling* are interspersed throughout this report. It is important to note that these consultations were targeted and only represent the opinions expressed by submitters to the W1070 Review.

This supporting document provides an overview of the evidence FSANZ currently has in terms of consumer understanding and use of allergen labels on food. In addition, it highlights some issues allergen-sensitive consumers may be experiencing with current labelling. Following the first round of public comment, it is anticipated that FSANZ will prepare a broader literature review to expand this evidence base, which will include overseas literature. The narrative above provides some insights into what the literature review will cover, including what will be in and out of scope. Where possible, readers are encouraged to submit responses to the consumer research questions in the main Call for Submissions report.

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## Appendix A

A methodological overview of the FSANZ research and reviews that are primarily drawn upon for this supporting document are provided below.

- **A door-to-door study.** This research was conducted in 2003 during the time of transition to the joint *Australian New Zealand Food Standards Code* (the Code) to provide baseline indicators of consumer attitudes, awareness and use of labelling elements. A total of 1,940 interviews were conducted in metropolitan cities in Australia (n=1,259) and New Zealand (n=681). The questionnaire and stimulus materials for fifteen label elements included in the study were developed based on input from the qualitative research, pre-testing and two in-field pilot tests with interviewer debrief discussions (NFO Donovan Research 2003).
- **A benchmark study.** In 2003, soon after the joint Code became fully enforceable (after a transition period), FSANZ commissioned a quantitative consumer survey on food allergen labelling. This study targeted the main grocery buyer in the household for individuals 'at risk' of adverse or allergic reactions to food in terms of their use and understanding of food label elements and selection decisions. The 2003 benchmark survey had a total of 513 respondents (n=416 from Australia and n=97 from New Zealand) (NFO Donovan Research 2004).
- **Consumer attitudes survey.** In 2007, FSANZ commissioned a baseline survey to establish the views of Australian and New Zealand consumers with regard to overall confidence in the food supply. As part of this survey, a total of 2,000 respondents (n=1,200 in Australia and n=800 in New Zealand) provided insights into their behaviours, attitudes and confidence in allergen labelling (Food Standards Australia New Zealand 2008).
- **A follow-on study.** In 2008-09 a follow-on survey to the 2003 benchmark study was conducted. The methodology was guided by the 2003 study, targeting households with members who have one or more food allergies or allergic conditions. Similar to 2003, the study aimed to investigate the effectiveness of food labelling provisions and highlight areas for improvement to ensure that consumers are provided with the necessary information to avoid adverse reactions to food. This study also provided insights into the changes in consumer awareness and use of allergen labelling with the joint Code fully in place. A total of 1,028 people completed the survey, including 893 in Australia and 135 in New Zealand (TNS Social Research 2009).
- **A qualitative survey of food labels.** In 2015, FSANZ conducted a qualitative study into the terminology used for allergen declarations on the labels of food sold in New Zealand. Information on 2,227 food products in four food categories (biscuits, breakfast cereals, fish and seafood, convenience foods) was exported from the NutriWeb database into an Excel spreadsheet. In the 713 food products that met the inclusion criteria, specific terms that did not refer to an allergen (as named in Standard 1.2.3, e.g. terms such as 'wheat', 'peanut' etc.), and may be perceived as confusing to consumers, were then identified (Food Standards Australia New Zealand 2016b).
- **Targeted stakeholder consultation for W1070.** FSANZ conducted targeted consultation from November 2015 to January 2016 with key Australian and New Zealand stakeholders involved in food allergen management. The purpose of these consultations was to gather information and clarify stakeholder views on the terminology used in allergen declarations, and to determine relevant issues. FSANZ received 13 submissions (Food Standards Australia New Zealand 2016a).
- **Rapid evidence assessment on consumer understanding, attitudes and behaviour with respect to food allergen labelling.** In March 2015, this rapid evidence assessment (REA), or literature review, was published as a supporting document for the FSANZ Technical Evaluation for Labelling Review Recommendation 6 – Food safety labelling elements and Recommendation 47 – Embolden warning and advisory statements and allergen declarations (Food Standards Australia New Zealand 2015).