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Sent: Sunday, 23 February 2020 3:25 PM
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Subject: Re Submission P1044 Plain English Allergen Labelling-H [REDACTED] Marrero

[REDACTED] Marrero

RE Submission **P1044 Plain English Allergen Labelling:** to make allergen labelling requirements clearer and more consistent for food allergen-sensitive consumers and food businesses.

I am supporting Proposal P1044 and looking forward to watching these changes take place in the very near future.

Please find below evidence on several matters re packaged Food Labelling concerns. Vital changes are needed to help keep the Allergic consumer safe and be able to make an informed choice.

A food allergy is defined as “an adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food”. According to the Australasian Society of Clinical Immunology and Allergy (ASCI), **4.1 million Australians (19.6%) have at least one allergy. There is a need for increased resources for the management of allergies at a population level due to the increasing prevalence and potential for fatality (Boyce 2010).** The most commonly reported food allergies in Australia and New Zealand include: milk, egg, peanut, tree nut, soy, wheat, sesame, fish and crustacea

(Savage & Johns 2015). These allergies may have onset at infancy or adulthood and may be out-grown during the course of a person's lifespan (Savage & Johns 2015).

The process for identifying food allergies is to completely avoid the food containing the allergen followed by a food challenge with the allergen under professional medical guidance (Sicherer 2011). **Treatment consists of total allergen avoidance, which can be difficult, especially when selecting food products that contain many potentially allergenic ingredients and many terms are used for describing these ingredients (Savage & Johns 2015).** Thus it is essential for food-allergic consumers to be able to understand allergen to understand allergen labelling in order to identify potential allergens that may cause adverse health outcomes.

Food allergies affect an individual's choice to select certain products on the market.

Due to the prevalence of both food allergies and food intolerances it is essential for food products to have clear labelling of ingredients and allergens so that consumers can make informed decisions.

Food manufacturers often declare allergens in the ingredient list, although it is not essential for them to do so as long as it is declared elsewhere on the label of packaged food. Some manufacturers use a 'contains' statement (e.g. 'contains: allergen X, allergen Y' etc.). **Standard 1.2.3 does not mandate the terminology used on food labels for allergens, and the use of terms that may not be readily understood by consumers could cause confusion when attempting to select products appropriate for an allergy or intolerance.**

Food labels can potentially be confusing and difficult to interpret by consumers trying to avoid allergens due to the number of different terms used (Appendix 1) and inconsistencies in allergen declarations (Puglisi & Frieri 2007).

Often the allergen was identified, either in the ingredient list or in the 'contains' statement. However, there were several specific cases identified from further analysis of the data (see Appendix 2) where the terminology used for allergen declarations could potentially cause consumer confusion. **Food allergy is an important health issue due to the potential for severe and life threatening reactions.** Rigorous declaration requirements are considered the most appropriate risk management option for food allergens since even small amounts of the allergen may trigger allergic reactions. In October 2006, the Australia and New Zealand Food Regulation Ministerial Council requested FSANZ to review the regulatory management of food allergens. **The overall aim of the review is to determine whether, in the context of current scientific knowledge, improvements can be made to the existing regulatory approach which allows consumer choice but does not compromise the safety of allergic consumers.**

Bad Versus Good Packaging Design

When you look through an aisle of food items and drinks, you see hundreds of products shelved on the racks ready to be picked. Some you can't resist and some you pass. So there is a difference between a bad and good packaging design and here is it.

Bad Packaging

In the case of Cadbury, the problem was that the brand didn't use design to clearly distinguish the different types of cookie packs. Brands often make the mistake of imposing their intelligence quotient and emotional quotient on their target audience, instead of truly understanding their respective markets.

A bad packaging is a result of ignorance on the part of brands and designers. A bad packaging is evidently the type that doesn't recognize the needs and habits of the consumers online and offline. So let me list down the bad qualities of a bad design:

- Packaging that is hard to recognize and remembers
- Design that has indecipherable information on it
- Label that is misleading in terms of what is inside
- External wrapper that is difficult to tear open
- Colors that ignores factors like gender, culture, flavor etc.

- Language that is challenging to comprehend
- Font that lacks legibility and miscommunicates
- Material that's rickety and doesn't hold the product

While all these factors affect a brand's image, these can also be injurious to someone's health.

Good Packaging

On the other hand, there are some great examples of packaging out there. Their greatness isn't limited to the fact that they've used [trending packaging designs](#), but extends to the extent of making a design that is outstanding and user-friendly.

- Design that differentiates products of a single brand
- A unique façade from competitors – an original execution
- Clear branding (logo design, key information) sans ambiguity
- Credible packaging and labelling: what's outside is what's inside
- A functional packaging with easy-to-use engineering
- Follows federal regulations and complies with industry
- Acknowledges market preferences and solves problems

Vector Source: Freepik

What Matters Most In Packaging Design?

An estimated 60 to 70 percent of in-store purchases are influenced by the packaging of a product. Considering this, we can't ignore the extent to which design plays a role in wrapping a branded product. So here are five things that are the fundamental blocks of a packaging design:

Color Palette

The iconic purple shade confused Marrero's mother to pick the wrong flavoured cookie. Although the popular sweet and confectionary brand has vowed to change the colour scheme in order to differentiate packaging between its products, we have to make sure that packaging design doesn't harm anyone. It's better to be safe than sorry.

A research concluded that over 80% of total purchases are based on the colour of the item or its packaging. So it's necessary that designers and brands invest resources in understanding the [psychology of color for specific industries](#) and to exactly know how to create a colour palette.

Typography

Typography isn't just about selecting the perfect typeface style or font, in fact it is about how text is placed on a canvas. In packaging design, you'll see text in the shape of information about the product. You have to make sure that there is originality and clarity in all that is written on the packaging. Believe it or not, there is an entire [science of typography in packaging](#). Professional designers meticulously compose type on a given packaging and its label, to make sure that your customers find it easy to use your product.

Visual Hierarchy

You can't simply toss text and images into a delicious salad. In visual hierarchy, you need to structure the cake with layers of elements that all come together to make it heavenly. When creating a hierarchy, the following aspects matter the most:

- Size of individual elements of design
- Position of each text, image, icon
- Negative space in parts of design
- Color harmony and contrast
- Alignment of visual objects

Imagery

Humans grasp visual 6000 times faster than a dreary text, so the imagery on your packaging design is a vital part of the overall design. Whether it is a vector illustration, symbol and icon, or digital photography – any imagery on a packaging design should do three things:

- Shows the true picture of the product
- Clearly distinguishes one product from another
- Doesn't deviate customers in any way

Imagery on any given packaging design can be shown in a number of ways. In the paper *The Use of Images in Graphic Design on Packaging of Food and Beverages*, design professional and lecturer Watcharatorn Pensasitorn shares eleven things a visual can present on packaging. It can show:

- Only the product
- Benefits of the product
- Product usage guide
- Emotional appeal
- End result of product use
- Brand personality
- Product trademarks
- Mascot or ambassador
- Decorative pattern
- Inside of the product

Labelling

Labels in packaging of food items and beverages is a salient aspect of the overall design. Perhaps not in the case of Cadbury cookies, but many products have a naked packaging design such as a glass bottle or plastic wrapper accompanied with a label that contains everything about the brand and the product.

When you [create product packaging labels](#), make sure to keep these tips in mind:

- Select a befitting size and shape
- Pick a material that adheres to the surface
- Compose elements in a well-defined structure
- Don't settle for cheap labels with fuzzy printing
- Include all the valuable information on the label

Conclusion

It's distressing to hear such news that suggests design killed someone, because the purpose of design is to save the world right? It's disgraceful to even imagine that design can be a cause of something as grave as death. **I hope brands and designers around the world take a lesson from this incident and design packaging that is a savior not a murderer.**

Whether it's [gluten](#), [nuts](#), dairy or any other substance that you're [allergic to or intolerant of](#), you need to know which foods contain the offending substance, for the sake of your safety and sanity. But labels warning that a food "may" contain the allergen, rather than definitively stating that it does, can be frustrating, confusing and dangerously tempting to ignore.

Voluntary advisory labels on packaged foods, such as "May contain traces of..." or "Manufactured in a facility which also processes..." have increased recently, with one study finding these now appear on more than half of all packaged foods in Australian supermarkets. Not surprisingly this is causing some confusion.

Mandatory and voluntary labelling

It's mandatory for peanuts, tree nuts, milk, eggs, sesame seeds, fish, shellfish, soy, wheat, royal jelly and sulphites (more than 10mg/kg) to be listed as allergens on food packaging if they are included as an ingredient.

However, voluntary advisory labels can also be placed on packaging by manufacturers to warn that there may be accidental cross-contamination of the food by allergens during processing of the food. For example, a chocolate bar may not contain nuts, but if it's made in a factory that makes other foods with nuts, there's a risk that tiny traces or even a fragment of nut may contaminate the bar.

As there's no standard wording, font or style specified, manufacturers use whatever wording they like - making the huge variety of so-called precautionary warnings confusing for consumers (see our other reports on food labelling).

How real is the risk?

It's impossible to know, but [**Murdoch Children's Research Institute**](#) (MCRI) in Melbourne found 90% of the top five foods at risk of contamination – chocolates, breakfast cereals, muesli bars and savoury and sweet biscuits – now carry some form of precautionary statement.

However, when tested, only seven per cent of these high-risk products with warning statements about peanuts actually had detectable levels of the nut. Other samples that had precautionary labelling for hazelnut, milk, egg, soy or lupin had no detectable level of those allergens present at all.

Confused consumers

More than 50% of packaged processed foods in Australian supermarkets now show these precautionary warnings, and a study by the MCRI found that people with allergies have little idea whether the food really might be contaminated, or whether the manufacturer has just put the warning on to cover against legal action if someone does get sick from cross-contamination.

The MCRI study, which included parents of children with a history of anaphylaxis, found that 80% of those parents did not know if a food with a precautionary warning is safe, irrespective of the wording. Only five per cent felt they could "completely trust" food labels and tended to ignore warnings because they perceived them simply as a way for food manufacturers to cover themselves legally.

"We have no data on how many people who ignore labels suffer anaphylactic events, and we're planning to do a national study," says Professor Katie Allen, lead researcher from MCRI in Melbourne. "At this stage we think it's more likely that the increase in anaphylactic hospitalisations is due to the increase in allergies, but the problem with the current labelling system is that the 'may contain' statements transfer the assessment of risk of contamination from manufacturers to consumers."

As a result it's up to the consumer to decide, with no real information, whether to take the risk of eating a food, and people with serious allergies are left with a diminished choice of products they can consume with complete confidence.

Experts call for clear labelling

"Labelling is also a big issue, "It's easy for people to miss allergen information, and they often only find it after a reaction when they go back and look at the packet. The print is too small and hard for older people to read, and packaging can sometimes fold over, obscuring the warning.

"I'd like to see a recognisable standard health information panel on all packaging that is separate to the ingredients list and contains allergen warnings, additives and health claims. That way, everyone knows where to look."

The VITAL Solution

If many foods with warnings don't actually have allergen contamination, then why are manufacturers using unnecessary warnings.

"Allergens were not on the radar of manufacturers last century, but after mandatory allergen labelling began in 2002, most big manufacturers cleaned up their act. "However, avoiding all cross-contamination in a factory that makes different products requires a lot of time and investment - and in some cases, building separate facilities. In the small Australian market, this may not be cost-effective."

The good news is that there is a solution to this label confusion. The bad news is that it's not being widely used.

VITAL (Voluntary Incidental Trace Allergen Labelling) is a process to assess cross-contamination risk. Developed by food manufacturers, the industry group Allergen Bureau, **NSW Food Authority** and allergy support groups, it estimates the risk of cross-contamination in a factory and can tell if a product will be safe for 90% of people.

Under VITAL, a 'may be present' warning should only be placed on packaging by a manufacturer if the risk of contamination is assessed to be above a certain level.

It's a great idea but...

While VITAL can provide consumers with clarity around risk levels, there's currently no way for people to know whether a product has been through the VITAL risk assessment or whether the manufacturer is adding the warning just in case.

"VITAL has been useful for raising awareness of cross-contamination among manufacturers," says Professor Katie Allen. "Food makers can tell via VITAL that the food would be safe to eat for about 90% of people with allergies, but because they can't be 100% sure it's safe for everyone, they're too scared to label it as safe.

"If they said something like 'highly unlikely to contain nuts', it would be much more useful."

Research from MCRI in 2012 also found that only 12.7% of foods with precautionary labels surveyed had been through the VITAL process, which means the other 87.3% of warnings are likely to be placed on products as an insurance policy for the manufacturer.

- The recommended labelling format consists of an ingredient list declaring allergenic ingredients and their derivatives in bold, an allergen summary statement, and a precautionary statement. The ingredient/ component should be qualified according to the allergenic foods listed in the Table to clause 4 of Standard 1.2.3, either in the ingredient list itself or in the allergen summary statement. **This is to ensure that the allergenic ingredients are clear to the sensitive consumer, through use of the source name. Implementation of the guide by food manufacturers is voluntary.**
- Responses to the issues paper released by FSANZ in March 2008 for targeted stakeholder consultation indicated that precautionary labelling and, in particular, the plethora of various statements currently being used, was an area of concern. **Consumers may not be able to evaluate the actual risk through these statements alone, and could misinterpret the potential harm that the food in question may cause.**

- Consumer research (2003 and 2008) collected data on consumers' views and behaviours towards food allergen labelling requirements, including the use of precautionary labelling statements. **Both surveys indicated that the extensive use of precautionary labelling presents a difficulty to allergic consumers and their carers. A main concern was that precautionary statements were overused, possibly by manufacturers 'when in doubt'.** The overuse of precautionary statements may cause allergic consumers to unnecessarily restrict their food choices, and undermines the impact of the statement. Studies have shown that food allergic consumers may ignore product precautionary statements as a result of an increase in use of such statements (Hefle et al., 2007; Lemon-Mule et al.' 2007). **A further concern was that due to the ambiguous wording of many precautionary statements such as 'may contain...', such statements carry with them a level of uncertainty such that consumers cannot be assured one way or the other about the presence of the allergen.**

The most recent consumer research (FSANZ, 2009) also indicated that consumer understanding and behaviour in response to precautionary labelling varied widely depending on the statement. Questionnaire respondents were presented with the following precautionary statements:

'may contain traces of...'

- 'made in the same premises as...' 'made on the same equipment as...' 'May be present'
 - The use of clear terminology and easily understood names for ingredients assists allergic consumers in recognising products they need to avoid.

- Despite improvement in consumers' ability to recognise ingredients of concern where the source allergen is not declared by name, a percentage of allergic consumers fail to do so. However, data from the label monitoring surveys indicate that declaration of the source of allergenic ingredients is widely practiced by the food industry on a voluntary basis, as recommended by the peak industry body the AFGC and endorsed by the NZFGC.
 - In general, regulatory requirements and additional voluntary declarations provide adequate information to allergic consumers to assist them in identifying ingredients of concern. Based on the consumer survey of 2009, 5% of respondents reported they have suffered an allergic reaction due to unlabelled or incorrectly labelled food.
 - **Allergic consumers and their carers have an expectation that precautionary labelling should be truthful and not misleading, and provide accurate, clear and consistent information about the potential presence of food allergens.**
 - FSANZ recognises that the potential for cross contact allergens is inherent to the food production and processing environment. A desirable outcome is to improve the precautionary labelling such that it maximises food choices for allergic consumers without compromising safety.
- Precautionary labelling is recognised internationally as a difficult area to regulate. The science needed to answer relevant questions and to underpin decisions, such as allergen thresholds and the reliability of detection methods, is not available or is incomplete. Research is continuing to improve the evidence base and to establish robust risk assessment methodology in this area.

“V” for VITAL™.

“What people need to know is whether a product is reasonably safe to eat. Even if manufacturers are not prepared to provide that guarantee they should at least give the consumer guidance by labelling whether the ingredients have been risk-assessed or not and allow the consumer to make an informed choice.” Instead, she says, the industry is just focused on putting more precautionary warning labels on their products that an allergen “may be present”. Based on supermarket surveys, Professor Allen and colleagues have found that the proportion of packaged food products with precautionary allergen labels grew from 55 per cent in 2009 to 65 per cent by 2014. Among snack foods, 95 per cent had precautionary allergen labels. The proportions she says are likely to be higher now.

Anaphylaxis prevented altogether with a change in labelling practices.

Pre-packaged foods pose 'significant risk' to allergy sufferers

Pre-packaged foods have been linked to a string of anaphylaxis cases in Australia, prompting a warning that people with allergies are taking “significant risks” by eating the items that fill our supermarket shelves.

Would a VITAL logo work?

One option could be that manufacturers whose products have been put through the VITAL process would carry a VITAL logo so consumers could be confident that the risk had been assessed. Some allergen labelling advocacy groups would also like the VITAL process to be made mandatory for all food manufacturers, in order to reduce the number of unnecessary precautionary warnings.

"The idea is that VITAL can define the level below which 90% of people will not have an allergic reaction." VITAL may be useful to prevent acute anaphylaxis, but traces can still be a problem for the most sensitive people who must avoid all contact."

He prefers a harder line: "Food companies should be forced to use 'may be contaminated with' rather than the less confronting 'may contain'. This would spur the food industry to put more effort into developing allergen-free foods, which would make it easier for consumers to trust the labels."

"While a 'may contain' label may be less than perfect, a product with no precautionary label can be more dangerous if the manufacturer isn't educated about the risks of cross-contamination."

Anaphylactic shock

"Food labelling in Australia has made great strides and is leading the world," says Said. "But the danger for people at risk of anaphylaxis lies less with labelling than with the food service industry, schools, and in private homes, where poor communication and/or lack of understanding of the risks can lead to severe and, sometimes fatal, reactions. "In 2012, an eight-year-old girl with a milk allergy died when given a piece of cake that she was told contained no milk."

Said also cites an incident in NSW where a man with a milk allergy was served a meal with cheese. He asked for a replacement dish containing no milk products, but was allegedly served the same dish again, suffered anaphylactic shock and was hospitalised.

Many people in the food service industry don't understand that when a customer says they have an allergy, it is illegal to serve them food containing allergens. "State health authorities responsible for enforcing Food Standards regulations are overloaded, and the council inspectors who investigate events often aren't trained to investigate food allergy incidents properly," she says.

Said is calling for the food service industry to acknowledge food allergy as a serious safety issue, as well as for a national allergy management education plan.

"Allergic reactions happen all the time. People must report the events to the state food authorities to be investigated. This will help raise awareness of the problem."

A key task for the review was to identify specific areas of allergen regulation that could benefit from emerging scientific evidence. Six issues were outlined in a consultation paper, released by FSANZ in March 2008, targeting major stakeholders in Australia and New Zealand including allergy support groups, the food industry, allergy clinicians and the jurisdictions.

In reviewing these issues, FSANZ considered information from a variety of sources including allergic consumers, the food industry, the scientific and medical literature and expert opinion, as well as international regulations. The review identified information gaps which need to be addressed in order to strengthen the evidence base.

The review also provided an opportunity to consider the current requirements in light of industry initiatives to improve allergen control practices in the food production and processing environment.

This report presents the findings and conclusions of the review, and makes recommendations. One key recommendation, which has already been implemented by FSANZ, is the establishment of a Scientific Advisory Group to facilitate the integration of emerging clinical evidence into regulatory and non-regulatory approaches to food allergens.

Food labels need to be clearer for consumers with allergies, experts say

Warnings printed on packaged foods in supermarkets across Australia are now so overused they have lost meaning for consumers wary of triggering an allergic response, experts say.

Researchers have found that despite Australia's food safety regime being among the world's best, crucial information about products is not passed onto shoppers in the form of accurate labelling.

People who have food allergies are now currently taking risks by eating foods that are unlabelled,"

"Those unlabelled foods, some of them are very safe because people have been through a risk assessment process, and the others are completely unsafe because no-one's actually checking to see what foods have allergens and what don't."

Food Standards Australia New Zealand said some of the problems were caused by reformulation of recipes, packaging errors or accidental cross contamination. The process FSANZ uses to develop food regulatory measures is very open with input from government, industry, consumers and other stakeholders. In developing, reviewing or varying food regulatory measures, FSANZ adheres to three primary objectives in descending order of priority:

- **protection of public health and safety;**
- **provision of adequate information relating to food to enable consumers to make informed choices; and**
- **prevention of misleading or deceptive conduct.**

In developing and varying standards, FSANZ must also have regard to:

- **the need for standards to be based on risk analysis using the best available scientific evidence;**

In its role of standards setting, FSANZ undertakes food regulatory science, defined as *the use of risk analysis, including the analysis of all available information and data, to inform food regulatory activities including standards development*. Food regulatory science recognises that food regulatory decisions encompass a broad range of scientific areas and that other factors, such as trade and consistency with international food standards, also need consideration in order

to ensure the best food regulatory decisions. Further information on FSANZ's food regulatory science is available in our document, *Analysis of Food-Related Health Risks*.⁵

Example

- Labels with "Contains no known allergens" & "No Allergens Present"
- What does this mean? Many people are allergic to foods outside those required for mandatory labelling
- Supporting this claim could be difficult, very absolute statement

A 2008 survey identified that food labels were not easy for people to use and understand when avoiding allergens. Australian and New Zealand consumers reported a number of issues including difficulty in finding or reading allergen declarations, inconsistent labelling, the use of many names for the same thing, and precautionary labelling generally.

- In some specific cases, there were reports of consumers having difficulty in finding or reading information on food labels. The literature indicates that to be used by consumers, food safety label elements need to be able to cut through the surrounding text and be noticed. The various approaches to make food safety label elements more noticeable (boldening, larger font, colour, contrast) could assist consumers in finding the information they need.

- The Code currently requires mandatory information on food labels to be legible and prominent such as to afford a distinct contrast to the background. Reasons for having general legibility criteria in the Code include the recognition that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.

1.1 Recommendation 6

- The Forum asked FSANZ to undertake a technical evaluation and provide advice on the food safety elements on food labels. The government response stated that advice from FSANZ will assist the Forum to fully consider the expected benefits and cumulative impacts of possible changes to mandatory labelling requirements prior to proposing any amendments to the existing labelling requirements in the Food Standards Code, **noting that food safety is the most critical message to communicate to consumers.**
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- The government response to the recommendations in Labelling Logic was publicly released in December 2011. In relation to recommendation 6, the Forum noted that the recommendation proposes that the food safety elements of the label be considered at a technical level to ensure consumers' ability to access relevant information. Given the analysis presented by the review panel, the Forum considered there was justification to fully investigate and characterise the issues.
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Attention stage: Consumers must have their attention drawn to the food safety label element. As each element on a food label is competing with the rest to gain the attention of consumers, **the food safety label elements need to be able to 'cut through' to be noticed.** Attention is the process through which information gained by the senses is filtered to remove irrelevant information. The information left is then made available for other cognitive processes. In the context of food labelling, sight is likely to be the primary sense used. Increasing the visual salience of food safety label information can assist in drawing consumers' attention to it.

Knowledge stage: This includes the reading and understanding of the label element. Once a food safety label element is noticed, the consumer must be able to read and understand it. Consumer and label characteristics will influence the extent of reading and comprehension that can occur. The size of text, contrast with background and other detail on the label, colour and formatting will influence the ability of consumers to read food safety information, while existing knowledge, literacy and motivations will influence their comprehension of the information. Consumer characteristics will also influence the comprehension of the label information and its evaluation and assessment. Evaluation and assessment may draw on consumers' knowledge about the information, their previous experiences, their motivations and goals, and their values, beliefs and attitudes. Depending on the nature of the decision to be made, greater or lesser cognitive effort may be involved in this process and other factors may also impact such as affect and mood (Loken 2006).

In this assessment of food safety label elements, the attention stage is particularly important, as without noticing a label element, consumers are unable to respond to its messages. Of course this assessment may have occurred historically and need not be repeated every time a food product is

encountered. Section 3.2.5 briefly outlines the features of labelling that the literature suggests can enhance its ability to grab consumers’ attention. This is applicable to all the mandatory food safety labelling elements considered in this report. The particular content of food safety messages and their impact on consumers, that is consumers’ ability to understand and use the information to respond in a behaviourally appropriate manner, is considered in the context of each of the food safety label elements in the relevant sections of this report.

3.2.5 Enhancing attention

When viewing a food package, consumers are presented with a complex array of visual stimuli: a range of different textual, numerical and graphical elements in a range of sizes, colours, finishes, typefaces, densities, contrasts and locations. Each element of the food label competes for the attention of the consumer and some elements will more readily gain that attention than others. Those elements that gain attention readily have a high degree of visual salience; those elements stand out from the rest of the information. In an effort to reduce the burden of processing all possible stimuli, a subset of those elements with a high degree of visual salience will receive the attention of consumers. Where a consumer has specific motivations or goals, this will also guide where their attention is directed (e.g. an allergenic consumer confirming the presence or absence of particular allergens). Most label information is likely to go unnoticed unless it has a high degree of visual salience or the consumer is particularly motivated to seek it out.

In their review of the literature on the impact of label format on consumers’ attention and comprehension of label elements, Mercer et al. (2013) identified a number of factors that may contribute to enhancing the visual salience of label elements. Table 1 briefly summarises these factors (see SD1 for further details).

Table 1: Factors enhancing attention

Factor enhancing attention	Explanation
shape of enclosing area	enclosing shapes such as hexagons and diamonds may increase attention
location	front of pack locations, where interactivity is required, and information on tags may increase attention
size	larger in absolute and relative to surrounding information may increase attention
colour and symbols	contrasting colour and use of pictograms/graphics may increase attention
text direction	horizontal rather than vertical text may increase attention
signal words	warning, attention and caution may increase attention

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Similarly, Argo and Main (2004) in their meta-analysis of warning labels found that the presence of ‘vividness enhancing characteristics’ such as pictures, font size, colour, spacing and placement increased the noticeability of warning labels relative to the absence of those characteristics.

As noted in the FSANZ report for recommendation 43 of the labelling review (Perceptible Information Principle), there is a limited evidence base on the impact of format and presentation of mandatory label information on consumer use and understanding. **However, mandatory food safety information on food labels (defined as date marking, allergen declarations, warning and advisory statements and storage and preparation instructions) can often be presented in a manner that does not necessarily enhance its visual salience.**

The burden of label reading on those trying to avoid food allergens is high as all foods need checking and many people buying foods check labels every time they purchase a food, even if it is one that has been consumed safely before. The ingredient lists and precautionary labelling tend to be checked when checking for ingredients of concern (NFO Donovan Research 2004; TNS Social Research 2009).

While the assessments of trust, certainty and ability to find information have increased between 2003 and 2008, **food labels are still not easy for people to use and understand when avoiding allergens.** The 2008 survey highlighted some issues related to food allergen labelling. These include: difficulty in finding/reading ingredients or allergen declaration, inconsistent labelling, many names for the same thing, and precautionary labelling generally. Not surprisingly, the types of improvements that consumers suggested seek to rectify these issues, for example emboldening or larger font, using standard English for ingredients, and the use of ‘does/does not contain’ instead of ‘may contain’.

There is some evidence that in Australia and New Zealand, consumers have difficulty in locating such label elements, and techniques to promote their visual salience could be used to enhance the attention they receive from consumers.

- Australian and New Zealand consumers reported a number of issues including difficulty in finding/reading ingredients or allergen declaration, inconsistent labelling, the use of many names for the same thing, and precautionary labelling generally.
- The literature indicates that to be used by consumers, food safety label elements need to be able to cut through the surrounding text and be noticed. In some specific cases there are reports of consumers having difficulty in reading and finding information on food labels. The various approaches to make food safety label elements more noticeable (boldening, larger font, colour, contrast) could assist consumers in finding the information they need.
- The Code currently requires mandatory information on food labels to be legible and prominent such as to afford a distinct contrast to the background. In contrast with the general legibility criteria in the Code, food regulations in Canada, the USA and the EU include more detailed requirements. However, reasons for having general legibility criteria in the Code include the recognition **that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.**

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In conclusion, many of the aspects of format identified in the literature to be of relevance to consumers have been included in the user guide for Standard 1.2.9, the guidance on allergen labelling provided by the Australian Food and Grocery Council (AFGC) and in best practice advice/guidance documents available overseas. With regard to the content of food safety labelling elements, **there is limited evidence available about consumer use and understanding of the individual food safety labelling elements currently in Australia and New Zealand.**

- ***The labelling of foods and the impact on the occurrence of adverse / allergic reaction***

Forty-two percent of respondents reported that the person with the most serious food allergy within their household had had an adverse reaction after the diagnosis had first been made. The causes reported for this repeat reaction had been accidental consumption (36%), contact with the substance of concern (21%), unlabelled / incorrectly labelled food (14%) and traces of substances in unexpected foods (6%). Members of allergy support groups were significantly more likely (10%) than non-members (1%) to report that the reaction was caused by unexpected traces of substance in the product. Most respondents with peanut, tree nut, shellfish or fish allergies said they never eat the substance knowingly. In contrast, those with sulphite, soy or wheat allergies said they try but cannot avoid the substance completely.

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Conclusions and recommendations

Clarity and understanding of allergen labelling were the two key aspects that were said to impact on the effectiveness of labels, by consumers shopping for foods for those ‘at risk’ of adverse or allergic reactions.

According to respondents, the clarity of labelling information could be enhanced by:

- ☐ **adopting more meaningful or accurate labelling or ‘advisory’ statements;**
- ☐ **ensuring that the origin or derivations of particular ingredients are stated;**
- ☐ **using uniform wording in plain English for allergens;**

- ☐ using percentage labelling for allergens to indicate how much of the substance of concern is in the food to enable an assessment of risk; and
- ☐ further considering formatting issues, such as print size and standard placement fields on labels.

The second factor, understanding of allergen labelling, was clearly an issue for respondents. While ‘understanding’ is a difficult concept to measure, in this survey it was assessed by the respondents’ ability to use food labels to select appropriate foods, including their ability to identify different names for the substance of concern to them. The results of this survey indicated that understanding the information on food labels played a role in consumers’ ability to use food labels appropriately when selecting foods for those ‘at risk’ of adverse or allergic reactions.

This survey has found that the membership of an allergy support group assisted greatly in the respondents’ ability to identify the foods that were not suitable, and consequently to avoid foods that might otherwise trigger an allergic reaction. For example, members of a support group were more likely to contact the food manufacturer or the support group for advice on certain foods.

Clarity and understanding of food labelling information is not an issue confined to consumers shopping for the sub-population ‘at risk’ of food allergic reactions. The two key issues identified in this survey, clarity and understanding, are similar to the findings of ‘Quantitative research with consumers on food labelling issues’, a survey undertaken with the general population. **That survey also indicated that consumers in Australia and New Zealand had difficulties using labelling information effectively to make informed food choices (FSANZ 2003).**

- This baseline survey measured the current situation with regard to the use of food labels amongst the target group of those purchasing food for a household in which there is someone 'at risk' of an adverse or allergic reaction to food. I

1.2. Research objectives

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The evaluation described herein is the first part of what is intended to be a two-part process to measure the impact of the new allergen labelling requirements. The research aims were to:

1. assess the level of awareness and knowledge of consumers ‘at risk’ of an adverse reaction, and their carers (if relevant), of the labelling provisions that cover allergens;
2. assess the ability of those ‘at risk’, or their carers (if relevant) to successfully identify those foods that contain the pertinent allergens;
3. understand the existing behaviours of ‘at risk’ consumers or their carers (where relevant) in regard to food selection; and
4. identify whether a lack of understanding of the allergen labelling of foods contributes to the occurrence of adverse reaction in those affected, and if so to what degree

It is planned to conduct a second phase of research at some time in the future to track changes in awareness, knowledge and behaviours when compared to the measures that are established by the benchmark survey based on the aims listed above.

Just under half of those with a food allergy (42%) had had a severe allergic reaction since the allergy was first identified. The occurrence of severe allergic reaction was significantly higher in New Zealand than in Australia (52% versus 40% respectively).

As indicated, the propensity to have had an adverse reaction increased along with the time since the allergy was first identified.

There was no significant difference by membership of an allergy support group.

By allergen, some with the most serious food allergy had been more susceptible to a severe allergic reaction than others. Those with the following allergies in the household had the highest occurrence of severe allergic reaction since the allergy was first identified:

- ☐ sulphites (65%);
- ☐ milk (56%);
- ☐ fish (54%);
- ☐ other allergies (50%);

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- ☐ sesame seeds (47%); and
- ☐ egg (47%).

The occurrence of adverse reaction for those with peanut and / or tree nut allergies were the two least reported, despite being the two highest reported allergies in the households of people with allergies (Table 3.4d):

- ☐ peanuts (41%); and
- ☐ tree nuts (42%).

The reasons for these differences were not further explored, though may be due to differences in the ease with which these allergies can be managed.

Respondents who had a severe allergic reaction were then asked to describe the circumstances in which the reaction happened. The major responses are shown in Table 6.1b.

After diagnosis, the most commonly given reason for having a repeat severe food allergic reaction was accidentally imbibed / drank / consumed (36%) followed by a fifth (21%) who came into contact with the food substance but had not consumed it.

Of some note for food labelling, 14% attributed their severe allergic reaction directly to unlabelled or incorrectly labelled food, and 6% attributed their severe allergic reaction to traces of substances in unexpected products.

2003 Benchmark survey

It is recommended that as part of future evaluation activity a replicate survey be conducted in two to three years time, using the same methodology. Such a survey would enable FSANZ to track whether the allergen labelling provisions of the Code are meeting the desired objective of providing adequate information in relation to food, to enable consumers to make informed choices. If a survey is not possible, an alternative approach should be considered.

Food labelling

FSANZ has a statutory responsibility to ensure, through appropriate food standards, that consumers are informed about the contents or nutrition value of food, including information

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required by shoppers to avoid certain foods or food ingredients. Increasingly, consumers are seeking information describing the health benefits of food.

Food labels or signage associated with a food have proved to be effective means of providing this type of information to consumers. Our regulatory challenge is to ensure that consumers are not deceived by the information they receive in the marketplace.

Food Labelling Issues: Qualitative research on participants' perceptions and use of nutrition, health and related claims, and Food Labelling Issues: Quantitative research on consumers' perceptions and use of nutrition, health and related claims – two studies providing evidence on consumers' behaviours and attitudes to nutrition, health and related claims, including purchasing behaviour.

Food labelling monitoring survey – Phase 1 involved collecting a representative sample

of packaged foods from major food categories (1200 samples in 2002 and 2003) and assessing them for consistency with a range of key labelling requirements. We found high levels of consistency for most labelling requirements, but that many food manufacturers were having technical problems with the correct presentation of the nutrition information panel.

We have commenced Phase 2 of the label-monitoring program, with 1200 packaged food samples collected in 2005 currently being assessed and work about to begin on the 2006 data collection. Once again, we will assess key labelling elements to determine consistency with labelling requirements in the Code, including nutrition and health claims and, for the first time, country of origin labelling.

Impact on key stakeholders of the 2002 introduction of the Code – research to determine if the objectives of the *Australia New Zealand Food Standards Code* are being met. The study also investigated the level of awareness of changes to labelling and compositional standards, ease of understanding and main advantages and disadvantages of the new food standards for government enforcement officers, health professionals and food manufacturers. Overall, the outcomes of the research were positive.

We had to delay a follow-up national survey of food business knowledge, attitudes and practices towards food handling issues, due for completion in 2005-06, to ensure the participation of all jurisdictions. The three-year rolling ISC Coordinated Survey Plan now includes the ongoing Label Monitoring Program and the follow-up National Food Handling Survey, ensuring full jurisdictional participation in both of these projects in the future. We expect to complete the Food Handling Survey in 2006-07.

Allergy sufferers urgently call for food labelling laws to be improved

There are urgent calls for Australia's food labelling laws to be beefed up, with new research revealing people are still nearly dying despite precautionary allergen labelling.

Researchers in Melbourne surveyed more than 800 people, with dozens reporting anaphylactic reactions to packaged foods - some of which didn't have the allergen listed.

They say the current system is confusing and must be improved as more people are diagnosed with serious allergies.

Ingredients change and website details are not always updated. MILK now an ingredient in Primo cocktail franks.

A follower has sent us this product which her son with a MILK allergy has safely consumed in the past. It now contains MILK as an ingredient, but the supermarket website details have not been updated.

General rule scope

The general safety rule must override other safety provisions to the extent that they are weaker than the general rule. The FSANZ definition of safe food is so weak and so filled with loopholes, that it would render a general rule meaningless should it be allowed to prevail over a general standard. For example, a food is not deemed unsafe if less than half the population has an adverse reaction to that food.

Safety

FSANZ is currently required to take steps to ensure that harm is prevented as well as remediated. However, FSANZ currently limits its protection of public health to acute health issues such as food poisoning. A general standard of safety should operate to ensure that, as relevant, acute, lethal and sub-lethal harms, including long term harm and harm from combined uses are all covered in the scope of 'safety'.

Sub-lethal harms are not relevant to all products, but are certainly critical in ensuring food safety and the health and well-being of the human population. Long term, cumulative and compound harms are all critical issues in food safety, although they are currently ignored. Food related allergies have increased

dramatically and our three largest public health epidemics – obesity, diabetes and heart disease – are all strongly linked to the amount and types of foods eaten, yet no safety standard is applied to the foods most responsible, nor is there any reporting requirement related to these epidemics. This slows intervention and allows space for industry to manufacture doubt, thereby making interventions less likely. The definition of safety must recognise and incorporate precautionary and preventative complexities.

Serious harm: The ACCC is already responsible for addressing serious harm caused by products. While with many products, determining that harm has occurred is reasonably obvious, that is not always true of food.

A definition of serious harm should recognise social, physical, behavioural and mental harm. Serious harm must be understood more broadly than simply acute harm. For example, obesity is clearly serious harm but may not ‘qualify’ under some definitions – as are behavioural problems associated with certain additives. A more sophisticated and nuanced definition of harm and its prevention is needed in relation to food.

Data and testing requirements: The details of such requirements may need to be process, product or product-type specific, but we support a general requirement that the manufacturer has sufficient data to ensure their product is safe. This data must be subject to regular audits by regulators.

We would propose that mandatory reporting be broadened to include long term adverse reactions or adverse reactions that may be caused by unexpected synergistic interactions, cumulative or compound effects.

We support the idea, cited by Baker McKenzie and used in food safety reporting regimes in the Australian Capital Territory, South Australia (SA) and Tasmania, which requires that a medical practitioner, rather than a supplier, report food-related illness or death, although we would further recommend that adverse reactions as well as illness or death be reported. (p. 96)

Transparency: Transparency provisions could include the right of the public to be informed of the product testing that has been done, the data produced and any audits undertaken.

Enforcement and public rights of review: There should be public review rights to allow claims of safety to be tested. These should be merits-based not process-based reviews.

While we do not have the capacity to analyse the costs of such a regulatory regime, it is crucial that positive externalities and preventative savings are properly recognised and costed in. A European Environment Agency report - *Late Lessons from Early Warnings* - identifies costs associated with not taking a precautionary approach to safety. The costs of failure to act on early warnings can be enormous. Tobacco, asbestos and DDT are some obvious examples.

FSANZ has responsibility for enforcing the current labelling laws related to food. Labelling under the Food Standards Australia New Zealand Act (Food Act) is provided for in the Objects clause (s.3), which requires the provision of adequate information for consumers to make informed choices. Certain labelling laws (e.g. Country of Origin and Free Range) are within the jurisdiction of the ACCC.

These jurisdictional decisions appear to have no regulatory or other basis.

The regulatory systems, requirements and public rights are quite different in these two regulatory schemes. This degree of inconsistency is unfair for everyone. The regulatory regimes of the two agencies are very different, with FSANZ having no formal labelling complaint procedures and no citizen remedies for breaches of labelling. *Ad hoc* systems are inefficient and rarely used well. State and territory governments have enforcement responsibilities but no capacity or political will to implement them.

The regulatory regimes of the two agencies are very different, with FSANZ having no formal labelling complaint procedures and no citizen remedies for breaches of labelling. *Ad hoc* systems are inefficient and rarely used well. State and territory governments have enforcement responsibilities but no capacity or political will to implement them.

At a minimum, clear delineation of responsibilities and roles is needed.

Concerns relating to why Scientific terms are still been used in the ingredient list.

Misleading and ambiguous labelling

Certain labelling requirements are in themselves deeply misleading. Food additives are frequently labelled but not using commonly understood names. Aware of workshops that lawyers give advising food producers how to avoid labelling requirements using arcane terms. For example, consumers have identified 129 ways in which glutamate, the active ingredient in monosodium glutamate (MSG) which many seek to avoid, can be legally added to foods while still claiming 'no added MSG'. Similarly, the bread preservative propionate (280-283) is frequently hidden by about 10 different deliberately misleading names, such as cultured dextrose, while claims are made that the product is preservative-free. Complaints on this issue to ACCC and to FSANZ are not acted upon by either organisation and are routinely cross-referred. The result is that consumers are being misled by food producers gaming the system and agencies not responding to legitimate and serious issues associated with labelling.

Noted that the Consumer Survey 2016 recorded that respondents had found food labels misleading. It reflects a serious problem.

The issue of how the ACCC deals with labelling laws that are in themselves misleading needs to be addressed, as does the question of whether the ACCC should be charged with preventing the Government from engaging in misleading practices.

Use of the term 'free'.

'free' is an absolute term with zero tolerance at the technical thresholds of detection which may change from time to time. Whether the technology to measure 'free' exists is a different issue - but in terms of consumer law, free should continue to mean 'without'. Contamination, adventitious or otherwise, should not be permitted in foods or products labelled as 'free' from a certain ingredient. Contrary to the AFGC claim, this is not just an issue of dietary safety, but an issue of informed choice and citizen empowerment to create a level playing field for all participants in commerce. We also disagree with the AFGC in relation to imported foods using the term 'free'. Australia should not participate in a regulatory race to the bottom. If other countries permit the term 'free' to be used loosely (and contrary to its commonly understood meaning), then labels must be altered on products for sale in Australia and NZ.

Consistency with ingredient labelling statements on packaged food. Where to find the list? How large font should be? What colour? Allergens to be listed in same manner? So generally looking at been consistent.

Differentiating between similar range food packaging especially if one contains an allergen. What I mean by this is from the get go if manufacturer has a similar range of food product, to differentiate packaging and if they also decide to add a new package to the range make sure its differentiated.(and of course if it contains an allergen).Differentiation between packaging for it not to be misleading or deceptive. **A variety of flavours and packaging can look very similar/almost the same.**

Spot the difference is not a game to be played with packaging, especially where common life-threatening allergens are present.

There should be a must on: if a manufacturer changes an ingredient (adds or removes, whether it be an allergen or not) within a current product on the market they must change the name of product and front label (or at least be a code for mandatory labelling of New formula or new improved formula (highlighted and or new allergen) some kind of indication there is a change in that product. Not just in the ingredients list.

When an existing product changes an ingredient (Reformulation) either taking out or adding there is no indication on front label of the change. Only in the ingredients so both items can exist on shelf at the same time without consumer been aware. Eg Leggo s Bolognese had milk (an allergen) . Both items on shelf (Identical) except back of label. Which left one bottle with an allergen and one without which is a risk.

I expressed Food Standards says to always read the ingredients. By saying this though there is the changing of ingredients of an existing product. Same product (your go to product) without notification. Also then you are not safe because manufacturers have recalls at least twice a week as a minimum and 37% of the time it is undeclared allergens. So with this you could be reading every label but then the product may contain an allergy anyway as manufacturer has not labelled correctly. Due to four reasons usually which are ridiculous within themselves.

Allergy anaphylaxis has almost 43,000 followers. I would say that the allergy sufferers there families and carers are extremely higher than this so not a lot of the Allergic population is in the loop.

I asked what % of the population would know this? It was unknown and that organisations such as Allergy Anaphylaxis educate the public and the health system.

There is an estimated amount of 4.1 million Food Allergic sufferers in Australia. This indicates that 1% of the Food allergic consumer population is in the loop.

Efforts to communicate risks with consumers are lagging.

This is why it is so important to get packaged food items clearer as it is potentially the only form of knowledge gained to make an informed decision whether to consume this product.

I asked what % of the population would know this? It was unknown and that organisations such as Allergy Anaphylaxis educate the public and the health system.

Importance of the below to be mandated.

- placing a 'check allergen advice' label on the front of pack, to use whenever the recipe of a product changes. This additional labelling is used for a period of time before being replaced with a standard label where the allergen declaration appears on the back on pack.
 - placing a new recipe on the label, which also has the function of alerting consumers to the presence of an allergen.
- Differentiating packaging.

There was limited evidence regarding consumer use and understanding of warning and advisory statements on food labels. There is some evidence that in Australia and New Zealand, consumers have difficulty in locating such label elements, and techniques to promote their visual salience could be used to enhance the attention they receive from consumers.

- Across the general adult population, in a 2007 survey, approximately 23% of Australians and 17% of New Zealanders looked for information about allergens when purchasing a food for the first time. Among those with a food allergy or the guardian or parent of a food allergic child, there are much higher levels of food label reading, with nearly 100% reading food labels for allergen information. While assessments of trust, certainty and ability to find information have increased between 2003 and 2008, a 2008 survey identified that food labels were still not easy for people to use and understand when avoiding allergens. Australian and New Zealand consumers reported a number of issues including difficulty in finding/reading ingredients or allergen declaration, inconsistent labelling, the use of many names for the same thing, and precautionary labelling generally.
- The literature indicates that to be used by consumers, food safety label elements need to be able to cut through the surrounding text and be noticed. In some specific cases there are reports of consumers having difficulty in reading and finding information on food labels. The various approaches to make food safety label elements more noticeable (emboldening, larger font, colour, contrast) could assist consumers in finding the information they need.

Two of the ‘unprompted’ problems regarding allergen labelling mentioned in the 2008 survey are being addressed through Proposal P1044 Plain English Allergen Labelling (that is, whether to require declarations to always be made in the ingredient list or in a separate allergen summary statement, and clearer wording for label declarations). For the other two problems:

- imported foods with non-compliant labelling are a matter for the state and territory enforcement agencies, and
- voluntary precautionary allergen labelling, which relates to the potential presence of allergens through cross-contamination during food manufacturing, is not regulated by the Code and is not in scope of the work being undertaken in Proposal P1044. These voluntary ‘May contain...’ statements are typically found near the ingredient list.

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Increases in anaphylaxis fatalities in Australia from 1997 to 2013.

Abstract

BACKGROUND:

Recent epidemiological studies indicate increases in Australian, hospital anaphylaxis admission rates.

OBJECTIVES:

The aim of this study was to determine whether Australian anaphylaxis fatalities are increasing in parallel and to examine the characteristics of fatalities recorded in the National Coronial Information System (NCIS).

METHODS:

Time trends in Australian anaphylaxis fatalities were examined using data derived from the Australian Bureau of Statistics (ABS) 1997-2013 and the NCIS 2000-2013, the latter providing additional information to verify cause and identify risk factors.

RESULTS:

The ABS recorded 324 anaphylaxis fatalities by cause: unspecified (n = 205); medication (n = 52); insect stings/tick bites (n = 41); food (n = 23); and blood products (n = 3). From 1997 to 2013, all-cause fatal anaphylaxis rates increased by 6.2%/year (95% CI: 3.8-8.6%, P < 0.0001) or from 0.054% to 0.099/10(5) population. Fatal food anaphylaxis increased by 9.7%/year (95% CI: 0.25-20%, P = 0.04) and unspecified anaphylaxis deaths by 7.8% (95% CI: 4.6-11.0, P < 0.0001). There was an insignificant change in medication-related fatalities (5.6% increase/year; 95% CI: 0.3% decrease to 11.8% increase, P = 0.06), and sting/bite fatalities remained unchanged. Hospital anaphylaxis admission rates for all-cause, food, unspecified and medication anaphylaxis increased at rates of 8%, 10%, 4.4% and 6.8%/year, respectively. A total of 147 verified NCIS deaths were examined in detail: medication- and sting/bite-

related fatalities occurred predominantly in older individuals with multiple comorbidities. Upright posture after anaphylaxis was associated with risk of sudden death (all causes). Seafood (not nuts) was the most common trigger for food-related anaphylaxis deaths.

CONCLUSIONS:

Australian anaphylaxis fatality rates have increased over the last 16 years.

Food labels need to be clearer for consumers with allergies.

Warnings printed on packaged foods in supermarkets across Australia are now so overused they have lost meaning for consumers wary of triggering an allergic response, experts say.

Researchers have found that despite Australia's food safety regime being among the world's best, crucial information about products is not passed onto shoppers in the form of accurate labelling.

In Australia, overall hospital admission rates from anaphylaxis triggered by food grew by 50 per cent between 2005 and 2012. Among children aged 5-14 the rate increased by 110 per cent.

Food Standards Australia New Zealand said some of the problems were caused by reformulation of recipes, packaging errors or accidental cross contamination. The process FSANZ uses to develop food regulatory measures is very open with input from government, industry, consumers and other stakeholders. In developing, reviewing or varying food regulatory measures, FSANZ adheres to three primary objectives³ in descending order of priority:

In its role of standards setting, FSANZ undertakes food regulatory science, defined as *the use of risk analysis, including the analysis of all available information and data, to inform food regulatory activities including standards development*. Food regulatory science recognises that food regulatory decisions encompass a broad range of scientific areas and that other factors, such as trade and consistency with international food standards, also need consideration in order

to ensure the best food regulatory decisions. Further information on FSANZ's food regulatory science is available in our document, *Analysis of Food-Related Health Risks*.⁵

Example

- Labels with “Contains no known allergens” & “No Allergens Present”
- What does this mean? Many people are allergic to foods outside those required for mandatory labelling
- Supporting this claim could be difficult, very absolute statement

A 2008 survey identified that food labels were not easy for people to use and understand when avoiding allergens. Australian and New Zealand consumers reported a number of issues including difficulty in finding or reading allergen declarations, inconsistent labelling, the use of many names for the same thing, and precautionary labelling generally.

- In some specific cases, there were reports of consumers having difficulty in finding or reading information on food labels. The literature indicates that to be used by consumers, food safety label elements need to be able to cut through the surrounding text and be noticed. The various approaches to make food safety label elements more noticeable (emboldening, larger font, colour, contrast) could assist consumers in finding the information they need.
- The Code currently requires mandatory information on food labels to be legible and prominent such as to afford a distinct contrast to the background. Reasons for having general legibility criteria in the Code include the recognition that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.

1.1 Recommendation 6

- The Forum asked FSANZ to undertake a technical evaluation and provide advice on the food safety elements on food labels. The government response stated that advice from FSANZ will assist the Forum to fully consider the expected benefits and cumulative impacts of possible changes to mandatory labelling requirements prior to proposing any amendments to the existing labelling requirements in the Food Standards Code, **noting that food safety is the most critical message to communicate to consumers.**
- The Forum asked FSANZ to undertake a technical evaluation and provide advice on the food safety elements on food labels. The government response stated that advice from FSANZ will assist the Forum to fully consider the expected benefits and cumulative impacts of possible changes to mandatory labelling requirements prior to proposing any amendments to the existing labelling requirements in the Food Standards Code, noting that food safety is the most critical message to communicate to consumers.
- The government response to the recommendations in Labelling Logic was publicly released in December 2011. In relation to recommendation 6, the Forum noted that the recommendation proposes that the food safety elements of the label be considered at a technical level to ensure consumers' ability to access relevant information. Given the analysis presented by the review panel, the Forum considered there was justification to fully investigate and characterise the issues.
The Forum asked FSANZ to undertake a technical evaluation and provide advice on the food safety elements on food labels. The government response stated that advice from FSANZ will assist the Forum to fully consider the expected benefits and cumulative impacts of possible changes to mandatory labelling requirements prior to proposing any amendments to the existing labelling requirements in the Food Standards Code, **noting that food safety is the most critical message to communicate to consumers.**

Attention stage: Consumers must have their attention drawn to the food safety label element. As each element on a food label is competing with the rest to gain the attention of consumers, **the food safety label elements need to be able to 'cut through' to be noticed.** Attention is the process through which information gained by the senses is filtered to remove irrelevant information. The information left is then made available for other cognitive processes. In the context of food labelling, sight is likely to be the primary sense used. Increasing the visual salience of food safety label information can assist in drawing consumers' attention to it.

Knowledge stage: This includes the reading and understanding of the label element. Once a food safety label element is noticed, the consumer must be able to read and understand it. Consumer and label characteristics will influence the extent of reading and comprehension that can occur. The size of text, contrast with background and other detail on the label, colour and formatting will influence the ability of consumers to read food safety information, while existing knowledge, literacy and motivations will influence their comprehension of the information. Consumer characteristics will also influence the comprehension of the label information and its evaluation and assessment. Evaluation and assessment may draw on consumers' knowledge about the information, their previous experiences, their motivations and goals, and their values, beliefs and attitudes. Depending on the nature of the decision to be made, greater or lesser cognitive effort may be involved in this process and other factors may also impact such as affect and mood (Loken 2006).

In this assessment of food safety label elements, the attention stage is particularly important, as without noticing a label element, consumers are unable to respond to its messages. Of course this assessment may have occurred historically and need not be repeated every time a food product is encountered. Section 3.2.5 briefly outlines the features of labelling that the literature suggests can enhance its ability to grab consumers' attention. This is applicable to all the mandatory food safety labelling elements considered in this report. The particular content of food safety messages and their impact on consumers, that is consumers' ability to understand and use the information to respond in a behaviourally appropriate manner, is considered in the context of each of the food safety label elements in the relevant sections of this report.

3.2.5 Enhancing attention

When viewing a food package, consumers are presented with a complex array of visual stimuli: a range of different textual, numerical and graphical elements in a range of sizes, colours, finishes, typefaces, densities, contrasts and locations. Each element of the food label competes for the attention of the consumer and some elements will more readily gain that attention than others. Those elements that gain attention readily have a high degree of visual salience; those elements stand out from the rest of the information. In an effort to reduce the burden of processing all possible stimuli, a subset of those elements with a high degree of visual salience will receive the attention of consumers. Where a consumer has specific motivations or goals, this will also guide where their attention is directed (e.g. an allergenic consumer confirming the presence or absence of particular allergens). Most label information is likely to go unnoticed unless it has a high degree of visual salience or the consumer is particularly motivated to seek it out.

In their review of the literature on the impact of label format on consumers' attention and comprehension of label elements, Mercer et al. (2013) identified a number of factors that may contribute to enhancing the visual salience of label elements. Table 1 briefly summarises these factors (see SD1 for further details).

Table 1: Factors enhancing attention

Factor enhancing attention	Explanation
shape of enclosing area	enclosing shapes such as hexagons and diamonds may increase attention
location	front of pack locations, where interactivity is required, and information on tags may increase attention
size	larger in absolute and relative to surrounding information may increase attention
colour and symbols	contrasting colour and use of pictograms/graphics may increase attention
text direction	horizontal rather than vertical text may increase attention
signal words	warning, attention and caution may increase attention

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Similarly, Argo and Main (2004) in their meta-analysis of warning labels found that the presence of 'vividness enhancing characteristics' such as pictures, font size, colour, spacing and placement increased the noticeability of warning labels relative to the absence of those characteristics.

As noted in the FSANZ report for recommendation 43 of the labelling review (Perceptible Information Principle), there is a limited evidence base on the impact of format and presentation of mandatory label information on consumer use and understanding. **However, mandatory food safety information on**

food labels (defined as date marking, allergen declarations, warning and advisory statements and storage and preparation instructions) can often be presented in a manner that does not necessarily enhance its visual salience.

The burden of label reading on those trying to avoid food allergens is high as all foods need checking and many people buying foods check labels every time they purchase a food, even if it is one that has been consumed safely before. The ingredient lists and precautionary labelling tend to be checked when checking for ingredients of concern (NFO Donovan Research 2004; TNS Social Research 2009).

While the assessments of trust, certainty and ability to find information have increased between 2003 and 2008, **food labels are still not easy for people to use and understand when avoiding allergens.** The 2008 survey highlighted some issues related to food allergen labelling. These include: difficulty in finding/reading ingredients or allergen declaration, inconsistent labelling, many names for the same thing, and precautionary labelling generally. Not surprisingly, the types of improvements that consumers suggested seek to rectify these issues, for example boldening or larger font, using standard English for ingredients, and the use of ‘does/does not contain’ instead of ‘may contain’.

There is some evidence that in Australia and New Zealand, consumers have difficulty in locating such label elements, and techniques to promote their visual salience could be used to enhance the attention they receive from consumers.

- Australian and New Zealand consumers reported a number of issues including difficulty in finding/reading ingredients or allergen declaration, inconsistent labelling, the use of many names for the same thing, and precautionary labelling generally.
- The literature indicates that to be used by consumers, food safety label elements need to be able to cut through the surrounding text and be noticed. In some specific cases there are reports of consumers having difficulty in reading and finding information on food labels. The various approaches to make food safety label elements more noticeable (boldening, larger font, colour, contrast) could assist consumers in finding the information they need.
- The Code currently requires mandatory information on food labels to be legible and prominent such as to afford a distinct contrast to the background. In contrast with the general legibility criteria in the Code, food regulations in Canada, the USA and the EU include more detailed requirements. However, reasons for having general legibility criteria in the Code include the recognition **that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.**

March 2015

In conclusion, many of the aspects of format identified in the literature to be of relevance to consumers have been included in the user guide for Standard 1.2.9, the guidance on allergen labelling provided by the Australian Food and Grocery Council (AFGC) and in best practice advice/guidance documents available overseas. With regard to the content of food safety labelling elements, **there is limited evidence available about consumer use and understanding of the individual food safety labelling elements currently in Australia and New Zealand.**

- ***The labelling of foods and the impact on the occurrence of adverse / allergic reaction***

Forty-two percent of respondents reported that the person with the most serious food allergy within their household had had an adverse reaction after the diagnosis had first been made. The causes reported for this repeat reaction had been accidental consumption (36%), contact with the substance of concern (21%), unlabelled / incorrectly labelled food (14%) and traces of substances in unexpected foods (6%). Members of allergy support groups were significantly more likely (10%) than non-members (1%) to report that the reaction was caused by unexpected traces of substance in the product. Most respondents with peanut, tree nut, shellfish or fish allergies said they never eat the substance knowingly. In contrast, those with sulphite, soy or wheat allergies said they try but cannot avoid the substance completely.

Conclusions and recommendations

Clarity and understanding of allergen labelling were the two key aspects that were said to impact on the effectiveness of labels, by consumers shopping for foods for those ‘at risk’ of adverse or allergic reactions.

According to respondents, the clarity of labelling information could be enhanced by:

- ☐ **adopting more meaningful or accurate labelling or ‘advisory’ statements;**
- ☐ ensuring that the origin or derivations of particular ingredients are stated;
- ☐ **using uniform wording in plain English for allergens;**
- ☐ using percentage labelling for allergens to indicate how much of the substance of concern is in the food to enable an assessment of risk; and
- ☐ further considering formatting issues, such as print size and standard placement fields on labels.

The second factor, understanding of allergen labelling, was clearly an issue for respondents. While ‘understanding’ is a difficult concept to measure, in this survey it was assessed by the respondents’ ability to use food labels to select appropriate foods, including their ability to identify different names for the substance of concern to them. The results of this survey indicated that understanding the information on food labels played a role in consumers’ ability to use food labels appropriately when selecting foods for those ‘at risk’ of adverse or allergic reactions.

This survey has found that the membership of an allergy support group assisted greatly in the respondents’ ability to identify the foods that were not suitable, and consequently to avoid foods that might otherwise trigger an allergic reaction. For example, members of a support group were more likely to contact the food manufacturer or the support group for advice on certain foods.

Clarity and understanding of food labelling information is not an issue confined to consumers shopping for the sub-population ‘at risk’ of food allergic reactions. The two key issues identified in this survey, clarity and understanding, are similar to the findings of ‘Quantitative research with consumers on food labelling issues’, a survey undertaken with the general population. **That survey also indicated that consumers in Australia and New Zealand had difficulties using labelling information effectively to make informed food choices (FSANZ 2003).**

- This baseline survey measured the current situation with regard to the use of food labels amongst the target group of those purchasing food for a household in which there is someone ‘at risk’ of an adverse or allergic reaction to food. I

1.2. Research objectives

1

The evaluation described herein is the first part of what is intended to be a two-part process to measure the impact of the new allergen labelling requirements. The research aims were to:

1. assess the level of awareness and knowledge of consumers ‘at risk’ of an adverse reaction, and their carers (if relevant), of the labelling provisions that cover allergens;

2. assess the ability of those ‘at risk’, or their carers (if relevant) to successfully identify those foods that contain the pertinent allergens;
3. understand the existing behaviours of ‘at risk’ consumers or their carers (where relevant) in regard to food selection; and
4. identify whether a lack of understanding of the allergen labelling of foods contributes to the occurrence of adverse reaction in those affected, and if so to what degree

It is planned to conduct a second phase of research at some time in the future to track changes in awareness, knowledge and behaviours when compared to the measures that are established by the benchmark survey based on the aims listed above.

Just under half of those with a food allergy (42%) had had a severe allergic reaction since the allergy was first identified. The occurrence of severe allergic reaction was significantly higher in New Zealand than in Australia (52% versus 40% respectively).

As indicated, the propensity to have had an adverse reaction increased along with the time since the allergy was first identified.

There was no significant difference by membership of an allergy support group.

By allergen, some with the most serious food allergy had been more susceptible to a severe allergic reaction than others. Those with the following allergies in the household had the highest occurrence of severe allergic reaction since the allergy was first identified:

- ☐ sulphites (65%);
- ☐ milk (56%);
- ☐ fish (54%);
- ☐ other allergies (50%);

QUANTITATIVE CONSUMER SURVEY ON ALLERGEN LABELLING: BENCHMARK 2003 – REPORT OF RESULTS

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- ☐ sesame seeds (47%); and
- ☐ egg (47%).

The occurrence of adverse reaction for those with peanut and / or tree nut allergies were the two least reported, despite being the two highest reported allergies in the households of people with allergies (Table 3.4d):

- ☐ peanuts (41%); and
- ☐ tree nuts (42%).

The reasons for these differences were not further explored, though may be due to differences in the ease with which these allergies can be managed.

Respondents who had a severe allergic reaction were then asked to describe the circumstances in which the reaction happened. The major responses are shown in Table 6.1b.

After diagnosis, the most commonly given reason for having a repeat severe food allergic reaction was accidentally imbibed / drank / consumed (36%) followed by a fifth (21%) who came into contact with the food substance but had not consumed it.

Of some note for food labelling, 14% attributed their severe allergic reaction directly to unlabelled or incorrectly labelled food, and 6% attributed their severe allergic reaction to traces of substances in unexpected products.

2003 Benchmark survey

It is recommended that as part of future evaluation activity a replicate survey be conducted in two to three years time, using the same methodology. Such a survey would enable FSANZ to track whether the allergen labelling provisions of the Code are meeting the desired objective of providing adequate information in relation to food, to enable consumers to make informed choices. If a survey is not possible, an alternative approach should be considered.

Food labelling

FSANZ has a statutory responsibility to ensure, through appropriate food standards, that consumers are informed about the contents or nutrition value of food, including information
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FOOD STANDARDS AUSTRALIA NEW ZEALAND
38 required by shoppers to avoid certain foods or food ingredients. Increasingly, consumers are seeking information describing the health benefits of food. Food labels or signage associated with a food have proved to be effective means of providing this type of information to consumers. Our regulatory challenge is to ensure that consumers are not deceived by the information they receive in the marketplace. <i>Food Labelling Issues: Qualitative research on participants’ perceptions and use of nutrition, health and related claims, and Food Labelling Issues: Quantitative research on consumers’ perceptions and use of nutrition, health and related claims</i> – two studies providing evidence on consumers’ behaviours and attitudes to nutrition, health and related claims, including purchasing behaviour. <i>Food labelling monitoring survey</i> – Phase 1 involved collecting a representative sample of packaged foods from major food categories (1200 samples in 2002 and 2003) and assessing them for consistency with a range of key labelling requirements. We found high levels of consistency for most labelling requirements, but that many food manufacturers were having technical problems with the correct presentation of the nutrition information panel. We have commenced Phase 2 of the label-monitoring program, with 1200 packaged food samples collected in 2005 currently being assessed and work about to begin on the 2006 data collection. Once again, we will assess key labelling elements to determine consistency with labelling requirements in the Code, including nutrition and health claims and, for the first time, country of origin labelling. <i>Impact on key stakeholders of the 2002 introduction of the Code</i> – research to determine if the objectives of the <i>Australia New Zealand Food Standards Code</i> are being met. The study also investigated the level of awareness of changes to labelling and compositional standards, ease of understanding and main advantages and disadvantages of the new food standards for government enforcement officers, health professionals and food manufacturers. Overall, the outcomes of the research were positive. We had to delay a follow-up national survey of food business knowledge, attitudes and practices towards food handling issues, due for completion in 2005-06, to ensure the participation of all jurisdictions. The three-year rolling ISC Coordinated Survey Plan now includes the ongoing Label Monitoring Program and the follow-up National Food Handling Survey, ensuring full jurisdictional participation in both of these projects in the future. We expect to complete the Food Handling Survey in 2006-07.

Allergy sufferers urgently call for food labelling laws to be improved

There are urgent calls for Australia’s food labelling laws to be beefed up, with new research revealing people are still nearly dying despite precautionary allergen labelling. Researchers in Melbourne surveyed more than 800 people, with dozens reporting anaphylactic reactions to packaged foods - some of which didn't have the allergen listed. They say the current system is confusing and must be improved as more people are diagnosed with serious allergies. Ingredients change and website details are not always updated. MILK now an ingredient in Primo cocktail franks. A follower has sent us this product which her son with a MILK allergy has safely consumed in the past. It now contains MILK as an ingredient, but the supermarket website details have not been updated.

Section 10 Objectives

- a) **The protection of public health and safety.**
- b) **The provision of adequate information relating to food to enable consumers to make informed choices.**
- c) **The prevention of misleading or deceptive conduct.**
- **In developing or reviewing food standards, the Authority is also required to have regard to the following.**
 - a) **The need for standards to be based on risk analysis using the best scientific evidence.**
 - b) The promotion of consistency between domestic and international food standards.
 - c) The desirability of an efficient and internationally competitive food industry.
 - d) The promotion of fair trading in food.
 - e) Any written policy guidelines formulated by the Council and notified to the Authority.

Imagine living with the stress that your child may eat something that is in almost every type of food could potentially kill them? Now imagine going shopping... Checking EVERY label, double checking, triple checking, EVERY time you go to the shops. Searching for different types of food to give to your child that they can eat. It takes a while to go shopping in any case, but for someone with anaphylaxis in their family, the trip can be two-fold.

It would be much easier for the consumer to see an 'Allergen Warning' symbol on packaging and could potentially save a child from a devastating tragedy. Please look at this website that outlines packaging symbols in America <https://www.charlottepackaging.com/latest-news/what-do-food-packaging-symbols-mean/>. As you can see, what I am asking for has already been implemented in America, yet I still don't understand why it has not been implemented in Australia, especially when 'Australia leads the world deaths from anaphylaxis' (please see following articles: <http://www.mydr.com.au/allergy/australia-leads-the-world-in-deaths-from-anaphylaxis> and <https://www.ncbi.nlm.nih.gov/m/pubmed/27144664/>).

If this had already been implemented in Australia, I would have been one of those parents that could clearly see an allergen symbol at the front of the packet and it would have rang alarm bells. I often wonder about those people who can't read that small writing at the back of packaging.

I have taken the time to ponder the dilemmas on a manufacturers point of view, and can see how such a change could burden their product both negatively and financially, but large companies like the Mondelez Group need to understand that they have a huge responsibility and duty of care to their consumers when they provide foods to the public. It would be no extra work to put a symbol on the front of their packaging than all their writings and highlighting of allergens on the back of their packaging in small writing.

I understand that it is not only about the Mondelez Group and I am approaching you for the specific reason to make a change to the food standard code for ALL packaging. I do want to make the point, though, that the Mondelez Group is in the process of differentiating the packaging of those biscuits. Although after the incident they continuously payed for displays (as per the photo I sent above) of those specific biscuits that caused the mix up in the first place. It is extremely upsetting to know.

To help implement a change and awareness I have gone to the Media. The legacy of my beautiful daughter and to even save one other family of having to deal with what my family and the community is going through.

Final Summary of info for 243 AAI surveys 2003

I think ingredient labels:	Agree	Disagree	No response
3. Are easy to understand	33%	65%	
2%			

4. Are simple enough

33%

65%

2%

5. Give enough info about allergens

11%

86%

3%

6. Can be understood by a 7 year old child

5%

93%

2%

7. Can be understood by a babysitter

12a. Have you ever called a food manufacturer for more info. On the ingredients of a product	81%	18%	1%
			Can't Remember
12b. If YES were you satisfied with the response you were given on your most recent call	61%	21%	2%

13. The age of the FAI is with most severe allergy	Under 4	4-11	12-18	19-25	25+
	24%	65%	8%	1%	1%

The FAI is allergic to	Milk	Egg	Peanut	Tree nut	Sesame
	23%	40%	87%	53%	16%

The FAI is allergic to	Soy	Fish	Shellfish	Other*
	9%	7%	10%	17

The most severe allergic reaction treated by the FAI was (tick all that apply)	a)	b)	c)	d)	e)	f)	g)	h)	i)	j)
	63%	26%	16%	48%	2%	45%	15%	6%	28%	31%

-
-
- a) Treated with antihistamine
- b) Treated with EpiPen/adrenaline
- c) Treated by ambulance officer
- d) Treated by a GP or allergist
- e) Treated by a school nurse
- f) Treated at an Emergency Unit
- g) Required an overnight hospital stay
- h) Not so severe to require treatment
- i) Treated with steroids
- j) Treated by a family member
-
- 5 of those treated with an EpiPen/ adrenaline (2%) did not tick to say that they attended an emergency unit.
- 5 other of those treated with EpiPen/ adrenaline (2%) only attended a GP or allergist.
- This is frightening if it truly reflects what happened!!!!

Comments

May contain

-
- So many products say “may contain” seems more aimed at legal liability than being helpful for FAI
- “may contain” statements restrict the FAI even further. It should be made as simple as it contains or does not contain the allergen.
- “May contain” blanket statements means that manufacturers don’t have to be so careful!
- “May contain” and “may contain traces” are very confusing, I think that these will lead to more risk taking behaviour as my child becomes older.
-
- May contain are very frustrating as they potentially prevent a FAI from consuming a safe product.
- Limiting choices for FAI by using the may contain, may contain traces.
- Foods I have reacted to in the past now all have “may contain” labels- life is a lot safer with full disclosure! If these labels were around 5-10 years ago I wouldn’t have been in hospital so many times! (22 year old FAI)
-
- May contain is too ambiguous, this label is not specific enough. Is it safe or isn’t it?
-
- Now they all say “may contain” I bake my own stuff!!!
- May contain statement is not necessarily relevant and serves in some instances only to cover/limit manufacturers liability. They are no longer a reliable safeguard/benchmark for FAI consumers
- The “may contain” label has only added more confusion and fear and has greatly reduced our already limited diet.
- The may contain traces of is very unhelpful as it appears on practically every product.

- I feel that all the “may contain” statements only make the decision more difficult. Food labels should be definitive ie. It does or it doesn’t. Manufacturers should change their processing procedures to ensure against accidental contamination.
- I think manufacturers misuse “may contain” labelling for fear of litigation.
- Labelling is still not good enough ie. Hydrolysed vegetable protein sounds safe but is derived from whey therefore not safe for milk allergic individual. I still see as an ingredient “natural flavour” which can be a milk product. I usually have to ring the manufacturer or not purchase the product.

Blanket Statements

- Blanket warnings make buying processed foods very difficult
- Frustrating for there to be blanket labelling on so many products
- Wish we could be more confident about cross contamination in factories instead of having blanket statements Perhaps more testing of products is required.
- Too many blanket statements, may contain allergen is not useful, either it does or doesn’t

Iceblocks

- Even lemonade iceblocks have may contain traces of nuts- is this really necessary!!!
- Lemonade iceblocks are a big concern, they were once an always safe treat for an FAI, now they may contain or may contain traces, this is a big concern. Thanks to Bulla as these are the only ones I know of that are 100% safe!!
- When a “twin pole” (water ice) has may contain traces of nuts, you just have to wonder about the whole label thing!!

General Food Labelling comments

- Many versions of allergen warnings, makes it difficult to understand the “real risk”
- Parent states that her concern is that because choices for her daughter are so limited (peanut allergy) she may take risks as she grows up with food choices.
- There are so many disclaimers on products that one starts to question their validity, are they there to inform or clear liability resulting from sloppy manufacturing
- Allergen statements change constantly making food that was once OK now a problem.
- Food labels have become more informative but not necessarily more helpful. We feel that food labels have become a legal document developed to protect manufacturers and not help FAI’s (the consumer) find safe foods.
- Food labels detail majority of allergens but we have huge food restrictions & I wonder whether all these foods need to be labelled with precautionary statements & whether food companies do this instead of using good manufacturing practice or instead of testing foods produced with recent testing equipment eg. EUSA testing.
- More information and easier to understand.
- Good to have allergens highlighted/ in bold
- There are too many varieties of label information, it should become standardised.

- Bold writing for allergens brings it to your attention immediately, because even if you read an ingredient list you can miss allergens. The bold writing helps prevent this.
- · Not all companies correctly label their food products as they are supposed to.
- · Because labels have become more detailed they are now more complex and use legal terminology.
- · More information so that I can make a more informed decision.
- · Good differentiating between tree nuts and peanuts
- · Vastly decreased choices for the FAI
- · Would appreciate major companies to provide update listing of products with allergens, the onus is always on the consumer to follow up
- · Manufacturers are always changing ingredient lists and where products are manufactured, more consumer info on this would be great as what is safe to buy one week may not be safe the next, it's hard and confusing.
- · Some individual manufacturers make an effort, but the law remains vague and ambiguous. Do penalties exist? Deli departments in supermarkets are very lax. Imports are not required to have the same labelling even though they are purchased in Australia.
- · Manufacturing ingredients eg in wine aren't listed.
- · Labelling that is useful should say "made in a nut free zone"
- · There are still too many product recalls!!
- · I have to constantly check products as they change their labelling and their ingredient list.
- · With so many different disclaimers it is hard to know what foods are really safe for my daughter to consume.
- · I don't think my adult friends would be able to read ingredients and determine if a product was safe for my FAI child.
- · Need more details on manufacturing process and environment

Ministerial Policy Guideline

Labelling of foods produced or processed using new technologies

SCOPE/AIM

This policy guideline provides guidance on the expectations of the Legislative and Governance Forum on Food Regulation convening as the Australia and New Zealand Food Regulation Ministerial Council (the FoFR) for the case by case consideration of labelling of foods produced or processed using a new technology following a pre-market safety assessment.

Foods that require a pre-market safety assessment by FSANZ, because the foods use a new technology, fall within the scope of this policy guideline. This guidance applies when developing or reviewing a food regulatory measure that regulates all foods produced or processed using a new technology

The policy guideline recognises that labelling on foods produced or processed using a new technology can be an issue of consumer interest. In meeting this need, it is acknowledged that labelling of foods produced or processed using a new technology following a pre-market safety assessment is not a public health and safety issue.

Labelling refers to the provision of information on a package or display of the food, identifying that the food has been produced or processed using a new technology.

HIGH ORDER POLICY PRINCIPLES

The Food Standards Australia New Zealand Act 1991 (the FSANZ Act) establishes a number of objectives for FSANZ in developing or reviewing of food standards (section 18 of the FSANZ Act).

The FSANZ Act states that the objectives (in descending priority order) of the Authority in developing or reviewing food regulatory measures and variations of food regulatory measures are:

- (a) the protection of public health and safety; and
- (b) the provision of adequate information relating to food to enable consumers to make informed choices; and
- (c) the prevention of misleading or deceptive conduct.

The FSANZ Act states that in developing or reviewing food regulatory measures and variations of food regulatory measures, the Authority must also have regard to the following:

- (a) the need for standards to be based on risk analysis using the best available scientific evidence;

These objectives apply to the regulatory management of foods produced or processed using a new technology that requires a pre-market safety assessment by FSANZ.

A number of other policies and principles are also relevant, including:

- the Council Of Australian Governments document ‘Principles and Guidelines for National Standard Setting and Regulatory Action by Australia and New Zealand

Food Regulatory Ministerial Council and Standard Setting Bodies (1995, amended 1997) (Australia only);

- relevant World Health Organization agreements; and

SPECIFIC POLICY PRINCIPLES

- · Be cost effective overall by balancing the benefits of labelling with the cost to industry, consumers and governments of providing it.
- · Comply with Australia and New Zealand obligations under international agreements while not being more trade restrictive than necessary.
- · Ensure consistent treatment of domestic and imported foods with regard to any additional regulatory measures to provide consumers with information on the foods using the new technology.

ADDITIONAL POLICY GUIDANCE

- · In assessing the costs and benefits of providing information on foods using new technologies, regulatory and non-regulatory measures should be considered, including consideration of methods other than labelling to provide information.
- · Consistent with good regulatory practice, any regulatory intervention to provide information to consumers on foods produced or processed using new technology should be monitored and periodically reviewed to assess its effectiveness.

- **Unless reviewed prior, FSANZ should initiate a review of the regulatory intervention every ten years to determine whether it should lapse or continue.**
- Any review should include a consideration of the current evidence relating to:
 - o consumer confidence in the new technology;
 - o the value to consumers of the regulatory measure; and
 - o the overall cost effectiveness of the regulatory measure.

2011

Recommendation 2: That food labelling policy be guided by an issues hierarchy in descending order of food safety, preventative health, new technologies and consumer values issues. Regulatory action in relation to food safety, preventative health and new technologies should primarily be initiated by government and referenced in the Food Standards Code. Regulatory action in relation to consumer values issues should generally be initiated by industry and referenced to consumer protection legislation, with the possibility of some specific methods or processes of production being referenced in the Food Standards Code.

The modes of intervention should be mandatory for food safety; a mixture of mandatory and co-regulation for preventative health, the choice dependent on government health priorities and the effectiveness or otherwise of co-regulatory measures; and mandatory with time limits for new technologies. The modes of intervention for consumer values issues should be self-regulatory but subject to more prescriptive forms of intervention in cases of market failure or the ineffectiveness of self-regulatory schemes.

Response: Supports in principle

Timeframe for commencement: < 2 years

Recommendation 3: That once the case for a labelling standard has been established and becomes part of the Food Standards Code, sufficient resources be allocated to ensure that it is effectively monitored and enforced.

Response: Supports in principle

Timeframe for commencement: < 2 years

Analysis:

The review panel developed some high-level principles in relation to monitoring and enforcement of standards relating to food labels so that the community could be confident that the food regulatory system, which is designed to protect its health and safety, operates effectively. The review panel called for food labelling standards to be monitored and enforced by food regulatory agencies with as high a priority as any other food standard.

Comment:

There should be consistent and effective monitoring and enforcement of food labelling laws that involves all three tiers of government (in Australia) and multiple enforcement agencies. All decisions in relation to monitoring and enforcement should be made in the context of the level of risk and prioritised accordingly.

Proposed action:

The FoFR will explore a range of options to improve the capacity of the food regulatory system to monitor and enforce food laws in a more consistent and effective way. This work will take into account risk management principles. The Food Regulation Standing Committee (FRSC) (in consultation with its Implementation Sub-Committee (ISC) members) will develop a high-level regulatory monitoring and enforcement strategy and a possible package of enforcement tools (refer also section 7, recommendation 58) with advice on how this will be used. Proposed actions to address recommendation 7 will also be considered as part of this work.

Analysis:

The review panel called for a higher priority to be given to food-related consumer protection concerns to maintain public confidence in the food industry and the accuracy of label information on which to base their purchasing decisions.

Comment:

The Australian Consumer Law (ACL), a cooperative reform of Australia's consumer protection laws, was enacted on 1 January 2011. The ACL protects consumer rights when buying goods and services and creates a national enforcement regime, with consistent enforcement powers for Australia's consumer protection agencies to take effective action for consumers.

FSANZ has a memorandum of understanding with the ACCC to ensure cross-agency collaboration on food labelling issues that transcend both agencies.

Analysis:

This recommendation aims to place an emphasis on *enhancing* label comprehension for *all levels* of the population to ensure consumers with varying degrees of literacy, numeracy, health literacy, and cognitive and physical ability understand information presented on food labels.

Comment:

It is important for optimal comprehension and readability of information that appears on food labels; however, there are some design and presentational challenges in developing label information that is understood 'across all levels of the population'.

Proposed action:

The FoFR will develop an overarching policy statement on food labelling that supports the principle that information on food labels be presented in a clear and comprehensible manner to enhance understanding. The policy statement will guide decisions and actions by both government and industry.
Food safety elements

Recommendation 6: That the food safety elements on the food label be reviewed with the aim to maximise the effectiveness of food safety communication.

Response: Notes and refers to FSANZ for technical evaluation and advice

Timeframe for commencement: < 2 years

Analysis:

This recommendation proposes that the food safety elements of the label be considered at a technical level to ensure consumers' ability to access relevant information.

Comment:

Given the analysis presented by the review panel, there is justification to undertake further work to fully investigate and characterise the issues identified.

Proposed action:

The FoFR will request that FSANZ undertake a technical evaluation and provide advice on the food safety elements on food labels. Advice from FSANZ will assist the FoFR to fully consider the expected benefits and cumulative impacts of possible changes to mandatory labelling requirements prior to proposing any amendments to the existing labelling requirements in the Food Standards Code, **noting that food safety is the most critical message to communicate to consumers.**

Analysis:

The Food Standards Code requires retailers and food outlets to provide information about allergens or other food components in unlabelled products upon request if the information is not already displayed. In the case of vending machines, the presence of certain allergens is required to be declared on or in connection with the dispensed food. This information can be critically important for those people who need information to manage food sensitivities and allergies.

The review panel indicated that the food service sector may not have a good understanding of its responsibility in this area and that appropriate systems may not be in place to ensure customers are able to access this information.

Comment:

It is important for people with food sensitivities and allergies to access information about allergens or other food components in unlabelled products where this information is not already displayed. Retailers and food outlets are already subject to routine inspections in relation to compliance with this requirement. Vending machines are not subject to this compliance regime, but the packaged products they dispense are subject to labelling requirements. The availability of information required to manage food sensitivities means that the vending machine issue does not relate directly to food safety but to the ability to access this information before purchasing the product.

It should be noted that the standard approach to compliance is to ensure there are sufficient education initiatives and understanding of regulatory requirements in the marketplace before moving to an enforcement approach. While recommendation 7 advocates more effective monitoring and enforcement, education is the first step.

The Food Regulation Standing Committee's (FRSC) Implementation Sub-Committee's (ISC) document *Strategy for the consistent implementation of food regulation in Australia* is the key mechanism in place to achieve effective and consistent monitoring and enforcement by food regulatory enforcement agencies.

It covers the existing requirements in the Food Standards Code regarding warning and advisory statements, as well as allergen declarations on packages of food not for retail sale, and foods for sale at restaurants and other food outlets, foods from mobile food vendors.

FSANZ completed a review of regulatory management of food allergens in December 2010 and found that current regulatory measures are adequate to manage the food allergy risks from foods that are exempt from bearing a label. FSANZ recommended some improvements to allergen management through a coordinated approach to education activities and other regulatory initiatives regarding allergen declaration in the food service sector.

6. Presentation

The review panel considered that the effectiveness of its recommendations in practice will depend on the consumer's ability to notice, read and comprehend the information provided on food labels. The recommendations in this section, as a suite, are intended to improve the effectiveness of labelling in communicating important information relating to food safety and nutrition information.

Recommendation 43: That the Perceptible Information Principle be used as a guide for labelling presentation to maximise label comprehension among a wide range of consumers.

Response: Notes and refers to FSANZ for technical evaluation and advice

Timeframe for commencement: < 2 years

Analysis:

The principles and criteria that framed the review panel's work resulted in recommendations to ensure all relevant information is presented to enhance consumer comprehension. The review panel recommended that the Perceptible Information Principle developed by the Centre for Universal Design is used as a guide for labelling presentation to maximise consumers' comprehension of information on food labels.

Comment:

The principles of Universal Design are not specific to food or food labels and the Perceptible Information Principle includes elements that are not relevant for food labels.

Further work is required to explore how the Perceptible Information Principle, which has various applications in design more broadly, could be used in the context of food labelling regulation. In addition, research may indicate if there are other tools that may be more relevant for the Australian and New Zealand environment.

Proposed action:

The FoFR notes recommendation 43 and will request FSANZ to undertake a technical evaluation and provide advice on the application of the Perceptible Information Principle to the presentational aspects of food labels, as well as whether the Perceptible Information Principle as a tool to aid food label design has benefits over other tools.

Proposed action:

The FoFR supports the work being undertaken by the AFGC and will request FSANZ to work with the AFGC and other industry organisations in Australia and New Zealand as appropriate to identify and clarify those presentational factors and problems with existing Food Standards Code provisions that lead to consumer confusion. These aspects of presentation could be explored through consumer research and raised as focus areas for industry to consider for inclusion in the AFGC *Code of Practice for Food Labelling and Promotion*.

Recommendation 47: That warning and advisory statements be emboldened and allergens emboldened both in the ingredients list and in a separate list.

Response: Notes and refers to FSANZ for technical evaluation and advice

Timeframe for commencement: < 2 years

Analysis:

The review panel suggested that emboldening warning and advisory statements may assist allergic consumers to more quickly identify allergens.

Comment:

This recommendation relates to the presentation of food safety information on the label and proposes a technical change to the mandatory presentation requirements for food labels in the Food Standards Code.

It is also closely linked to recommendation 6, which proposes that the food safety elements on labels be reviewed, with a view to maximising the effectiveness of food safety communication (refer section 3). On this basis, it is appropriate for FSANZ to provide technical advice to the FoFR, in the context of considering recommendation 6.

Proposed action:

The FoFR notes recommendation 47, and will request FSANZ to undertake a technical evaluation and provide advice, including advice on the benefits of mandatory requirements compared with the cost burden imposed by design limitations, before a final decision is made to amend the Food Standards Code.

That monitoring and enforcement of food labelling requirements of the Food Standards Code (accuracy as well as the presence of labelling information) be considered equally important as other aspects of the Food Standards Code and the responsible agencies be given the appropriate level of resources to meet their obligation

Analysis:

The review panel considered it important that the consumer protection laws are effectively enforced and that misleading or deceptive claims are followed up and resolved.

Comment:

The food regulation system is supported by complementary general consumer protection provisions relating to misleading or deceptive representations. In New Zealand consumer protection is covered by the *New Zealand Fair Trading Act 1986* and monitored and enforced by the NZCC. In Australia the national consumer protection legislation is the CCA, which is monitored by the ACCC, plus State and Territory consumer protection provisions monitored by particular State and Territory consumer protection agencies.

The ACL, a cooperative reform of Australia's consumer protection laws, commenced on 1 January 2011. The ACL guarantees consumer rights when buying goods and services and creates a national enforcement regime, with consistent enforcement powers for Australia's consumer protection agencies to take effective action for consumers.

The ACCC, NZCC and State and Territory consumer protection agencies all have formal processes for handling complaints. Complaints should at all times be handled appropriately and resolved in a timely manner, but this necessarily takes place within the broader context of limited resources and competing priorities of consumer protection agencies.

Agencies assess complaints against their risk-based consumer protection principles within a whole-of-economy context. Priority goes to matters of significant consumer detriment and national interest issues. Not all labelling complaints are afforded equal priority or even high priority – some complaints have the potential for very significant impacts on the health and safety of a broad or vulnerable population and others do not. The priority applied to food labelling complaints should therefore continue to be a matter for each consumer protection agency, within their existing framework.

It should also be noted that FSANZ has a Memorandum of Understanding with the ACCC to ensure cross-agency collaboration on food labelling issues that transcend both agencies.

Proposed action:

The FoFR notes that consumer protection concerns are afforded appropriate priority by relevant agencies within the context of their existing risk-based frameworks.

Recommendation 60: That food standards always be drafted with the understanding that they are intended to be enforceable legal documents. **Where current deficiencies in the labelling requirements have been identified, standards should be re-drafted to make the obligations clear.**

Response: Supports

Analysis:

The review panel stated that labelling standards should be written in such a way that they clearly convey what is required of industry and are also capable of being enforced should a prosecution occur.

Unclear drafting of standards poses a substantial barrier for compliance and enforcement. The review panel reported that a number of stakeholders were critical of the wording of the standards, claiming that they were poorly drafted; others called for a review of the Food Standards Code.

A food labelling bureau

- **monitor consumer values issues claims on labels and liaise with consumer protection agencies in relation to confusing, misleading or deceptive food labelling**

Analysis:

The review panel accepted that, for a range of reasons, it is desirable to leave responsibilities for the statutory requirements for compliance and prosecution as they are currently. However, it recommended the establishment of a food labelling bureau to advise Australian and New Zealand Ministers on all aspects of

labelling policy. The review panel stated that the resources for this bureau must reflect the high profile that food labelling has as the most public face of food policies, standards and laws. The review panel described the bureau's role as being administrative, advisory and a monitor of compliance and enforcement. The review panel also states that it would be user-friendly for consumers and industry and would marshal and support the resources already on the ground. The review panel considered that the development of such a new entity would show that food labelling is taken seriously by governments.

Appendix: Response at a glance

The following provides a summary of the responses at a glance including the proposed timeframe for action. For more information relating to each, please refer to the relevant sections of the response.

Recommendation	Response	Proposed timeframe for action		
		< 2 years	2–5 years	Other
Recommendation 1: That the Food Standards Australia New Zealand Act 1991 be amended to include a definition of public health to the effect that: 'Public Health is the organised response by society to protect and promote health, and to prevent illness, injury and disability'.	Supports in principle	✓		
Recommendation 2: That food labelling policy be guided by an issues hierarchy in descending order of food safety, preventative health, new technologies and consumer values issues. Regulatory action in relation to food safety, preventative health and new technologies should primarily be initiated by government and referenced in the Food Standards Code. Regulatory action in relation to consumer values issues should generally be initiated by industry and referenced to consumer protection legislation, with the possibility of some specific methods or processes of production being referenced in the Food Standards Code. The modes of intervention should be mandatory for food safety; a mixture of mandatory and co-regulation for preventative health, the choice dependent on government health priorities and the effectiveness or otherwise of co-regulatory measures; and mandatory with time limits for new technologies. The modes of intervention for consumer values issues should be self-regulatory but subject to more prescriptive forms of intervention in cases of market failure or the ineffectiveness of self-regulatory schemes.	Supports in principle	✓		
Recommendation 3: That once the case for a labelling standard has been established and becomes part of the Food Standards Code, sufficient resources be allocated to ensure that it is effectively monitored and enforced.	Supports in principle	✓		
Recommendation 4: That consumer protection concerns be accorded a high priority by the relevant government agencies and complaints be properly processed and resolved.	Supports in principle	✓		
Recommendation 5: That information on food labels be presented in a clear and comprehensible manner to enhance understanding across all levels of the population.	Supports in principle	✓		
Recommendation 6: That the food safety elements on the food label be reviewed with the aim to maximise the effectiveness of food safety communication.	Notes and refers to FSANZ for technical evaluation and advice	✓		
Recommendation 7: That there be more effective monitoring and enforcement of the existing requirements in the Food Standards Code to provide mandatory warning and advisory statements and allergen declarations on packages of food not for retail sale, foods for sale at restaurants and other food outlets, foods from mobile food vendors and vending machines, and foods for catering purposes.	Supports in principle		✓	
Recommendation 8: That the Voluntary Incidental Trace Allergen Labelling system be explored as a possible supplementary model to manage food label declarations relating to the adventitious presence of allergens in foods.	Supports			Not applicable
Recommendation 19: That a responsive regulatory approach to the use of simple words and terms that may infer health implications be commenced, with the food industry working with Food Standards Australia New Zealand to develop a Code of	Supports			As appropriate

Practice covering consistent use of definitions for such words and terms, with a view to their use being restricted if appropriate constraint is not implemented.				
Recommendation 47: That warning and advisory statements be emboldened and allergens emboldened both in the ingredients list and in a separate list.	Notes and refers to FSANZ for technical evaluation and advice	✓		
Recommendation 49: That the development of an automated label assessment tool be investigated that can gauge a label's compliance with mandated legibility requirements and those stipulated in relevant voluntary codes.	Notes		✓	
Recommendation 51: That a multiple traffic lights front-of-pack labelling system be introduced. Such a system to be voluntary in the first instance, except where general or high level health claims are made or equivalent endorsements/trade names/marks appear on the label, in which case it should be mandatory.	On hold			Pending the outcome of recommendation 50
Recommendation 52: That government advice and support be provided to producers adopting the multiple traffic lights system and that its introduction be accompanied by comprehensive consumer education to explain and support the system.				
Recommendation 53: That ongoing monitoring and evaluation of the multiple traffic lights system be undertaken to assess industry compliance and the effectiveness of the system in improving the food supply and influencing consumers' food choices.				
Recommendation 54: That chain food service outlets across Australia and New Zealand be encouraged to display the multiple traffic lights system on menus/menu boards. Such a system be mandatory where general or high level health claims are made or equivalent endorsements/trade names/marks are used.				
Recommendation 56: That the potential of new information technologies be considered by consumer organisations, industry and government to provide extended product labelling for non-mandatory information.	Supports			As appropriate
Recommendation 57: That monitoring and enforcement of food labelling requirements of the Food Standards Code (accuracy as well as the presence of labelling information) be considered equally important as other aspects of the Food Standards Code and the responsible agencies be given the appropriate level of resources to meet their obligations.	Supports in principle			As appropriate
Recommendation 58: That the Model Food Provisions and the food acts of the jurisdictions be amended to allow a more versatile range of enforcement provisions, such as the power to make orders or require user-paid compliance testing consequent on a breach or impose enforceable undertakings in relation to non-compliant labelling.	Supports	✓		
Recommendation 59: That consumer protection concerns related to food labelling be accorded a high priority by the relevant consumer protection agencies (Australian Competition and Consumer Commission, New Zealand Commerce Commission, and State and Territory consumer protection agencies) and complaints be processed and resolved in a timely and transparent manner.	Supports in principle			Not applicable
Recommendation 60: That food standards always be drafted with the understanding that they are intended to be enforceable legal documents. Where current deficiencies in the labelling requirements have been identified, standards should be re-drafted to make the obligations clear.	Supports			As appropriate
Recommendation 61: That a new and effectively resourced entity in the form of a trans-Tasman Food Labelling Bureau be established under the Food Standards Australia New Zealand Act 1991 to undertake the functions as specified in this Report and more generally to: (a) be the primary contact for, and source of, food labelling information and advice; (b) undertake research into food labelling issues; (c) undertake a general educational role in relation to food labelling issues and requirements; (d) assist industry to comply with labelling requirements; (e) act as a clearinghouse for complaints and facilitate compliance and the resolution of complaints; (f) monitor and report on food labelling compliance; and (g) monitor consumer values issues claims on labels and liaise with consumer protection agencies in relation to confusing, misleading or deceptive food labelling.	Does not support			Not applicable

September 2013

Technical Evaluation for Labelling Review Recommendation 43: Perceptible Information Principle

Executive summary

In 2009, the then Australian and New Zealand Ministerial Council for Food Regulation (now known as the COAG Legislative and Governance Forum on Food Regulation (Forum)) agreed to a comprehensive independent review of food labelling law and policy. An expert panel, chaired by Dr Neal Blewett, AC, undertook the review and the panel's final report, *Labelling Logic: Review of Food Labelling Law and Policy (2011)* (Labelling Logic) was publicly released in January 2011.

Recommendation 43, one of several recommendations relating to presentation of information on food labels in Labelling Logic states: *That the Perceptible Information Principle be used as a guide for labelling presentation to maximise label comprehension among a wide range of consumers.*

In the government response to Recommendation 43, the Forum asked FSANZ to *undertake a technical evaluation and provide advice on the application of the Perceptible Information Principle to the presentational aspects of food labels, as well as whether the Perceptible Information Principle as a tool to aid food label design has benefits over other tools.*

In response to the Forum's request for technical evaluation and advice, FSANZ has:

- commissioned a literature review on the impact of format/presentation on consumer use and understanding of label information and the application of the Perceptible Information Principle to presentational aspects of information on food labels
- considered the requirements in the *Australia New Zealand Food Standards Code* (the Code) and any guidance provided by industry and jurisdictions relating to the presentation of mandatory food label information
- compared requirements in Canada, the United States of America (USA) and the European Union (EU) relating to the presentation of mandatory food label information with those in the Code
- evaluated the suitability and effectiveness of requirements/guidance, the Perceptible Information Principle and any other tools for presentational aspects of mandatory information on food labels.

The Perceptible Information Principle¹ is one of seven principles of universal design developed in 1997 from the disability rights movement in the USA. To date, the principles have not been widely adopted by the design community and have not been explicitly applied to food labelling. In addition, only guidelines and not specific recommendations for optimising design are provided. Nonetheless, the Perceptible Information Principle can be applied to

1 The Perceptible Information Principle: *The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.*

the format and presentation of mandatory information on food labels.

Two of the five guidelines associated with the Perceptible Information Principle refer to legibility and contrast. Legibility and contrast are covered in Standard 1.2.9 – Legibility Requirements of the Code in general terms and to a greater extent in the FSANZ user guide for Standard 1.2.9. Guidance on allergen labelling is also available from the Australian Food and Grocery Council.

The remaining three guidelines are not specifically covered in the Code but can be applied to food labelling. These guidelines include the use of more than one mode of providing information, such as pictorial and textual modes together, differentiation of information and the use of computer technology. However, the intent of the guidelines could be applied to the provision of mandatory label information, both via the label and by other means, through developing further guidance, if required.

No other tools similar to the Perceptible Information Principle have been identified. However, best practice advice/guidance is available which can assist with the presentation of information on food labels. Although the current evidence base is limited, there are a number of factors relating to the presentation of information on food labels identified in the literature that are considered to be helpful in attracting consumers' attention and also in aiding knowledge acquisition. Many of these factors are not encompassed by the Perceptible Information Principle, for example grouping and consistency of information, but

have been included in guidance documents available for use in other countries. The effectiveness of such guidance documents in improving the format and presentation of mandatory label information is unknown.

Food regulations in Canada, the USA and the EU include detailed requirements relating to legibility and format of mandatory information on food labels in contrast with the general legibility criteria in the Code. Reasons for having general legibility criteria in the Code include the recognition that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.

In conclusion, the Perceptible Information Principle can be applied to the format and presentation of mandatory information on food labels but has not been explicitly applied to date. The Perceptible Information Principle is chiefly about principles of good design and does not provide any degree of detail or prescription that assists designers to meet the principles. Some aspects of the Perceptible Information Principle are covered in the Code and an associated user guide. No other tools similar to the Perceptible Information Principle have been identified, however, some best practice advice/guidance is available both locally and overseas. The best practice advice/guidance includes factors relating to the presentation of information on food labels identified in the literature review to be helpful for consumers. The effectiveness of the best practice advice/guidance is unknown.

T1 Introduction

1.1 Background to Recommendation 43 – Perceptible Information Principle

In 2009, the then Australian and New Zealand Ministerial Council for Food Regulation (now known as the COAG Legislative and Governance Forum on Food Regulation (Forum)) agreed to a comprehensive independent review of food labelling law and policy. An expert panel, chaired by Dr Neal Blewett, AC, undertook the review and the panel's final report, *Labelling Logic: Review of Food Labelling Law and Policy (2011)* (Labelling Logic) (Blewett et al. 2011), was publicly released on 28 January 2011.

Recommendation 43 from Labelling Logic states: *That the Perceptible Information Principle be used as a guide for labelling presentation to maximise label comprehension among a wide range of consumers.*

The Perceptible Information Principle, one of seven principles of universal design developed by the Centre for Universal Design in the USA in 1997, relates specifically to the presentation of information and therefore was considered by the labelling review panel to be a *useful guide for food labelling policy*. Refer to section 3.1.1 for further details.

The labelling review panel considered presentation issues to be central to label communication and therefore it was important to *apply universal design principles that aim to increase accessibility across the population*. The panel considered the use of universal principles, and in particular the Perceptible Information Principle, in food label design, to be warranted for several reasons:

- The importance of food to health means that as many consumers as possible need to be able to access information to inform food purchase decisions.
- The Australian and New Zealand population is ageing, which will result in increasing numbers of consumers with age-related vision deterioration.
- Less affluent population groups tend to have higher levels of obesity and related health issues.

The panel considered that these reasons demonstrate the need for food labelling to be *readily visible and comprehensible to a wide range of consumers with differing levels of vision, motivation, cognitive ability and knowledge*. It was therefore suggested that the adoption of a universal principles approach could have the *potential to increase the ability of food labelling to favourably influence the dietary behaviours of the maximum number of consumers*.

Recommendation 43 is one of several recommendations relating to presentation of information on food labels in Labelling Logic. Recommendations 5, 6, and 43-49 (excluding front-of-pack labelling), as a suite, are intended to improve the effectiveness of labelling in communicating important information relating to food safety and nutrition. A summary of these recommendations and the government response is at Attachment A).

1.2 Government response to Recommendation 43

The government response to the recommendations in Labelling Logic was publicly released in December 2011². In relation to Recommendation 43, the Forum noted that the:

- review panel considered the effectiveness of its recommendations in practice will depend on the consumer's ability to notice, read and comprehend the information provided on food labels
- principles and criteria that framed the review panel's work resulted in recommendations to ensure all relevant information is presented to enhance consumer comprehension
- principles of universal design are not specific to food or food labels and the Perceptible Information Principle includes elements that are not relevant for food labels.

The Forum asked FSANZ to undertake a technical evaluation and provide advice on the application of the Perceptible Information Principle to the presentational aspects of food labels, as well as whether the Perceptible Information Principle as a tool to aid food label design has benefits over other tools.

2 Project objectives and approach

The main objective of this project was to undertake an evaluation of the application of the Perceptible Information Principle to presentational aspects of food labelling. Specific objectives included:

- an analysis of the suitability and effectiveness of the Perceptible Information Principle and any other tools as a guide for food labelling presentation
- whether the Perceptible Information Principle as a tool to aid food label design has benefits over other tools
- the impact of the format of label information on consumer use and understanding of label information.

In addressing these objectives, FSANZ has:

- commissioned a literature review on (refer to Mercer et al. 2013 at SD1):
 - - the impact of format/presentation on consumer use and understanding of label information
 - - the application and effectiveness of the Perceptible Information Principle and any other tools to presentational aspects of food labels in order to maximise label comprehension among a wide range of consumers
- considered the requirements in the *Australia New Zealand Food Standards Code* (the Code) and any guidance provided by industry and jurisdictions relating to the presentation of mandatory food label information
- compared requirements in Canada, the USA and the EU relating to the presentation of mandatory food label information with those in the Code
- evaluated the suitability and effectiveness of requirements/guidance, the Perceptible Information Principle and any other tools for presentational aspects of information on food labels.

2 Government response to Labelling Logic is at

<http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/home>

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3 Analysis of issues

3.1 Tools to aid food label design

The concept of universal design emerged in the 1980’s from the disability rights movement (Story et al. 1998, Steinfeld and Maisel 2012). Initially, the approach was focussed on improving the accessibility of the built environment for those with disabilities. Over the last 30 years, the concept has also been applied to other areas including education, public health, public transportation and product design (Steinfeld and Maisel 2012). While a number of models have been developed around consumer use and understanding of information from a variety of sources including food labels (see section 3.4), no tools similar to the Perceptible Information Principle have been reported in the literature (Mercer et al. 2013 (SD1)). However, various guidance documents have been developed to support clear labelling of both medicines and food (Institute for Safe Medication Practices 2013, Food Standards Agency 2008, Buckley and Shepherd 1993). The following sections provide background information on the principles of universal design, including the Perceptible Information Principle and selected guidance documents on clear labelling.

3.1.1 Principles of universal design and the perceptible information principle

The term *universal design* was initially defined as *the design of products and environments to be usable by all people, to the greatest extent possible, without adaptation or specialised design* (Mace 1985). Story et al. (1998) considered universal design to respect human diversity and promote the inclusion of all people in all activities of life. The seven principles of universal design and associated guidelines were first published in 1997 by the Centre for Universal Design (Connell et al. 1997)³. It was intended that the seven principles *be applied to evaluate existing designs, guide the design process, and educate both designers and consumers about the characteristics of more usable products and environments*. The seven principles of universal design with associated guidelines are at Attachment B (Connell et al. 1997). The Perceptible Information Principle is Principle 4 and is shown in Table 1 below.

³ The Centre for Universal Design at North Carolina State University was established in 1989 and became a leading national and international resource for research and information on universal design in housing, products, and the built environment.

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Table 1: Perceptible Information Principle and Guidelines (Connell et al. 1997)

Principle 4: Perceptible Information Definition of principle 4: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities.	
Guidelines	
4a	Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
4b	Provide adequate contrast between essential information and its surroundings ⁴ .
4c	Maximise ‘legibility’ of essential information.
4d	Differentiate elements in ways that can be described (i.e. make it easy to give instructions or directions).
4e	Provide compatibility with a variety of techniques or devices used by people with sensory limitations.
Examples:	Tactile, visual, and audible cues and instructions on a thermostat. Redundant cueing (e.g. voice communications and signage) in airports, train stations, and subway cars.

No articles in the scientific or grey literature on the application of the Perceptible Information Principle to food labels have been identified (Mercer et al. 2013 (SD1)). Story et al. (1998) provide examples of the application of guideline 4c in the Perceptible Information Principle to the design process including:

- the use of dark background on overhead airport terminal signage to contrast with lighted ceilings
- the provision on subway fare machines of tactile lettering in all-capital letters and printed lettering in capital and lower case letters for maximum legibility in each format.

Of the seven principles of universal design, the Perceptible Information Principle is most relevant to food labels and could provide some guidance. However, specific recommendations for achieving *adequate contrast* (4b) or *maximising legibility of essential information* (4c) are not provided. Guidelines 4a and 4e move beyond the label into consideration of alternative ways of providing information, such as verbal modes and the use of computer technology (refer to section 3.5 for further discussion).

The principles of universal design have not yet been widely adopted by those working in design. Indeed, the conceptual framework for universal design continues to evolve. Edward Steinfeld, one of the authors of the seven principles of universal design and co-author of a recent book on the topic (Steinfeld and Maisel 2012) considers the seven principles to be limited in scope and conception in the context of current thinking in design (E Steinfeld, pers. com.)⁵. Rather than focussing mainly on usability issues, Steinfeld suggests that more emphasis needs to be placed on how to improve social participation of diverse groups by not only removing barriers but also by providing positive support. Steinfeld and Maisel (2012) have consequently proposed a revised definition of universal design as follows:

Universal design is a process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation.

This revised definition encompasses more than just the physical environment since the concept is also applicable to the provision of information and delivery of services; it addresses outcomes of the universal design process such as improved health and social participation and recognises that the full diversity of the population should be considered in

4 Guideline 4b was added after the principles of universal design were first published in 1997.

5 E Steinfeld, Director of the Centre for Inclusive Design and Environment Access, Department of Architecture, University at Buffalo, Buffalo, New York, personal communication 13 August 2013

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design. It is therefore important that demographic information and trends relevant to a particular design project are considered. For example, in the context of food labelling, consideration could be given to the needs of the ageing population in Australia and New Zealand. Demographic projections indicate that the number of people in both Australia and New Zealand with impaired vision could nearly double by 2036.

To complement the revision of the initial definition of universal design, the seven principles have also been reconsidered. Criticisms of the seven principles include the (Steinfeld and Maisel 2012):

- difficulty in applying the principles to specific design problems because of the lack of detail
- lack of clarity of some of the language used
- narrow scope as the principles do not address important issues such as health promotion and disease prevention
- difficulty for benchmarking as the principles and guidelines do not provide standards against which one can measure whether an environment or product is indeed a good example of universal design
- lack of a body of evidence related to the principles as this is a significant barrier to their use in practice.

Reference to the lack of a body of evidence underpinning the principles is an important issue when considering the possible application of the

Perceptible Information Principle to food labelling. Requirements for the presentation of information on food labels clearly need to be supported by an evidence base (refer to section 3.4)

As part of the continuing discussion of the conceptual framework for universal design, Steinfeld and Maisel (2012) have developed eight goals of universal design which encompass human performance (goals 1-4), social participation (goals 6-8) and wellness (goal 5) which addresses both human performance and social participation, as follows:

1. *Body Fit* (accommodating a wide range of body sizes and abilities)
 2. *Comfort* (keeping demands within desirable limits of body function)
 3. *Awareness* (ensuring that critical information for use is easily perceived)
 4. *Understanding* (making methods of operation and use intuitive, clear, and unambiguous)
 5. *Wellness* (contributing to health promotion, avoidance of disease, and prevention of injury)
 6. *Social Integration* (treating all groups with dignity and respect)
 7. *Personalisation* (incorporating opportunities for choice and the expression of individual preferences)
 8. *Cultural Appropriateness* (Respecting and reinforcing cultural values and the social and environmental context of any design product).
- These goals extend the revised definition of universal design as previously noted. Universal design involves a process whereby the principles and goals can be considered along with the relevant evidence base and demographic information with the aim of producing a design that supports human performance, social participation and wellness for as many people as possible. 6 In 2012 13.8% of the Australian population was aged 65 and over. This is projected to increase to over 20% by 2036 (Australian Bureau of Statistics 2012). Similarly in New Zealand, 13.8% of the population was also aged 65 and over in 2012 (Statistics New Zealand 2012a) and it is expected that 23% of New Zealanders will be aged 65 and over by 2036 (Statistics New Zealand 2012b).

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3.1.2 Guidance for presentation of information on food labels

In 2008, the UK Food Standards Agency published best practice advice for the design of food labels. While this advice incorporates the relevant requirements from the food regulations in effect at that time, the advice also includes more detailed information and suggestions for ways to present information clearly (Food Standards Agency 2008). The UK Food Standards Agency has identified three key issues relating to clear labelling:

- finding information
- reading information
- understanding how to use information.

The guidance document makes recommendations that address the first two issues. For example, guidance is provided on font, type size, contrast; prioritisation, layout and consistency; ways to increase the printable area on the pack; format of date marking; presentation of nutritional information. Many of these aspects of format/presentation of label information have also been reported previously by Buckley and Shepherd (1993) in response to a review of food labelling practices in the UK. The overall aims of the guidance are to help:

- food businesses be aware of the legal requirements by bringing together relevant legislation on clear labelling and to support the development of labels with the highest clarity that is practicable by following best practice

- enforcement authorities to have an easily accessible reference source on clear labelling legislation and best practice
- consumers by encouraging food businesses to produce clear labels
- visually impaired consumers by addressing their specific requirements in relation to legibility (UK Food Standards Agency 2008).

Since this guidance was produced, new labelling regulations have been introduced in the EU (EU regulation No. 1169/2011 on the provision of information to consumers (EU FIC)) (see Section 3.3 and Attachment C). The extent to which the guidance is currently used by food businesses is not known.

The Institute for Safe Medication Practices in the USA has developed recommendations for the labelling of medicines, some of which are relevant for food labels (Institute for Safe Medication Practices 2013). Their recommendations include the following topics:

- font and type size (use the largest size the label allows – minimum of 18 point for people with low vision) use of bolding, maximising white space, logical organisation of information
- provision of explicit instruction to improve understanding – use of numbers instead of text, use mixed case, avoid abbreviations, simplify language avoiding unfamiliar terms
- use of a standard icon for signalling warnings.

Table 2 presents a summary of best practice advice relating to the presentation of label information from the three documents discussed above (Food Standards Agency 2008, Institute for Safe Medication Practices 2013, Buckley and Shepherd 1993).

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Table 2: Summary of best practice advice/guidance on format/presentation of information on food labels (Food Standards Agency 2008, Institute for Safe Medication Practices 2013, Buckley and Shepherd 1993)

	Aspect of Format/presentation		Best Practice Advice/Guidance				
			Recommended		To be used with care		Best avoided
Grouping of information		<ul style="list-style-type: none"> • Mandatory information grouped together with defined borders either on single face of pack or in same field of vision • Group text into separate, conceptually-related sections to facilitate searching and acquisition of information 		<ul style="list-style-type: none"> • If not possible to group all information together present information in two groups and use directions between the two groups, only if necessary. 		<ul style="list-style-type: none"> • 	
Information location		<ul style="list-style-type: none"> • Use of top right hand corner for maximum noticeability, followed by bottom left hand corner. 				<ul style="list-style-type: none"> • 	
Language		<ul style="list-style-type: none"> • Where possible use only one or minimum number of languages. • Simplify language, avoiding unfamiliar terms 				<ul style="list-style-type: none"> • Large number of languages 	

Font and type size		<ul style="list-style-type: none"> Open fonts such as Arial for letters Thicker, denser line letters make text easier to read Bold type if print quality is retained Mixed case Minimum font size of 8-point if contrast, text format and print quality is a high standard. If they are not of a high standard a larger font size should be used Make sure numbers are distinct Use numbers instead of alphabetic characters 		<ul style="list-style-type: none"> Boldtype Uppercase letters Underlining Hyphenation Justified text Coloured text/backgrounds Where space is limited at least the name of the food, the date mark, list of ingredients and allergen information should be listed in 10- point, with a minimum of size 6-point used for other information 		<ul style="list-style-type: none"> Ornate fonts Shadowing Italics, oblique, narrow, condensed fonts Arial for numbers as 6, 8, and 9 may be misread 	
Contrast		<ul style="list-style-type: none"> Black type on a white background or good tonal contrast of at least 70% Greater the brightness contrast between text and background, the greater the legibility. 		<ul style="list-style-type: none"> Light type on a dark background Where packaging is transparent, good contrast is necessary with food product forming the visible background Watermarking on non-solid background (e.g. dot filled background) where text appears 		<ul style="list-style-type: none"> Dark type on a dark background Light type on a light background Green/red or yellow/white combinations 	

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Table 2 continued

	Aspect of Format/presentation		Best Practice Advice/Guidance					
			Recommended		To be used with care			Best avoided
Colour		<ul style="list-style-type: none"> Red, blue, green and white aid rapid identification but colour must be considered in conjunction with other design factors. 						
Layout		<ul style="list-style-type: none"> Consistent layout of information within product ranges Text that starts from and is aligned with the left margin Horizontally printed wording rather than vertically printed wording Maximise the amount of white space while managing the readability of the text 		Text wrapping		<ul style="list-style-type: none"> Label clutter Unnecessary prominence or emphasis of lot identification may mislead in relation to origin of food or date marks. 		
Surfaces		<ul style="list-style-type: none"> Matt finish printing surface 				<ul style="list-style-type: none"> Metallic and shiny surfaces 		

							• Rough surfaces		
Shapes		<ul style="list-style-type: none"> No more than five geometric shapes and no more than nine colour combinations of hue, brightness and saturation on any one label Use a standard icon system for signalling and organising auxiliary warnings and instructions Octagonal, triangular and diamond shapes can attract attention. 							

3.2 Current requirements and guidance for presentation of information on food labels in Australia and New Zealand

3.2.1 Current requirements in the Code

There are two main standards in the Code that set out format and presentation requirements for mandatory food label information: Standard 1.2.9 – Legibility Requirements and Standard 1.2.8 – Nutrition Information Requirements (refer to Attachment C). Standard 1.2.9 requires that the mandatory information on a food label is legible and prominent such as to afford a distinct contrast to the background, and is in the English language. Type size is prescribed for warning statements and for country of origin labelling of unpackaged foods (Standard 1.2.11 – Country of Origin Labelling) only. Standard 1.2.8 prescribes the layout of the nutrition information panel (NIP) including the format for column headings, borders, text case, and order nutrients are presented in the table.

The user guide for Standard 1.2.9 includes suggestions of ways to help make information on a label as easy to read as possible (FSANZ 2010). For example, factors affecting legibility,

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suggestions for improving legibility, ways to make information noticeable and suggestions for the positioning of information, are included. The user guide for Standard 1.2.8 recommends that food businesses check table borders, text case, the order nutrients are presented in the table and format for column headings are as prescribed in the Standard (FSANZ 2012).

It is of interest to note that the former Australian *Food Standards Code* and the *New Zealand Food Regulations (1984)* that were in operation before the gazettal of the joint Code in 2000, contained a number of provisions relating to key legibility criteria, such as standard type (upper case/lower case), type size, placement of information, uniform colour and type of font. As part of the development of the joint Code, it was considered that prescribed information should be regulated using general legibility criteria only, that is, that information should be prominent, legible and in English. Reasons for this decision included the difficulty in identifying which format criteria are critical given that legibility can be optimised using a number of effective combinations of legibility criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for manufacturers. Due to their direct role in the protection of public health and safety, it was considered that warning statements should be treated in a more prescriptive manner in relation to type size. At the time Standard 1.2.9 was finalised, a brief guideline document was also prepared. Similar guidance information was incorporated in the user guide for Standard 1.2.9.

3.2.2 Guidance from industry on presentation of information on food labels

The Australian Food and Grocery Council (AFGC) has the *Code of Practice for Food Labelling and Promotion* freely available on its website (AFGC 2011). Some food businesses have signed up as signatories to the Code of Practice. The food labelling and promotion aspects currently covered by the Code of Practice are the Daily Intake Guide (DIG) labelling scheme, date marking, and allergen labelling.

The Code of Practice includes recommended allergen labelling formats for food businesses to adopt, noting that the Code does not specify the format of allergen labelling. The following labelling format is recommended:

- an ingredient list declaring in bold allergenic substances and their derivatives

- an allergen summary statement using the word ‘contains’
- a precautionary statement using the words ‘may be present’.

Alternative labelling formats are also suggested when label size constraints and other variables do not allow the use of the recommended labelling format as follows:

- when an allergen summary statement is present, bolding and qualifying allergenic substances in the ingredient list is optional
- when an allergen summary statement is not present, allergenic substances are bolded and qualified within the ingredient list.

FSANZ is not aware of any other guidance on the presentation of information on food labels developed by industry for use in New Zealand and Australia.

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3.2.3 Guidance from jurisdictions on presentation of information on food labels

Some jurisdictions in Australia cover the requirements for presentation of information on food labels that are specified in the Code in guidance documents⁷. However, such documents only repeat the requirements and do not provide any best practice advice for the format or presentation of mandatory information on food labels.

The Ministry for Primary Industries in New Zealand includes brief comments on aspects of the legibility of label information in section 6 of its food labelling guide⁸. Reference is made to the need for labelling to be impossible to remove, that consideration should be given to the conditions under which the food is presented for sale (e.g. lighting, ice crystals on labels in a freezer display cabinet), eyesight of likely purchasers of the product, common colour blindness disabilities and positioning of mandatory information on the package.

3.3 Summary of international requirements for presentation of information on food labels

3.3.1 Codex requirements

Codex includes a brief reference to the presentation of label information in some of its standards and guidelines on food labelling. For example, the *General Standard for the Labelling of Prepackaged Foods* (Codex Standard 1-1985) states that:

- *statements shall be clear, prominent, indelible and readily legible by the consumer under normal conditions of purchase and use*
- *where the container is covered by a wrapper, the wrapper shall carry the necessary information or the label on the container shall be readily legible through the outer wrapper or not obscured by it*
- *the name and net contents of the food shall appear in a prominent position and in the same field of vision.*

In addition to the points noted above the *General Standard for the Labelling of Food Additives when Sold as Such* (Codex Standard 107-1981) also includes reference to the type size of the name of the food additive in relation to the most prominent printed matter on the label.

3.3.2 Comparison of requirements for presentation of mandatory information on food labels in Canada, the USA and the EU with those in Australia and New Zealand

A summary of requirements for the presentation of mandatory information on food labels in Canada, the USA and the EU, along with the requirements for Australia and New Zealand is at Attachment C.

In contrast to the requirements in the Code, regulations in other countries include minimum type size for packages of specified size and for some label elements, the use of bolding, for example for the common name, net quantity, and instructions for use. Another aspect of

⁷ Examples of guidance documents provided by jurisdictions in Australia can be found at <http://www.health.qld.gov.au/ph/documents/ehu/28009.pdf> and <http://www.foodauthority.nsw.gov.au/industry/food-business-issues/labelling/> and http://www.public.health.wa.gov.au/3/1669/2/food_labelling.pm#13

⁸ The food labelling guide is at <http://www.foodsafety.govt.nz/elibrary/industry/nzfsa-food-labelling-guide/index.htm>.

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labelling that has been included in overseas regulations to varying degrees is the grouping of certain mandatory elements.

The Canadian food and drug regulations include detailed requirements for the presentation of nutrition information as do the USA regulations and both regulations are supported by very detailed guidance. In contrast, Standard 1.2.8 – Nutrition Information Requirements, sets out the required format of the NIP by way of a table and the user guide for Standard 1.2.8 provides an example. There are no particular requirements for the orientation of the NIP on a label, or font/type size, use of colour, contrast etc. within the NIP in the Code.

In the EU regulation 1169/2011, allergens are required to be highlighted in the ingredient list. This aspect of label format is specifically the subject of Recommendation 47 for which FSANZ has been asked to provide separate technical evaluation and advice.

FSANZ notes the government response to Recommendations 44 (mandatory font size) and 46 (minimum contrast level) in Labelling Logic did not support mandatory font size or contrast settings because it was considered that highly prescriptive requirements could place design limitations on industry, costs of such requirements could outweigh potential benefits, and a user guide for Standard 1.2.9 is available.

3.3.3 Guidance on presentation of information on food labels

The Canadian Food Inspection Agency has published a *Guide to Food Labelling and Advertising*⁹. The guide is a tool to help industry comply with legislation and includes reference to the requirements for the format/presentation of information on food labels. The guide includes extensive information on the format of the nutrition facts table which supports the detailed requirements set out in the regulations. A summary of legibility and location requirements is also provided¹⁰.

The US Food and Drug Administration (FDA) also provides a labelling guide which helps industry comply with the regulations¹¹. As in Canada, there are no documents available that provide best practice advice/guidance on clear labelling.

The British Retail Consortium in partnership with the Food and Drink Federation has published guidance on allergen labelling which incorporates the requirements in Regulation (EU) No. 1169/2011 on the provision of food information to consumers (EU FIC) (British Retail Consortium 2013). While the EU FIC requires allergens listed in an ingredient list to be highlighted in some manner (Attachment C), the advice recommends that allergens are bolded. No other guidance on the format/presentation of information about allergens is provided in this document. FoodDrinkEurope has also released a guidance document on the management of allergens that includes reference to labelling requirements in the EU FIC. This document also recommends bolding of allergens in an ingredient list¹².

The Department of Health in the UK has recently published *Technical Guidance on Nutrition Labelling* (UK Department of Health 2013). This document explains the nutrition-related requirements under EU FIC and specifically includes reference to legibility requirements for

⁹ The *Guide to Food Labelling and Advertising* is at <http://www.inspection.gc.ca/food/labelling/guide-to-food-labelling-and-advertising/eng/1300118951990/1300118996556>

¹⁰ *Legibility and Location of Labelling Information* is at <http://www.inspection.gc.ca/food/labelling/core-requirements/legibility-and-location/eng/1328038498730/1328038540376?chap=2>

¹¹ *Guidance for Industry: A Food Labelling Guide* is at <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm2006828.htm>).

¹² *Guidance on Food Allergen Management for Food Manufacturers* is available at http://www.fooddrinkurope.eu/uploads/publications_documents/FINAL_Allergen_A4_web.pdf

¹¹

nutrition declarations. The Department for Environment, Food and Rural Affairs (DEFRA) in the UK anticipates releasing a guidance document on general labelling requirements and allergen labelling together with national legislation (*The Food Information Regulations 2013*) by the end of 2013¹³. This document

will not go beyond guidance on compliance with the regulations. The Department of Health in the UK has advised that it has not seen any guidance documents relating to EU FIC from other EU member states to date (D. Townsend, pers. com.)¹⁴.

The industry groups FoodDrinkEurope and EuroCommerce released a guidance document on the EU FIC in September 2013. This document only covers the legibility requirements and not any best practice advice¹⁵.

3.4 The impact of label format and presentation on consumer use and understanding of label information

Mandatory food labelling is a key source of information for consumers at the point of purchase. The Perceptible Information Principle, in part, relates to the ability of people to notice, locate and use mandatory food labelling. Commissioned by FSANZ, Mercer et al. (2013) (SD1) have undertaken a literature review on the impact of format and presentation of mandated label elements on consumers' attention and comprehension. The literature review had, as its primary focus, the format and presentation (e.g. font, format, contrast, position) of mandatory label elements rather than content per se¹⁶. Searches of the peer-reviewed and grey literature identified 61 articles that were considered in scope for the review.

A number of models and approaches have been used to guide the study of the impact of labelling on consumers. Mercer et al. (2013) identified a number of the models regarding consumers' use of food labels, and more generally warning labels and other information sources. Most of the models recognise a staged approach to how consumers interact with labels to arrive at a decision. Typically, this comprises an initial stage of search and attention where the label element is noticed, followed by an evaluative stage where information is accessed and interpreted, leading to a final decision stage of purchasing the product or not. Mercer et al. (2013) adopted an information processing model as the conceptual framework for the literature review, the Attention, Knowledge and Compliance (AKC) model.

The AKC model has been used largely in the context of the communication of warnings (e.g. Wogalter and Laughery 1996; Wogalter et al. 1999; Laughery and Wogalter in press). In order to use the content of mandatory label information, consumers first need to notice the information and be aware of it. This is the *attention* stage of the AKC model. Attention is the process through which information gained by the senses, is filtered to remove irrelevant information. The information left is then made available for other cognitive processes. In the context of food labelling, sight is likely to be the primary sense used. The second stage, *knowledge acquisition*, includes the comprehension and understanding of the label information and its evaluation and assessment. This may draw on consumers' knowledge about the information, their previous experiences, their motivations and goals, and their values, beliefs and attitudes. Depending on the nature of the decision to be made, greater or lesser cognitive effort may be involved in this process, and other factors may also impact

¹³ A draft guidance document is available at <https://www.gov.uk/government/consultations/food-information-regulations-fir-2013>

¹⁴ D. Townsend, Food Legislation & Standards Manager, Obesity and Food Policy Branch, Department of Health, London, UK personal communication 28 August 2013

¹⁵ *Guidance on the Provision of Food Information to Consumers* is available at http://www.fooddrinkEurope.eu/uploads/press-releases_documents/FDE_Guidance_WEB1.pdf

¹⁶ Note that the FSANZ work on Recommendation 6 from Labelling Logic includes consideration of content and format of food safety labelling elements and work on Recommendation 14 will include relevant evidence on consumer use and understanding of fibre information.

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such as affect and mood (Loken 2006). Finally, the *compliance* stage, is focussed on behavioural compliance with the intent of the label. In the context of food labelling the term compliance is not as accurate as perhaps the term behaviour would be. The former term reflects the heritage of the AKC model from research with warning signs where compliance with a particular warning is the desired behavioural outcome. Despite this, the three stages are useful as an organising framework to consider the aspects that could enhance the effectiveness of mandatory labelling to inform consumers' decision making.

When considering the role of format and presentation in the attention stage of consumers' use of label information, Mercer et al. (2013) highlighted six relevant factors from the literature:

- **shape** of the area containing the information – shapes can increase attention particularly for warning signs
- **location** of the information – front of package gains more attention
- **size** of the information – bigger text gains more attention
- use of **colour and symbols** – pictures and graphics can be more attention grabbing than text
- **text direction** – horizontal labels more noticeable
- use of **signal words** – for example ‘danger’ is useful in the case of warnings (refer to Table 6 in the report by Mercer et al. 2013).

At the next stage in the process, a number of factors were identified by Mercer et al. (2013) as aiding knowledge acquisition. The ones with the greatest relevance to mandatory labelling are:

- **graphics** – the use of symbols to convey meaning but notes limited application for some types of data that are best expressed textually
- **tables** – can enhance the speed at which information can be accessed compared to text
- **information clutter** – reducing density of information may enhance the attention on particular label elements
- **consistency of information** – consistent location, format and terminology assists consumers to find and use nutritional information
- **use of numbers** – can create difficulties for some consumers, while descriptive terms (high/low) are more readily understood
- **multiple avenues for delivery of information** – for example different modes including computer based solutions
- **lines and shading** – to divide sections of the information
- **font** – font types and size impact on the readability of textual information.

The final stage is the compliance stage, or as noted above, the resulting behaviour to purchase the product or not.

It is difficult to determine from the literature if any particular aspects of format and presentation are more important than others in affecting consumers’ attention and knowledge acquisition due to the limited evidence base. In addition, it is recognised that different combinations of format criteria can achieve optimal legibility. Mackey and Metz (2009) identified the following elements that may contribute most to making print readable from a focus group study in Canada: large print size, space between lines, good colour contrast, position and organisation of text, mixed case, left justification and matt surface. Most of these aspects are noted above. Mercer et al. (2013) (SD1) observed that many of the studies they reviewed were specific to the nutrition information panel, warnings on products or medication labels but that the principles relating to format would likely be of

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relevance to food labels. There is limited evidence on actual use of label information by consumers including the influence of format and presentation factors. The use of computer technology to supplement information provided on labels is likely to become of increasing interest in the future.

3.5 The suitability and effectiveness of tools and requirements/guidance for presenting information on food labels

The philosophy of universal design can be broadly applied to the presentation of information on food labels. Ideally, information on food labels should be presented in a manner that is accessible to as many consumers as possible to support informed choice so that consumers can choose food that is safe and nutritious. While universal design, as a process and philosophy could be applied to the design of food labels, in order to achieve a useful outcome, knowledge of consumer use and understanding of information on labels including aspects of design that particularly influence consumer use and understanding, is desirable as a starting point.

An analysis of the Perceptible Information Principle in the context of current requirements in the Code for the presentation of mandatory label information is provided in Table 3 below. Guidelines 4b and 4c are covered by the requirements in Standard 1.2.9 (with general references to legibility and contrast) and also by the FSANZ user guide for Standard 1.2.9 which includes some discussion on ways to improve legibility.

While guidelines 4a, 4d and 4e are not specifically covered in the Code, the intent of the guidelines could be applied to the provision of mandatory label information to consumers both via the label and by other means, possibly through the development of further guidance, if required. Currently, the use of different modes for presenting information on food labels is limited (guideline 4a), however, some voluntary front-of pack systems do combine both pictorial and textual presentation of nutrition information. The combination of pictorial representations of product ingredients and percentage declarations in the ingredient list is another example. Computer technology is another means of providing information to consumers who may benefit from a verbal or large print format.

In the context of food labelling, guideline 4d could relate to, for example, differentiation of instructions for using a product from other label information via the use of colour or using colour to help make allergen information easier to find. Although there are requirements for type size for warning statements in the Code, such a requirement does not guarantee that warning statements are readily distinguishable from surrounding text.

Food labels are compatible with other means of providing information to consumers (guideline 4e). For example, hand-held devices such as smart phones can be used to scan barcodes which can facilitate the display of ingredients and check products for allergens of particular interest. However, the usefulness of this relies on the scope of the product database. The use of technology such as smart phones has the potential to increase and improve the accessibility of information to the consumer and could become a significant source of information for many consumers in the future. To what extent such a development might influence the presentation and indeed the content of mandatory information on food labels is unclear at this time.

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Table 3: Analysis of the Perceptible Information Principle in the context of food labelling

	PIP Guideline	Coverage by the Code	Comment
4a	Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.	Nil	<ul style="list-style-type: none"> Given the nature of food labels the presentation of information in different modes is not mandatory. Some voluntary front-of-pack systems and some approaches to nutrition content claims do provide information in both pictorial and textual modes. There is potential for solutions using computer technology to provide information in verbal modes for sight impaired consumers.
4b	Provide adequate contrast between essential information and its surroundings ¹⁷ .	Yes	<ul style="list-style-type: none"> Standard 1.2.9 states label information must be <i>written or set out legibly and prominently such as to afford a distinct contrast to the background</i>. User guide for Standard 1.2.9 gives guidance on contrast.
4c	Maximise 'legibility' of essential information.	Yes	<ul style="list-style-type: none"> Standard 1.2.9 states label information must be written or set out legibly. Type size specified for warning statements only. User guide for Standard 1.2.9 suggests ways to improve legibility.
4d	Differentiate elements in ways that can be described (i.e. make it easy to give instructions or directions).	Nil	<ul style="list-style-type: none"> Currently, limited applicability to mandatory label information. An example could be use of colour to help make allergen information easier to find.
4e	Provide compatibility with a variety of techniques or devices used by people with sensory limitations.	Nil	<ul style="list-style-type: none"> There is increasing use of the internet by food businesses for providing nutritional information and there is the capacity for that to be read aloud for individuals with sight impairments. Mobile phone apps relating to the provision of label information are available.

There are a number of other aspects relating to the format/presentation of label information that have been identified in the literature that are not clearly encompassed by the Perceptible Information Principle, such as the grouping of information, consistency of information, layout, use of shapes, use of symbols, use of language such as 'signal' words, use of numbers versus text. It is of interest to note that many of these aspects have been included in the guidance

developed by the UK Food Standards Agency (2008) and to some degree by the Institute for Safe Medication Practices (2013) (refer to summary Table 2). No comparable best practice guidance is currently available for use in Australia and New Zealand. As noted at Attachment A, Recommendations 45 (guidelines on presentation factors) and 48 (co-location of mandatory health information) relate to the development of industry guidelines.

There is no information available on the effectiveness of the application of the Perceptible Information Principle to the presentation of information on food labels as the principle has not yet been explicitly applied to food labelling. No other tools similar to the Perceptible Information Principle have been identified.

However, guidance documents providing

17 Guideline 4b was added after the principles of universal design were first published in 1997.

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suggestions for food businesses can assist with the presentation of information on food labels (section 3.1.2). The effectiveness of such guidance documents in improving the legibility of information on food labels is unknown.

4 Conclusions

The key findings from this technical evaluation of Recommendation 43 are as follows:

- The Perceptible Information Principle can be applied to the format and presentation of mandatory information on food labels but has not been explicitly applied to date.
- The Perceptible Information Principle is chiefly about principles of good design and does not provide any degree of detail or prescription that assists designers to meet the principles.
- Two of the five guidelines associated with the Perceptible Information Principle that relate to legibility and contrast are covered in Standard 1.2.9 and the user guide for Standard 1.2.9.
- The remaining three guidelines are not specifically covered in the Code. However, the intent of the guidelines (use of more than one mode of providing information, differentiation of information and the use of computer technology) could be applied to the provision of mandatory label information, both via the label and by other means, through developing further guidance, if required.
- No other tools similar to the Perceptible Information Principle have been identified. However, best practice advice/guidance is available which can assist with the presentation of information on food labels. Such guidance documents provide more detailed suggestions for maximising legibility and presentational aspects of information than what is encompassed by the Perceptible Information Principle.
- There is a limited evidence base on the impact of format and presentation on consumer use and understanding of mandatory label information. Many of the aspects of format identified in the literature to be of relevance to consumers have been included in the user guide for Standard 1.2.7, the guidance on allergen labelling provided by the Australian Food and Grocery Council and in best practice advice/guidance documents available overseas. The effectiveness of the best practice advice/guidance documents is unknown.
- Food regulations in Canada, the USA and the EU include detailed requirements relating to legibility and format of mandatory information on food labels in contrast with the general legibility criteria in the Code. Reasons for having general legibility criteria in the Code include the recognition that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.

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Attachment A – Summary of labelling review recommendations relating presentation of information on food labels

Labelling review recommendations relating to presentation of information on food labels		Government Response ¹
5. That information on food labels be presented in a clear and comprehensible manner to enhance understanding across all levels of the population.	The Forum will develop an overarching policy statement on food labelling that supports the principle that information on food labels be presented in a clear and comprehensible manner to enhance understanding. The policy statement will guide decisions and actions by both government and industry.	
6. That the food safety elements on the food label be reviewed with the aim to maximise the effectiveness of food safety communication.	The Forum will request that FSANZ undertake a technical evaluation and provide advice on the food safety elements on food labels. Advice from FSANZ will assist the Forum to fully consider the expected benefits and cumulative impacts of possible changes to mandatory labelling requirements prior to proposing any amendments to the existing labelling requirements in the Food Standards Code, noting that food safety is the most critical message to communicate to consumers.	
43. That the Perceptible Information Principle be used as a guide for labelling presentation to maximise label comprehension among a wide range of consumers.	The Forum notes recommendation 43 and will request FSANZ to undertake a technical evaluation and provide advice on the application of the Perceptible Information Principle to the presentational aspects of food labels, as well as whether the Perceptible Information Principle as a tool to aid food label design has benefits over other tools.	
44. That a minimum font size of 3.5mm in an open font style in mixed case be applied for mandated information, with then exception of small package sizes where the minimum font size should be 1.5mm. (Note this was not supported by the Forum)	The Forum agrees not to pursue action in relation to recommendation 44 at this time.	
45. That a set of guidelines be developed in consultation with industry that includes reference to other presentation factors such as letter and line spacing, text justification and stroke width.	The Forum supports the work being undertaken by the AFGC and will request FSANZ to work with the AFGC and other industry organisations in Australia and New Zealand as appropriate to identify and clarify those presentational factors and problems with existing Food Standards Code provisions that lead to consumer confusion. These aspects of presentation could be explored through consumer research and raised as focus areas for industry to consider for inclusion in the AFGC Code of Practice for Food Labelling and Promotion.	
46. That a minimum contrast level of 70% for mandated information be stipulated in the Food Standards Code. (Note this was not supported by the Forum)	The Forum agrees not to pursue action in relation to recommendation 46 at this time.	
47. That warning and advisory statements be emboldened and allergens emboldened both in the ingredients list and in a separate list.	The Forum notes recommendation 47, and will request FSANZ to undertake a technical evaluation and provide advice, including advice on the benefits of mandatory requirements compared with the cost burden imposed by design limitations, before a final decision is made to amend the Food Standards Code.	
48. That industry be encouraged to develop a set of guidelines relating to the co-location of mandatory health information presented in a standardised manner on the label. Government should facilitate this process through the provision of appropriate resources and expertise.	The Forum supports recommendation 48 in principle and will support industry by requesting FSANZ to provide advice on any guidelines developed by industry.	
49. That the development of an automated label assessment tool be investigated that can gauge a label's compliance with mandated legibility requirements and those stipulated in relevant voluntary codes.	The Forum supports the provision of guidance to industry to assist compliance with labelling requirements. The Forum notes the recommendation and will request the FSANZ to consider the current tools available with a view to review, enhance and, where appropriate, more widely promote their use.	

1 Government response to Labelling Logic is at

<http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/home>

Attachment B – Principles of Universal Design and Guidelines (Connell et al.1997)

PRINCIPLE ONE: Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- 1a.** Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b.** Avoid segregating or stigmatizing any users.
- 1c.** Provisions for privacy, security, and safety should be equally available to all users. **1d.** Make the design appealing to all users.

PRINCIPLE TWO: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- 2a.** Provide choice in methods of use.
- 2b.** Accommodate right- or left-handed access and use. **2c.** Facilitate the user's accuracy and precision.
- 2d.** Provide adaptability to the user's pace.

PRINCIPLE THREE: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- 3a.** Eliminate unnecessary complexity.
- 3b.** Be consistent with user expectations and intuition.
- 3c.** Accommodate a wide range of literacy and language skills.
- 3d.** Arrange information consistent with its importance.
- 3e.** Provide effective prompting and feedback during and after task completion.

PRINCIPLE FOUR: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- 4a.** Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b.** Provide adequate contrast between essential information and its surroundings.
- 4c.** Maximize "legibility" of essential information.
- 4d.** Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e.** Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

PRINCIPLE FIVE: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- 5a.** Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b.** Provide warnings of hazards and errors.

5c. Provide fail safe features.

5d. Discourage unconscious action in tasks that require vigilance.

PRINCIPLE SIX: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

6a. Allow user to maintain a neutral body position. **6b.** Use reasonable operating forces.

6c. Minimize repetitive actions.

6d. Minimize sustained physical effort.

PRINCIPLE SEVEN: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

7a. Provide a clear line of sight to important elements for any seated or standing user. **7b.** Make reach to all components comfortable for any seated or standing user.

7c. Accommodate variations in hand and grip size.

7d. Provide adequate space for the use of assistive devices or personal assistance.

Please note that the Principles of Universal Design address only universally usable design, while the practice of design involves more than consideration for usability. Designers must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental concerns in their design processes. These Principles offer designers guidance to better integrate features that meet the needs of as many users as possible (Connell et al. 1997).

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Attachment C – Requirements for format and presentation of mandatory information on food labels in Australia/New Zealand, Canada, the USA and EU (packaged food)

	Labelling element	Australia and New Zealand (Australia New Zealand Food Standards Code)	Canada (Food and Drugs Act 1985, Food and Drug Regulations, Consumer Packaging and Labelling Act 1985, Consumer Packaging and Labelling Regulations)	USA (Food, Drug and Cosmetic Act, Fair Packaging and Labelling Act) Food Allergen Labelling and Consumer Protection Act 2004	EU (Regulation EU No. 1169/2011 – Provision of food information to 18 consumers – EU FIC)
General		Standard 1.2.9 – Legibility Requirements, requires that prescribed labelling and information is in English. All information on a label must be written legibly and prominently such as to afford a distinct contrast to the background. Standard 1.2.9 also includes size of type requirements for warning statements (e.g. statements about royal jelly, infant formula, food for infants, formulated supplementary sports food). Type size must not less than 3 mm, or, in the case of a small package, not less than 1.5 mm.	Required information must be easily read and clearly and prominently displayed in both French and English ¹⁹ (with a recommended minimum type height of 1.6 mm (1/16 inch), based on the lowercase letter "o", unless otherwise specified); and located on any panel except the bottom, except for the information required to appear on the principal display pane (PDP) ²⁰ . All mandatory information must appear grouped together, on any part of the label, unless it is information which is required to be shown on the PDP or information exempted from grouping	There are placement requirements for labelling statements, either: all required labelling statements on the front label panel (principal display panel) (PDP) ²¹ , or certain specified label statements on the front label panel and other labelling on the information panel (the label panel immediately to the right of the front label panel, as seen by the consumer facing the product). Certain label statements are generally required to be placed together, without any intervening material, on the information panel, if such labelling does not appear on	Mandatory information must be marked in a conspicuous place in such a way as to be easily visible, clearly legible and indelible. Mandatory information, including nutrition declaration, must be printed on the label in such a way as to ensure clear legibility, in characters using a font size where the 'x-height' is equal to or greater than 1.2mm (for packages 80 cm ² and over). Mandatory information must appear in a language(s) easily understood by consumers of

				the PDP. These label statements include the name and address of the	
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18 Provisions apply from 13 December 2014, except for provisions for mandatory nutrition declarations which apply from 13 December 2016. If, however, the nutrition declaration is provided on a voluntary basis during the period 13 December 2014 – 12 December 2016 or is required because a nutrition and/or health claim has been made or vitamins and/or minerals have been added to a foodstuff, then the EU FIC formatting and presentation provisions will apply to it from 13 December 2014.

19 There is one exception to the bilingual requirement as follows: The identity and principal place of business of the person by or for whom the pre-packaged product was manufactured, processed, produced or packaged for resale, may be in either English or French.

20 *Principal Display Panel* refers to the main panel that is normally visible when the product is displayed for sale.

21 The term *principal display panel* as it applies to food in package form means the part of a label that is most likely to be displayed, presented, shown, or examined under customary conditions of display for retail sale. The principal display panel shall be large enough to accommodate all the mandatory label information required to be placed thereon by this part with clarity and conspicuousness and without obscuring design, vignettes, or crowding.

	Labelling element		Australia and New Zealand		Canada		USA		EU	
General continued				provisions e.g. identity of food business, date marking, nutrition facts table).		manufacturer, packer or distributor, the ingredient list, nutrition labelling and any required allergy labelling. Information on the information panel must be prominent and conspicuous. Letters that are at least one-sixteenth (1/16) inch in height must be used. Smaller type sizes may be used for information panel labelling on very small food packages.		Member States where a food is marketed.		
Common name ²²		No additional format requirements		Must be shown on the PDP.		Statement of identity or name of the food must be on the PDP and on alternate principle display panels (ie other surfaces suitable for principle display panels). Must be in bold type, in a size reasonably related to the most prominent printed matter on the PDP, and in lines generally parallel to the base on which the package rests as it is designed to be displayed.		Name of the food, net quantity, declaration of alcoholic strength (for beverages containing more than 1.2% by volume of alcohol) must be in the same field of vision.		
Net quantity		Australia: Must be declared on principal display panel. Type size required depends on package size.		Must be declared on the PDP. Numerals must be shown in bold face type and in the size specified in		Must be on the PDP and on alternate principle display panels (ie other surfaces suitable for principle				

		Requirements for location on principal display panel. ²³ New Zealand: Must be in legible figures and letters. Should be in a prominent position and in close proximity to the product name. Letters and figures should be at least 2 mm in height and in a		the regulations according to the size of the PDP.		display panels). Minimum type size requirements apply. Must appear in conspicuous and easily legible boldface print or type in distinct contrast to other matter. Must be separated from other printed label information appearing above or below the declaration and (by at least				
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Australia and New Zealand

Allergens

Can appear in the ingredient list or following a ‘Contains’ statement immediately after or adjacent to the ingredient list in a type size no smaller than that of the ingredient list

Must be highlighted in ingredient list. **Food business decides on approach for highlighting e.g. font, style or background colour.**

Technical Evaluation for Labelling Review Recommendation 43: Perceptible Information Principle

(September 2013)

Executive Summary

In 2009, the then Australian and New Zealand Ministerial Council for Food Regulation (now known as the Australia and New Zealand Ministerial Forum on Food Regulation (Forum)) agreed to a comprehensive independent review of food labelling law and policy. An expert panel, chaired by Dr Neal Blewett, AC, undertook the review and the panel’s final report, Labelling Logic: Review of Food Labelling Law and Policy (2011) (Labelling Logic) was publicly released in January 2011.

Recommendation 43, one of several recommendations relating to presentation of information on food labels in Labelling Logic states: That the Perceptible Information Principle be used as a guide for labelling presentation to maximise label comprehension among a wide range of consumers.

In the government response to Recommendation 43, the Forum asked FSANZ to *undertake a technical evaluation and provide advice on the application of the Perceptible Information Principle to the presentational aspects of food labels, as well as whether the Perceptible Information Principle as a tool to aid food label design has benefits over other tools.*

In response to the Forum’s request for technical evaluation and advice, FSANZ has:

- commissioned a literature review on the impact of format/presentation on consumer use and understanding of label information and the application of the Perceptible Information Principle to presentational aspects of information on food labels
- considered the requirements in the Australia New Zealand Food Standards Code (the Code) and any guidance provided by industry and jurisdictions relating to the presentation of mandatory food label information
- compared requirements in Canada, the United States of America (USA) and the European Union (EU) relating to the presentation of mandatory food label information with those in the Code
- evaluated the suitability and effectiveness of requirements/guidance, the Perceptible Information Principle and any other tools for presentational aspects of mandatory information on food labels.

The Perceptible Information Principle is one of seven principles of universal design developed in 1997 from the disability rights movement in the USA. To date, the principles have not been widely adopted by the design community and have not been explicitly applied to food labelling. In addition, only guidelines and not specific recommendations for optimising design are provided. Nonetheless, the Perceptible Information Principle can be applied to the format and presentation of mandatory information on food labels.

Two of the five guidelines associated with the Perceptible Information Principle refer to legibility and contrast. Legibility and contrast are covered in Standard 1.2.9 – Legibility Requirements of the Code in general terms and to a greater extent in the FSANZ user guide for Standard 1.2.9. Guidance on allergen labelling is also available from the Australian Food and Grocery Council.

The remaining three guidelines are not specifically covered in the Code but can be applied to food labelling. These guidelines include the use of more than one mode of providing information, such as pictorial and textual modes together, differentiation of information and the use of computer technology. However, the intent of the guidelines could be applied to the provision of mandatory label information, both via the label and by other means, through developing further guidance, if required.

No other tools similar to the Perceptible Information Principle have been identified. However, best practice advice/guidance is available which can assist with the presentation of information on food labels. Although the current evidence base is limited, there are a number of factors relating to the presentation of information on food labels identified in the literature that are considered to be helpful in attracting consumers' attention and also in aiding knowledge acquisition. Many of these factors are not encompassed by the Perceptible Information Principle, for example grouping and consistency of information, but have been included in guidance documents available for use in other countries. The effectiveness of such guidance documents in improving the format and presentation of mandatory label information is unknown.

Food regulations in Canada, the USA and the EU include detailed requirements relating to legibility and format of mandatory information on food labels in contrast with the general legibility criteria in the Code. Reasons for having general legibility criteria in the Code include the recognition that legibility can be optimised using a number of effective combinations of criteria and that regulations should be no more prescriptive than is necessary to protect public health and safety while providing maximum flexibility for food businesses.

In conclusion, the Perceptible Information Principle can be applied to the format and presentation of mandatory information on food labels but has not been explicitly applied to date. The Perceptible Information Principle is chiefly about principles of good design and does not provide any degree of detail or prescription that assists designers to meet the principles. Some aspects of the Perceptible Information Principle are covered in the Code and an associated user guide. No other tools similar to the Perceptible Information Principle have been identified, however, some best practice advice/guidance is available both locally and overseas. The best practice advice/guidance includes factors relating to the presentation of information on food labels identified in the literature review to be helpful for consumers. The effectiveness of the best practice advice/guidance is unknown.

4. ALLERGEN LABELLING & COMMUNICATION

Allergen labelling on food packaging is one of the most important means of communication for people with food allergy when deciding if a product is suitable and safe for them to consume. Increasing use of online shopping means that allergen information in electronic formats should also be accurate, clear and consistent with the allergen information on the food packaging.

Regardless of whether allergen declarations are on labels, provided on specifications, through verbal communication for unpackaged foods, or made available online, the process to determine the allergen status of a food is the same. In this Guide, section 3.2 Allergen Risk Review discusses the aspects of a thorough investigation of the allergen status of a food. After this information is collected, it can be transcribed into a format (usually an ingredient list) for consumers to access.

This section of the Guide

- Describes allergen labelling best practice, which includes guidance for composing a voluntary allergen summary statement and voluntary precautionary allergen statement.
- Provides recommended allergen labelling formats for industry to adopt. Alternative labelling options are provided in recognition of constraints due to label size, legibility and other variables, while still promoting overall consistency and clarity of allergen information. In adopting one of these labelling formats, industry will assist consumers by providing greater consistency in the presentation, legibility and ease of identifying product allergen information.
- Describes the importance of clearly communicating the allergen status of foods and provides guidance on the management and communication of a change in allergen status of a food product. It also provides industry with guidance on the management of reports in relation to alleged allergic reactions to a food the company has supplied.

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4.1 ALLERGEN LABELLING BEST PRACTICE

As described in this Guide (section 2.2 *Australia New Zealand Food Standards Code*), the Code sets out the mandatory declaration requirements for foods and substances that are allergens, but (other than legibility) does not specify formatting requirements for this information. For example, there is no requirement for the placement of the declarations, how food allergens should be declared and if and how precautionary allergen labelling statements should be made.

The allergen labelling guidance in this document is voluntary and represents industry best practice. It aims to assist the food industry with making allergen declarations and provide consumers with clear and consistent information.

General Labelling Recommendations

The general allergen labelling recommendations are:

- All allergen information should be grouped together to be easily identified and not hidden amongst other labelling information.
- Allergens should be described using plain English terms consistent with the Code.
- Legibility requirements are specified in Section 1.2.1—24 of the Code.
- The print size should be big enough to be easily read, preferably at a minimum 1.5 mm sans-serif font, and the font colour should contrast distinctly from the background. The use of lower or upper case will depend on the overall presentation of labelling information.
- Product description and representation should provide an accurate expectation of the food and should not be misleading.
- Similar products with different allergens should be clearly and easily distinguishable.

Describe Allergens in Plain English Terms

Consumers can potentially misunderstand allergen declarations when the terms used to describe the allergens are inconsistent or unfamiliar to them. For example, the ingredient sodium caseinate may not be recognised by a consumer as being a milk product.

When declaring food allergens, use descriptions that are in plain English and are consistent with the terminology used in Section 1.2.3—4 of the Code. For example, ‘sodium caseinate (milk)’.

Understand the Allergenic Nature of Ingredients

To declare ingredients that are (or contain) allergens accurately, manufacturers need to be aware of the nature of the ingredients they use in their products, and whether there are components in compound ingredients, additives and processing aids that are derived from an allergen.

Examples include:

1. Additives, processing aids and vitamins may be combined with carriers or diluents derived from allergens. Suppliers of ingredients, additives and processing aids have a responsibility to provide their customers with information on allergens contained in their products.

2. Some ingredients are grown on a fermentation substrate that may be an allergen. The Allergen Bureau describes some of the decisions required when assessing the allergen status of foods and food ingredients that are produced using bacteria, yeasts and other micro-organisms

in a fermentation process in Appendix One of Unexpected Allergens In Food. It is also discussed in the AFGC Product Information Form (PIF) V6.0 User Guide (Dec 2018)

The requirement to declare the presence of cereals containing gluten serves two purposes. People who are allergic to wheat can identify its presence and those who are gluten intolerant can identify the cereals that contain gluten. If the term ‘gluten’ or the term ‘cereals containing gluten’ is used, ensure that the individual cereal is also declared.

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Although most food allergens are proteins, these proteins are usually not denatured under normal food processing conditions and are relatively resistant to digestion. It should not be assumed that normal food manufacturing processes will make a food less allergenic. Foods and ingredients that contain denatured proteins can still trigger an allergic reaction in a food allergic individual. An exception may be a food that has been extensively hydrolysed and then tested in robust clinical studies. In all cases, the allergen must still be declared unless it falls under an allergen labelling exemption.

If manufacturing processes result in the allergen protein not being detected by analytical means, it cannot be assumed that the allergen is not present. An example is a fermented food where the allergen is not detected using analysis, however the food is the product of an allergen source.

Some ingredients undergo processes which remove most of the allergenic proteins. Unless that ingredient falls under an allergen labelling exemption, the allergenic source of these ingredients must be declared irrespective of how highly refined or processed they may be. An example of a material that can be highly processed is wheat, where wheat declaration would apply equally to wheat flour, wheat starch, wheat maltodextrins and caramel derived from wheat.

Allergen Labelling Exemptions

Some foods or substances have undergone processing steps and/or have been assessed by FSANZ as safe and suitable for people who have allergies. These are generally known as allergen labelling exemptions, are listed

in Section 1.2.3—4 of the Code, and do not require mandatory declaration. A summary of the allergen labelling exemptions currently listed in the Code is in Table 2.

4.1.1 RECOMMENDED ALLERGEN LABELLING FORMAT

Allergen labelling information can consist of an ingredient list, an allergen summary statement and a precautionary allergen statement, of which some elements are mandatory and others voluntary. This is shown in Table 4.

Table 4: Allergen labelling elements

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Element	Description	Mandatory/Voluntary
Ingredient list	A statement of ingredients including the allergens and their products when present in the food for sale.	Mandatory allergen declaration is required on the label of packaged food. This is usually located within the ingredient list.
Allergen summary statement	A statement that summarises the allergens and their products when present in the food. Summary statements begin with the word “Contains”.	Voluntary
Precautionary allergen statement	Statement of cross contact allergens.	Voluntary

A consistent approach in the presentation of allergen information will help consumers with food allergy more quickly and easily identify foods of concern, helping to minimise accidental consumption of unsuitable foods. The recommended best practice labelling format includes:

- an ingredient list declaring in **bold** the allergens and products of these;
- an allergen summary statement using the word ‘contains’; and
- a precautionary allergen statement if required. The VITAL Program’s

“**May be present: allergen x, allergen y.**” is recommended after conducting a VITAL risk assessment. Figure 2 sets out an example of a best practice allergen labelling format.

Figure 2: Best practice labelling format

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Allergenic foods/ingredients or products of these are declared in bold and in plain English each time they appear.

Specific name of the tree nut, cereal containing gluten & fat/oil from an allergenic source is declared (unless allergen labelling exemptions apply).

Ingredients

Water, vegetable oil, vinegar, sugar, tomato paste (5%), salt, parmesan cheese (2%) (**milk**), **egg** yolk, thickener (1412), **almonds**, capsicum, garlic, **wheat** starch, flavour (**wheat** maltodextrin, **sesame** oil), antioxidant (320).

Contains: milk, egg, almonds, wheat and sesame. May be present: peanut.

Precautionary allergen statement for cross contact allergens used when appropriate. ‘May be present’ cannot be used without a VITAL risk assessment.

Although some packaged foods do not require an ingredient list, allergens must still be declared when they are present. The allergens should be labelled in an easily identified format such as in an allergen summary statement.

Examples of some packaged foods that do not require an ingredient list include:

- individual portion packs with an outer package [Standard 1.2.1]
- foods in small packages [defined in Standard 1.1.2]
- foods where the name of the food is the allergen [Standard 1.2.4]
- packaged and labelled water [Standard 1.2.4]

<ul style="list-style-type: none"> a standardised alcoholic beverage [Standard 1.2.4]. <p>Allergen summary statement lists all allergenic ingredients present in the product in bold and in plain English.</p>		
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4.1.2 COMPOSITION OF ALLERGEN LABELLING INFORMATION <p>Table 5 describes the recommended process for preparing allergen labelling for packaged foods. However, the same principles can be applied to non-packaged foods. The process outlined applies to the development of new labels and updating or changing existing labels when the allergen status of a product changes.</p> <p>Table 5: Process for composing an allergen declaration – packaged foods</p> <p>Chapter 4: Allergen Labelling & Communication</p>		
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Step	Description	Reference/Resource
1	Obtain the product formulation/recipe including amounts of each ingredient.	
2	Obtain Product Information Forms (PIFs) and/or specifications for all ingredients. Ensure all sources of allergens as ingredients and cross contact allergens are identified and recorded.	<ul style="list-style-type: none"> AFGC - Product Information Form (PIF) Allergen Bureau - Allergen Risk Review website
3	Identify allergens in the product using the formulation and ingredient information, including: <ul style="list-style-type: none"> Ingredients Food additives Processing aids Compound ingredients Cross contact from ingredients 	<ul style="list-style-type: none"> ANZ Food Standards Code Standard 1.2.3 AFGC - Product Information Form (PIF) AFGC & Allergen Bureau– Food Industry Guide to Allergen Management and Labelling Allergen Bureau - Food Industry Guide to the Voluntary Incidental Trace Allergen Labelling (VITAL) Program Allergen Bureau - Unexpected Allergens in Food
4	Compose the ingredient list and declare the allergens formulated into the product.	<ul style="list-style-type: none"> ANZ Food Standards Code Standard 1.2.3 AFGC & Allergen Bureau– Food Industry Guide to Allergen Management and Labelling Allergen Bureau - VITAL Best Practice Labelling Guide for ANZ
5	Conduct a VITAL risk assessment to determine the presence of cross contact allergens from ingredients and processing.	<ul style="list-style-type: none"> Allergen Bureau - Food Industry Guide to the Voluntary Incidental Trace Allergen Labelling (VITAL) Program Allergen Bureau – VITAL Online (web-based VITAL calculator) Allergen Bureau – VITAL Q&As Allergen Bureau - Allergen Risk Review website
6	Finalise allergen labelling: <ul style="list-style-type: none"> confirm the allergens in the ingredient list, confirm the allergen summary statement, and compose the appropriate precautionary allergen statement 	<ul style="list-style-type: none"> Allergen Bureau – VITAL Online (web-based VITAL calculator) AFGC & Allergen Bureau– Food Industry Guide to Allergen Management and Labelling Allergen Bureau - VITAL Best Practice Labelling Guide for ANZ
<p>Food Industry Guide to Allergen Management and Labelling</p> <p>4.1.3 PRESENTATION OF AN INGREDIENT LIST</p> <p>The general recommendations for declaring allergens in an ingredient list are:</p> <ul style="list-style-type: none"> All allergenic foods/ingredients or products of these (as per Section 1.2.3—4 of the Code) are declared in the ingredient list each time an ingredient containing the allergen is listed. Allergens are declared in bold each time they appear in the ingredient list. The specific name of the allergenic components of ingredients are declared in bold e.g. Sodium Caseinate (milk). The specific name of the cereal containing gluten is declared. The specific name of each tree nut is declared, not the generic term nuts or tree nuts. Declare in bold any allergens present due to food additives and/or processing aids. Declare any sulphite ingredients, additives or processing aids as per Standard 1.2.4 of the Code, declare in bold when present in concentrations of 10mg/kg or more. <p>An example of this formatting is shown in Figure 2: <i>Best practice labelling format</i> of this Guide.</p> <p>Ingredient List Alternatives</p>		

To provide flexibility, alternative allergen labelling approaches are listed below. Refer to Appendix 6.1 *Alternative labelling formats* in this Guide for further information.

When an allergen summary statement is used in conjunction with the ingredient list:

- Bolding of the allergens in the ingredient list is optional (but is highly recommended).
- The specific name of each allergen does not have to be used within the ingredient list when the allergen summary statement uses the allergen terms described in the Section 1.2.3—4 and

Schedule 10 of the Code.

An example of this formatting is shown in Appendix 6.1 Figure 5: *Alternative labelling format 1*.

When there is no allergen summary statement following the ingredient list:

- Allergens should be declared in bold in the ingredient list.
- The specific name of the allergens should be declared using the terms described in Section 1.2.3—4 of the Code e.g. vegetable oil (soy) or soybean oil.
- When processing aids are allergens or components of allergens, they must be declared as per Section 1.2.3—4 of the Code. This may

be a generic statement, such as ‘processing aids contain allergen x, allergen y.’ and should appear on a separate line at the end of the ingredient list.

- The use of ingredient substitution where one ingredient is an allergen and the other is not e.g. wheat or corn starch, should be avoided where possible. Where unavoidable, the declaration of substitute ingredients should highlight the allergen such as ‘sunflower oil or **peanut** oil’ or ‘**wheat** starch or corn starch’, or ‘hydrolysed vegetable protein (corn or **soy**)’.

An example of this formatting is shown in Appendix 6.1 *Figure 6: Alternative labelling format 2* of this Guide.

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4.1.4 PRESENTATION OF AN ALLERGEN SUMMARY STATEMENT

The general recommendations for declaring allergens in an allergen summary statement are:

- List the allergens present in the food using the terms set out in Section 1.2.3—4 of the Code.
- Declare as ‘**Contains: allergen x, allergen y.**’ and position directly beneath the ingredient list on a separate line in bold.
- Use the same text size as the ingredient list, or at a minimum print size of 1.5mm.
- Apply to the packaging of single ingredient foods where the product name does not include the name of the allergen e.g. For a pack of Edamame beans, the allergen summary statement could

be ‘**Contains: soy.**’.

- Declare each specific cereal containing gluten, alternatively use the general term ‘cereals containing gluten’ if there is more than one cereal containing gluten present, and the individual cereals are specified in the ingredient list.

• Declare the specific name of the tree nut, alternatively use the general term ‘tree nuts’, if there is more than one tree nut present, and the individual tree nuts are specified in the ingredient list.

The term ‘nuts’ should not be used at any time.

- Declare any allergens present due to food additives and/or processing aids.
- The allergens stated in the allergen summary statement should align with the information in the ingredient list.

An example of this formatting is shown in Figure 2: *Best practice labelling format* of this Guide.

Allergen Summary Statement Alternatives

- The summary statement may be declared as ‘Ingredients contain...’ or ‘Contains allergens from...’ or words of similar intent.
- A summary statement may be omitted if the allergens are declared in the ingredient list and qualified using the terms listed in Section 1.2.3—4 of the Code and are declared in bold.

An example of this formatting is shown in Appendix 6.1 *Figure 6: Alternative labelling format 2* of this Guide.

The allergen summary statement should be limited

to declaring the presence of allergens in the product and should not be used to indicate other features e.g. ‘contains 10% milk fat’. Allergen summary statements should be clear and any other ‘contains’

statement should be separated from the allergen information.

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4.1.5 PRECAUTIONARY ALLERGEN LABELLING (PAL)

Allergen cross contact occurs when a residue or other trace amount of an allergen is unintentionally incorporated into another food. Clear and consistent labelling of cross contact allergens assists consumers with a food allergy and their carers to identify foods that are safe for them to eat, and those that they should avoid. The declaration of a cross contact allergen in

a PAL statement does not diminish the requirement

to apply HACCP and GMP to ensure that the cross contact allergen is present at the lowest practicable level and is controlled at this level.

• When a VITAL risk assessment has been applied (refer to this Guide, section 4.1.6 *The Voluntary Incidental Trace Allergen Labelling (VITAL®) Program*), declare the cross contact allergens as “**May be present: allergen x, allergen y.**” refer

to the VITAL Best Practice Labelling Guide for Australia and New Zealand for further information.

- The PAL statement is positioned below the allergen summary statement on a separate line in bold.
- Ensure the PAL statement makes sense and is not contradictory to the ingredients list or allergen summary statement. For example, if a product contains added soy which is declared in the ingredient list and the allergen summary statement, do not also include soy in the PAL statement.
- Use the same text size as the ingredient list, or at a minimum print size of 1.5mm.

An example of this formatting is shown in Figure 2: *Best practice labelling format* of this Guide.

PAL Alternatives

- Alternative PAL statements might be used when VITAL risk assessment has not been applied.
- The use of alternative PAL statements must consider product liability laws and must not be false, misleading or deceptive. Consumers should have a reasonable expectation that the presence of allergens indicated in a PAL statement is unintended, and the occurrence is random

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Inconsistent use of PAL statements can lead to consumer distrust of the product label and are sometimes seen as ‘manufacturers protecting themselves’ rather than informing the consumer of the true allergen status of the food.

Using statements such as ‘manufactured on equipment that also processes xxx’ or ‘made in a facility that also makes products on the same production line containing xxx’ are confusing and fail to communicate the risks presented by such products to the allergic consumer.

However, when PAL is applied after a robust scientific risk-based assessment process, which involves the reduction and/or elimination of cross contact allergens wherever possible, and is described in a clear, accurate and consistent manner, it enables consumers to trust the information provided.

Presentation of a Precautionary Allergen Labelling (PAL) Statement

The general recommendations for declaring allergens in a PAL statement are:

- List the cross contact allergens using terms set out in Section 1.2.3—4 of the Code.

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and with relatively low frequency. This does not preclude advice that allergic consumers should not consume a product with PAL statements towards those allergens to which they are sensitive.

- This Guide does not offer examples of alternative PAL statements. It is the manufacturer’s responsibility to take the above requirements into account when determining an appropriate alternative precautionary allergen statement.

4.1.6 THE VOLUNTARY INCIDENTAL TRACE ALLERGEN LABELLING (VITAL®) PROGRAM

The VITAL Program is a standardised allergen risk assessment process for the food industry. It provides a consistent methodology to assess the impact of allergen cross contact from raw materials and the processing environment. It determines appropriate labelling outcomes for the purpose of PAL statements which are based on quantitative risk assessments

by using Action Levels¹⁵ that are underpinned by scientific evidence. The VITAL Program can be used to assist food producers in presenting allergen labelling information consistently for people with food allergy.

The standardised statement, “**May be present: allergen x, allergen y.**” is the recommended PAL statement to be used in conjunction with the VITAL Program. This statement should only be used where the VITAL Program has been implemented and the cross contact allergen concentration is determined to be present at Action Level 2¹⁶. The “May be present” statement is placed below the ingredient list and the allergen summary statement on a separate line in bold.

For a product which has been assessed using the VITAL Program, each opportunity for cross contact should be identified and eliminated. Where elimination is not practicable, cross contact should be reduced wherever possible and controlled to the lowest attainable level. The use of “**May be present: allergen x, allergen y.**” for an allergen in a PAL statement does not preclude the ongoing requirement to manage and control the allergen at the lowest practicable level.

Food companies implementing VITAL must refer to the VITAL Program. Details about the VITAL risk assessment process and a range of tools which support the VITAL Program are available on the Allergen Bureau website including the:

- Food Industry Guide to the Voluntary Incidental Trace Allergen Labelling (VITAL) Program
- VITAL Online (web-based VITAL Calculator)
- VITAL Best Practice Labelling Guide for Australia

and New Zealand

- Allergen Risk Review website.

Allergen Risk Review Anomaly – Dark Chocolate

In commercial operations, where dark chocolate

is manufactured following the production of milk chocolate, milk remains in the dark chocolate at variable (and not insignificant) levels. The milk cross contact concentration is often above the VITAL Program Action Level 2 where precautionary allergen labelling is recommended. This is also above the allergic consumer and their carer’s expectation of trace or minimal milk levels.

The risk review anomaly occurs where the milk is not an intended ingredient nor is it included as part of the recipe as an ingredient, additive or processing aid in the product but is present at potentially significant levels. It falls outside the mandatory labelling requirements in Standard 1.2.3 of the Code and does not necessarily fit with the principles of best practice risk review and PAL.

Guidance for food industry on the dark chocolate allergen risk review anomaly which includes key guiding principles and a decision tree is available on the Australian Industry (Ai) Group website and the Allergen Bureau website. This guidance is specific to dark chocolate only and cannot be transferred to other ingredients or food simply because cleaning and GMP practices impinge on allergen management best practice.

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4.2 LABEL ARTWORK APPROVAL & SIGNOFF

Each food business should have processes in place for reviewing and approving their allergen declarations on label artwork. Individuals responsible for compiling information, reviewing and approving the artwork, labels and product information should have:

- An understanding of the requirements for allergen labelling – both regulatory and best practice.
- Access to up to date information about the product, including any changes that have been made to the formulation, ingredients or processing that may affect the allergen status.
- An understanding of how the information will be presented on the package. For example, an ink

jet code may only require an allergen summary statement, however, a package that has a front of pack label, back of pack label, neck label and print on the cap, may require considerations for the placement of the allergen declaration, and clarity and consistency of other information.

Table 6. Packaging considerations

Finished Product Specification

Records should be maintained detailing the allergen status and the format of the allergen labelling declaration for every product – this can be done in the form of specification or an artwork brief and may be recorded as a document or a within an electronic database. A process for checking and approving the allergen declaration within the specification should be in place.

Label Artwork

Records of the review of label artwork should be maintained. This should document who reviewed the artwork, any requests for changes, and details of the final approval. A process for checking and approving the final artwork or packaging should be in place.

When reviewing the allergen information on label artwork, the information in Table 6 should be considered.

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Packaging aspect	Consideration
Ingredient list	Does it declare allergens present in the food?
Allergen summary statement	Does it align with the information in the ingredient list? Is it clear? Does it make sense? Are there any contradictions that can be removed or corrected?
Precautionary allergen statement	Is it clear? Does it make sense? Are there any contradictions that can be removed or corrected?
Claims or statements	Does the label contain any claims about the allergen status of the food? Are these correct and substantiated?
Impressions	Are there any words, images or graphics on the label that give the consumer an impression of the allergen status of the food? Are the impressions consistent with the allergen status of the food?
Differentiation	How does the allergen information on this artwork compare to others in the product range? Is there sufficient differentiation for a consumer to recognise differences in allergen status throughout the range?
Foods in small packages	Does the package declare allergens present in the food?
Packages that bear more than one label	Is the information on all label components clear and consistent?
Foods with inner and outer packages, including trays & cases	Does the information on all packaging formats align?

Change Approval Process

Changes to product formulations, ingredients and processing conditions need to be risk assessed, documented, and approved prior to any changes being implemented. If there is a change to the allergen status of the product, the labelling must be updated prior to product reaching the market.

4.3 ALLERGEN FREE CLAIMS

Allergen free claims are claims that food companies use that emphasise the absence of an allergen in a food product. Allergen free claims are intended for consumers with food allergy. An example of an allergen free claim is ‘Egg Free’.

Free From

Consumers with food allergy may seek out products that make claims that they are ‘free’ from an allergen. Products with a free from claim must not have any ingredients or derivatives of that allergen formulated directly into the product. Also, the product must not have any cross contact for that allergen at any level, and therefore does not require a PAL statement identifying that allergen as a cross contact risk.

There are no requirements set out in the Code for making allergen free claims, so the criteria for making the claim falls to each company and consumer laws. When making an allergen free claim, the manufacturer is targeting a high-risk population, and therefore more stringent risk management controls than those described in this Guide are required. Allergen free claims should be supported by documented evidence of the controls and measures in place, and where possible, relevant and appropriate analysis should be applied to support these claims. To provide a safe product in this context it is critical to apply all established parameters of allergen management with the utmost stringency and to understand the consumer’s perception of ‘free’.

Further information is available on the Allergen Bureau website.

Consumer Law and Free Claims

The Australian Competition and Consumer Commission (ACCC) and the New Zealand Commerce Commission

view ‘free’ to literally mean ‘zero’ or ‘no traces’ and is particularly likely to do so in relation to allergen free claims given the reliance that affected consumers might place on such a claim. Claims that a food is free of an allergen, in the absence of any specific regulation to the contrary, should therefore be understood in terms of three conditions:

- the food should not have the allergen present as an ingredient, or as a sub-ingredient, or as a food additive or processing aid (including as an additive or processing aid in a sub-ingredient) as set out in Section 1.2.3—4 of the Code;
- the food and its ingredients should be produced in an environment where the allergen is not present and not subject to cross contact (noting that this may be by the use of dedicated lines and equipment, or by ensuring a relevant AMP is in place ensuring that the allergen is not present); and
- the allergen should not be detectable in the food using a current recognised test method such as Association of Official Analytical Chemists (AOAC) or alternate accepted method.

The final point should be treated as a confirmation process of the previous points rather than in substitution for them.

It follows from this approach that it is inconsistent for a product to contain both a PAL statement and a ‘free’ claim in relation to the same allergen.

Gluten Free and Lactose Free Claims

A ‘gluten free’ claim, and a ‘low gluten’ claim are nutrition content claims, the conditions of which are

set out in Standard 1.2.7 *Nutrition, health and related claims* and Schedule 4 of the Code. In Australia and New Zealand, a gluten free food must not contain detectable gluten. The method of analysis to detect gluten or the detection limits are not specified. This criterion differs in other countries. For example, in the US and in Europe, a gluten free product can contain less than 20 parts per million (ppm) of gluten. Care is required when importing foods and ingredients from overseas, as the supplier may not have considered the Australian and New Zealand criteria for gluten free.

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The food industry should not assume that foods that do not contain added cereals containing gluten are gluten free. The presence of cereal traces, cereal cross contact, highly refined cereals or products derived from these may not constitute gluten free. An example is the presence of cereals into other grains or legumes as a result of agricultural co-mingling.

A ‘lactose free’ claim, and a ‘low lactose’ claim are nutrition content claims, the conditions of which are set out in Standard 1.2.7 and Schedule 4 of the Code. In Australia and New Zealand, a lactose free food must not contain detectable lactose. The term ‘dairy free’ is not regulated by the Code. A ‘dairy free’ claim should only be used on products where the manufacturer has verified that the product does not contain milk or milk products as an ingredient or a cross contact allergen.

Manufacturers and importers need to further consider the impact of ‘free’ claims as markers used by consumers for allergen purposes. Care should be taken with wheat free claims as they may give the impression to consumers that the product is gluten free. A wheat free claim may not necessarily mean that the product is free from gluten, as other cereals containing gluten may have been used as an ingredient. Additionally, to some consumers a lactose free claim may imply the product is dairy free when this may not necessarily be the case. The need to highlight allergen presence (whether intentional or incidental) is elevated in such circumstances, for example by making a more prominent ‘contains’ allergen declaration than might otherwise be considered.

4.4 ALLERGEN COMMUNICATION

This section of the Guide focuses on consumer facing communications in relation to the allergen status of food products.

Alerting Changes to Allergen Status of Existing Products

Recipe reformulation, variations in ingredient supply, or changes to production process, line or facility, can result in changes to the allergen status of a food. When this occurs, updating the allergen declaration on labels is required. However, without careful reading of the label it may not be obvious to a consumer that the allergen status of the food has changed. Additionally, a consumer may not realise that the original product and the reformulated one may be in a store, or in their pantry, at the same time.

Clearly communicating any changes to the allergen status of a product on the front of the pack can assist with alerting consumers. Possible approaches to altering the label or package so that it is visually different include:

- changing a product's name or descriptor
- changing colours or other visuals on the label
- including a temporary flash or icon alerting the

allergen change.

Figure 3: Examples of graphics that indicate a change to allergen status

In addition to front of pack communications, consideration should be given to alerting consumers with food allergy through patient support organisations such as Allergy & Anaphylaxis Australia (A&AA) or Allergy New Zealand, and Coeliac Australia/New Zealand. These organisations can notify their members of the nature and timing of the change to support the company. Information can also be communicated via a company website or social media.

When determining the duration of an alert, consider shelf life and stock in trade practices (e.g. first-in, first- out).

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Packaging Differentiation

When designing packaging artwork, consideration should be given towards providing a visual cue that distinguishes between products of different allergen status. An example is a range of pasta sauces that share the same branding. This range consists of both cream and tomato-based variants which have different allergens. Labels bearing clear visual differences can help shoppers recognise the variants more easily, reducing the chance of an incorrect purchase.

A company should review each product range and identify the potential for consumer confusion. Consider whether there are similar products with different allergen status within a product range, their proximity in-store and/or online, and whether products can be readily substituted for each other.

If determined to be of moderate to high potential for consumer confusion, then the company should differentiate the products using measures such as:

- colour of packaging and label
- using other visual cues such as ingredient pictures
- creating differences in visual appearance of the

product (within the package)

- consistent location of variant descriptor across the

range.

Alternatively, consider only using formulations that harmonise the allergens across similar products.

A food packed in different formats should have the same allergen status and declaration

Consumers may assume that the allergen status of a food is always the same, even when that food is sold in various packaging formats.

In commercial operations, products sold in more than one pack format, or size, may require slight variations in composition (such as a less viscous formulation for a squeeze bottle). They may also be manufactured in different facilities or lines (such as filled into cans or pouches). This can result in different allergens being declared on the various packaging formats.

Business should make every effort to ensure that the allergen status and declarations on a food that is packed in various formats, are consistent.

1. Consider aligning formulations so that allergens present in the food, and therefore declared in the ingredient list and allergen summary statement, are the same
2. Where differences in manufacturing lines, equipment or facilities result in inconsistent cross contact allergens, business should eliminate or reduce cross contact wherever practicable. PAL

statements should be aligned amongst the packaging formats.

If alignment is not possible, then measures to visually differentiate products outlined above should be employed.

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Parallel Imports

Parallel imports are foods that resemble locally produced brands that are imported and sold into Australia or New Zealand outside of formal manufacturer distribution channels and without authorisation of the manufacturer. Due to the branding and

overall appearance of the packaging, it may be difficult for a person with food allergy to recognise that they are purchasing a parallel import. The consumer may not realise that the allergen status of these imported foods may be different to the same food from an Australian or New Zealand authorised supplier.

A seller or supplier of parallel imports is required

to ensure the product complies with the mandatory allergen declaration requirements of the Code. When a company becomes aware of the existence of a parallel import being sold within their market, if the allergen status of the imported food is different, the company may wish to alert consumers through their website or through social media.

Other Forms of Communication

Product labels are no longer the only means by which to communicate the allergen status of a food product.

In Store Demonstrations

Manufacturers should assess the need for in-store demonstrators to provide consumer advice about the presence of allergenic ingredients, as consumers often do not have the opportunity to read the label before tasting the product.

Online Shopping

With the increasing rates of online grocery shopping, people with food allergy will rely more heavily on online food label information. This information should be presented in a way that assists consumers with their purchasing choice. Vigilance is required in ensuring online information regarding the ingredient and allergen content is correct as shoppers are likely to assume that this information reflects the food that will be delivered.

It is critical the information online clearly reflects what is on pack. Food manufacturers should have procedures

in place that alert retailers and distributors when the allergen status of a food changes so that the shopping websites can be updated.

For those who maintain the websites, it is recommended that measures are in place to ensure that the online food label information is up to date. An example is to include the date of the label upload and artwork version control information.

Websites, Social Media etc.

Many companies provide product information via their own website or social media. As with the provision of allergen information on product packaging, it is critical that information provided on a company's website

or through social media is up to date and consistent with product packaging which is in the marketplace. Consideration is needed for clear communication when there are different versions of a label in the marketplace such as old stock in trade potentially having a different allergen status compared to new stock. Additionally, allergen product lists should be kept up to date and aligned with the foods for sale.

Conclusion

There is endless evidence and research from consumer and professionals. Feedback how Food Package Labelling is not up to scratch. In particular with the Food allergens standards of labelling. There should be a differentiation on packaging especially if one contains an allergen. The overall Label or a stand out Label of same package and or name should change if an ingredient changes within that product.(As there is a loop whole) as stated above. 4.4 from the Food and Grocery Council Guide needs to be Mandated. Plain English clearer and consistent with zero scientific terms for consumer to understand what they are reading and purchasing. To be able to make an informed decision. There should be new codes implemented and stricter. It seems the manufacturer is given to many choices. Leaving the allergic consumer unsafe and without been able to make an informed choice.

