The Practice and Perception of Precautionary Allergen Labelling by the Australasian Food Manufacturing Industry (Zurzolo et al accepted for publication Clinical and Experimental Allergy 2017).

Dr Giovanni Zurzolo
Introduction

Mandatory labelling

Precautionary Allergen Labelling (PAL)

Regulated and legislated

Industry self regulated
Introduction

Within a supermarket setting 65% of products contain a PAL statement

Zurzolo et al. 2011 Journal of Paediatrics and Child Health
They may have traditional forms of PAL such as “may contain” or may have been VITAL assessed and contain a “may be present” statement.
Introduction

There currently is confusion amongst health care providers and food allergic consumers.
Introduction
Consumers are taking risk

65% of food allergic consumers ignore PAL statements irrespective of previous risk

( Zurzolo et al. 2013 Med J Aust)
Introduction
PAL labelling is widespread

Only 35% of food products bear no warning statements
Introduction
We don't know of these unlabeled products, what percentage have been through a risk assessment process.

Unlabelled foods can be either safe because it has been risk assessed or unsafe because it has not
Aims

• To assess the prevalence of unlabelled products that have been risk assessed to understand the proportion of foods that should be safe to eat

• To examine the factors influencing industry’s uptake of the VITAL® process
Methods

- Web-based questionnaire distributed via email during a two month period to the Australian Food and Grocery Council (AFGC), the Allergen Bureau and their members.

- Participants were asked that they only report their business in Australasia.
Results

137 Australasian manufacturers were contacted via industry funded organisations

• Response rate 43%
Results

The respondents represented 454 different manufacturing sites throughout Australasia.
Results

Respondents were from companies that employed

- < 50 (20%)
- < 100 (9.0%)
- < 200 (9.0%)
- 200-1000 (26%)
- 1000 staff (36%)
Results

- 100% reported providing training to their staff in the management of allergens and
  98% reported that allergens were included in their food safety plan

- Hazard Analysis and Critical Control Point (HACCP)
- Reported to be used by 98% of manufacturers (n=45)
Percentage of incoming ingredients undergoing allergen testing N=26

- Cereals containing gluten
- Cow's milk
- Wheat
- Soy
- Egg
- Peanut
- Tree nuts
- *Shellfish
- #Fish
- Sesame
- ^Other
- Lupin
Percentage of finished products undergoing allergen testing N=34

- Cereals containing gluten
- Cow's milk
- Wheat
- Tree nuts
- Soy
- Egg
- Peanut
- Sesame
- Other
- Shellfish
- Fish
- Lupin
What are the benefits of using the VITAL risk assessment process?

N=25 *Risk Assessment Process

- Assumptions is saved as part of the RAP*
- Based on science
- Assists for allergen cross contact
- There is a lot of support
- Online is easy to use
- Ongoing monitoring of the RAP*
- A quick response to my concerns

Strongly disagree/Disagree
Neutral
Strongly agree/Agree
What are the challenges of using the VITAL risk assessment process?

N=25

- It is too time-consuming
- Government has not endorsed it
- Our plant is too complex
- It is too complicated to use
- It is difficult and not user-friendly
- It is too expensive to set up
- It is of no benefit to my business

Strongly disagree/Disagree
Neutral
Strongly agree/Agree
<table>
<thead>
<tr>
<th>Food product</th>
<th>PAL</th>
<th>Type of RAP</th>
<th>PAL Label</th>
<th>No PAL label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal products</td>
<td>241</td>
<td>VITAL®</td>
<td>30</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>211</td>
<td>47%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>53%</td>
</tr>
<tr>
<td>Milk products</td>
<td>194</td>
<td>VITAL®</td>
<td>100</td>
<td>73%</td>
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<tr>
<td></td>
<td></td>
<td>Other</td>
<td>94</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27%</td>
</tr>
<tr>
<td>Cereal base products</td>
<td>200</td>
<td>VITAL®</td>
<td>180</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>Meat, poultry, game products &amp; dishes</td>
<td>4</td>
<td>VITAL®</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Savoury sauces &amp; condiments</td>
<td>260</td>
<td>VITAL®</td>
<td>110</td>
<td>34%</td>
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<tr>
<td></td>
<td></td>
<td>Other</td>
<td>150</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snack foods</td>
<td>96</td>
<td>VITAL®</td>
<td>10</td>
<td>80%</td>
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<tr>
<td></td>
<td></td>
<td>Other</td>
<td>86</td>
<td>34%</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg products &amp; dishes</td>
<td>2</td>
<td>VITAL®</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Special dietary food</td>
<td>100</td>
<td>VITAL®</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Confectionery &amp; cereal/nut/fruit/seed bars</td>
<td>6</td>
<td>VITAL®</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Vegetable products &amp; dishes</td>
<td>8</td>
<td>VITAL®</td>
<td>0</td>
<td>100%</td>
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<tr>
<td></td>
<td></td>
<td>Other</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Seed/nut products &amp; dishes</td>
<td>24</td>
<td>VITAL®</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Soups</td>
<td>16</td>
<td>VITAL®</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>Fish products &amp; dishes</td>
<td>0</td>
<td>VITAL®</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Seafood products &amp; dishes</td>
<td>0</td>
<td>VITAL®</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Legume/pulse products &amp; dishes</td>
<td>3</td>
<td>VITAL®</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Infant formula &amp; foods</td>
<td>50</td>
<td>VITAL®</td>
<td>50</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0</td>
<td>10%</td>
</tr>
<tr>
<td>Dairy/meat substitutes#</td>
<td>73</td>
<td>VITAL®</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>43</td>
<td>-</td>
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<td>-</td>
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</table>
Figure 3: Comparison of Risk Assessment Processes and the percentage of finished products with and without a Precautionary Allergen Labelling (PAL) statement. *Risk Assessment Process. **No information was provided on what type of risk assessment process these products underwent.
• Industry is endeavoring to reduce the risk of cross contact as 100% of those who responded reported providing training to their staff in the management of allergens.

• Hazard Analysis and Critical Control Point is used by 98% of manufacturers even though it is not a legal requirement.

• Up to 60% of industry (depending on the food allergen) actually reported performing analytical testing on the incoming ingredients or the finished products.
Summary

• Industry regarded VITAL® as an effective tool which was based on science.

• In contrast, challenges that may have impeded industry’s uptake of the VITAL® process were the perceptions that it was too time-consuming (which may result in a loss of production), that VITAL® was not endorsed by any government agency.

• The result of this study also showed that within a supermarket setting, 30% of products (when combining both VITAL® & PAL) have undergone a risk assessment process but have no label on their products.
Recently experts have suggested that food labelling should also identify safe and suitable foods for allergy affected individuals, not just the foods which should be avoided (ie those with PAL). This was termed “permissive labelling”.

(Zurzolo et al. 2016 Journal of Paed Child Health)
Conclusion

- Permissive labelling could be used to indicate those products that have been through a risk assessment process and bear no PAL statement.
Conclusion

• However, it would take further investigation into these products to examine the frequency and level of unintended allergen presence.

• All stakeholders would need to agree that food products that bear no label are safe and suitable for consumption by people with food allergies.

• Nevertheless, permissive labelling would help to decrease the uncertainty surrounding industry’s current labelling practices.
THANK YOU