

Allergen Management Introduction

Citrus Australia Food Safety Forum

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Who is the Allergen Bureau?

- The Allergen Bureau is the **peak industry body** representing food industry allergen management in Australia and New Zealand
- The Allergen Bureau is a **membership based** organisation established to provide food industry with rapid responses to questions about allergen risk management in food ingredients and manufactured foods
- Established 2005, **pre-competitive**, 'not-for-profit', industry volunteer Board

Full Members





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The Allergen Bureau – Our Vision and Mission

Vision

- The Allergen Bureau is a globally recognised and supported industry organisation promoting best practice food industry allergen management, risk review and consistent labelling to facilitate informed consumer choice

Mission

- To facilitate a globally accepted, consistent, science-based approach to food allergen risk assessment, management and communication that:
 - guides **industry** best practice
 - assists allergen sensitive **consumers** to make informed choices based on label information



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The Allergen Bureau & Primary Producers

- Primary producers are the start of supply chains for ingredients used in processed foods
- Allergen Management is increasingly becoming a requirement of Good Agricultural Practice
- We have a lot of information to share on

allergen management!



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Overview

- ~ **Adverse Reaction to Food (incl. Food Allergy)**
- ~ **Allergen Regulation**
- ~ **Allergen Management**



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Why should the food industry manage food allergens?

- ~ protect allergic consumers
- ~ food safety necessity
- ~ consumers depend on food that is labelled correctly
- ~ legal requirement for declaring food allergens
- ~ costly to have non-compliance, allergen issues with consumers, recalls, withdrawals, re-labelling

Adverse Reactions to Food



Adverse Reactions to Food

Immune Mediated

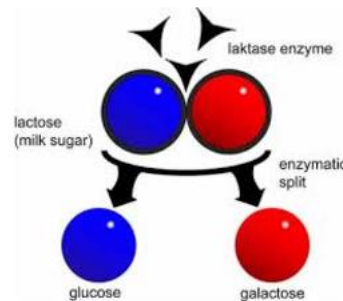
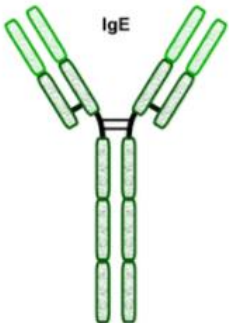
Non-immune Mediated

IgE Mediated
(e.g. **food allergy**)

IgE Mediated
(e.g. **coeliac disease**)

Metabolic
(e.g. **lactose intolerance**)

Other (e.g. **sulphite sensitivity**)



The allergic reaction

- ~ **Dermal** – skin breaks out in hives or eczema
- ~ **Gastrointestinal** – nausea, cramps, diarrhoea
- ~ **Respiratory** – struggle for air
- ~ **Circulatory** – blood pressure drops, lose consciousness

Anaphylaxis is an acute allergic reaction ~ in rare cases, multiple organ systems are affected and death can occur in as little as ten minutes

Predominant food allergens

peanuts
tree nuts
soy
milk
egg
fish
cereals containing gluten

crustacea
sesame
lupin
mustard
celery



Impact of food allergy

- ~ there is currently no cure
- ~ sensitivity differs between individuals and depends on type of food, amount ingested and other activities at time of ingestion
- ~ people with food allergy do not know when their next allergic reaction will occur or how severe it will be

Avoidance of the food is the only protection



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Australian Allergen Regulations

Australia New Zealand Food Standards Code

Section 1.2.3-4 Mandatory declaration of certain foods or substances in food sets out further requirements for declaring these foods or substances if present in a food.

A declaration is required when these foods or substances may be present as:

- (a) an ingredient or as an ingredient of a compound ingredient; or
- (b) a substance used as a food additive, or an ingredient or component of such a substance; or
- (c) a substance or food used as a processing aid, or an ingredient or component of such a substance or food.

1.2.3—4

Mandatory declaration of certain foods or substances in food

- (1) For the labelling provisions, if any of the following foods or substances is present in a food for sale in a manner listed in subsection (2), a declaration that the food or substance is present is required:
 - (a) added sulphites in concentrations of 10 mg/kg or more;
 - (b) any of the following foods, or products of those foods:
 - (i) cereals containing *gluten, namely, wheat, rye, barley, oats and spelt and their hybridised strains other than:
 - (A) where these substances are present in beer and spirits; or
 - (B) glucose syrups that are made from wheat starch and that:
 - (a) have been subject to a refining process that has removed gluten protein content to the lowest level that is reasonably achievable; and
 - (b) have a gluten protein content that does not exceed 20 mg/kg; or
 - (C) alcohol distilled from wheat;
 - (ii) crustacea;
 - (iii) egg;
 - (iv) fish, except for isinglass derived from swim bladders and used as a clarifying agent in beer or wine;
 - (v) milk, other than alcohol distilled from whey;
 - (vi) peanuts;
 - (vii) soybeans other than:
 - (A) soybean oil that has been degummed, neutralised, bleached and deodorised; or
 - (B) soybean derivatives that are a tocopherol or a phytosterol;
 - (viii) sesame seeds;
 - (ix) tree nuts, other than coconut from the fruit of the palm *Cocos nucifera*;
 - (x) lupin.

History of Allergen Management in Australia

- Requirement to declare Mandatory allergens was mandated in 2002
- Food industry uses specifications (industry standard is the Australian Food & Grocery Council Product Information Form – PIF) to question downstream supply chain about allergens
- Many unexpected allergens were found
- Food labels changed – more allergens were declared

History of Allergen Management in Australia

- Focus shifted to unintentionally added (**cross contact**) allergens
- Food Standards Australia New Zealand expects the food industry to manage and control these allergens
- Food industry was inconsistent in their approach to cross contact allergen risk assessment and labelling
- The Allergen Bureau focuses much of its resources in this area



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Allergen Management

What is allergen management?

- The sum of policies, procedures and practices which contribute towards controlling allergens
- Part of a food safety plan
- Unless it is written down, it didn't happen!
- Needs to be understood by all people working on the farm

Allergen Management Plan (AMP)

- Incorporate allergens in Food Safety Plan
- Treat allergens as a food safety hazard
- Write it down (or it doesn't exist)
- Not 'one-size-fits-all' – must be specific!
- Identify allergens, control allergens, verify, validate, record and review. Awareness & training!



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Identify Allergens – Part 1 Intentional

Intentionally added/intrinsic allergens (e.g. Eggs have egg allergens) and any other inputs (sprays)

Ask suppliers of inputs to provide written evidence with allergen status which includes every allergen listed in Australian regulations – do a sense check!

Identify Allergens – Part 2 **Unintentional**

Unintentionally added allergens (due to shared growing area, hand wash, worker lunch, equipment e.g. bins, storage etc)

Look at other sources of allergens such as other crops (e.g. Almonds, wheat, soy, barley, oats, rye, triticale), cleaning chemicals including handwash, oats/lupin grown as soil improver or crop rotation, transport trucks, shared picking equipment, peanut butter sandwiches for lunch



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Are citrus low risk for allergens?

- There is no research available about citrus or any other crop in terms of allergen risk
- No one-size-fits-all risk approach
- An adverse issue could have major impact on your business and your industry
- Cover all your allergens in an allergen management plan
- Control and manage allergens – at every stage of the supply chain

What about allergen testing?

- If you use allergen testing, a laboratory specialising in allergen testing should be used
- Limitations of allergen testing are many E.g. only tests a tiny sample (one gram)
- When would you use allergen testing – validation of an assumption in your allergen management plan
For example: to check cleaning of equipment between different products



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Example 1:

Milk whey powder spray used for disease control

1. Identify this allergen in allergen management plan
Can it be eliminated? If not, how can it be controlled?
2. Is the allergen still present at harvest? How can this be confirmed? Talk to supplier. Perhaps an opportunity to do laboratory allergen testing.

Example 2:

Asparagus planted between almond trees

1. Identify this allergen in allergen management plan
Can it be **(practicably)** eliminated? If not, how can it be controlled?
2. Can almond contaminate the asparagus? Shared equipment? Procedures in place to control.
Allergen testing perhaps not as useful in this circumstance.



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Further Engagement and Resources

The Allergen Bureau

- Visit the website www.allergenbureau.net
- Subscribe to our free monthly Allergen Bureau eNews www.allergenbureau.net/news/
- Access the AllergenBureau Helpline
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Allergen Bureau Management

Allergen Bureau ('Not for Profit')

The Board of Directors

- ~ Kirsten Grinter (Nestlé)
- ~ Caroline Gray (Danisco-DuPont)
- ~ Debbie Hawkes (Hawkins Watts)
- ~ Karen Robinson (Invited Director)
- ~ David Henning (Invited Director)



Our support network

- ~ VITAL[®] Coordinator /support (Georgina Christensen & Lisa Warren)
- ~ Technical expertise (Simon Brooke Taylor & Rob Sherlock)
- ~ VITAL[®] Scientific Expert Panel (VSEP)

Funded Secretariat