



Food Allergen Management Training

Training Overview

- **Food Allergens**
 - What they are and what they do?
- **Allergen Management in Manufacture**
 - Making food safe for all consumers
- **Training and Education**
 - Raising awareness at all levels
- **Allergen Labelling**
 - Proper use of allergen labelling

What is Allergy?

A reaction of the immune system to a normally harmless substance

Food proteins

Substances (eg. Latex)

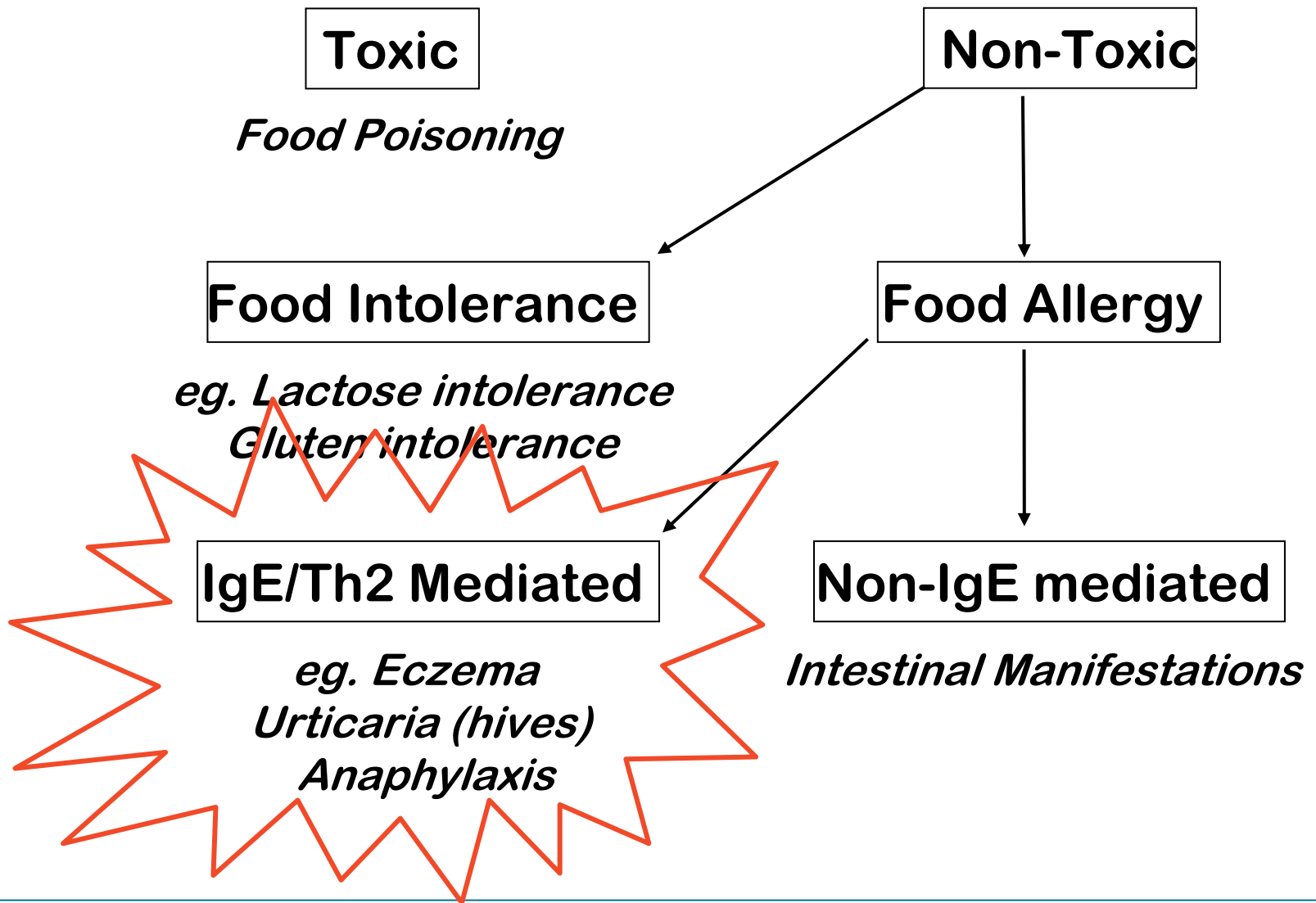
Aeroallergens

- House Dust Mites
- Pollens
- Moulds and more....

Stinging Insects

Drugs

Adverse Reactions to Foods



The Allergic Reaction

- **Dermal – skin breaks out in hives or eczema**
- **Gastro intestinal – nausea, cramps, diarrhoea**
- **Respiratory – struggle for air**
- **Circulatory – blood pressure drops, lose consciousness**
- **Anaphylaxis – in rare cases, multiple organ systems are triggered and death can occur in as little as ten minutes**



Symptoms of Anaphylax

The Allergic Response

Trace amounts can cause a reaction

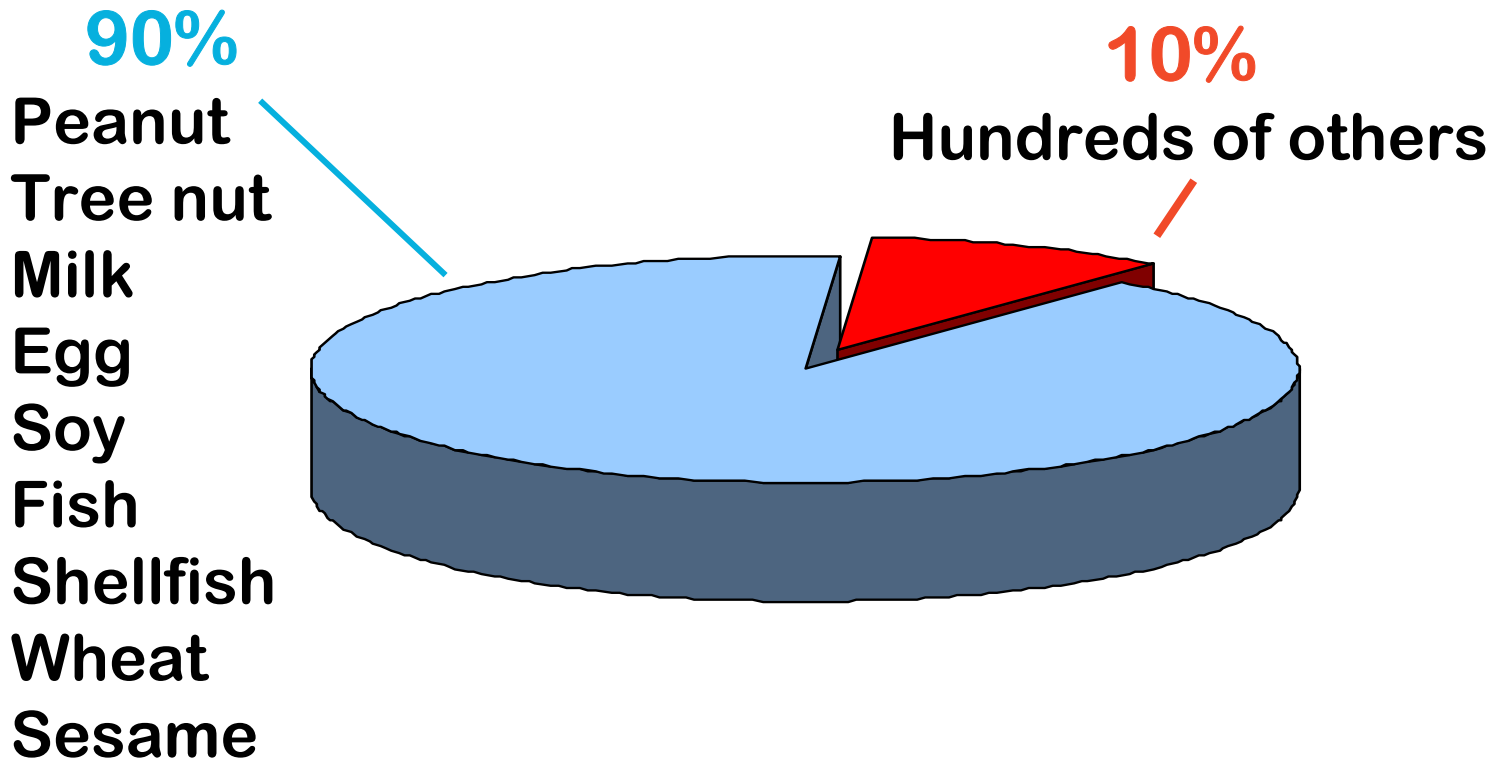
- Lowest dose able to provoke a reaction has not been calculated

Sensitivity differs between individuals and depends on type of food

There is no cure for food allergies...

Avoidance of the food is the only protection

Major Food Allergens



Prevalence

- 6-8% of children under 3yrs and 2% of adults have at least one food allergy
- Many infants outgrow their food allergy
- Especially true if the food allergy occurs before the age of 3 yrs
- Some food allergies (eg. peanuts) are more likely to persist than others (eg. milk, eggs)

Predominant Food Allergens

Children

- Peanut
- Tree nuts
- Soy
- Milk
- Eggs
- Wheat

Adults

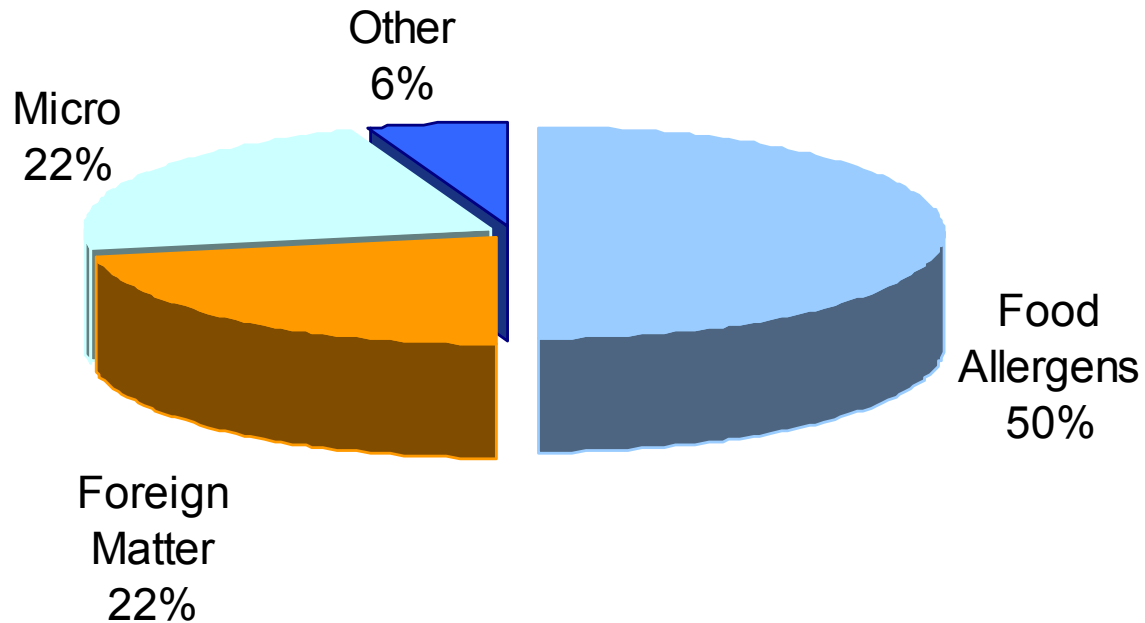
- Peanuts
- Tree nuts
- Crustacea
(shrimp, crab,
lobster)
- Fish
- Sesame

Why is Food Allergy important to the Food Industry?

- **Food allergies are increasing in prevalence, are potentially life-threatening and there is no cure**
- **Successful management is through avoidance of the food**
- **Consumers lives are at risk from eating formulated foods (hidden ingredients)**
- **Awareness, Education & Communication can prevent deaths & improve quality of life of food-allergic consumers**

ANZ Product Recalls: May 04 – April 05

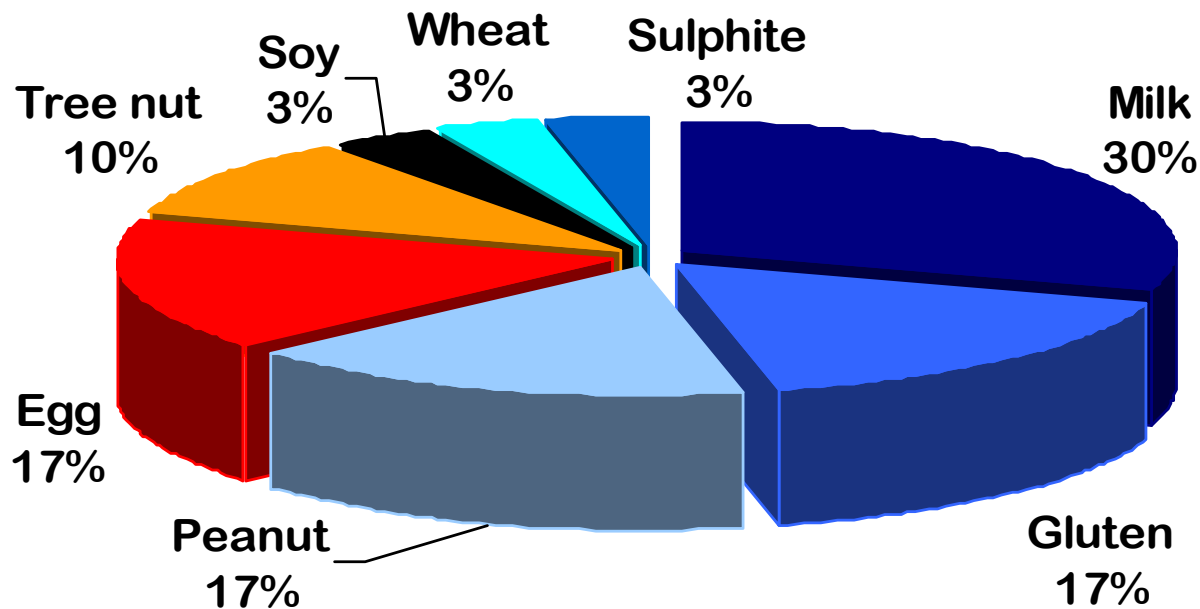
Recall causes as a proportion of total
(www.foodstandards.gov.au)



ANZ Product Recalls: May 04 – April 05

Proportion of recalls by allergen type

(www.foodstandards.gov.au)



Mouseover these symbols for easy navigation



Food [FSANZ]

[New Search](#)

There are 43 Recalls with this criteria.

Records 1 to 43 of 43

PRA Number	Product Name	Recall Type	Date Created
2005/7936	Fresh Milk packed in 2 litre plastic bottles	Food [FSANZ]	09/08/2005
2005/7923	AUS SOYA Tofu - 5 products	Food [FSANZ]	04/08/2005
2005/7915	Pear & hazelnut pyramid (fruit paste) & Deluxe Party Box	Food [FSANZ]	28/07/2005
2005/7897	Pun Chen Lye Water	Food [FSANZ]	20/07/2005
2005/7879	Skinny Milk	Food [FSANZ]	14/07/2005
2005/7881	Hello Bee Bee Pon Rice Snack (Gaueteau de Riz)	Food [FSANZ]	14/07/2005
2005/7871	Atkins Advantage Chocolate Decadence Bar	Food [FSANZ]	11/07/2005
2005/7862	Coles Farmland Natural Spring Water	Food [FSANZ]	04/07/2005
2005/7867	Mars and Snickers Bars	Food [FSANZ]	04/07/2005
2005/7853	Woolworths Homebrand Milk Chocolate Sultanas	Food [FSANZ]	01/07/2005
2005/7858	La Be De sou cause	Food	01/07/2005

Where do risks occur?

- Research and Development
- Engineering and System Design
- Raw Materials
- Production Scheduling
- Labelling and Packaging
- Rework
- Cleaning
- Human Error

Research & Development

- Minimise use of allergenic ingredients
- Design formula to add allergenic ingredients at end of process
- Recommend accessible/cleanable equipment for new product design
- Allow for adequate sanitation when testing on production lines
- Ensure allergens will be readily identifiable on finished product labels

Engineering & System Design

- Design access for cleanouts and inspection
- Isolate allergen addition points
- Dedicate rework systems
- Eliminate cross over and poor product containment points
- Dedicate production systems and/or install parallel modules for units not cleanable

Raw Materials

- Assess allergens in all raw materials
- Audit suppliers & co-packers, and help develop their awareness
- Always ask the allergen question
- Be vigilant in changes to ingredient specs
- Review possible sources of contamination from other raw materials eg. recycled/reused containers

Production Scheduling

- Dedicate production systems
- Longer run times/minimise change-overs
- Produce 'Allergen' containing products at end of production sequence
- Where possible, control each allergen separately from other allergens
- Allow for thorough clean out time between runs
- Confirm correct packaging available

Labelling & Packaging

- Ensure label reflects current formula
- Review label accuracy when:
 - an ingredient change/substitution is made
 - accelerating the intro of an “improved” formula
- Appropriately manage excess packaging inventory/write offs
- Ensure no mixed cartons
 - supplier capability
 - scanners at printer and in your plant

Rework

- Clearly label all rework
- Ensure refeed systems can be cleaned
- Post instructions on the use of rework along with other operator instructions
- Promptly report any misuse of rework
- Audit rework periodically to ensure proper identification and use
- Dedicate refeed/regrind systems

Cleaning practices

- Allow for adequate cleanout between runs
- Disassemble and manually clean equipment that cannot be cleaned thoroughly in place
- Properly clean accessory tools or equipment (ie. scoops, bins, hoppers, etc)
- Dedicate equipment that is difficult to clean
- Use alternative cleaning measures where wet wash is not viable eg. sugar or salt flush

Training & Communication

- Training manuals
- Policies and procedures
- Certification
- Plant communications
- Videos

Components of an Allergen Policy

- Summary of Regulations and Laws
- Identifying and minimising allergen hazards in the plant
- How to avoiding cross-contact in the plant
- Policy on labelling and precautionary statements
- Training and education for staff, suppliers, contractors and vendors

Components of an Allergen Plan

- Raw materials & Supply chain management
- Labelling
- Goods Inwards, Storage & Handling
- Product Formulation & Development
- Production Design & Scheduling
- Operations
- Marketing
- Quality Assurance
- Recall plan
- Executive sign-off

Labelling:

ANZ Food Standard 1.2.3

Allergens must be declared when present as:

- an ingredient; or
- an ingredient of a compound ingredient; or
- a food additive or component of a food additive; or
- a processing aid or component of a processing aid.

Substances that must be declared

- Cereals containing gluten (wheat, rye, oats, barley)
- Peanuts
- Crustacea and their products
- Egg and egg products
- Fish and fish products
- Milk and milk products
- Tree nuts (eg brazil, cashew, etc)
- Sesame seeds and their products
- Soybeans, and their products
- Added Sulphites in concentrations of 10mg/kg or more

Allergen Labelling

- Label in a way that is useful to consumers:
- Consistent & Legible
- Near or in ingredients list
- Common English language
- Necessary detail eg. “sunflower oil” rather than “vegetable oil” so consumers know it is safe for them
- Avoid precautionary labelling such as “May contain”

Precautionary labelling!



Why Avoid Precautionary labelling?

- To protect the allergic consumer
- Do not leave it to the consumer to guess
- You know more about your systems than they do - you should make the safety decision
- “Contains traces of...” makes a positive statement to the allergic consumer that the product should be avoided

Allergens are not always obvious

- Baking powder – wheat?
- Cocoa, Icing sugar – soy or wheat?
- Amylase – from cereal?
- Colours & flavours – fish gelatin encapsulation?
- Coconut milk – casein?
- Corn flour, starch – wheat?
- MSG, Xanthan etc – check fermentation substrate and nitrogen source
- HVP/TVP – Soy, Wheat?
- Vegetable oil – peanut, sesame, soy?
- Vinegar – fining agents; milk, egg, fish?
- Whitener – wheat or milk?
- Tocopherols, antioxidants – soy?



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