



# Control of Food Hazards – Allergens

FSKN 10

# GFSI Basic Level

- The organisation shall ensure there are adequate control measures in place to prevent cross contamination of allergens. All ingredients known to cause food allergies in the product shall be clearly identified and communicated to the customer.

# Criteria

- The importance of allergens
- The handling and control of allergens

# The Importance of Allergens

- A food allergy is a reproducible adverse reaction to a particular food that involves the immune system. Nearly all allergens are proteins
- A food allergen is defined as a form of food intolerance associated **with a hypersensitive immune response** mediated reaction in which antibodies are formed
- A food intolerance is defined as a reproducible reaction to a food which occurs **without a hypersensitive immune response**

# The Importance of Allergens

- Allergen lists differ from region to region
- On a global basis approximately 1-2% of adults and 5-8% of children suffer from food allergy
- Death and serious health problems can result from allergic reactions
- In some cases 1 mg can trigger a reaction and even death
- Approximately 100 deaths in US due to peanut allergy in 2006



# Symptoms

- Respiratory reaction e.g. asthma
- Gastrointestinal reaction e.g. vomiting, diarrhoea
- Skin reaction e.g. dermatitis
- Anaphylactic shock- drop in blood pressure, severe constriction of airways, multiple organ failure and death



# Legal Requirements

- EU Directive 2003/89/EC as regards indication of the ingredients present in foodstuffs
- US- Public Law Section 201 -210
- Australia/ New Zealand- Food Code Standard 1.2.3



# EU Requirements vs Australia Requirements

- Celery
- Cereals (containing gluten) and exceptions (e.g. glucose syrups, maltodextrins, cereals used for distillates and other alcoholic drinks)
- Crustaceans
- Eggs
- Fish (except fish gelatine or isinglass)
- Milk (except whey used for distillates and other alcohol drinks and lactitol)
- Mustard
- Nuts (except nuts for making distillates and other alcohol drinks)
- Peanuts
- Sesame Seeds
- Soybeans (except fully refined oil and fat, tocopherols, phytosterols, stanol esters)
- Sulphur Dioxide and Sulphites (> 10 mg/kg or 10mg /litre as SO<sub>2</sub>)
- Molluscs
- Lupin
- Cereals (containing gluten)
- Crustacea
- Egg
- Fish
- Milk
- Peanuts
- Soybeans
- Sulphites
- Tree nuts
- Sesame Seeds
- Bee Pollen
- Propolis
- Royal Jelly





# The Handling and Control of Allergens



# People



- Staff awareness by product identification and recipe control
- Hand washing
- Clothing
- Rework control
- Waste control
- Use of utensils
- Control of food consumption

# Raw Materials and Ingredients

- Known status of ingredients from suppliers i.e. possible cross contamination
- Specifications
- Clear labelling or identification



# Packaging

- Correct packaging control
- Packaging line change
- High level of problems with 'mislabelling'



# Cleaning



- Effective cleaning to reduce the risk of cross contamination
- Dedicated cleaning equipment
- Cleaning schedules
- Cleaning of spillages
- Dismantling equipment

# Production

- Different parts of the factory
- Physical barriers
- Dedicated equipment
- Minimise movement of materials
- Scheduling of production runs with appropriate cleaning between production runs
- Control of rework



# QUESTIONS?



# License to Reuse



- © 2009 Coca-Cola Company and Michigan State University, licensed using Creative Commons Attribution-Share Alike 3.0 Unported (CC-BY-SA).
- Source: © 2009 Michigan State University, original at <http://www.fskntraining.org>, licensed using Creative Commons Attribution-Share Alike 3.0 Unported.
- To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/3.0/> or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.