## NSW Food Authority

Food Safety Supervisor Learner
Guide
Allergen Management

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Disclaimer:

Every effort has been made to ensure that the information in this document is accurate at the time of publication (April 2018). However, as appropriate, readers should obtain independent advice before making any decision based on this information.

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## Learning outcome, key messages and content

Learning outcomes: Manage allergens and customers with allergies appropriately

## Key learning messages:

1. Any food may contain an allergen.
2. Know the 10 common allergens and intolerances.
3. Be aware of business responsibilities regarding communicating allergen information in food for sale;

- If known to contain allergen, declare or inform consumer.
- If not known to contain allergen, seek clarity and if still unsure, inform customer that you are unsure.

4. Recipes, ingredients and food components (e.g. purchased sauces used in food preparation) should be reviewed to understand if they do contain allergens.
5. Read the label on all ingredients used in food preparation. If ingredient does not have a label, it is not recommended for usage.
6. Be allergy aware during food preparation. Allergens may be introduced through cross contamination (e.g. peanut oils used to fry non-peanut containing food may introduce peanut traces to food).

## Content

## Introduction:

- What is a food allergy?
- What are the 10 most common allergens?


## Food service (front of house):

- Implement procedures to ensure food service staff know their obligation to declare allergens and other substances in food if a customer asks.
- Implement procedures for ensuring all staff know how to access information about the food products they are selling, including making staff aware that recipes and ingredients should be reviewed to understand whether they contain allergens (e.g. sauces or cooking oils used in food preparation may contain an allergen ingredient).


## Food preparation (back of house):

- Process steps for preparing meals for customers with allergies:
- Know what is in your food (i.e. check ingredients) to understand whether it may contain an allergen.
- Manage the risk of cross contamination between different foods, food and equipment and food handling practices.
- Store food safely in clearly labelled containers.
- Keep surfaces, utensils and hands clean.


## Further links:

Be Prepared Be Allergy Aware NSW Food Authority

## Instructions to the RTO

Allergen management does not map specifically to either of the two Hospitality FSS Units of competency, however would fit appropriately into the 'Food hazards' section of your learning materials.

This module must be integrated in full, and all information in this guide must be taught and assessed for students to successfully achieve the NSW Food Safety Supervisor Certificate. Training material for students starts on page seven of this module.

RTO's that do not integrate this module in full, risk regulatory action by the NSW Food Authority under cl 20 of Food Regulation 2015. This can include mediation, suspension or cancellation of an RTO approval from the NSW program.

Suggestion: integrate content in this guide into the contaminants or potentially hazardous foods section of your training tools.

## Overview

Food allergies are becoming more common. It is critical that the Food Safety Supervisor (FSS) and all food handlers working in a food business understand their obligation to know what ingredients are in the food products that they handle, make, or sell.

Any food may contain an allergen. It is vital that the business and FSS ensure procedures and training are put in place, and food service staff understand their obligations to declare known allergens in food, when a customer asks.

The service of an allergen to a person who is sensitive to it can lead to serious health consequences, including death.

Food businesses are accountable for knowing the presence of allergens in foods they sell. Ignorance is not an excuse, nor a defence. This applies whether the food sold is packaged or unpackaged.

## Introduction

The instances of allergic reactions to various foods have increased dramatically in the past few decades. The Food Standards Code legally requires ten common allergens to be declared, but there are many other foods that can cause allergic reactions.

After 26 May 2018 all businesses are required to declare lupins on the label where they are present in food or ingredients. Food service staff must now also check for lupin on the label of a product, ensuring they provide accurate information when a customer asks about allergens in foods that are being served.

## Fatal reactions to food allergies

People with food allergies react differently. Some people have a reaction that presents as a rash or hives, others may suffer swelling or dizziness, which can affect their breathing. Anaphylactic reactions can occur almost instantaneously in persons who are sensitive to allergens, and in severe cases, death will occur if the allergic reaction can't be treated quickly. Regardless of sensitivity, there is no safe level of exposure for individuals with an allergy.

## Key messages to understanding food allergens

The main factors to understand about food allergens are described below. These will be explained in more detail in the following sections:

1. Always treat an allergy request seriously.
2. Any food may contain an allergen. Once a customer informs of an allergy it is the businesses legal responsibility to prepare food that doesn't contain the allergen or notify the customer they cannot guarantee the customer food that does not contain the allergen.
3. There are ten common allergens. These contribute to over $90 \%$ of food allergies and are legally required to be declared on labels.
4. Review recipes, ingredients and food components such as premade sauces, checking if they contain allergens.
5. Read the label on all ingredients used in food preparation. If a premade food item or ingredient does not have a label it should not be used unless you have documentation listing all ingredients.
6. Be allergy aware during food preparation. Allergens may be introduced through cross contamination between allergenic and non-allergenic ingredients (e.g. peanut oils used to fry non-peanut containing food, may introduce traces of peanut into food).
7. Cross contamination during preparation mostly occurs through the following ways:

- Food to food - such as touching or dripping.
- Food to hand - unhygienic handling by cooking staff, front service staff.
- Food to equipment - sharing of utensils.

8. Be aware of business responsibilities about communicating allergen information:

- If the product contains an allergen, you must let the consumer know by labelling the food product or telling them this is the case, when they ask.
- If you can't guarantee a customer an allergen free meal, you must notify the customer.

9. Allergens are an important food safety risk. Heavy penalties, including prosecution and criminal conviction may apply to businesses complicit in customers experiencing allergic reactions from their food.


## Learning activity: 1

The recent examples below demonstrate the serious consequences of allergic reactions to food and how widespread this condition is across different demographics. You can follow the links to read more about the food allergies involved. Pay special attention to how easily very small amounts of allergens can cause fatal reactions, even where medical responses are immediate.

[^0]Read at least two of the articles listed in the box on the previous page. List below two key messages you can take away from these articles about allergen management. Discuss your responses with another student or colleague.

## Allergies and food intolerances

You need to be aware of and understand the differences between allergies and food intolerances, as they develop and present differently to one another.


Image link: http://img. allw.mn/content/gk/oh/wxt0ehae.jpg

## Allergies

A food allergy is a response by the body to a protein that the body 'thinks' is harmful. There is no cure for a food allergy. The only way to prevent an allergic reaction is to avoid eating the food containing the protein.

The body can react in many ways to an allergen such as; developing hives, swelling, pain, vomiting, difficulty breathing, dizziness and collapse. The symptoms can be fatal. There is no safe limit for exposure to an allergen.

Allergies are different from food intolerances.

## Food intolerances

Food intolerance is the bodies inability to digest or process some foods e.g. gluten in bread.

Gluten, lactose, yeast, food additives and sulphites are all products which may cause intolerances in some people. While the symptoms can be unpleasant, and in some cases severe, they are generally not life-threatening. Food handlers should apply the same principles to responding to intolerances as allergies.

Cereals containing gluten and their products must be declared on the food package label. Foods with added sulphites in concentrations of $10 \mathrm{mg} / \mathrm{kg}$ or more must also be declared on the food package label. Where a food product is not required to carry a food label, the declaration must be displayed on the food or in connection with the display of the food or declared to the purchaser upon request.

Further links: Food allergy and intolerance (NSW Food Authority)

## The 'top ten' allergens

While the 'top ten' most common food allergens cause around $90 \%$ of allergic reactions, ALL foods can be allergenic depending on individual sensitivity. On 27 May 2017, Food Standards Australia New Zealand (FSANZ) added lupin to the list of 9 allergens that must be declared on food labels. Food businesses were given 12 months to meet the requirement, which comes into effect on 26 May 2018.

The top ten food allergens and the products they make, that must be declared by law, are:

1. peanuts
2. crustaceans e.g. prawns, lobster)
3. tree nuts (e.g. almonds, cashews)
4. sesame
5. eggs
6. soy
7. milk
8. wheat

9. fish
10. lupin

Link to image: http://www.foodauthority.nsw.gov.au/ Documents/retail/be prepared be allergy aware.pdf

Knowing your products and effectively communicating product information is key to ensuring the safety of your customers with food allergies.

## Allergens in detail

This section includes a sample list of products for each of the top ten allergens. Each allergen is frequently used as an ingredient in other foods you may not be aware of. It is important to review ingredients of all pre-packaged foods when checking for allergens and look for any trace of allergen or declaration of cross contamination.

## Peanuts

Peanuts could be considered the poster food for allergies but are classified as legumes and not nuts. They contain many potential proteins that may trigger an allergic reaction in susceptible customers and are common ingredients in many cuisines and premade products (e.g. satay sauces). Food handlers should be aware, foods containing other nuts may also have traces of peanut due to cross-contamination during manufacture. Common peanut ingredients in commercial kitchens include; peanut oil, butter and raw or roasted whole nut.

## Tree Nuts

Tree nuts are separate to peanuts and include; almonds, brazil nuts, cashews, chestnuts, hazelnuts, hickory nuts, macadamia nuts, pecans, pine nuts, pistachios, walnuts and others. Many with a tree nut allergy will be allergic to more than one type of tree nut, so it is important for staff in food businesses to check products for any tree nut ingredient, not just individually declared allergies. Tree nut products include; flours and meals, some non-dairy milks, bakery products and as flavourings for foods such as ice creams and chocolate.

## Eggs

Eggs are another common allergy triggering food, particularly for children. Both the white and the yolk can cause an allergic reaction, so food handlers should not serve either if a customer notifies of an egg allergy. Eggs are also a common ingredient in lots of foods, including; baked goods, meringues, custards and other desserts, pasta and some types of noodles, dressings such as mayonnaise and aioli, and as a binding agent in processed foods, including some processed meats.

## Dairy

Milk allergies should not be confused with lactose intolerance. Milk allergies are caused by an immune system reaction to proteins in milk products, whereas lactose intolerance results from the body lacking the digestive enzyme, lactase. Those with a milk allergy may also have allergies to other animal milks like goat or sheep. It is important you check with the customer what alternatives they can consume, as many non-dairy milks are made from other allergens like soy or almond (tree nut). Because milk products are common, food handlers
should be mindful of; cheese, cream, powdered milks, yoghurts, whey protein, as well as fresh milk.

The Food Authority recently prosecuted a business importing coconut milk for failing to declare milk proteins. The presence of milk proteins was confirmed in these products through laboratory analysis. The outcome of this matter was a guilty verdict with a conviction recorded. Further information may be found on the Food Authority website:
http://www.foodauthority.nsw.gov.au/offences/prosecutions.

Further case studies based on actual investigations, may also be found on the website: http://www.foodauthority.nsw.gov.au/ip/case-studies-project-outcomes/case-studies

## Fish

Fish allergies refer to finned fish species, people diagnosed with an allergy for one type of fish are advised to avoid all other species. However, people with fish allergies have not been shown to have a significantly increased risk of shellfish allergy. A fish allergy is also more likely to be diagnosed later in life, in contrast to most other allergies that are more common in childhood. Food handlers should be aware of processed fish products such as; fish sauce, imitation crab or lobster (surimi), anchovies, and fish stock, as well as whole pieces of fish in their menus. Some sauces, including Worcestershire and Caesar salad dressing will include anchovies.


Worcestershire sauce


Caesar dressing

## Shellfish

Shellfish allergies, like eggs, are a well-known allergy and includes all kinds of marine invertebrae (boneless animals). Shellfish allergy includes crustaceans like; crab, lobster, prawns, scampi, and crayfish, as well as molluscs like, snails (including escargot), clams, oysters, mussels, squid (calamari), and octopus. Shellfish are also common ingredients in Asian soups, sauces, and stocks and as flavourings. Food handlers should ask for clarification if a customer is allergic to all, or some types of shellfish.


Escargot


Oysters


Lobster


Prawns

## Sesame

Sesame seeds are known to be a very strong allergen, so it is critical to check ingredients for sesame products. Sesame is a common ingredient in a range of cuisines, from Asian dishes made with sesame oil, to Turkish and Lebanese foods such as tahini and hummus. Sesame seeds are used in many types of baked goods such as crackers, biscuits, and pretzels, in salads as either seeds or oil in dressings, spice mixes, marinades and herb rubs, and in vegetarian foods.


Hummus


## Soybeans

Soy is another legume allergen that has several common alternative names like; bean curd, tamari, tempeh, and tofu, which means food handlers should be checking for alternative names on labels. Aside from obvious soy products like soy milk and soy bean paste, soy is also a common vegetable product in processed foods, particularly as a meat or dairy substitute in vegetarian dishes. Soy is also known to be used as a substitute for gluten or allergy-free breads. It can be found in; vegetable stocks, gums, soup mixes, and as flour or flavouring in cereals and baked goods.


## Wheat

Wheat allergies should not be confused with gluten intolerance or coeliac disease. A wheat allergy is an immune sensitivity to wheat proteins, and exposure symptoms are like other allergic reactions, up to and including anaphylaxis.
Common products containing wheat are; bread, biscuits, cakes and other baked goods, pasta, and cereals, wheat is also used as a thickening agent in; sauces, Iollies like liquorice, jelly beans, and hard candies, in vegetable gums, hydrolysed vegetable protein, beer and ales, and processed meat products like hot dogs. Gluten is also found in barley and rye grains, so it is important to look for the right ingredients when assisting a wheat allergenic customer.

## Lupin

Lupin is also a legume and is increasingly used as a gluten-free alternative to wheat and other grain flours. However, it is also known for high cross-reactivity with peanut allergies because it carries similar proteins. After 26 May 2018, food laws ${ }^{1}$ will require lupin to be declared on labels when present in a food product. Lupin is typically found where wheat or other flours can be substituted, such as breads, biscuits and other baked goods, sauces,

[^1]pasta, processed meat products like burgers and sausages, and also as a substitute for soy products.

## Product management to avoid allergic reactions

Know your products
and their ingredients

- Be aware of ingredients
added to products
- Know the process of
preparation and
opportunity for cross-
contamination
-Only use labelled
ingredients
Communication of
ingredients
- Give staff and customers
ingredient information (full
disclosure) both in written
documents and in
response to verbal
questions
- Provide a safe
environment for staff to
feel comfortable to ask
management and others
about products if unsure
-If you can't guarantee an
allergy or intolerance free
meal notify the consumer,
so they can decide what to
do next.
Food preparation
- Only use ingredients listed,
do not replace one
ingredient with another
- Always use clean and
sanitised equipment
- Know and be confident
that an allergen-free
product is being produced
-Food allergens cannot be
destroyed through heating
or cooling
-Only use ingredients that
are labelled, DO NOT
MAKE ASSUMPTIONS or
GUESS
-Avoid cross-contamination
by not reusing any
equipment for different
ingredients

There are many processes that you and your food service staff should know and follow to minimise the risk when preparing, displaying, or selling foods that contain known allergens.

## Know your products

It is vital that you and your staff know the products that you make and sell as well as their ingredients. The FSS should check product labels of all foods and ingredients used in the business for allergens, including allergens listed by alternative names. All staff should be informed of allergens in products.

All staff should be aware of:

- Checking ingredients in pre-packaged foods, especially products manufactured offsite, for example, commercial mayonnaise.
- Only using labelled ingredients and products. For example, if a bag of dried porcini mushroom and herb risotto mix does not list all the contents, then the product should not be used.
- Any ingredients added to products in-house. For example, peanut butter added to a curry, or sesame oil used in a salad dressing.
- Only using reliable suppliers, and checking-in with them for allergens when products are reformulated or changed.


## Communicate with customers

Food handlers must tell any customer who asks, if food items they sell contain known allergens. It's also vital food handlers know what to do if they are unsure when asked about allergen content. All food establishments should follow these principles so that staff can make informed decisions:

- Give staff and customers ingredient information (full disclosure) both in written documents and in response to verbal questions.
- If unsure, staff should feel comfortable asking management and others about products.
- Explain to staff that they must tell the customer if they cannot guarantee an allergy free or intolerance free meal.
- Tell all kitchen and service staff an allergen free meal is being prepared.
- Discuss with the customer how you will manage their allergy, they may be able to advise preparation techniques to assist you.

Information about known allergens in food can also be provided by listing them clearly in an obvious place such as:

- a menu
- chalkboard
- information pack

If information is not provided upfront, let your customers

[^2]
know where they can get it, either in writing or verbally.

## Ignorance is no excuse

The cartoon below provides example of how to respond to customers if they ask about allergens in food.


Source: $\underline{\text { http://www.food.gov.uk/sites/default/files/multimedia/pdfs/publication/thinkallergy.pdf }}$

## Learning activity: 2

How would you respond to the following queries from customers about different allergens?
Write your answers on the lines provided below or discuss with colleagues or other students.

1. A customer asks you if the stir-fried beef on your lunch menu contains peanuts or traces of nuts. If you are not sure, what would you say to her? Discuss your response with another student or colleague.
2. A customer at your hotel explains that he is allergic to cow's milk and wants to know if you have an alternative to prepare custard. What would you say to him if you also have light soy milk and almond milk in the refrigerator? Discuss your response with another student or colleague.

## Manage food preparation

When a customer alerts you to a food allergy, you must take steps to minimise the risk of cross-contamination. Everyone who handles food needs to be informed and remain updated about the products they prepare or sell, and the ingredients contained in those products. To assist staff, known allergens must be identified and communicated.

You and your staff should:

- Always document and verbally alert kitchen and wait staff when a customer has ordered an allergen free meal.
- Only use ingredients listed in recipes - do not replace one ingredient with another.

For example, do not use sesame seeds instead of poppy seeds, a customer may have chosen the meal and not disclosed an allergy.

- Understand allergen proteins are not destroyed by cooking or cooling processes.
- Try to keep a designated allergen free meal preparation area set aside, and regularly clean and sanitise preparation areas to remove residues - tiny amounts can still cause allergic reactions.
- Always use clean and sanitised utensils when storing, preparing, or serving an allergen free meal.
- When preparing an allergen free meal, make it fresh, and prepare it first. Depending on the type of dish ordered, check with the customer what a suitable alternative might be, for example, laying foil on a grill when cooking a steak to avoid contamination with fish cooked earlier, or using olive oil instead of butter on pasta.
- Avoid cross-contamination by not reusing any equipment for different ingredients. For example, do not reuse a cutting board used for preparing chopped peanuts to prepare vegetables for a salad. All utensils must be thoroughly washed and dried between uses/products.


Link to image: http://a.abcnews.go.com/images/Health/cb food allergy warning label || 121206 wg.jpg

## Learning activity: 3

Explain how you would minimise the risks associated with the following practices:
a) A wok containing peanut oil is wiped out with a paper towel and then the wok re-used
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
b) A chocolate mud cake, which may contain traces of tree nuts, is displayed on the same tray as a lemon meringue pie.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
c) A jar of Thai curry paste does not have ingredients listed on the label.

## Training staff

Ongoing training and updating of knowledge in allergen management for staff is a necessary part of any food business. All food handlers need to understand the severity of allergic reactions to foods by some people, and how to deal with any situations that may arise.

All staff should be trained in how to inform customers about known allergens in food and how to deal with situations when they don't know or are unsure about food items they sell.

When training staff in allergen management, you need to ensure they:

- Are aware of the food items and processes involved in preparing products
- Are aware of foods that contain allergenic products.
- Avoid cross contamination by changing gloves and preparing foods following appropriate food hygiene procedures.
- Are comfortable reading ingredients or seeking clarification from management if they are unsure about a product's ingredients.
- Know who to ask, when information is requested by a customer, if the presence of allergens in a food product is unknown.
- Do not serve or sell a product to customers if there is any known risk.
- Communicate to all appropriate staff involved, if they are aware that a customer has an allergy.
- Know to call 000 immediately if a customer has an allergic reaction.

Click on the highlighted link above to access a video on how to avoid cross contamination.
The following guidelines will assist all food handling staff in front and back of house to manage food allergens:

## Food Service (front of house):

- Implement a procedure to ensure food service staff know their obligation to declare allergens and other substances in food if a customer asks.
- Implement a procedure for ensuring all staff know how to access information about the food products they are selling, including making staff aware that recipes and
ingredients should be reviewed to understand whether they contain allergens (e.g. sauces or cooking oils used in food preparation may contain an allergen ingredient).
- Update information regularly so that staff are correctly informed.

Food Preparation (back of house):
Ensure food preparation staff know and understand these process steps for preparing meals for customers with allergies:

- Only accept correctly labelled foods from the supplier.
- Avoid cross contamination (in the context of allergen control).
- Store food safely in clearly labelled containers.
- Keep surfaces, utensils and hands clean.

While food allergens can cause reactions in some people, informed and well-trained food handling staff will be able to minimise the risks involved when preparing, displaying and

selling food products to customers.

Link to image: http.//farm5.static.flickr.com/4093/4863621966 7457814350.jpg
Knowledge is empowering and in the case of allergen awareness, it can be lifesaving. Don't risk the lives of others by taking risks.

## References

Be Prepared, Be Allergy Aware. NSW Food Authority
http://www.foodauthority.nsw.gov.au/ Documents/retail/be prepared be allergy aware.pdf
http://www.food.gov.uk/sites/default/files/multimedia/pdfs/publication/thinkallergy.pdf
Allergy \& Anaphylaxis Australia www.allergyfacts.org.au
Food allergy and intolerance NSW Food Authority


[^0]:    Shahida Shahid, 18, died from an allergic reaction after eating at a local restaurant. Full Story
    Paul Wilson, 38, died after eating a dish that contained peanuts. Full Story
    Elijah Silvera, 3, died after being a served a grilled cheese sandwich at his preschool. He had a severe milk allergy. Full Story

    Justin Mathews, 33, died after being exposed to walnuts during sandblasting. Full Story
    Nainika Tikoo, 9, died after eating pancakes topped with blackberries. Full Story \& Full Story
    Chloe Gilbert, 15, died after eating a food containing yogurt. She had a dairy allergy. Full Story
    Alastair Watson, 3, suffered an anaphylactic reaction during a baked milk challenge. Full Story
    Amanda Thompson, 50, died after having an allergic reaction to a Sorbet. Full Story
    http://nonutsmomsgroup.weebly.com/blog/remembering-those-we-have-lost-to-foodallergies

[^1]:    ${ }^{1}$ Australia New Zealand Food Standards Code - Standard 1.2.3 - Information Requirements - Application, saving and transitional provisions

[^2]:    Link to image:
    http://www.food.gov.uk/sites/default/files/multimedia/pdfs/publication/loose foodsleaflet.pdf

