



Food Manufacture

Allergens in Food Manufacture

Lesson 1

This course is ideal for all people working in food manufacture or wanting to work in food manufacture as it gives the learner in depth knowledge of allergens and how to control them.





Learning Objectives

- Identify the key features of a food allergy, intolerance and coeliac disease.
- List symptoms of food allergies.
- State the symptoms of anaphylaxis shock.
- Classify the types of food allergies.
- List the fourteen main allergens.





Learning Objectives

- Understand allergen identification.
- Recognise the correct labelling of allergens.
- Understand the importance of allergen training.
- State what is included in allergen training.
- Understand the control of ingredients containing allergens.





Learning Objectives

- Identify the importance of packing and storing allergens correctly.
- Understand the importance of cleaning and prevention of cross contamination.
- Describe what is involved in an allergen risk assessment.
- Outline the procedures which help to manage allergens and prevent cross contamination.
- Recognise action taken from allergen recalls and withdrawals.





Some people may be allergic or intolerant to a certain type of food and must avoid consuming them to prevent any type of symptom from occurring this can be mild symptoms or even a life-threatening emergency.



A food which is harmless to most people but can cause an unfavourable physical reaction to someone is known as a food hypersensitivity.

A person who has food hypersensitivity may have one of the following conditions:

- Food allergy
- Food intolerance
- Coeliac disease



When a person has a food allergy their body thinks that a protein in a certain food is a risk to the body.

Their body will then release chemicals to try to defend itself against the risk. The symptoms of an allergic reaction are caused by the chemicals being released.



The type and severity of symptoms from an allergic reaction can be different for people some factors which affect this are:

- The amount of exposure to the allergen
- The persons severity of allergy
- Sensitivity to allergens can be increased by exercise, medication or not enough sleep





Some people who are extremely sensitive to a certain allergen can have a severe reaction from only the smallest amount of exposure to the allergen.





Some symptoms of food allergies are:

- Mouth itching or tingling
- Hives which look like a raised red itchy rash
- Angioedema which is when parts of the body swell usually the face, mouth and throat
- Swallowing can become hard to do
- Dizziness



Some symptoms of food allergies are:

- Difficulty breathing
- Nausea or vomiting
- Diarrhoea or stomach pain
- Symptoms similar to hay fever e.g. itchy eyes and sneezing
- Anaphylaxis is the most severe reaction which could be life threatening





**Anaphylaxis shock (Anaphylaxis)
can result in death, symptoms are:**

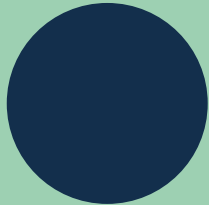
- **Voice change**
- **Continuous cough**
- **Difficulty breathing and wheezing**
- **Raised heartrate**
- **Fainting**
- **Anxiety and confusion**
- **Sweating**
- **Collapsing and becoming unconscious**



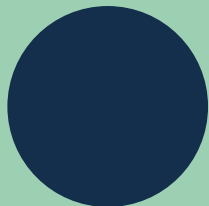
There are three types of food allergies:



Type 1: IgE-mediated food allergy – antibodies known as immunoglobulin E are released by the immune system. Symptoms can occur straight after eating the allergen and up to two hours after. This is the most common type of food allergy and has the biggest risk of anaphylaxis occurring.



Type 2: Non-IgE-mediated food allergy – symptoms can take several hours to appear after eating the allergen. Different components of the immune system causes the reaction not IgE antibodies. Coeliac disease is an example of a non-IgE-mediated food allergy.



Type 3: Mixed IgE and non-IgE-mediated food allergy – this is when the symptoms are a result of the IgE antibodies and other components of the immune system.



Food intolerance is when the body finds it difficult to digest a certain food.

It is different to food allergies as it doesn't involve the immune system.

An intolerance to food is much more common than an allergic reaction to food.





Common symptoms to food intolerances are:

- Bloating of the abdomen
- Wind
- Stomach pain
- Diarrhoea
- Itching
- Skin rash





The most common non-immune mediated food reaction is food intolerances but some less common are:

- **Metabolic e.g. lactose intolerance**
- **Toxic e.g. mishandled food**
- **Pharmacologic e.g. alcohol**



Coeliac disease is caused by eating gluten, it is an auto-immune illness.

Coeliac disease can result in the gut lining becoming damaged which causes the body not to be able to absorb nutrients from foods effectively.





Symptoms of coeliac disease are:

- Diarrhoea
- Bloating of the abdomen
- Wind
- Nausea
- Constipation
- Anaemia and tiredness
- Headaches
- Mouth ulcers
- Loss of weight
- Loss of hair
- Joint and bone pain
- Depression
- Infertility
- Poor skin condition
- Shortness of height



Revision Activity 1

List five symptoms of a food allergy?