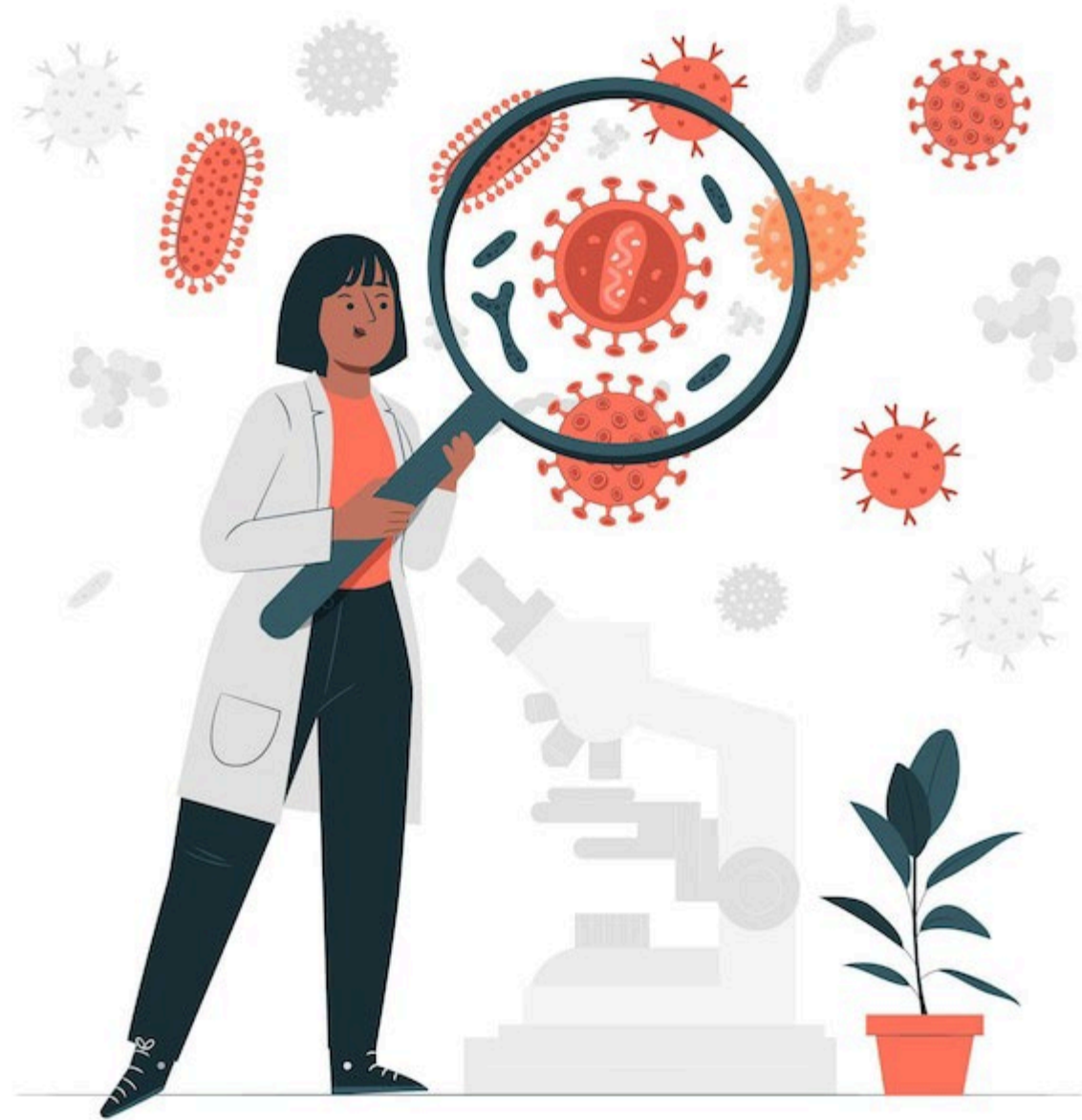


1.4 Food safety in hospitality and catering

1.4.1 Food related causes of ill health

1.4.2 Symptoms and signs of food-induced ill health



1.4.1 – 1.4.2 Food related causes and symptoms of ill health

In this topic, learners will gain knowledge and understanding of the following areas:

- Factors which cause ill health
- Food poisoning causes
- Food allergies
- Food intolerances
- Visible and non-visible symptoms of food-induced ill health
- Food labelling laws
- Food safety legislation

1.4.1 Food related causes of ill health

Microbes

The word 'microbe' is short for micro-organisms, which are very small life forms that are only clearly visible under a microscope.

In the right conditions, micro-organisms can multiply and cause food spoilage. Some of them have the potential to be harmful to humans.

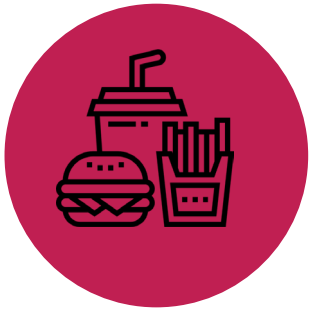
1.4.1 Food related causes of ill health

Bacteria

- Bacteria are small, single-celled organisms that are found almost everywhere. Most bacteria are harmless. However, some types of bacteria are bad and cause food poisoning. These are called pathogenic bacteria.
- Food poisoning can make you extremely ill and, in some cases, can be fatal. People with weakened immune systems, pregnant people, newborn babies and older adults may face additional complications.

1.4.1 Food related causes of ill health

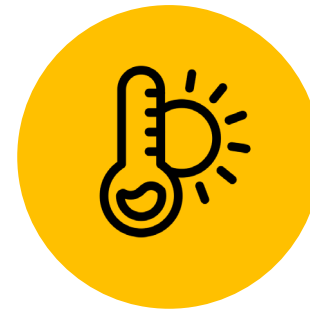
Bacteria



FOOD



MOISTURE



WARMTH



TIME



What are the ideal conditions necessary for bacteria to grow and cause food poisoning?

1.4.1 Food related causes of ill health: bacteria

A supply of food

- Bacteria need a supply of nutrients and energy from food to enable them to multiply.
- If food is not available to bacteria, they cannot grow and multiply.



1.4.1 Food related causes of ill health: bacteria

A supply of moisture

- Bacteria need water for all their biological processes.
- If moisture is not available to bacteria, they cannot grow and multiply.



1.4.1 Food related causes of ill health: bacteria

Warm temperature

- Bacteria grow and multiply fastest in warm temperatures: their **optimum** (best) temperature is 37°C.
- If it is **too hot**, the bacteria will be destroyed.
- If it is **too cold**, the bacteria will grow and reproduce very slowly, until they become dormant ('asleep'), which means they are still alive but not active.

1.4.1 Food related causes of ill health: bacteria

Time

- It takes time for bacteria to grow and multiply, and the more suitable the conditions, the faster they will do so.



1.4.1 Food related causes of ill health: bacteria

- Under the ideal conditions, a single bacterium can multiply to create millions of bacteria in just a few hours!
- The single-celled bacterium divides into two identical daughter cells. This process is called **binary fission**.

1.4.1 Food related causes of ill health: bacteria

High risk foods

Foods are grouped according to whether there is a **low risk** or **high risk** of allowing pathogenic bacteria to grow and multiply.

- Foods with a high level of moisture
- Foods with a high level of protein

ACTIVITY

Make a list of foods that you think would be high risk.

1.4.1 Food related causes of ill health: bacteria

High risk foods



ACTIVITY

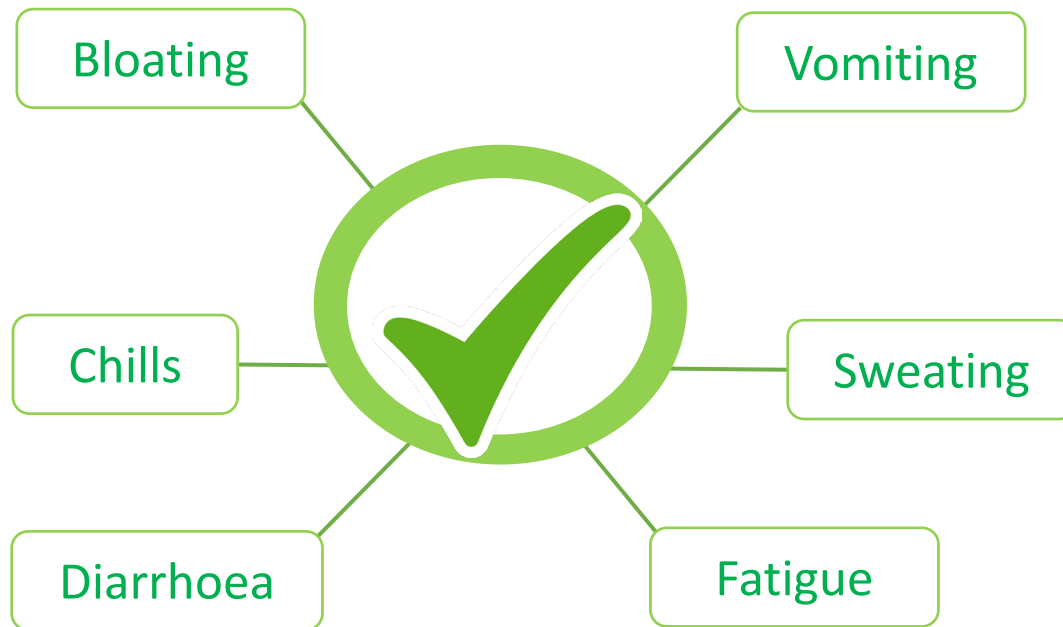
Identify which of these foods are high risk foods and justify your answers.

1.4.2 Symptoms and signs of food-induced ill health

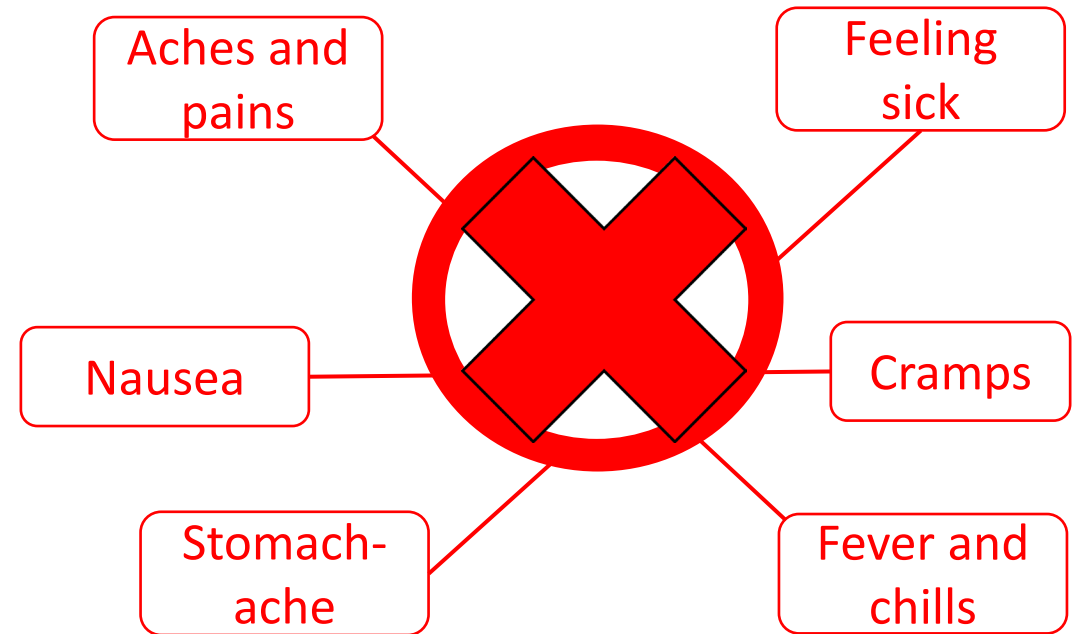
ACTIVITY

Brainstorm the main visible symptoms and non-visible symptoms of food poisoning.

Visible symptoms



Non-visible symptoms





1.4.1-1.4.2 Food related causes and symptoms of ill health

ACTIVITY

Using the internet, research visible and non-visible signs and symptoms and sources of different types of pathogenic bacteria.

Food poisoning bacteria	Non-visible symptoms and signs	Visible symptoms and signs	Found in
Salmonella	Cramps, abdominal pain, aches and pains.	Diarrhoea and fever.	Meat, poultry, eggs, unpasteurised milk, meat pie and leftovers.
Clostridium perfringens			
Staphylococcus aureus			
Campylobacter			
E. coli			
Listeria			
Bacillus cereus			

1.4.1-1.4.2 Food related causes and symptoms of ill health

Salmonella fact file



Non-visible symptoms

Cramps, abdominal pain, aches and pains



Visible symptoms

Diarrhoea and fever

Salmonella is found in:

- raw eggs and undercooked poultry
- processed foods
- unpasteurised milk and dairy products
- pets
- poor sanitation.

1.4.1-1.4.2 Food related causes and symptoms of ill health

Campylobacter fact file



Non-visible symptoms

Cramps, abdominal pain and fatigue



Visible symptoms

Diarrhoea and vomiting

Campylobacter is found in:

- the intestines of animals and poultry
- raw and undercooked meats
- unpasteurised milk
- contaminated water.

1.4.1-1.4.2 Food related causes and symptoms of ill health

Bacillus cereus fact file

Non-visible symptoms

Cramps and nausea

Visible symptoms

Diarrhoea and vomiting

Bacillus cereus is found in:

- reheated rice and dried goods: cereal, sauces, herbs and spices
- raw meats: beef, turkey and seafood.

1.4.1-1.4.2 Food related causes and symptoms of ill health

E. coli fact file



Non-visible symptoms

Cramps and fever



Visible symptoms

Diarrhoea and vomiting

E. coli is found in:

- raw and undercooked meats and poultry
- unpasteurised milk and dairy products
- contaminated water.

1.4.1-1.4.2 Food related causes and symptoms of ill health

Listeria fact file



Non-visible symptoms

Aches and pains



Visible symptoms

Diarrhoea and fever

Listeria is found in:

- ready to eat foods, prepacked sandwiches, pâté and delicatessen foods
- unpasteurised milk and dairy products, and soft cheeses
- soil, sewage and contaminated water.

1.4.1-1.4.2 Food related causes and symptoms of ill health

Staphylococcus aureus fact file



Non-visible symptoms

Nausea



Visible symptoms

Diarrhoea, lumps and sores on the skin

Staphylococcus aureus is found:

- in unpasteurised milk and dairy products
- on the skin and in the nose.

1.4.1-1.4.2 Food related causes and symptoms of ill health

Clostridium perfringens fact file



Non-visible symptoms

Cramps



Visible symptoms

Diarrhoea

Clostridium perfringens is found in:

- raw meats, poultry and food cooked in large batches
- soil on root vegetables
- intestines of animals.

1.4.1 Food related causes of ill health

Chemicals: pesticides

- Herbicides and pesticides are sprayed on crops to prevent damage from insects.
- Crops in the EU are tested for residues of both, as high levels of them can cause nerve damage, damage to unborn babies, dermatitis and other health problems.

Chemicals: fertiliser

- Crops are fertilised for a higher yield; the fertilisers used can pollute water and, at high levels, can be toxic to humans.

1.4.1 Food related causes of ill health

Chemicals: additives

- Food additives can be chemical or natural.
- They help to improve the shelf life, colour and flavour of food.
- Some additives are banned in the UK as they can cause hyperactivity and cancers.

Chemicals: packaging

- Chemicals found in packaging, such as BPA, can seep into foods in certain conditions; they may have negative effects on health.

1.4.1 Food related causes of ill health

Chemicals: cleaning

- Sometimes, using chemicals to clean food machines can leave residues on the food.
- Unlabeled cleaning products could be mistaken for ingredients and put into food causing toxic poisoning.

1.4.1 Food related causes of ill health

Food intolerance

- A food intolerance is when the body has a chemical reaction as a result of eating or drinking a certain food, making it difficult to digest.
- Food intolerance can sometimes cause painful reactions when eating food. It can cause nausea, bloating, wind, stomach cramps and diarrhoea.



1.4.1 Food related causes of ill health

Common food intolerances

Fruits:

Strawberries, citrus fruits and tomatoes

Flavour enhancers such as MSG:

Found in some Chinese foods, instant noodles, dried soup mix, some processed meats and canned vegetables

Aspartame:

Some sugar free products

Wine:

Particularly red wine

Eggs:

Particularly egg whites

Gluten:

Wheat, barley and rye

Lactose:

Dairy products, including milk, cheese and yoghurt

ACTIVITY

Jamie has recently been diagnosed with a food intolerance. Create a suitable leaflet/poster to give to Jamie detailing the condition and how to manage it.



Constant tiredness and weakness



Pain and bloating in the abdomen



Nausea



Eczema and dry skin conditions

1.4.1 Food related causes of ill health

Symptoms of food intolerances

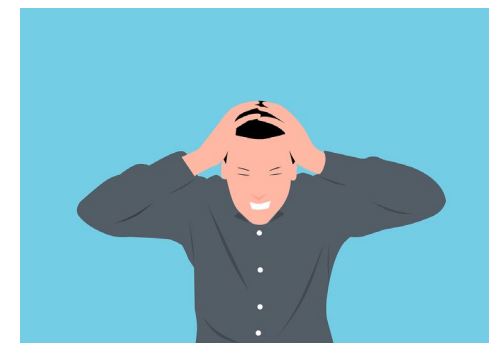
- Food intolerance is difficult for a doctor to diagnose, but it can make people feel unwell most of the time.
- Symptoms of a food intolerance could include one or more of the following:



Diarrhoea



Muscle and joint aches and pains



Headache

1.4.1 Food related causes of ill health

Food intolerance: lactose

- Inability to digest lactose, a type of sugar found in milk. This causes diarrhoea, wind and bloating after eating or drinking it.
- People with lactose intolerance must manage their condition by avoiding drinking milk and eating dairy products such as yoghurt, cheese, butter and cream.
- They must look at food labels to see if milk has been used as an ingredient in food products.
- It is possible to buy dairy products with reduced lactose or no lactose, for example milk and yoghurt.



Why are some People Lactose Intolerant?



1.4.1 Food related causes of ill health

Food intolerance: coeliac disease



- Coeliac disease is a reaction to gluten; when gluten is digested, the immune system will attack, damaging the gut and limiting nutrient absorption.
- Coeliac disease can cause a variety of symptoms; weight loss, constipation, abdominal pain, bloating, diarrhoea, wind, rash and painful joints.
- Gluten is found in many food products and comes from wheat, barley and rye.
- Individuals with coeliac disease must avoid eating any foods that contain gluten, such as wheat flour that is used to make bread, cakes and biscuits.
- There are many gluten-free food products available in food shops.

[What is celiac disease? \(youtube.com\)](https://www.youtube.com/watch?v=...)



1.4.1 Food related causes of ill health

Food allergies

- An allergic reaction is a response from the body's immune system, which usually occurs within minutes of eating or touching the food.
- Some people can have a delayed allergic reaction which can take hours to develop.
- When a person has encountered a certain food or eaten a certain food, this reaction can cause severe symptoms and anaphylaxis and, in some cases, can be fatal.

1.4.1 Food related causes of ill health

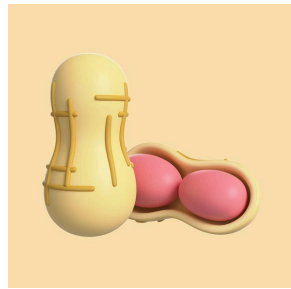
Common food allergens

ACTIVITY: THINK, PAIR, SHARE

- Think of as many allergens as possible.
- Discuss your answers with a peer/in a small group.
- Share your findings with the class.



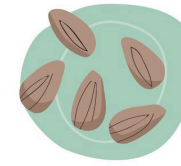
GLUTEN



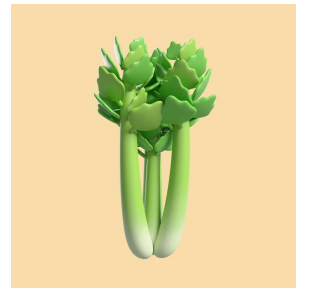
PEANUTS



MUSTARD



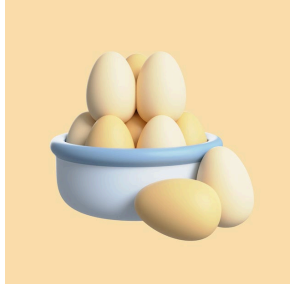
TREE NUTS



CELERY



MILK



EGGS

1.4.1 Food related causes of ill health

Common food allergens



FISH



CRUSTACEANS

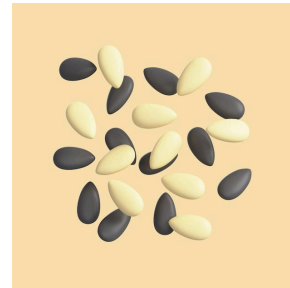


MOLLUSCS:

Clams, scallops, oysters, squid, snails and cockles



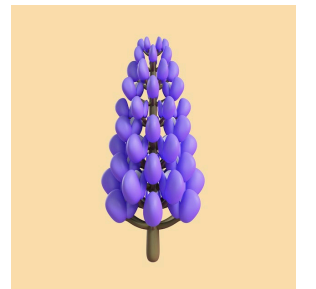
SOYA



SESAME



SULPHITES



LUPIN

1.4.1 Food related causes of ill health

Symptoms of food allergies

ACTIVITY

From the list of food allergy symptoms provided, note which symptoms are visible and non-visible.

Visible signs of food allergies	Non-visible signs of food allergies

- Swelling of the face, lips and throat
- Breathing difficulties and wheezing
- Dry tongue and throat
- Swollen tongue
- Itchy tongue and throat
- Bloating stomach
- Rash
- Nausea
- Vomiting
- Coughing
- Painful stomach cramps
- Feeling faint or lightheaded
- Chills

1.4.1 Food related causes of ill health

Food allergies: anaphylaxis

Anaphylaxis: **life threatening**

- Confusion
- Difficulty breathing
- Wheezing
- Fast heart rate
- Feeling faint
- Clammy, sweaty skin
- Fainting or losing consciousness

An EpiPen is a self-injecting device used in an emergency to treat life-threatening allergic reactions.

ACTIVITY

Watch the video, and in your own words, write step-by-step instructions for treating someone suffering from anaphylaxis.

[What is anaphylaxis? | Anaphylactic shock | First Aid | iHASCO \(youtube.com\)](#)



- ✦ Severe difficulty breathing
- ✦ Visible swelling of their tongue and throat
- ✦ A feeling of terror
- ✦ May go into shock

1.4.1 Food related causes of ill health

Food safety legislation

All hospitality and catering provisions should be aware of the following:

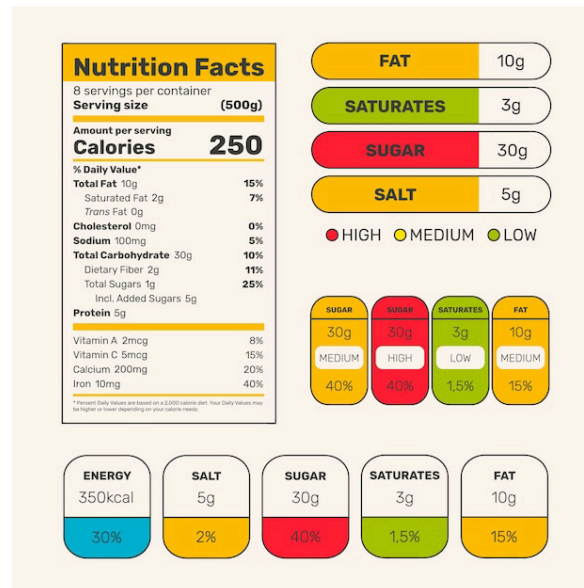
- Food Labelling Regulations
- Food Safety Act
- Food Safety (General Food Hygiene) Regulations

1.4.1 Food related causes of ill health

Food Labelling Regulations

ACTIVITY

The purpose of food labelling is to inform and educate consumers about the food product they choose to buy. The label also protects the consumer, manufacturer and retailer by requiring certain information to be shown on the label. Study a food label and identify and explain why the information is shown on the label.



- The name of the manufacturer
- The name of the food must not be misleading to the consumer
- If there is a picture of the food product, the product inside must look the same and not be misleading
- The net weight/quantity of the food product

1.4.1 Food related causes of ill health

Food Labelling Regulations

- Food and drink labelling is extremely important in order to manage food safety. The labelling must be permanent, clear and easy to read.
- There are several legal requirements in place when it comes for food labelling:

- Information about nutrition
- Contact details of the manufacturer, distributor or retailer of the food product
- Foods with 'use by' and 'best before' dates cannot be sold past the dates displayed
- List of ingredients (in descending order) with allergens in **bold**, *italics* or in different colour
- Cooking and heating instructions
- Storage advice

1.4.1 Food related causes of ill health

Food Labelling Regulations

A food label should also state:

- the place of origin and the percentage of alcohol it contains
- warnings: noting if the product contains aspartame, additives (E numbers), caffeine, skimmed milk, polyols or sweeteners.

ACTIVITY

You work in a small bakery and the safety of its customers is of the utmost importance. They have asked you to provide food labelling training to all new members of staff. Watch the video and read the newspaper article before creating a training resource suitable for the new employees.



[Calls for Better Food Labelling at Pret A Manger as Teenager Dies From Allergic Reaction | GMB \(youtube.com\)](#)

Pret a Manger will list all ingredients, including allergens, on its freshly made products following the death of a teenager who had an allergic reaction after eating a Pret sandwich.

Natasha Ednan-Laperouse, 15, went into cardiac arrest after eating a sandwich at Heathrow Airport in 2016.

Theresa May called for a review of food labelling.

Clive Schlee, Pret chief executive, said: "We are taking steps to learn from this tragedy and ensure meaningful changes happen," he said.

In October 2021, new legislation called Natasha's Law was passed; this law came into force following an extensive petition campaign by the parents of Natasha Ednan-Laperouse. Food labelling regulations and Natasha's law are in place to prevent food-induced ill health.

[Pret a Manger to label products after allergy death - BBC News](#)

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Pret a Manger to label products after allergy death

© 3 October 2018

Did you know?

1.4.1 Food related causes of ill health

Food Labelling Regulations

- Nutritional information enables customers to make informed choices about the foods they eat.
- The product's nutritional information is displayed in a specific order: energy per 100g or ml (calories and kilojoules), fat, saturates, carbohydrates, sugars, protein, salt, vitamins and minerals.
- Many companies have made the nutrition list easier by using the 'traffic light' labelling system.
- The **red**, **amber** and **green** traffic light system helps the customer to identify whether there are high, medium or low levels of one or more of the following: fats, saturates, sugars and salt.



[WATCH ME!](#)

1.4.1 Food related causes of ill health

Food Safety Act

The Food Safety Act provides a structure for food establishments to follow in order to ensure that foods are safe for people to eat. All food businesses that prepare, transport, store, handle, serve and sell foods must follow the regulations set out in the Act. The main responsibilities of all food businesses under the Food Safety Act are:

- to ensure food businesses do not include anything in food, remove anything from food or treat food in any way that would have a detrimental effect on the health of the people who eat it
- to ensure that the food served or sold by food businesses is of the nature, substance or quality that consumers would expect
- to ensure that food is labelled, advertised and presented in a way that is not false or misleading.

Businesses that do not fulfill the responsibilities outlined in the Food Safety Act are committing an offence.

1.4.1 Food related causes of ill health

Food Safety (General Food Hygiene) Regulations

The Food Safety Regulations are in place to prevent food and beverages from causing ill health.

The Food Safety Regulations are a legal requirement for all food provision.

The main aspects of the regulations are:

- produce and handle food safely to make sure it is safe to eat
- analysis and control of any food safety risk hazard (HACCP)
- keep records of all suppliers to be able to trace food ingredients.

1.4.1 Food related causes of ill health

Food Safety (General Food Hygiene) Regulations

Food premises must:

- be maintained to a good standard on a regular basis
- be well lit and ventilated
- include toilets and adequate hand washing facilities
- ensure that all areas and facilities are clean and free from pests
- ensure storage areas are maintained; monitor and control the temperatures of fridges and freezers
- ensure equipment is maintained and cleaned
- ensure that staff are hygienic and trained.

STARTER/PLENARY ACTIVITY

Instructions: Identify the food labelling symbols.

Topic: Food labelling



STARTER/PLENARY ACTIVITY

Instructions: Work from the bottom upwards to answer the questions.

Food poisoning

4 points

Explain how food poisoning could be prevented.

3 points

Name **three** pathogenic bacteria.

Name **four** conditions that bacteria need to grow and reproduce.

2 points

Name **two** foods that may contain a pathogenic bacteria.

What is the process called when a single-celled bacterium divides into two identical daughter cells?

Name **two** groups of people for whom food poisoning is particularly dangerous.

1 point

Name **one** LOW RISK food.

State **one** visible symptom of food poisoning.

State **one** non-visible symptom of food poisoning.

What is a pathogenic micro-organism?

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

The Miller family are on holiday in Cornwall, they have visited a bakery to purchase lunch. One of the Millers has a peanut allergy. She has looked at the labels for ingredients and has chosen a sandwich that states it does not contain peanuts. However, after consuming the sandwich, she has started to show signs of an allergic reaction.

- (a) Describe the **visible** and **non-visible** symptoms that she would have. [4]

Answer

Describe the **visible** and **non-visible** symptoms that she would have.

Award 0 marks where a response is not creditworthy.

Award 1 mark: for a limited description which shows little knowledge and understanding of the **visible** or **non-visible** symptoms that she would have. Response may be a list.

Award 2 marks: for a basic description which shows some knowledge and understanding of the **visible** or **non-visible** symptoms that she would have.

Award 3 marks: for a good description which shows knowledge and understanding of the **visible** or **non-visible** symptoms that she would have.

Award 4 marks: for a very good description which shows detailed knowledge and understanding of the **visible** or **non-visible** symptoms that she would have.

Answers may include:

Visible symptoms such as:

- Anaphylaxis shock V
- Bloating stomach V
- Choking V
- Coughing V
- Diarrhea V
- Hives/rash/Redness V
- Itching V
- Itching V
- Lips swelling V
- Pale V
- Passing out/fainting V
- Runny nose V
- Sweating V
- Sweaty V
- Swelling/swollen face V
- Swollen tongue V
- Vomiting V
- Wheezing V

Non-visible symptoms such as:

- Difficulty swallowing N
- Feeling faint/passing out N
- Feeling sick N
- Flatulent (wind) N
- Headache N
- Itch tongue N
- Lightheaded N
- Low blood pressure leading to fainting N
- Shortness of breath N/V
- Stomach cramps and pains N
- Stomach rumbling/ache N

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

The Miller family are on holiday in Cornwall, they have visited a bakery to purchase lunch. One of the Millers has a peanut allergy. She has looked at the labels for ingredients and has chosen a sandwich that states it does not contain peanuts. However, after consuming the sandwich, she has started to show signs of an allergic reaction.

- (b) Describe the Food Labelling regulations the bakery should have followed in regards to Food Safety legislation. [4]

Answer

Describe the Food Labelling regulations the bakery should have followed in regards to Food Safety legislation.

Award 0 marks where a response is not creditworthy.

Award 1 mark: for a limited description which shows little knowledge and understanding of the Food Labelling regulations the bakery should have followed in regards to Food Safety legislation. Response may just be a list.

Award 2 marks: for a basic description which shows some knowledge and understanding of the Food Labelling regulations the bakery should have followed in regards to Food Safety legislation.

Award 3 marks: for a good description which shows knowledge and understanding of the Food Labelling regulations the bakery should have followed in regards to Food Safety legislation.

Award 4 marks: for a very good description which shows detailed knowledge and understanding of the Food Labelling regulations the bakery should have followed in regards to Food Safety legislation.

Answer may include:

- Address of manufacturer
- Allergens must be identified in **bold/different font/colour**
- Clear/easy to read labelling
- Cooking instructions
- County of made/origin
- Easy to understand
- Easy visible and clear for customers to read
- Food match description
- Including GM products
- Inform customers about the food products they buy
- Ingredients must be listed
- Labelling must not mislead
- Mislabelling is criminal fraud
- Must follow these as it is the law
- Name of the food
- Nutrient
- Permanent labelling
- Responsible for nutrient information
- Shelf life of the product (use by date/best before)
- Storage
- Weight

STARTER/PLenary ACTIVITY: PAST PAPER QUESTION

The Environmental Health Officer (EHO) has discovered that the bakery contains findings of **two** types of food poisoning bacteria.

(c) Identify **two** types of food poisoning bacteria and where each type is usually found. [4]

Food poisoning	Where it is usually found		
Bacillus cereus	<ul style="list-style-type: none"> • Cereals • Herbs and spices • Food mixtures (soups, sauces and casseroles) • Rice • Dried or process goods • Raw meats, beef, turkey and seafood • Soil • Dust • Water 	<i>Listeria</i>	<ul style="list-style-type: none"> • Ready to eat foods • Prepacked sandwiches • Pate • Deli foods • Hot dogs • Unpasteurised milk and dairy products • Soft cheeses • Soil • Sewage • Contaminated water • Ready to eat salads • Unwashed fruits and vegetables (soil)
Campylobacter	<ul style="list-style-type: none"> • Found in the intestines of animals and poultry • Raw/undercooked chicken/poultry • Raw/undercooked meat (beef, pork, mutton) • Unpasteurised milk • Contaminated water 		
<i>Clostridium perfringens</i>	<ul style="list-style-type: none"> • Raw meats • Raw chicken • Intestines of animals • Cooked meat held at unsafe temp or held too long • Gravies • Dried or precooked foods • Cross contaminated food • Food cooked in large batches • Soil on root vegetables/fruits • Unwashed fruits and vegetables 		
<i>E. coli</i>	<ul style="list-style-type: none"> • Raw and undercooked meats • Raw and undercooked poultry • Unpasteurised milk/dairy products • Contaminated water • Poor hygiene when handling food. 		
		<i>Salmonella</i>	<ul style="list-style-type: none"> • Undercooked or raw poultry • Undercooked/raw meats • Some processed foods • Unwashed/dirty fruits and vegetables • Eggs • Unpasteurised milk and dairy products • Poor sanitation • Cross contaminated foods
		<i>Staphylococcus aureus</i> Or <i>Staph</i>	<ul style="list-style-type: none"> • Humans (skin, infected cuts, pimples, nasal passage, throat) • Salads (egg, tuna, chicken, potato, macaroni) • Bakery products (cream-filled pastries, cream pies, eclairs)

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

(d) Describe the conditions required for food poisoning bacteria to multiply.

[4]

Answer

Describe the conditions required for food poisoning bacteria to multiply

Award 0 marks where a response is not creditworthy.

Award 1 mark: for a limited description which shows little knowledge and understanding of the conditions required for food poisoning bacteria to multiply. Response may be a list.

Award 2 marks: for a basic description which shows some knowledge and understanding of the conditions required for food poisoning bacteria to multiply.

Award 3 marks: for a good description which shows knowledge and understanding of the conditions required for food poisoning bacteria to multiply.

Award 4 marks: for a very good description which shows detailed knowledge and understanding of the conditions required for food poisoning bacteria to multiply.

Answers may include:

- Warmth: a suitable temperature in which bacteria can grow and multiply (danger zone)
- Time: the more suitable the conditions, the quicker the bacteria will grow
- Moisture: if there is not enough moisture, then bacteria cannot grow and multiply
- Food: a supply of nutrient and energy from food enables bacteria to grow and multiply.
- Oxygen
- PH

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

Many hotels have guests with special dietary needs.

- (a) One of the hotel guests has told the waitress that he is lactose intolerant. Name **two** dishes this person cannot eat. [2]

Answer

Award **1 mark** for an example of food **dishes**.

Award 0 marks. No response or quality of response not sufficient.

Indicative content

- Any dish with cheese as this is made from cows' milk
- Mousse
- Cheese cake
- Quiche
- Soup
- Macaroni cheese
- Most cakes
- Ice creams
- Scones

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

- (b) Describe the visible and non-visible symptoms that this person would have if they ate food containing lactose. [4]

Answer

Describe the visible and non-visible symptoms that this person would have if they ate food-containing lactose.

Award 0 marks. No response or quality of response not sufficient.

Award **1-2 mark** for answers referring to visible or non-visible

Award **3-4 marks** for 2 or more examples making reference to visible and non-visible.

The person would show symptoms of:

Indictive content

- Diarrhea V
- Bloating stomach V
- Stomach rumbling N
- Vomiting V
- Runny nose V
- Wheezing V
- Anaphylaxis shock V
- Hives/rash V
- Lips swelling V
- Feeling sick N
- Swollen throat N
- Throat swelling N
- Stomach cramps and pains N
- Difficulty swallowing N
- Flatulent (wind) N
- Light headed/headache N
- Sweaty V
- Pale V

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

- (b) Describe the food safety legislation that the café should comply with in relation to food storage. [4]

Answer

Up to 2 marks available for each description of safety legislation in relation to food storage.

Award 1 mark for one point related to safety in food storage.

Award a maximum of 2 marks for a basic list with no description

Award 2-3 marks for basic description of at least one point in relation safety in food storage with a description.

Award 4 marks for a detailed description of two or more points.

Answers may include, but are not limited to:

- Relating directly to food safety act
- Food labelling
- Fridge/freezer temperatures
- Correct storage of food items within the fridge/freezer
- Could be interlinked with allergies
- Cross contamination
- Using a food probe to check temperature of food stock in the fridges
- Taking core temperature of food items in freezer to follow guidelines of storage
- To create a HACCP of all storage
- Rotate stock to make sure foods are not kept too long. Make sure high-risk food* is date-coded, including food which is prepared on the premises
- Store ready-to-eat food above and well separated from raw food in covered containers and in a clearly distinguishable part of the fridge/freezer
- Food with a 'use by' date should be checked regular and stored in a fridge
- Make sure that you do not use food after its 'use by' date. If you keep it any longer it might not be safe to eat
- Follow the food manufacturer's instructions on how to store the food, including how long it is safe to store food once opened, and any special temperature requirements, as these are designed to keep it safe
- It is important to use equipment properly to make sure food is kept cold enough. Follow the manufacturer's instructions on how to use fridges and chilled display equipment. Fridges must not be over-stocked to allow cold air to circulate
- Dry foods such as flour and rice should be stored in rooms which are clean, dry and well ventilated. Food should be kept off the floor and placed in covered food grade containers. When transferring food from its original packaging into containers, you should retain the ingredients list to ensure awareness of ingredients, which may cause an allergy. The date code should also be marked on the container.

Sample answers

Food must be stored at correct temperature. (1 mark)

All foods must be stored at the correct temperature to prevent growth of harmful bacteria. For example Store below 5°C for items that are perishable. (2 marks)

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

- (c) Name and describe the cause and symptoms of **two** common types of food poisoning by completing the table below. [6]

Name of food poisoning	Cause	Symptom
1.		
2.		

Up to 2 marks awarded for **name** of food poisoning, 2 marks for **Cause** and 2 marks for **Symptoms**.

Name:

- Campylobacter
- Salmonella
- E-coli
- Clostridium perfringens
- Listeria
- Bacillus cereus
- Staphylococcus aureus

Cause:

- Raw meat, poultry and sea food
- Raw eggs
- Contact with some animals
- Fruit and vegetables – unwashed
- Cross contamination
- Not washing hand/bad hygiene

Symptoms:

- Diarrhoea
- Abdominal pain and cramps
- Fever
- Nausea
- Vomiting
- Chills
- Headache
- Blood in the stool

Same responses for cause and symptoms can be credited more than once

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

In 2017 this was a main headline of the Mail Online.



The image shows a screenshot of a news article from Mail Online. The page header includes the 'Mail Online' logo and a navigation menu with links for Home, News, U.S., Sport, TV&Showbiz, Australia, Femail, Health, Science, Money, Video, Travel, and DailyMailTV. The word 'News' is highlighted in blue. The main headline reads: 'THREE HUNDRED Britons are trapped on one of the world's largest cruise ships in Australia amid food poisoning outbreak.'

(a) State **three non-visible** symptoms of the effects of food poisoning that the holidaymakers may have suffered on the cruise. [3]

(i)

(ii)

(iii)

(b) State **three visible** symptoms of the effects of food poisoning that the holidaymakers may have suffered on the cruise. [3]

(i)

(ii)

(iii)

Award 1 mark for each correct response up to a maximum of **3 marks**. [3x1]

Answers may include:

- stomach pains
- muscle contractions
- headaches
- feeling sick/nausea
- flu like symptoms (dizziness/light-headed)
- loss of appetite
- fatigue
- joint/muscle pains
- chills
- weakness.

Award 0 marks where a response is not creditworthy.

Award 1 mark for each correct response up to a maximum of **3 marks**. [3 x 1]

Answers may include:

- diarrhoea
- pale in colour
- vomiting
- signs of dehydration
- confusion
- chills/shivering
- bloating/swelling
- sweating
- fatigue.

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

The airline Atlanta has a new fleet of aeroplanes that will be flying between the United Kingdom and India. Their customers will be using the airline for leisure and business.

(a) Explain how the airline can meet the following catering needs of the customers.

(i) Special dietary requirements:

[4]

Answer

Explain how the airline can meet the following catering needs of the customers

Special dietary requirements.
(Vegan, vegetarians, pescatarian, low salt and diabetic)

Award 0 marks

No marks response or quality for response not sufficient or a mark to be awarded

Please note do not award marks for allergies for this question.

Award 1-2 marks

Outlining in general (basic) response to special dietary requirements.
Maybe 4 points but not described.
Response limited in detail mainly listed/bullet pointed.

Award 3-4 marks

Describes special dietary needs in detail with justification. SDN will be named and clear reasoning given to meet the customer needs.

Sample 1-2 marks

Atlanta would have to offer different dietary needs for customers. Like offering vegetarian and vegan, low salt meals.

Sample 3-4 marks

Atlanta airline will need to make sure that the meals that it offers covers the SDN of all customers on their plane. Indian people Hindu's, which means they are often vegetarian or lacto-vegetarian.

Indicative content

Diabetes
Gluten/Coeliac
Lactose
Low salt
Low fat
Phenylketonuria (PKU/medical)
MSG free

Vegetarian
Vegan
Lacto-vegetarian
Lacto-ove-vegetarian
Pescatarian
Paleo
Kosher (religious)

Religious beliefs
Muslims
Hindus
Sikhs
Jewish
Rastafarian

STARTER/PLENARY ACTIVITY: PAST PAPER QUESTION

The airline Atlanta has a new fleet of aeroplanes that will be flying between the United Kingdom and India. Their customers will be using the airline for leisure and business.

(a) Explain how the airline can meet the following catering needs of the customers.

(ii) Allergies:

[4]

Answer

Award 0 marks

No marks response or quality for response not sufficient or a mark to be awarded

Award 1-2 marks

Outlining in general (basic) response to allergies. Maybe 3/4 points but not described.

Response limited in detail mainly listed/bullet pointed.

Award 3-4 marks

Describes allergies in detail with justification.

Sample 1-2 marks

Atlanta would have to offer meals that cater for people with nut allergies. (1 mark)

Sample 3-4 marks

Atlanta airline will need to cater for coeliac who can't eat wheat produce. People with nut allergies will need a different menu, perhaps on airline will stop all meals containing nuts for that particular flight. (4 marks)

Indicative content:

Wheat/cereal Gluten free

Nuts

Seeds (sesame, pumpkin, poppy etc.)

Molluscs

Crustaceans (lobster, prawns etc.)

eggs

Dairy/milk free/lactose

Mustard

Sulphites

Fish

Fruits and vegetables

Lupin

Soya

Beans (kidney beans, soya)

Glossary

A

Allergic reaction – How the body responds when an allergen has been eaten; for example, rash.

Glossary

A

Allergen – Food that can cause an allergic reaction.

Glossary

A

Anaphylaxis – A severe reaction to eating an allergen that can lead to death.

Glossary

F

Food Labelling Regulations –
Includes the information that must be shown on a food label.

Glossary

F

Food Safety (General Food Hygiene) Regulations – A law to ensure that food is handled in a safe and hygienic way from field to fork.

Glossary

F

Food Safety Act – A law to ensure that food is safe for human consumption.

Glossary

F

Food spoilage – When something happens that makes food unfit and unsafe to eat.

Glossary

Intolerance – Not being able to digest certain foods without feeling ill; examples include wheat (gluten) and milk (lactose).

Glossary

M

Micro-organism – Tiny plants and animals that are only clearly visible under a microscope.

Glossary

N

Non-visible symptoms –
Symptoms of food-induced ill health that cannot be seen, including nausea (feeling sick) or headache.

Glossary

P

Pathogenic – Something that can cause illness in people.

Glossary



Visible symptoms – Symptoms of food-induced ill health that can be seen, including vomiting or a rash.

Acknowledgements

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