

**Food hazards**

A **food hazard** is something that makes food unfit or unsafe to eat that could cause harm or illness to the consumer. There are three main types of food safety hazards:

**Chemical** - From substances or chemical contamination e.g. cleaning products

**Physical** - Objects in food e.g. metal/plastic

**Microbiological**- Harmful bacteria e.g. food poisoning such as Salmonella

**VISIBLE SYMPTOMS OF FOOD POISONING :**

**VISIBLE** symptoms of food poisoning, allergic reactions and food intolerance could include:

**Diarrhoea**- This is a common symptom of most types of food poisoning.

**Vomiting**- This is a common symptom of most types of food poisoning

**Pale or sweating/chills**- A high temperature is a common symptom of E Coli and Salmonella

**Bloating** - A symptom of lactose intolerant

**Weight loss**- A symptom of gluten intolerance (Coeliac disease)



Can you identify at least 2 different VISIBLE and NON VISIBLE symptoms of food poisoning?

Ill health can be caused by any of the following:

- Bacteria
- Allergies
- Intolerances
- Chemicals



Can you identify 3 different types of food safety hazards?

Can you identify at least 3 different types of food poisoning?

**Bacillus cereus**: Found in reheated rice and other starchy foods.

**Campylobacter**: Found in raw and undercooked poultry and meat and unpasteurised milk

**Clostridium perfringens**: Found in human and animal intestines and raw poultry and meat.

**E-Coli**: Found in raw meat, especially mince

**Listeria**: Found in polluted water and unwashed fruit and veg  
**Salmonella** Found in raw meat, poultry and eggs

**Staphylococcus aureus**: Found in human nose and mouth

**NON VISIBLE SYMPTOMS OF FOOD POISONING :**

**NON VISIBLE** symptoms of food poisoning, chemical poisoning, allergic reaction and food intolerance include:

**Nausea (feeling sick)**:- The most common symptom for all types of food-induced ill-health.

**Stomach- ache cramps**: Abdominal pain is a common symptom of lactose intolerance as well as a sign of an allergic reaction. Cramps may happen at the same time as diarrhoea.

**Wind/flatulence**: A common symptom of lactose intolerance,

**Constipation**: A symptom of Listeria food poisoning

**Painful joints**: A symptom of E Coli food poisoning

**Headache**: A symptom linked to Campylobacter, E coli and Listeria

**Weakness**: Non stop vomiting and diarrhoea can leave a person feeling weak. Gluten intolerance (coeliac disease) can leave a person feeling tired because their bodies can't absorb the correct amount of nutrients.

## Cross contamination

This is when bacteria is transferred to high risk foods. It can be controlled by:

- Washing hands before and after handling raw meat and other high risk foods.
- Using colour coded chopping boards and knives when preparing high risk foods
- Washing hands after going to the toilet, sneezing or blowing your nose and handling rubbish.

## Physical contamination

This is when something that is not meant to be eaten gets in to your food. This could be things such as hair, bones, plastic, packaging etc. It can be controlled by:

- Food workers following personal hygiene rules
- Keeping food preparation and serving areas clean
- Checking deliveries for broken packaging
- Thoroughly washing fruit and veg before preparation
- Using tongs and gloves when preparing food.

## Hazard Analysis and Critical Control points (HACCP)

Every business lawfully needs to ensure the health and safety of customers whilst visiting their establishment. To ensure this they need to take reasonable measures to avoid risks to health. HACCP is a food safety management system which is used to ensure dangers and risks are noted and how to avoid them.

Here is an example of a HACCP table – it states some risks to food safety and some control points.

Hazard	Analysis	Critical Control Point
Receipt of food	Food items damaged when delivered / perishable food items are at room temperature / frozen food that is thawed on delivery.	Check that the temperature of high-risk foods are between 0°C and 5°C and frozen are between -18°C and -22°C. Refuse any items that are not up to standard.
Food storage (dried/chilled/frozen)	Food poisoning / cross contamination / named food hazards / stored incorrectly or incorrect temperature / out of date foods.	Keep high-risk foods on correct shelf in fridge. Stock rotation – FIFO. Log temperatures regularly.
Food preparation	Growth of food poisoning in food preparation area / cross contamination of ready to eat and high-risk foods / using out of date food.	Use colour coded chopping boards. Wash hands to prevent cross-contamination. Check dates of food regularly. Mark dates on containers.
Cooking foods	Contamination of physical / microbiological and chemical such as hair, bleach, blood etc. High risk foods may not be cooked properly.	Good personal hygiene and wearing no jewellery. Use a food probe to check core temperature is 75°C. Surface area & equipment cleaned properly.
Serving food	Hot foods not being held at correct temperature / foods being held too long and risk of food poisoning. Physical / cross-contamination from servers.	Keep food hot at 63°C for no more than 2 hours. Make sure staff serve with colour coded tongs or different spoons to handle food. Cold food served at 5°C or below. Food covered when needed.



Can you explain what HACCP means?

Can you identify at least 2 different hazards that might occur in the kitchen and the control points that you could put in place to prevent them?

Can you remember the different temperatures that food needs to be stored cooked and served at?

## Important temperatures

Delivery	Storage	Preparation	Service
The temperature of high-risk foods must be checked before a delivery is accepted. The food should be refused if the temperatures are above the safe range.  Refrigerated foods = 0-5°C Frozen foods = -22°C to -18°C	High-risk foods must be covered and stored at the correct temperature. Temperatures must be checked daily.  Refrigerator = 0-5°C Freezer = -22°C to -18°C  Unwashed fruit and vegetables must be stored away from other foods.	High risk-foods need to be carefully prepared to avoid cross-contamination. A food probe can be used to make sure that high-risk foods have reached a safe core (inside) temperature, which needs to be held for a minimum of two minutes.  Core temperature = 70°C	Food needs to be kept at the correct temperature during serving to make sure it is safe to eat. Hot food needs to stay hot and cold food needs to stay chilled.  Hot holding = 63°C minimum Cold holding = 0-5°C



Can you identify the difference between cross contamination and physical contamination?