

Food Preparation and Nutrition



REVISION BOOKLET 4 FOOD SAFETY

Name:
Tutor Group:

Key Words

Complete the table below with an overview of the keywords for food safety.

Keyword	Definition	Keyword	Definition
Bacteria		Use-By-Date	
Microorganisms		Best-Before Date	
Moulds		Frozen Food	
Enzymes		Chilled Food	
Starter Culture		Hygiene	
Probiotic		High-Risk Foods	
Pathogens		Danger Zone	
Food Poisoning		Reheating	
		Core Temperature	

Food Hygiene

To make sure that our food is safe and clean to eat, we need to store, prepare and cook it hygienically.

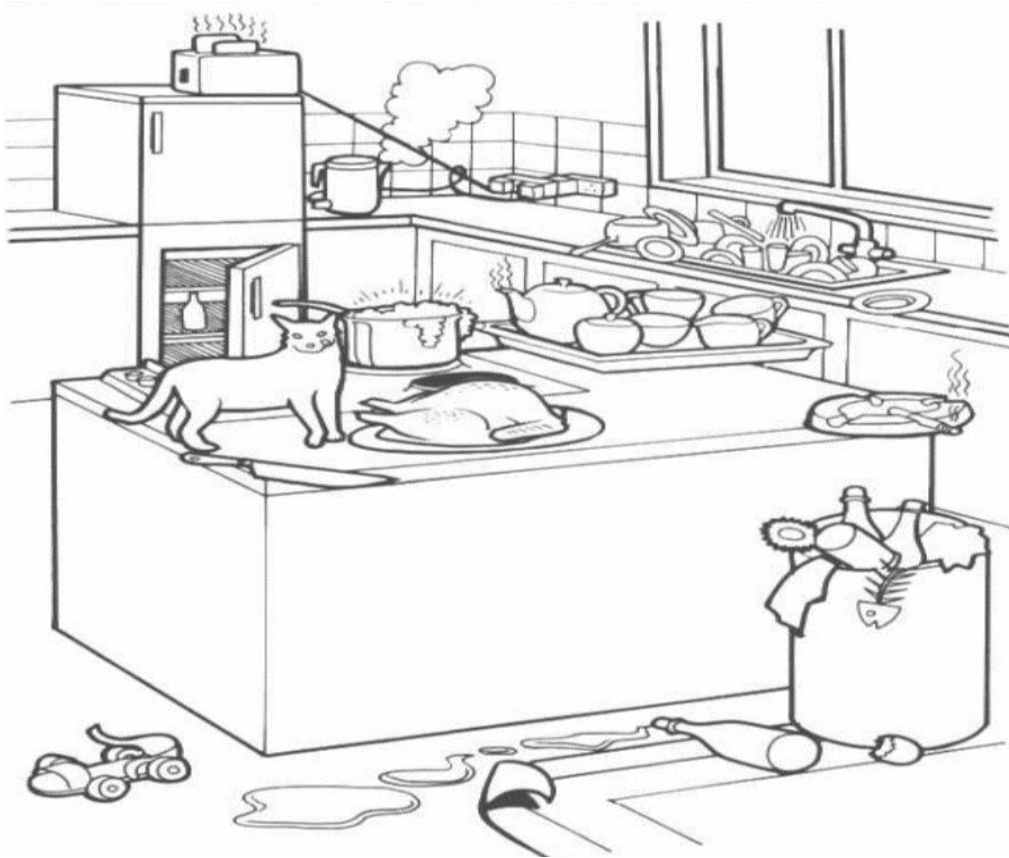
Good food hygiene includes:

- Good personal hygiene
- Careful buying and storing of food
- Safe preparation of food and thorough cooking
 - Good kitchen hygiene

Spot the Hazard: Kitchen Hygiene

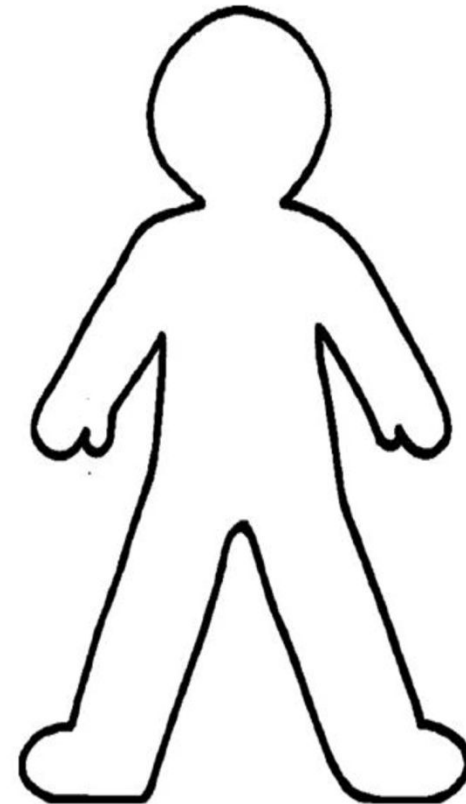
Study the image below. Circle all the hazards you can see.

Remember: A hazard is something that has the potential to cause harm.



Personal Hygiene

On the outline below, draw how you should look before you start cooking. What key things do you need to remember?



Preparing and Cooking Food

When preparing and cooking food it is important to have high personal and food hygiene standards.

Food must be cooked thoroughly to make sure it is safe to eat.

Preparing High Risk Foods

When preparing food, some foods are more of a risk than others: these are high risk foods. Protein-based foods, moist foods and ready-to-eat foods that require no further cooking are high-risk foods.

In the table below, list high and low risk foods.

High Risk Foods

Foods are usually moist and high in protein

Low Risk Foods

Foods are usually low in moisture and low in protein

Cooking and Reheating

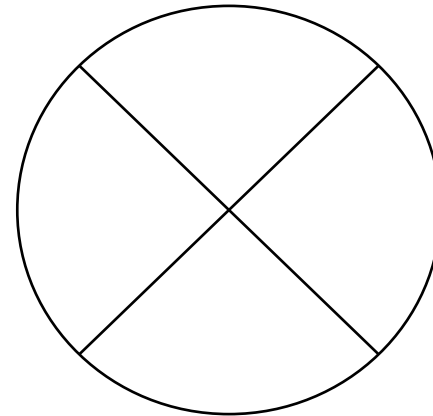
Pathogenic bacteria can be destroyed and food made safe by thorough cooking. If food is not cooked correctly, pathogenic bacteria may survive and cause food poisoning.

Why should leftover food only be reheated once?

Bacterial Contamination

Bacteria are microscopic, single cell organisms that are found everywhere and are very hard to detect.

To reproduce, bacteria need to be given idea conditions, which are:



How do bacteria multiply?

Hand Washing

Our hands can pass bacteria and germs onto food, so wash your hands before and after handling food. Bacteria spreads more quickly if hands are wet so dry hands thoroughly.

Fill in the missing words in the following sentences:

Eating Dirty Sneezing Pets Toilet Touching
Nose Playing Coughing

When do you need to wash your hands?

1. After going to the _____.
2. Before _____ and _____ food.
3. If your hands look or feel _____.
4. After playing with _____.
5. After _____ outside.
6. After _____ or _____ or blowing your nose.

List 5 other occasions when you must wash your hands:

1. _____
2. _____
3. _____
4. _____
5. _____

What items does a hand wash sink require?

Draw the missing items and annotate the sink below:



Colour the diagram to show the parts of the hands that are often missed when washing hands.

Key:

- ☐ Areas most frequently missed during hand washing
- ☐ Less frequently missed
- ☐ Not missed



Back of Hand



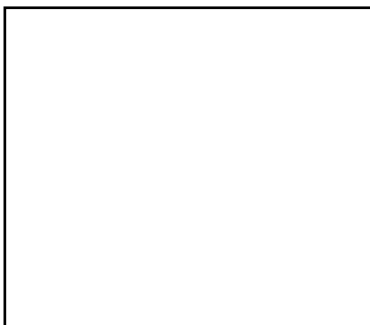
Palm of Hand

The 4C's for Good Food Hygiene

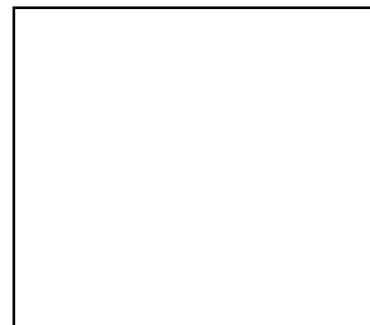
Food hygiene is about preventing food poisoning. Food poisoning bacteria grown very quickly in food if it is not handled properly, cooked properly or stored properly. There are laws which control how food manufactures can prepare and sell food. Statistics show that you are more likely to get food poisoning from a home made meal than you are from a bought one.

Fill out the 4Cs with a description for each one.
In the boxes draw a symbol that represents them.

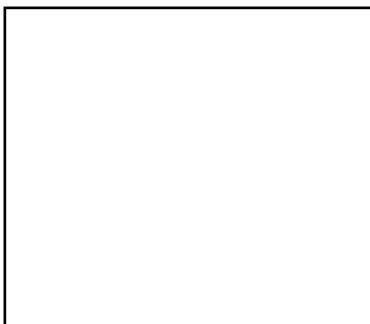
C _____



C _____



C _____



C _____

Chopping Boards

Colour the boards and label them with the foods they are used for.



Food Poisoning Bacteria

There are over 14,000 notified cases of food poisoning each year. Food poisoning is caused by harmful (pathogenic) bacteria multiplying on food. Complete the table below showing where the main pathogens are found:

Pathogenic Bacteria	Found in...	Symptoms	Onset Time
Clostridium Perfringens			
Clostridium Botulinum			
Salmonella			
Staphylococcus Aureus			
Bacillus Cereus			

Food-Borne Disease

Food-borne diseases are carried by pathogenic microbes (bacteria and viruses) carried on food. These microbes do not multiply in the food but in the person who has eaten the food.

Pathogenic Microbes	Found in...	Symptoms	Onset Time
Escherichia-Coli (E-Coli)			
Listeria Monocytogenes			
Campylobacter			
Norovirus			

Date Coding

Food labels carry date codes and, to maintain the safety and quality of food, it is important to check that food is not out of date. Date codes only refer to the product before the pack is opened. After opening, the food should be handled and stored according to instructions and eaten within 2 days.

Why is it important for food labels to show date codes?



What is the difference between the date codes 'use-by', 'best-before' and 'display until'?
Give 3 examples of food products which use each type of date code.

Discuss: should fresh vegetables carry date codes?

Storing Food

When handling food at any stage, from buying the food through to correct storage, steps must be taken to prevent contamination. Everything possible must be done to control the conditions that allow bacteria to multiply, causing food poisoning.

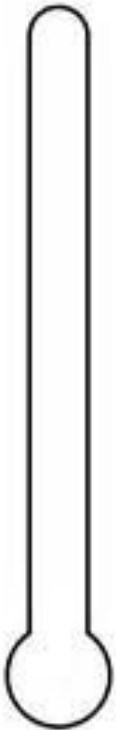
Storing Food

It is important to store food properly.
Food should be wrapped, covered or kept in a suitable clean container.

Complete the table below with top tips for food storage:

Dry Food Storage	Chilled Food Storage
Frozen Food Storage	Defrosting Food

Temperature	Reason
	Freezer (bacteria are dormant- not dead)
	Fridge (never put hot food into a fridge)
	DANGER ZONE
	Hot holding of food
	Core temperature of cooked food
	Boiling point



Microorganisms in Food Production

Microorganisms (bacteria) are used to make a wide range of food products.

Bacteria are used to make cheese, yogurt and bread. The most important bacteria in food manufacturing are the Lactobacillus species.

Explain how the products below are manufactured using microorganisms:

Cheese Production		Yogurt
Blue Cheese		The Meat Industry Salami, pepperoni, chorizo, dried ham. Bread-Making
Soft Ripened Cheese		
Rind-Washed Cheese		

Accident Prevention

A catering kitchen can be a dangerous place. Complete the table of the main dangers with way of preventing accidents in the kitchen.
You need to have 3 preventions for each hazard, some have been done for you.

Hazard	Prevention 1	Prevention 2	Prevention 3
Floors			
Knives			
Electrical Equipment	Check electrical wires are not frayed or worn		
Saucepans			
Fryers	Do not fill above indicated fat level	Do not put wet foods in fryers	
Foods	Be aware that fish bones and meat bones can cause cuts		
Storing Equipment			
Hobs (Gas and Electric)			
Clothing			
Behaviour			
Cleaning	Do not 'mix' cleaning materials		

HACCP

This is now a legal requirement for all food businesses to carry out some form of hazard analysis to ensure that all food is safe to eat and no items have been contaminated. Every aspect of food safety will be monitored for hazards from how the raw ingredients are produced, to how they are transported, prepared and cooked through to selling the final product.

Learn what HACCP stands for:

Critical Control Points

There are areas in the food business where control is essential to reduce the risk of food poisoning. If a caterer 'gets it wrong' they could be breaking the law, so it is important to ensure every step from the purchasing of food through its preparation and serving is controlled.

HACCP Chart

A business has ordered a variety of fresh and frozen fish. Using the HACCP system, explain the hazards and actions you would take at each of the below stages.

What is classed as a hazard?

In food products, a hazard is anything that can cause harm to a customer.

A hazard will be biological, chemical or physical.

Complete the table below with examples for each type of hazard:

Biological
Chemical
Physical

	Hazard	Action
Accepting the Delivery		
Storing the Fresh and Frozen Fish		
Preparing and Cooking the Fish		