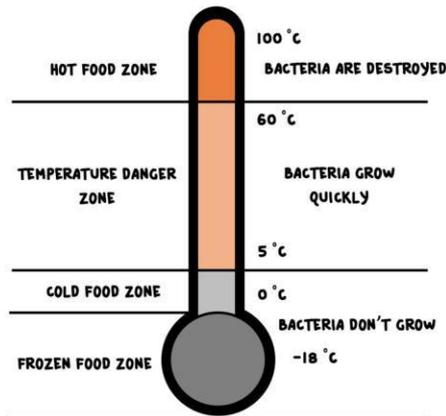
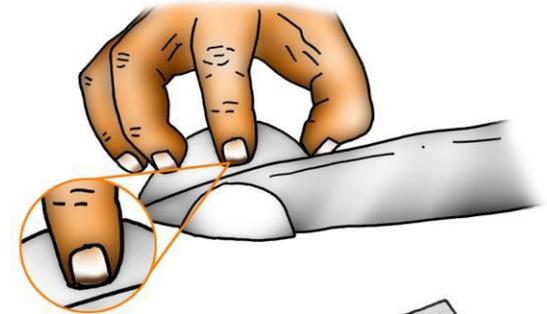


# KnowIT FOOD SAFETY



### Micro-organisms and Enzymes

- Define the term Micro-organisms.
- Where are they found?
- List 3 micro-organisms that cause food spoilage.
- What 5 conditions do micro-organisms need to multiply?
- Define the term 'enzyme'.
- What are toxins?

### Micro-organisms in Food Production

- Define 'non-pathogenic' micro-organisms.
- Identify 2 types of micro-organisms used in cheese production.
- What is pasteurisation?
- List 2 food/ drink products made using yeast?
- Define homogenisation.

### Controlling Microbial Growth

- List 4 ways to prevent microbial growth.
- Name 4 methods of packaging/ preserving foods which control bacterial growth.
- Why is it important to reheat rice carefully?

### Food Spoilage

- Define the word 'ripening'.
- Identify the stages of ripening in banana growth.
- Describe how moulds affect foods.
- List the ways in which yeast spoils fruits.
- What is oxidisation and enzymic browning?



### Buying & Storing Food

- Define shelf life.
- What is meant by 'ambient'?
- Describe what is meant by the term 'tainted'.
- Where would you store low risk foods?
- Typically, what is the temperature of a fridge?
- Identify the storage temperature of a freezer.
- What is meant by the term 'perishable'.

### Bacterial Contamination

- Who is most at risk from food poisoning?
- What causes food poisoning?
- List the main types of food poisoning bacteria.
- How quickly can the symptoms of food poisoning start?
- List the common symptoms of food poisoning.
- Define the term 'spore'.
- What is contamination?

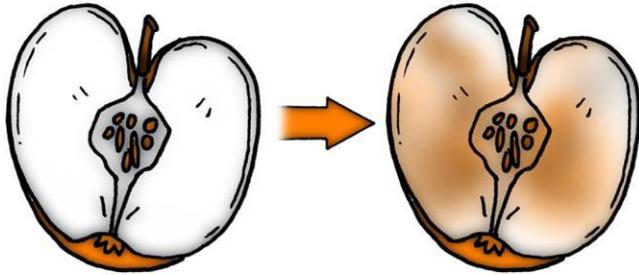
### Preventing Contamination and Cross-contamination

The key to safe food preparation is organisation.

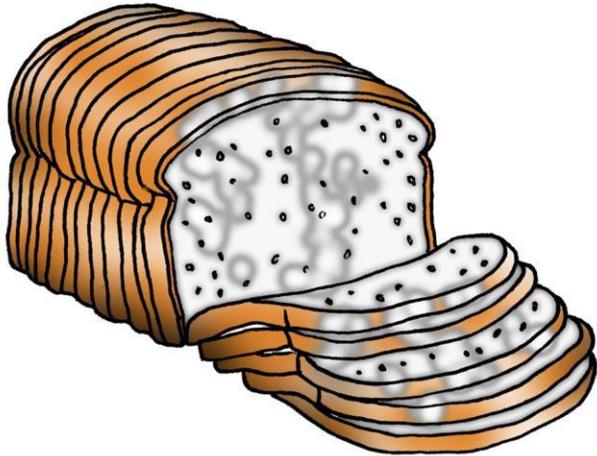
- Define contamination.
- Name the ways in which foods can become contaminated.
- What is cross contamination?
- List 5 ways in which food can be cross contaminated.

### Preparing, Cooking and Serving Food

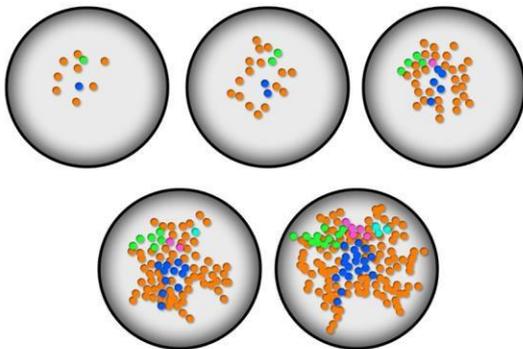
- List the food preparation rules to follow in regards to personal hygiene?
- What temperature should cooked food be kept hot at?
- Why should the core temperature of food be above 75°C.



Yeast



PIXL Technology  
GraspIT  
FOOD SAFETY



- RAW MEAT
- RAW FISH
- COOKED MEAT
- SALAD & FRUIT
- VEGETABLES
- BAKERY & DAIRY



### Micro-organisms and Enzymes

- How do micro-organisms make food unsafe to eat?
- Examine the effects of enzymes on foods.
- Explain what is meant by the term 'pathogen'.
- Discuss why some fruits go brown when being prepared.
- Identify what a 'high risk' food is and give examples.

### Micro-organisms in Food Production

- Explain how micro-organisms are used to make Danish Blue cheese.
- Examine how micro-organisms are used in the production of yogurt.
- Discuss how yeast is used in the production of bread.

### Controlling Microbial Growth

- Explain how preserving foods using the pickling method increases shelf life and reduces the chances of food poisoning.
- Summarise how freezing foods reduces bacterial growth.
- Discuss why modified atmosphere packaging (MAP) is suitable for packaging meat.

### Food Spoilage

- Discuss why bananas are refrigerated during transportation from the producers to the retailers.
- Explain how the discolouration of fruit and vegetables during food preparation can be delayed or prevented.
- Discuss why bread containing mould should be thrown away rather than removed and eaten.



### Buying & Storing Food

- Identify the qualities of a fresh fish.
- Describe the qualities you would expect in fresh fruit and vegetables.
- Explain the qualities to look for when purchasing fresh meat from the butchers.
- Discuss why it is important to store raw meat in the fridge, wrapped/ sealed and on the bottom shelf.

### Bacterial Contamination

- Explain how bacteria grow and multiply in food.
- Define the 'danger zone' and how it is important in reducing the chances of food poisoning.
- Examine how foods becomes contaminated, suggest some ways this could be reduced.

### Preventing Contamination and Cross-contamination

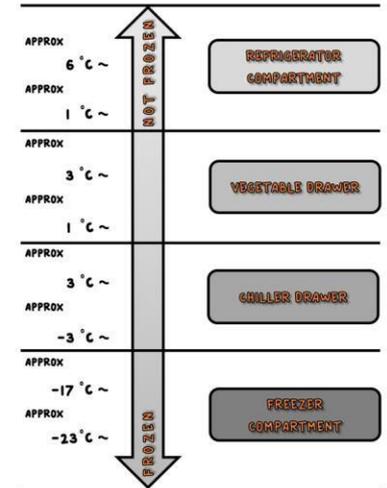
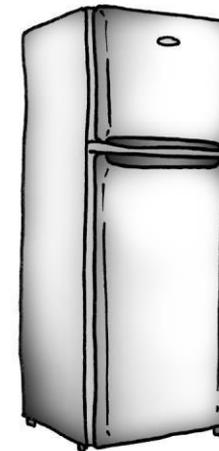
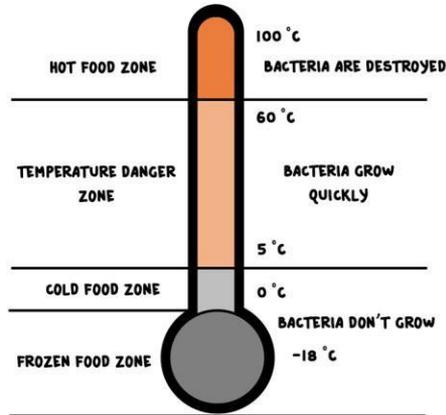
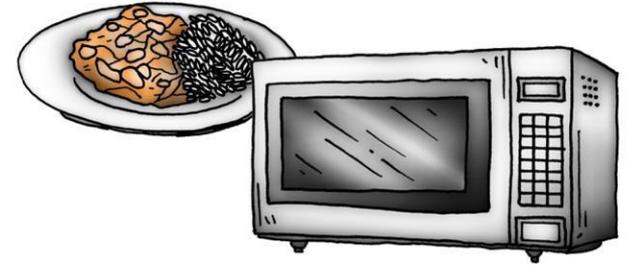
- Explain how the packaging of foods reduces the risk of food contamination.
- Illustrate how high standards of personal hygiene help to reduce bacterial contamination and cross-contamination.
- Discuss the reasons for thoroughly defrosting a chicken before preparation and why it is important that the a cooked chicken product temperature should be reduced to below 5°C within 1½ to 2 hours.

### Preparing, Cooking and Serving Food

- Explain how to correctly use a food probe.
- Discuss why you would use different coloured chopping boards when preparing meals.
- Examine why leftover food should be cooled to a maximum of 5°C within 1½-2hours.



# ThinkIT FOOD SAFETY



### Micro-organisms and Enzymes

- Consider what would happen if a piece of raw chicken was left on a kitchen worktop for 4 hours.
- Think about what would happen to a piece of sliced, white bread if left in a bread bag in warm conditions for 3-5 days.
- Explore what happens to an apple when cut in half and left for 3-5 hours, consider ways to prevent this.
- During bread-making, the dough is left in the fridge, consider how this will affect the dough.

### Micro-organisms in Food Production

- Compare how using different types of yeast (e.g. fresh, dried, fast acting) affects the bread-making process.
- Consider how brie and cheddar have been produced and how this impacts on the final product.
- Justify why yogurt is made with homogenised milk.

### Controlling Microbial Growth

- Compare 2 methods of preservation - identifying how they increase the shelf life of a food. Consider how they affect the food's appearance, texture and flavour.
- Consider what would happen if a wide range of foods were left unwrapped in a Marquee during July as part of a Wedding buffet for 4-5 hours. Explain your points identifying potential consequences.

### Food Spoilage

- Compare the recommended storage conditions for a scone and a packet of minced beef. Justify why these are suitable for each product.
- Consider why it is recommended to store cakes and bread in a cool dry place, in a covered container.
- Justify the importance of stock rotation when storing food at home.
- Consider why jams, pickles, rice and dried pasta have such a long shelf life.



### Buying and Storing Food

- Discuss what consumers should look for when purchasing food from a shop or market stall to ensure that it is safe.
- Compare the star rating system used for refrigerator ice boxes and freezers, suggesting foods suitable for each star rating.
- Consider the disadvantages of storing food in a freezer.
- Compare the use of 'best before' and 'used by dates' on food packaging.

### Bacterial Contamination

- Compare the processes of contamination and cross-contamination.
- Scenario: In a local nursery school 15 children have gone down with a case of food poisoning after eating a chicken and salad sandwich. Symptoms include vomiting, fever and a low body temperature. The EHO investigates and finds evidence that the butchers supplying the meat prepares raw meat and cooked meat on the same board, and that the cook in the nursery has a heavy cold and doesn't use gloves. Investigate the factors contributing to the outbreak of food poisoning, identifying 2 possible bacteria responsible.
- Discuss how food poisoning could be prevented with training in both establishments.

### Preventing Contamination and Cross-contamination

- Consider how you could reduce the risks of cross-contamination when preparing raw chicken for a 'Kiev'.
- Think about why a person could become ill from food prepared using dirty equipment. Consider the steps you would make to prevent this, justifying your points.
- Predict what could happen if you stored uncovered, raw pork on the top shelf of the fridge, next to cooked, sliced chicken breast. Justify your prediction and consider any other potential risks.

### Preparing, Cooking and Serving Food

- Consider why a left over chicken curry should only be reheated once.
- Explore how effective personal hygiene and good kitchen practices reduce the chances of food poisoning in consumers.
- Compare prebiotics and probiotics.