Food safety and hygiene matters

Training presentation for workers in the food industry

toolbox
council knowledge network

Introduction

- Current statistics identify increasing numbers of reported food poisoning cases in Australia. A large majority of these cases stem from incorrect food handling and hygiene practices within the food industry.

- Every person working in the food industry has a responsibility to prepare food that is safe and suitable to eat.

- This training presentation will assist you with this responsibility.

Program objectives

- Assist food businesses achieve the requirements of the Food Safety Standards.

- Provide food handlers with the necessary skills and knowledge of food safety and hygiene matters relevant to their work activities.

- Raise the level of compliance with food legislation throughout the food industry.

Program outline

- Food legislation
- Environmental Health Officers
- Food poisoning statistics
- Food hazards
- Bacterial food poisoning
- Potentially hazardous foods
- Causes of food poisoning
- Prevention of food poisoning
- Food handling controls
- Conclusion
- Assessment.

Food legislation

- ***Food Act 2006*:** ensure that food for sale is safe and suitable for human consumption to prevent misleading conduct relating to the sale of food and to apply the *Australian New Zealand Food Safety Standards Code*. Refer: www.legislation.qld.gov.au

- **Food Safety Standards** (Chapter 3 of the *Australian New Zealand Food Standards Code*): specific requirements for food businesses, handlers, premises and equipment to ensure that only safe and suitable food is sold in Australia. Refer: www.foodstandards.gov.au

What is an Environmental Health Officer (EHO)?

- An EHO is a professional person authorised to conduct inspections of food premises to ensure compliance with food legislation. EHOs have backgrounds in food safety, health promotion and law enforcement.

- An EHO also:
  - assesses food business licence applications
  - investigates food related complaints
  - enforces food legislation
  - consults with food business operators
  - provides training for food handlers.

For more information, contact your local Council

Who has had food poisoning?

Current food poisoning statistics in Australia

It is estimated there are:

- 11 345 food poisoning cases per day.
- 4.1 million cases per year.
- 31 920 hospital admissions per year.
- 86 deaths per year.
- $1.2 billion per year in associated costs.

60-80% of all reported cases come from commercial food premises.

It is also estimated that between 500,000 and 1 million cases of food poisoning occur in Queensland per year.

Costs associated with food poisoning

Food business

- Bad reputation.
- Loss of revenue.
- Business closure.
- Legal action and penalties.

Consumer/economy

- Productivity loss.
- Work absenteeism.
- Medical expenses.
- Hardship and suffering.
- Permanent disability.
- Death.

Hazards that can contaminate food

Food can be contaminated by the following three main hazard types:

- Physical hazards (foreign objects) – metal, wood, glass, plastic, etc.
- Chemical hazards – bleach, caustic soda, detergents, pesticides, etc.
- Microbiological – bacteria, viruses, moulds and parasites.

Food that is contaminated with any of these hazards is unsafe and unsuitable to eat.

Bacterial food poisoning

Bacteria are single-celled living micro-organisms. The most common form of food poisoning is bacterial food poisoning. To survive and multiply, bacteria need:

- Water.
- Food.
- Correct temperatures.
- Time.
- Most, but not all, need oxygen.

Under these conditions, bacteria will multiply by dividing in two every 10-20 minutes. After 6 hours, 1 bacterium can multiply into 262,144 bacteria, more than enough to cause food poisoning.

How does bacteria enter a food premises

Food poisoning bacteria come from five main sources:

- Food handlers (especially their hands).
- Raw foods, such as meat, poultry, shellfish and vegetables.
- Pests and animals.
- Air and dust.
- Dirt and food waste.

Potentially hazardous foods

- Potentially hazardous foods support the growth of bacteria. They need to be kept at temperatures either below 5°C or above 60°C to prevent the growth of any food poisoning bacteria that may be present in the food.

- Examples of potentially hazardous foods include meat, poultry, seafood, eggs, dairy foods, gravies and cooked rice.

Exercise 1

(Quick quiz to reinforce previous slides)

Causes of food poisoning

Food at incorrect temperatures

Under ideal conditions, bacteria multiply rapidly between 5°C and 60°C (the danger zone for food).

- Below 5°C, bacteria multiply slower.
- At freezing temperatures, bacteria stop multiplying and become dormant. **Freezing does not kill bacteria.**
- Most bacteria are killed at temperatures above 60°C.

Causes of food poisoning

Cross-contamination

- Cross-contamination occurs when food becomes contaminated with bacteria from another source.
- Bacteria can be transported by hands, utensils, surfaces, equipment, tea towels, raw food and pests.
- Common examples of cross contamination include unclean hands; dirty knives; utensils; equipment and food contact surfaces (eg chopping boards); blood dripping from raw foods; storing raw food with cooked foods; storing food uncovered; and using dirty cleaning cloths and tea towels.

Causes of food poisoning

Poor personal hygiene

Examples of poor personal hygiene include:

- Dirty hands and clothing.
- Uncovered cuts and wounds.
- Long dirty fingernails.
- Excess jewellery on hands and wrists.
- Coughing and sneezing over food.
- Handling food while ill.
- Not washing hands after going to the toilet.

Causes of food poisoning

- **Unclean food premises**

Dirty kitchens increase the risk of cross-contamination from pests and particles of food, grease and dirt.

- **Poor pest control**

Common pests found in food premises include:

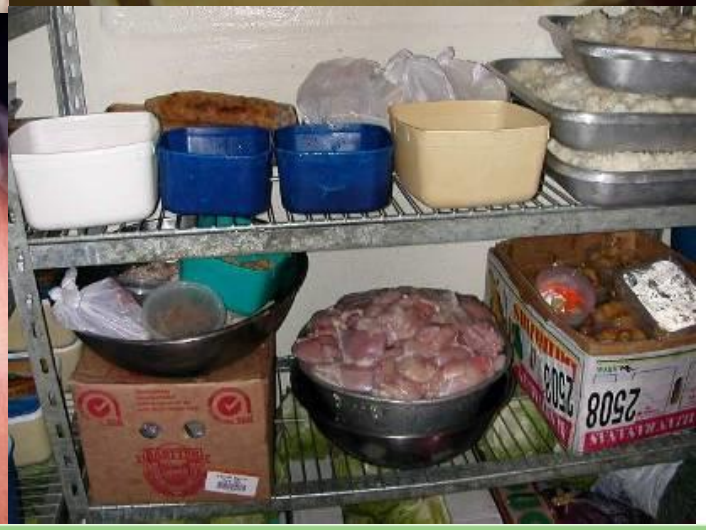
– rats and mice
– flies
– cockroaches.

These pests can carry food poisoning bacteria and may also cause physical contamination of food with their droppings, eggs, fur and dead bodies.

Exercise 2

Photographs for discussion

What are the risks of cross-contamination?



For more information, contact your local Council

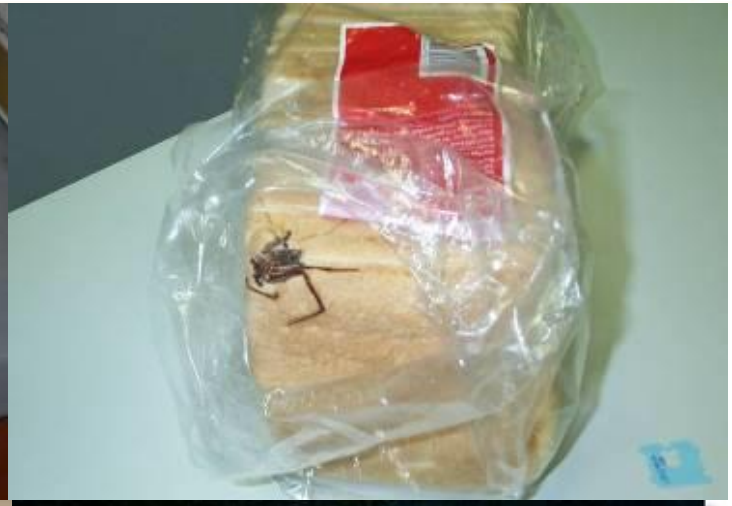
How can this result in food poisoning?

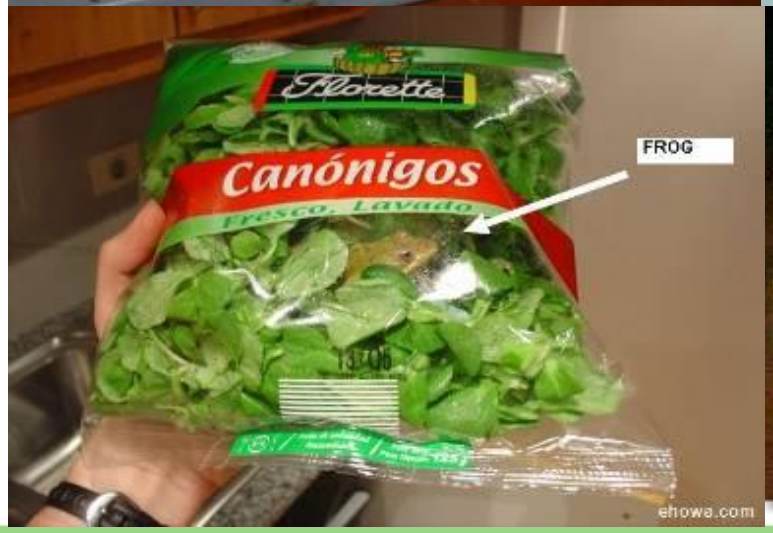
For more information, contact your local Council

How can this result in food poisoning?

For more information, contact your local Council

What are the risks of poor pest control?





For more information, contact your local Council

Prevention of food poisoning

Temperature control

Minimise the time that potentially hazardous foods spend in the danger zone.

Always remember to keep:

- cold food cold at 5°C or colder
- hot food hot at 60°C or hotter.

All food businesses are required to obtain and use a probe thermometer, accurate to +/-1°C to monitor the temperature of potentially hazardous foods.

Prevention of food poisoning

Avoid cross-contamination

- Keep food covered until use.
- Practise correct personal hygiene.
- Separate raw and cooked, and old and new food at all times.
- Use separate equipment and utensils when preparing raw meats, poultry and seafood.
- Clean and sanitise all equipment, utensils and food contact surfaces.
- Store chemicals separate to food.

Prevention of food poisoning

Personal hygiene

- Clean hands and clothing.
- Minimise jewellery on hands and wrists.
- Tie-back or cover hair.
- Clean and short fingernails.
- Avoid unnecessary contact with food.
- Cover all cuts and sores with a brightly coloured waterproof dressing.
- Do not eat over food or food surfaces.
- Do not prepare food when you are ill.
- Avoid touching your face and hair.
- Do not cough or sneeze over food.
- Do not taste food with your fingers or “double dip” with a spoon.
- If wearing gloves, change frequently.

Prevention of food poisoning

When should you wash your hands?

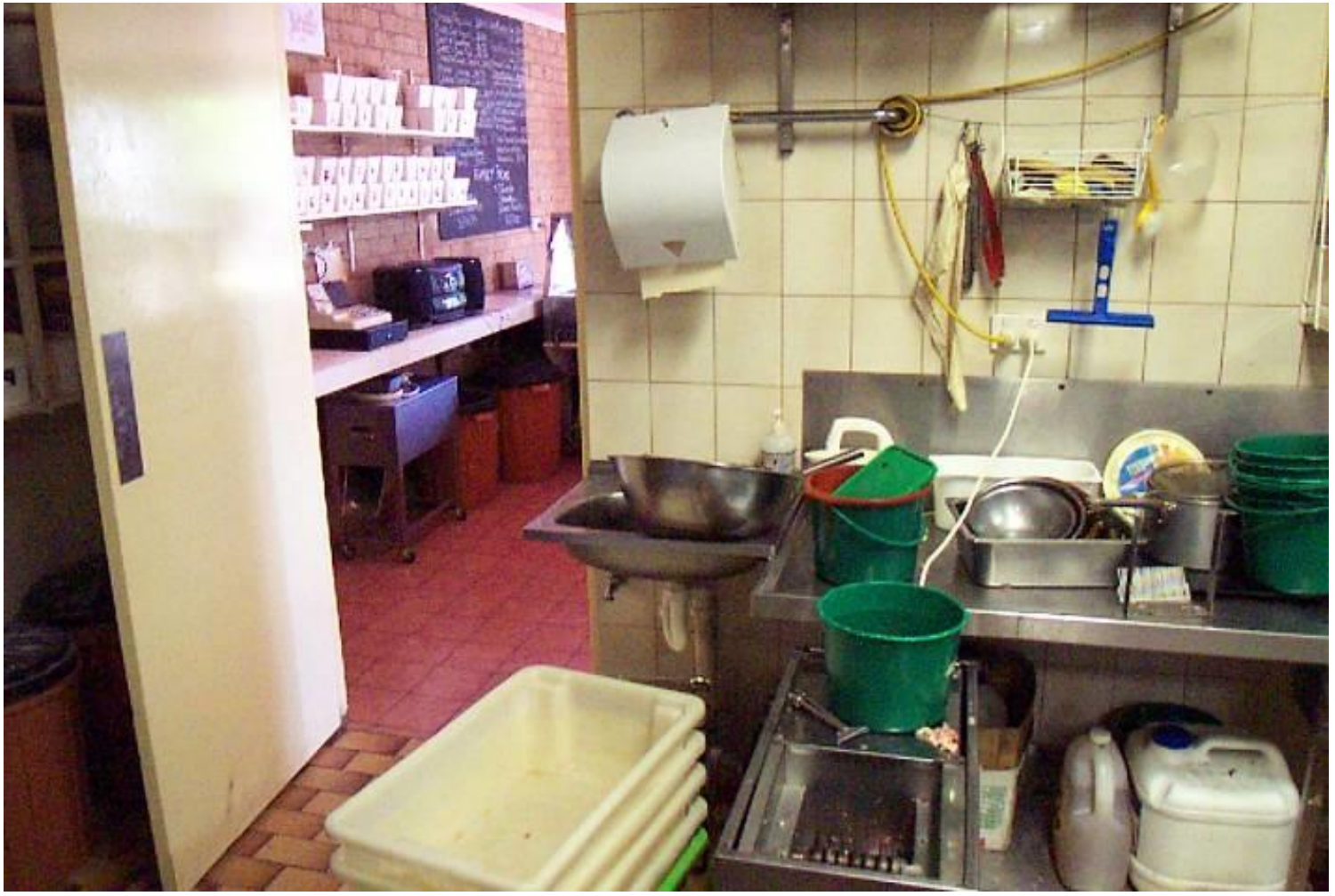
- Before commencing or resuming work.
- After using the toilet.
- After smoking.
- After handling rubbish.
- After using a handkerchief or tissue.
- After touching your hair or face.
- Before and after handling raw food.
- Before handling cooked food.
- After any cleaning task.

Prevention of food poisoning

Hand washing facilities

- Must be accessible to all food handlers.
- To be used only for the washing of hands.
- Provide soap and warm potable water.
- Provide disposable towels for drying hands.
- Provide a bin for the disposable towels.

What is wrong with this hand wash area?



For more information, contact your local Council

Prevention of food poisoning

Cleaning

- Essential for the safe operation of any food business.
- Must be continuous and ongoing.
- Thoroughly clean and sanitise all food surfaces, equipment and utensils with hot water and detergent and chemicals (sanitisers). Remember that most detergents do not kill bacteria, but hot water and sanitisers do!
- Implement a cleaning schedule to ensure that cleaning is conducted on a regular basis (including hard to reach places).

Prevention of food poisoning

Cleaning and sanitising without a dishwasher

- Wear rubber gloves to protect your hands from the hot water and chemicals.
- Remove food particles by scraping or soaking.
- Wash using hot water and detergent – change the water if it becomes cool or greasy.
- Rinse in hot water with chemical sanitiser or in very hot water (above 80°C - only if sink has heating element and rinsing baskets) and leave to soak for 30 seconds.
- Either drip-dry or use a clean tea towel to reduce the risk of cross-contamination.

Prevention of food poisoning

Pest Control

- Keep them out – seal the food premises.
- Starve them out – keep food premises clean.
- Throw them out – conduct regular pest inspections or services.
- Don’t give them a home - remove all unnecessary equipment and items.
- Report all pest sightings or evidence of pest activity to your supervisor.

Prevention of food poisoning

Waste management

- Place waste in plastic lined bins.
- Remove all waste from the premises as required.
- Empty and clean waste bins regularly.
- Ensure all external bins are covered.
- Protect external waste bin area from pests and birds.

Prevention of food poisoning

Food safety supervisors

From 1 July 2008, all licensed food businesses must have an approved food safety supervisor.

A food safety supervisor is a person who is responsible for day-to-day food safety and has relevant expertise or experience in food safety matters.

The food safety supervisor needs to be reasonably contactable by Council when the business is operating.

Prevention of food poisoning

Food safety programs

A food safety program is a documented system that identifies, monitors and controls food hazards to prevent contaminated food from reaching consumers.

You may need a food safety program if your food business:

- Involves off-site catering.
- Involves on-site catering.
- Serves and/or prepares potentially hazardous food to vulnerable persons, e.g. private hospital, childcare centre, meals on wheels or nursing home.

Food handling controls

Supply – use food suppliers that have a good reputation.

Receival – check temperatures of potentially hazardous foods on delivery and store at the correct temperature as soon as possible. Do not accept potentially hazardous food unless it is delivered under temperature control.

Storage

- 0 to 5°C for fresh; -18°C to -24°C for frozen; and 60°C or above for hot food
- Keep food covered and up off the floor.
- Separate food types (meat, poultry, seafood, dairy, fruit & veg).
- Separate raw food from cooked and new food from old.
- Store raw foods such as meat, poultry and seafood in containers on the bottom shelf of the coolroom or fridge.
- Rotate stock ("first in, first out").

Food handling controls

Preparation

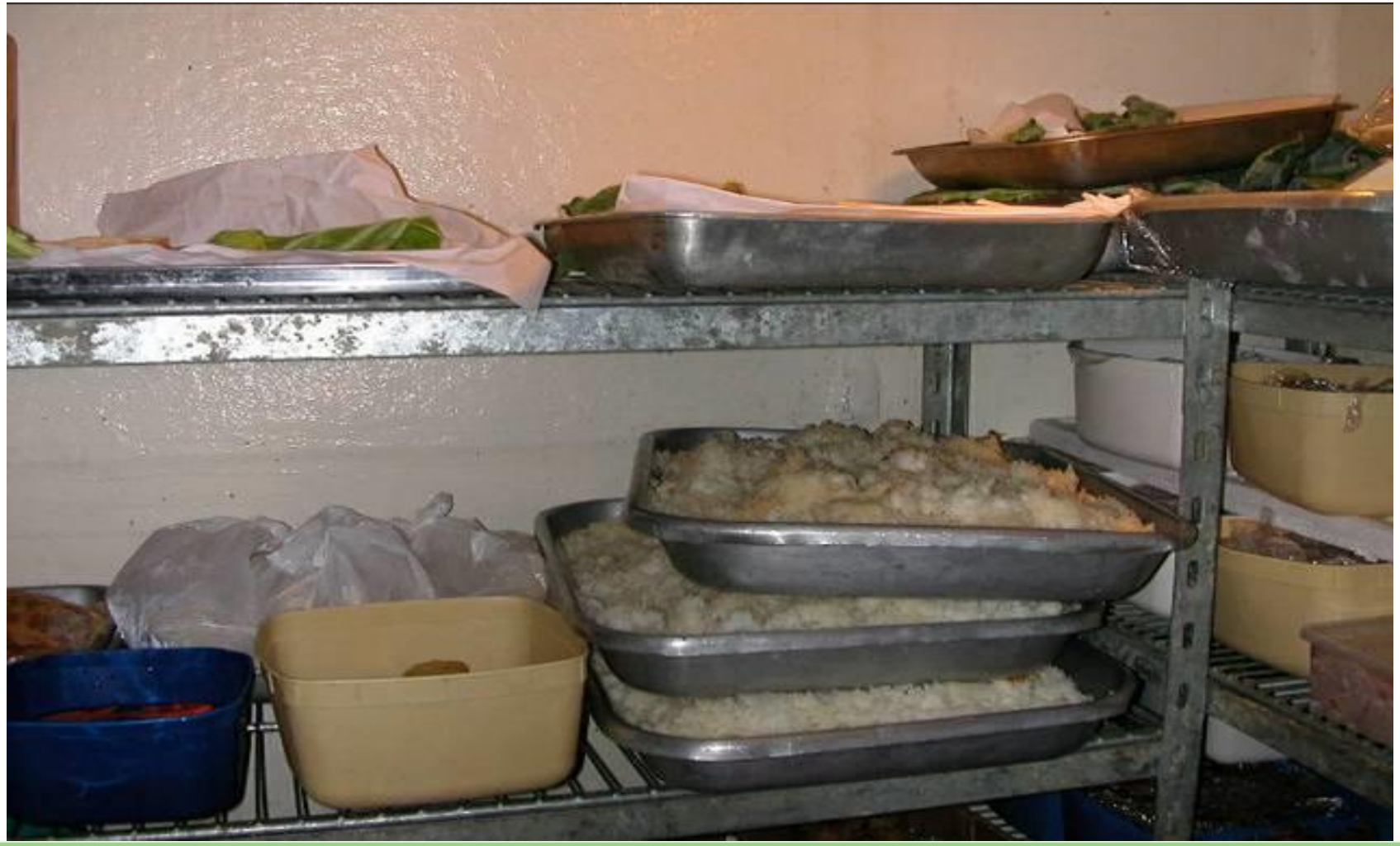
- Personal hygiene.
- Ensure that equipment, utensils and surfaces are clean.
- Temperature control.
- Avoid cross contamination.
- Don’t prepare food too far in advance.

Cooking – ensure correct internal temperatures are achieved, using your probe thermometer.

Cooling

- Cool to 5°C within 6 hours.
- Cool in shallow containers in a well-ventilated area.
- Cover only when cooled thoroughly.

What are the risks of cooling and storing food like this?



For more information, contact your local Council

Food handling controls

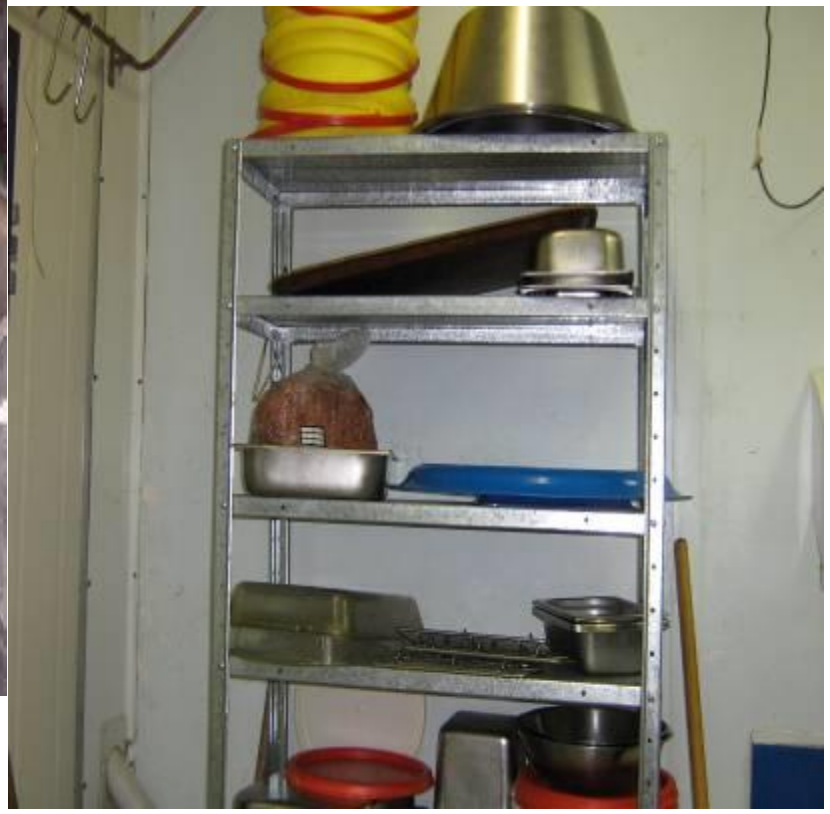
Reheating

- Reheat food rapidly to 60°C or above.
- Ensure correct internal temperatures are achieved, using your probe thermometer.
- Never reheat food in a bain marie or hot box.

Thawing

- Thaw foods in the coolroom or fridge on a drip tray.
- Thaw only small food items in the microwave, then cook immediately.
- Always ensure thorough defrosting before cooking.
- Never thaw foods at room temperature.
- Never thaw food in water.
- Never re-freeze thawed food.

What are the risks of thawing food like this?



Food handling controls

Displaying – protect food from contamination and keep potentially hazardous foods under temperature control.

Hot holding (bain maries, pie warmers and hot boxes)

- Pre-heat hot holding equipment before adding food.
- Heat food to above 60°C before hot holding.
- Maintain temperature of food above 60°C.
- Conduct regular temperature checks using your probe thermometer.

Packaging – protect food from contamination and use suitable packaging materials.

Transporting – protect food from contamination and keep potentially hazardous foods under temperature control.

Food handling controls

Food disposal

- Label food and keep separate.
- Destroy food or return to supplier.

Food recall – a food business involved in wholesale supply, manufacture or importation of food must have a documented system in place to ensure the recall of any unsafe food.

Be a pro-active food handler

- Report or prevent all suspected breaches of food safety.
- Report all evidence of pest activity.
- Conduct regular temperature checks of food with your probe thermometer.
- Implement a cleaning schedule.
- Obtain and read a copy of the Food Safety Standards.
- Encourage other food handlers to attend food safety training programs like this one.
- Be aware food hazards are everywhere! Don't give them any opportunity to contaminate food.
- Always remember - prevention is better than cure.

Conclusion

It is essential that food handlers have the required skills and knowledge of food safety and food handling controls to minimise the risk of food poisoning.

As a food handler, it is your responsibility to ensure that food for your customers is safe and suitable to eat.

Happy and safe cooking!

ASSESSMENT