Australian Food Safety Essentials
SAFE FOOD HANDLING (8min)

The greatest threat to food safety is food poisoning bacteria. Food poisoning bacteria grow well on low acidic, moist and protein-rich foods.

This includes raw and cooked meat, poultry and seafood; dairy products, food made from eggs, nuts or beans; small goods, cooked rice, fresh and cooked pasta; processed fruit and vegetables or any other foods with these ingredients.

These foods are called potentially hazardous foods - or PHF’s, because they support bacterial growth well. You need to keep these foods cold, at 5º C or less, or keep them hot, at 60 ºC or more.

In this module, we look at safe food handling of potentially hazardous foods and their temperature control during:

• Food Receipt
• Storage
• Preparation
• Cooking
• Serving, and
• Handling of Leftovers

Food Receipt

• Food should be delivered in appropriate packages or containers, to protect it from contamination.

• The label tells you what the food is and names the supplier, so that in the case of a recall, food can be traced back to its source.

• Do random checks on regular deliveries. If you have a new supplier, check the initial deliveries as well.

• Reject deliveries where the packaging around the food is damaged.

• Look out for unusual smell or discoloration, or signs of vermin.

• Make sure frozen food is frozen solid.

• Chilled foods should be 5º C or less.

• It’s a good practice for a staff member to be present when food is delivered, so that potentially hazardous food is not left lying at room temperature.
Food Storage

- Store food off the ground on shelves.
- Food should be stored in appropriate containers, covered or sealed.
- Put older stock in front of recently received goods to allow for good stock rotation.
- Storerooms should be kept clean and tidy to avoid attracting pests.

**Refrigeration:**

- Keep the fridges or cool room running at 5° C or less.
- Store raw or thawing food on the bottom shelf of the fridge or cool room. From here, the row juices cannot drip onto other food and contaminate it.

**Freezing:**

- Food should be frozen hard.
- Freeze food to -15 °C or less, or follow the recommended storage temperatures on the label.

**Food Preparation:**

- Before handling food, wash and dry your hands thoroughly.
- Wash all fruit and vegetables thoroughly to remove dirt and bacteria.
- Work only on clean, sanitised and dry surfaces and use only clean, sanitised and dry equipment and utensils.
- Don't use the same chopping boards or utensils for raw and then ready-to-eat food.
- If you have to use the same utensils, clean, sanitise and let them dry before reuse.
- Check food for spoilage before you use it. Look out for discoloration, mould or infestation.
- Keep the time that food is out of the refrigerator to a minimum.
- Put food back into the fridge as soon as it is ready.
Thawing Food

- Make sure food is thawed entirely before you use it.
- The safest place to thaw frozen food is in the refrigerator or cool room - on the bottom shelf.
- You need to plan ahead, as it takes time for food to thaw completely throughout.
- You can also use a microwave oven; however, you must cook the food immediately afterwards.

Cooking

- Cook foods thoroughly.
- This is usually achieved if the core of the food reaches 75°C or hotter.
- You can check the temperature with a probe thermometer.
- Remember, the probe must be clean and sanitised before use.
- In poultry, minced meats, rolled meats and sausages, bacteria can be found completely throughout. These foods must be thoroughly cooked, so that the juices run clear.
- Solid meat cuts are more likely to be contaminated with bacteria only on the cut surfaces. Searing the meat on all surfaces will reduce the number of bacteria to a safe level.
- Cool food quickly. Divide food into smaller portions or pour in shallow containers. You can leave it to cool for 20 - 30 minutes before placing into the cool room or freezer.
- To speed up cooling, keep space between foods, so that cold air can circulate well.

Serving

When holding ready-to-eat food, remember the rules:

1. Keep cold foods cold: at 5°C or less.
2. Keep hot foods hot: at 60°C or hotter.
For potentially hazardous food that is held between 5º C and 60º C you have two choices:

1. If you want to use it at a later stage, you must put it into the fridge within a total of 2 hours of being at a temperature between 5º C and 60º C and that includes preparation and delivery time.

2. If it is for immediate consumption, it may stay between 5º C and 60º C for 4 hours - and again that would include preparation and delivery. After 4 hours you must throw it out.

Here is an example:

a) It takes one hour to prepare these sandwiches in the morning for a lunchtime function.

b) The sandwiches are then refrigerated.

c) They are taken out of the cool room at 11.30 am, and held at room temperature over lunch.

Because preparation of the sandwiches took one hour, they can only be held at room temperature for a further 3 hours.

By 2.30 pm, all uneaten sandwiches are then thrown out

- Use tongs or other barriers when handling ready-to-eat food.
- Serve all food with clean utensils. All crockery and cutlery must also be clean.
- Covers, packaging or sneeze guards must protect food on display from potential contamination by the consumer.
- Don't refill trays, mixing old food with fresh food; replace the tray with freshly prepared food.

Handling Leftovers

- Refrigerate leftovers within 2 hours of cooking. Use all refrigerated leftovers within three days.

- **REMEMBER**: If in doubt, throw it out.

- If you have to re-heat leftovers, it’s a good practice to cook it for at least 2 minutes if possible - steaming hot.

- Potentially hazardous food shouldn't be cooled and re-heated more than once.
PERSONAL HYGIENE (4 min)

In this module we will talk about hand hygiene, gloves and hygienic conduct.

- When you handle food with contaminated hands, you can transfer bacteria.
- A simple but very effective way to prevent contamination of food is by washing and drying your hands thoroughly.
- You must wash your hands immediately before handling food. Even when you handle food with gloves, tongs or utensils, your hands must be clean.

How Well Do You Wash Your Hands?

Here’s a simple test:

- We’re putting a gel on this person’s hands.
- When dry, this gel is invisible to the naked eye.
- However, it will show up under ultra-violet light.

- Let’s see how much of the gel is still there after a casual hand wash.
- As you can see, there is still gel left on the hands. And just like bacteria, unless you wash and dry your hands properly, you still leave it on your hands.
- This time the hands were washed properly.

Hand Washing

Use warm water and soap.

All surface areas of your hands must be washed:

a) The wrists
b) Between your fingers
c) The palms of your hands
d) The fingers and tips, and
e) The back of your hands

- Rinse thoroughly with warm water.
- It is important that you dry your hands well with a disposable or single use towel.
- It is very effective if you use these in combination with a blow dryer.
- Don’t wipe your hands dry on your clothes, as they can contain bacteria.
When To Wash Your Hands

You must wash your hands immediately before handling food.

Here are some other reasons to wash your hands:

- After touching raw meats, poultry and vegetables
- After blowing your nose or touching other parts of your body, like ears, mouth or hair
- After eating
- After smoking
- After going to the toilet
- After putting away the rubbish
- After any unhygienic practice

You are encouraged to wash your hands frequently during your shift. Don't forget to dry them properly.

Gloves

- Use barriers when handling ready-to-eat food.
- You may also use gloves, but wash your hands first before putting them on. If your hands are dirty, you will transfer bacteria onto the gloves you put on.
- The gloves must be clean, and not ripped or torn.
- To prevent cross-contamination, use a new pair of gloves for each new task. You should never use the same gloves for raw meats and then for ready to-eat foods.
- Disposable gloves should not be worn for longer than one hour.
- Wear disposable gloves over brightly coloured dressings to protect minor cuts or wounds.
**Hygienic Conduct**

- Keep your fingernails short and clean.

- Wear only minimal jewellery, such as a plain-banded ring. Bacteria hide easily on jewellery, making it harder for you to wash your hands thoroughly.

- Long hair should be tied back.

- Wear clean protective clothing.

- Take it off when you put out the rubbish, go to the toilet or when on a lunch break.

- Don't eat where you prepare food.

- Don't cough or sneeze over food.

- If you suffer from an illness report it to your supervisor.

**For example**

- You must not work with food if you have diarrhoea or gastroenteritis.
CLEANING AND SANITATION (5min)

In this module we focus on cleanliness of the premises, fixtures and fittings; cleaning and sanitation; and the maintenance of equipment.

- Make sure that the premises, fixtures and fittings are clean.
- There should be no build up of grease or dirt, of food waste or mould. Clean not only the obvious areas, but also behind equipment and in areas less easy to reach.

It is a good practice to clean up spills as soon as possible.

For an efficient cleaning program you must have a daily and weekly cleaning routine of.

- Wiping and sanitation bench tops
- Mopping floors
- Cleaning back splashes and stove tops
- Clean at least once a day at the end of the shift, or as often as necessary.
- Range hoods must also be cleaned regularly. Fluff and grease collect in the fitters, and the build-up is a fire hazard. Small bits could fall into the food underneath. Change or clean filters regularly.
- When dishcloths get dirty, they are a good nourishing ground for bacteria. Exchange them for fresh ones frequently.
- Remove rubbish at least once a day. Rubbish bins and containers for recyclable material should not overflow. It's best to have a lid on them.
- Food scraps and general untidiness attract pests, can cause slips and trips and may even be a fire hazard.
Utensils and Equipment

- All eating and drinking utensils must be cleaned and sanitised before being used.
- To be clean, a utensil has to look clean, smell clean and feel clean.
- Cleaning removes food particles and grease, but does not kill or remove all the bacteria and viruses.
- Sanitation is required to reduce the number of micro-organisms present on a surface to a safe level. This is a level that does not allow the spreading of a contagious disease and does not endanger food safety.
- You also have to clean and sanitise surfaces that come into contact with food.
  1) Think of chopping boards, storage containers, cooking or processing or other equipment, and things like thermometer probes.

To sanitise, you can use heat or sanitation chemicals or both. The choice is yours.

Use proper sanitation procedures and follow the manufacturer's instructions on correct use and dosage of cleaning and sanitation chemicals. Always add the active agent to the water last.

- Store chemicals separate and away from food.
- Many commercial dishwashers will both clean and sanitise.
- If you wash dishes by hand, complete the following steps:
  1. Scrape off any food remains
  2. Wash with hot water and detergent
  3. Rinse
  4. Sanitise according to manufacturer's instructions, and
  5. Air dry

After sanitisation, all equipment should be air-dried thoroughly. If you use towels, they must be clean and dry.
Equipment Maintenance

Slicers, grinders, mixers and other equipment need to work safely.

- Don't operate machinery where the machine guarding has been removed or where protective parts are missing.

To clean machinery,

- Scrape off any food remains and wipe surfaces.
- Disassemble, wash and sanitise the equipment according to the manufacturer's instructions.

It is important to disassemble the equipment. Food particles can get stuck in corners, folds and creases and become a bacterial breeding ground that contaminates the food you process.

The equipment, especially the crockery,

- Should not be cracked, chipped or broken.
- Broken or chipped parts could end up in the food, or cracks in the eating and drinking utensils could impede efficient cleaning and sanitation
- This would endanger food safety.
TEMPERATURE MONITORING (3min)

- Potentially hazardous foods need to be kept under temperature control.
- For this reason you must have a thermometer in the kitchen and it must be easily available.

A thermometer helps you:

1. to check the temperature of foods upon delivery
2. to ensure that foods are cooked, cooled and re-heated at safe temperatures, and
3. to check that potentially hazardous foods are held at correct temperatures

Use a probe thermometer and insert it into the centre of the food.

Thermometer Use

a) Insert the probe right into the core of the food, and wait a moment for the reading to stabilise.

b) The probe should be cleaned, sanitised and dried before each and every use. This is important when checking different foods to avoid cross contamination.

c) Wipe off food remains and wash the probe with warm water and detergent.

d) Sanitise according to the manufacturer's instructions.

When you sanitise the probe with an alcoholic wipe, wait until the alcohol has evaporated.

- You may also sanitise the probe by leaving it in hot water above 77°C for 30 seconds.
- Let the probe air dry or dry thoroughly with a disposable towel.
- When checking temperatures of hot and cold food with the same probe, it should reach room temperature between measurements.

Fridges, cooling or holding units can distribute temperatures unevenly. It is a good practice to check the temperature of foods in different areas of the unit.

In the case of sealed food or frozen food,
- You may place the length of the probe in between the packages. This method will give you a close indication of the temperature at the core of the food.
Thermometer Check

- The thermometer must be accurate to +/- 1°C.

Here's a simple test to check the accuracy of your thermometer:

  a) Fill a container with equal amounts of crushed ice and water and wait 5 minutes.

  b) Place the probe into the mixture and leave it in a few minutes. An accurate thermometer will read 0°C.

  c) If the display shows a temperature outside the range of –1°C to +1°C, the thermometer is not accurately calibrated. You should not use it for temperature control.

An incorrect reading could be the result of a flat battery.