

167 Practise Food Safety Methods in a Food Business Under Supervision V9





Welcome & Introduction



Risks to Safe Food



Control Methods



Temperature Management

Welcome

This is the Innovative Hospitality Learning for
167 Practise Food Safety Methods in Food Business
Under Supervision

Unit Standard:

167

Version:

9

Credits:

4

Level:

2

We encourage you to use your skills and knowledge from your workplace and this learning to help you gain your qualifications and prepare for your assessment.

Course Aim

To give you the knowledge and skills to follow safe procedures for handling, storing, processing, Transporting and preparing food; and to identify causes of food spoilage, food contamination and food poisoning; and to apply preventative Methods.

Course Objectives

- Upon completion of this course you will be able to:
- Maintain personal hygiene when working with food
- Demonstrate clean and safe ways of handling food
- Demonstrate knowledge of cleaning and cleaning materials
- Understand the risks of bacteria and virus transmission
- Demonstrate knowledge of the control measures which prevent food spoilage, food contamination, and food poisoning.
- Demonstrate knowledge of the areas of risk in food handling
- Measure, record and act on the temperature of high risk foods

The Assessment

- The NZQA set the standards and outcomes for this unit. Ringa Hora who are the Workforce Development Council for the hospitality industry pre moderate and post moderate the assessment for this unit.
- Observation of your personal hygiene and work practice by your supervisor is also a component of this Unit Standard.

What is Food Safety?

Food safety means producing food items which are clean, safe and of good quality

Why is this important ?

People have the right to expect the food they eat to be safe and suitable for consumption. Foodborne illness and foodborne injury are at best unpleasant; at worst, they can be fatal. But there are also other consequences.

Outbreaks of foodborne illness can damage trade and tourism, and lead to loss of earnings, unemployment and litigation. Food spoilage is wasteful, costly and can adversely affect trade and consumer confidence.

Because of the increase in convenience and prepared food in the last 50 years it has become more important for all people involved in food handling situations to be aware of the dangers of cross contamination and food poisoning. When you are preparing food items for a few people like your family, only a small number of people may be affected if anything goes wrong. However, when you are in the situation of preparing for many people, such as a restaurant or food processing plant, this could mean hundreds of people could be affected so good food hygiene practices are vital.

Food Safety and Legislation

The Food Act 2014 took effect on 1 March 2016 and became fully in force from 1 March 2019. It helps make sure that food sold throughout New Zealand is safe.

Go to following website for more information [Food business | Food business | NZ Government \(mpi.govt.nz\)](https://www.mpi.govt.nz/food-business/food-act-2014/)

<https://www.mpi.govt.nz/food-business/food-act-2014/>

The Act promotes food safety by focusing on the processes of food production, not the premises where food is made. For example, someone who makes and sells food from a food truck must follow the same rules as someone who makes and sells food at a restaurant.

The Act introduced other changes, including: the way food recalls are managed; changes for food importers, and penalties and enforcement.

Who enforces New Zealand's food laws?

Food safety officers (previously known as Food Act officers) are responsible for enforcing the Food Act. They investigate non-compliance and complaints regarding the safety and suitability of food.

All food safety officers are employed by either MPI or a local council, and along with Public Health Officers they investigate any situation where food safety may have been compromised. New Zealand's food legislation applies to all food for sale in New Zealand and food that is exported.

Food Poisoning

An illness which can start between 1 – 48 hours after eating contaminated food.

Symptoms usually include vomiting or diarrhoea - sometimes both.

Food poisoning occurs when bacteria have been allowed to grow and multiply in the food.

Common symptoms of food poisoning are:

- Diarrhoea
- Vomiting
- Headaches
- Body fever
- Stomach cramps



Common Causes of Food Poisoning

Definition: An illness caused by eating contaminated food

The number of notified cases of food poisoning in New Zealand has risen in recent years and is of major concern to health authorities. Many health professionals believe that the notified food poisoning out-breaks may only be one-tenth or less of the true number of cases and that many mild illnesses never get reported and are often written off or blamed on other things.

It is estimated that the true figures for food poisoning in N.Z. last year was in fact as high as 200,000 cases.

The audit office estimates that the cost to the country could be as high as \$60-\$100 million a year in loss of work time and revenue.

Food poisoning can cause much personal suffering. All food workers, whether working in commercial food premises or the home, must be aware of their obligations to others when preparing or serving food.

What are the most common causes of food problems?

- Poor personal hygiene of food workers
- Current or recent illness of food workers
- Inadequate temperature control of food
- Unsafe food being used
- Bad handling practices by food workers
- Food being prepared in unsafe food premises
- The presence of insects and rodents in food preparation areas

Personal Habits

Human beings carry bacteria in their hair, teeth, under nails and hands and on their bodies. If you work with food it is important to maintain good hygiene.

Good personal habits that prevent food contamination	Bad personal habits that can cause food contamination
Washing hands often	Handling money and food at the same time
Drying hands on a paper towel	Scratching yourself
Wearing hair nets or masks	Using the same chopping board for different food types
Using disposable gloves	Using your mobile phone
Using separate chopping boards for different food types	Touching your hair
Sampling and serving food with clean utensils and never twice.	Spitting or spluttering
Removing jewellery and nail polish	Touching your mouth
Using tongs to handle food	Picking your nose

Common Viruses and Conditions



Hepatitis A



MY NAME
IS
CORONAVIRUS



Influenza



Common Cold/Flu



They can be airborne or passed through droplets and body fluids
Anyone sick at work or customers can pass these on to others

Being Sick and Unwell

Everyone who handles food should be healthy. Food can become contaminated by people who are unwell with certain infections or are carrying the bugs in or on their body.

Harmful microbes can be transmitted through a sick person's faeces, vomit and in some cases other body fluids and droplets.

Viruses are passed from humans to food and then onto humans again. They are highly contagious and be spread by coughing, sneezing or blowing your nose around food.

In this section we are explaining what you, your employer and doctors need to do if you are sick either before work or at work.



Prevent Food Contamination when you are sick

If you have any of the following symptoms:

- **Coughing**
- **Sneezing**
- **Vomiting**
- **Diarrhoea**
- **Fever**
- **Nausea**
- **Infected Skin**

Before you go to work

- Call work and don't come in
- Don't come to work until 48 hours (2 Days) after your symptoms have gone
- See the doctor and find out what the problem is

If you got the symptoms while you were at work

- Arrange to leave work immediately
- All food you were working with is to be thrown away
- All surfaces to be fully cleaned
- Don't come to work until 48 hours (2 Days) after you symptoms have gone

Pest Management



Insects like
Flies, Cockroaches,
Ants

- Keep doors and windows closed
- Keep foods attractive to insects in closed containers
- Turn on electronic insect catchers
- Keep rubbish bins tidy and securely closed
- Dispose of rubbish regularly
- Keep work area clean



Rodents
like Rats
and Mice

- Maintain rodent traps
- Keep foods attractive to rodents in closed containers
- Keep rubbish bins tidy and securely closed
- Dispose of rubbish regularly
- Keep work area clean
- Check for gaps and holes and fix



Birds
like
Sparrows,
Seagulls,
Crows

- Keep doors and windows closed
- Keep foods attractive to birds in closed containers e.g. sugar bowls
- Keep rubbish bins tidy and securely closed
- Keep work and service areas clean
- Discourage patrons from feeding and attracting birds.



Domestic
Animals
like Cats
and Dogs

- Keep doors and windows closed
- Keep rubbish bins tidy and securely closed
- Keep rubbish in fenced off area to stop cats and dogs getting into them
- Keep work and service area clean
- Discourage /ban patrons from bringing pets onto the premises

Preventing Cross Contamination

Personal Hygiene

The number one risk to safe food is humans. So it is really important to be properly groomed. To keep your hair, clothing , hands and nails scrupulously clean and jewellery removed.

Contaminant	How can it spread to food?	What can you do to stop it spreading to food?
Hair	Hair traps and provides a great environment for bacteria to grow. As it can drop into food and cause bacteria to cross-contaminate.	Keep hair clean, tie it back and wear a hat or hairnet. Never brush it or adjust in a food preparation area.
Clothing	Dirty clothes can carry dust, hair or other food particles that can drop into food or cause dirty hands	Wear light coloured washable clothing, use a clean cloth or disposable aprons Proper shoes to protect feet.
Hands and Nails	Dirt collects under nails, unclean hands can result in contamination of the food.	Keep nails short and scrubbed with a brush. No nail polish Wash hands after every food type every time you use the bathroom, your mobile phone or handle money etc
Jewellery	Bacteria can build up under a ring or watch and then contaminate food.	Remove all jewellery before working with food.

Preventing Cross Contamination

Handling

Handling food during preparation, cooking and serving is often a time when bacteria can enter the food. Unclean hands are one of the biggest risk factors for safe food.

To prevent cross contamination of food or allergens you can:

- Use Disposable gloves – they do not replace handwashing and you must use a new set for each new tasks and throw them away after use.
- Use hygienic hand drying methods – using the air dryer or paper towels
- Use tongs – tongs must be washed, sanitised and only used for one food type
- Sample food with clean utensils – mouths contain bacteria so you must use a new spoon or fork each time you sample the food.



Preventing Cross Contamination

Cleaning and Sanitising

For food handling to be safe, work areas and equipment must be maintained in a safe and hygienic manner. This means all work areas and equipment need to be cleaned and sanitised. Cross contamination occurs when pathogens are transferred to food from pests, work surfaces, equipment other food and people.

Unclean premises and equipment will allow microbes to grow, which can then contaminate and cause food-borne illness.

Dirty premises can attract pests

Good cleaning practices will help prevent cross-contamination.

Always clean a surface or equipment after preparing a dish.

Clean with detergents to remove dirt and grease

Sanitise after cleaning with boiling water (above 77°C)

Use the manufacturers instructions

Preventing Cross Contamination

Control Pests



Pests present a risk to food safety through:

- Physical contamination such as droppings
- Biological Contamination such as bacteria
- Physical damage to food and/or packaging



They will take over areas that aren't kept clean and tidy.
They love rubbish areas and where they can find food scraps.
There is a good chance they'll pass their bacteria and viruses
when they are around food areas



Inspect regularly, look for evidence such as eggs, droppings, food spillages, damaged packaging and consider employing a professional pest eradicator,

Preventing Cross Contamination

Manage Waste Safely



Food or other waste can contain
bacteria and attract pests

Regular removal of rubbish keeps the
food handling area free from clutter,
Discourages insects, rats or mice in
food preparation areas, reduces the
risk of cross-contamination, ensures
the premises meets its requirements
under the food hygiene regulations

Preventing Cross Contamination

Store Food Correctly

Food is at risk when not stored properly from pests or incorrect temperatures. Food must always be sorted properly for its type. For example frozen food or ambient food that is safe to be stored at room temperature – examples include rice, dried pasta and biscuits can be kept out of the fridge but must be off the ground in containers.

Important things to remember
Ready to eat products must be covered if not in packaging
The storage areas most at risk from rodent (mice, rats) infestation
Stored food should always have good airflow around it. This means that the temperature will remain constant (unchanging) and decreases the chance of bacteria, fungal or mould growth.
Food must be stored off the floor to avoid pest infestation.
Chilled food should be stored at or below 5°C in a clean area off the floor
Frozen food must be stored in a freezer below -18°C and off the floor
The temperature of chilled cabinets, chillers and freezers and a sample of food stored must be checked. Check several times throughout the day to make sure they are all working properly - if not at the right temperature corrective action needs to be taken.
Storage areas must be kept clean. Workplace schedules for cleaning should be used.

Killing and Controlling Micro-Organisms

Humans have devised methods to protect their food – even before fridges, every culture has ways of doing this !



Cooling and Freezing



Salting



Remove moisture



Irradiation- Ultra violet light



Smoking



Vacuum Packing



Bottling and Canning



Killing and Controlling Micro-Organisms

Clean

- Wash and dry your hands correctly before and after handling food
- Clean and sanitise work surfaces and equipment before and after they touch food.



Cook

- Cook food to at least 75°C
- Keep Raw and cooked foods separate
- Use different utensils and chopping boards for raw and cooked foods
- Defrost thoroughly before they are cooked all the way through,

Chill

- Keep chilled food at or below 5°C
- Ensure your fridges are working within 2°C to 4°C
- Keep raw and cooked food kept separate
- Keep raw foods lower than cooked food to avoid dripping on cooked food
- Keep food covered in the fridge.
- Cover and refrigerate perishable food quickly.
- Freeze at 18°C

High Risk Foods

Food poisoning bacteria prefer to live and grow in foods that are high in protein and moisture. These are foods such as meat, stocks, gravies, eggs, poultry, kai moana, dairy products, cooked rice and pasta, pre made salads as well as any products made from these foods.

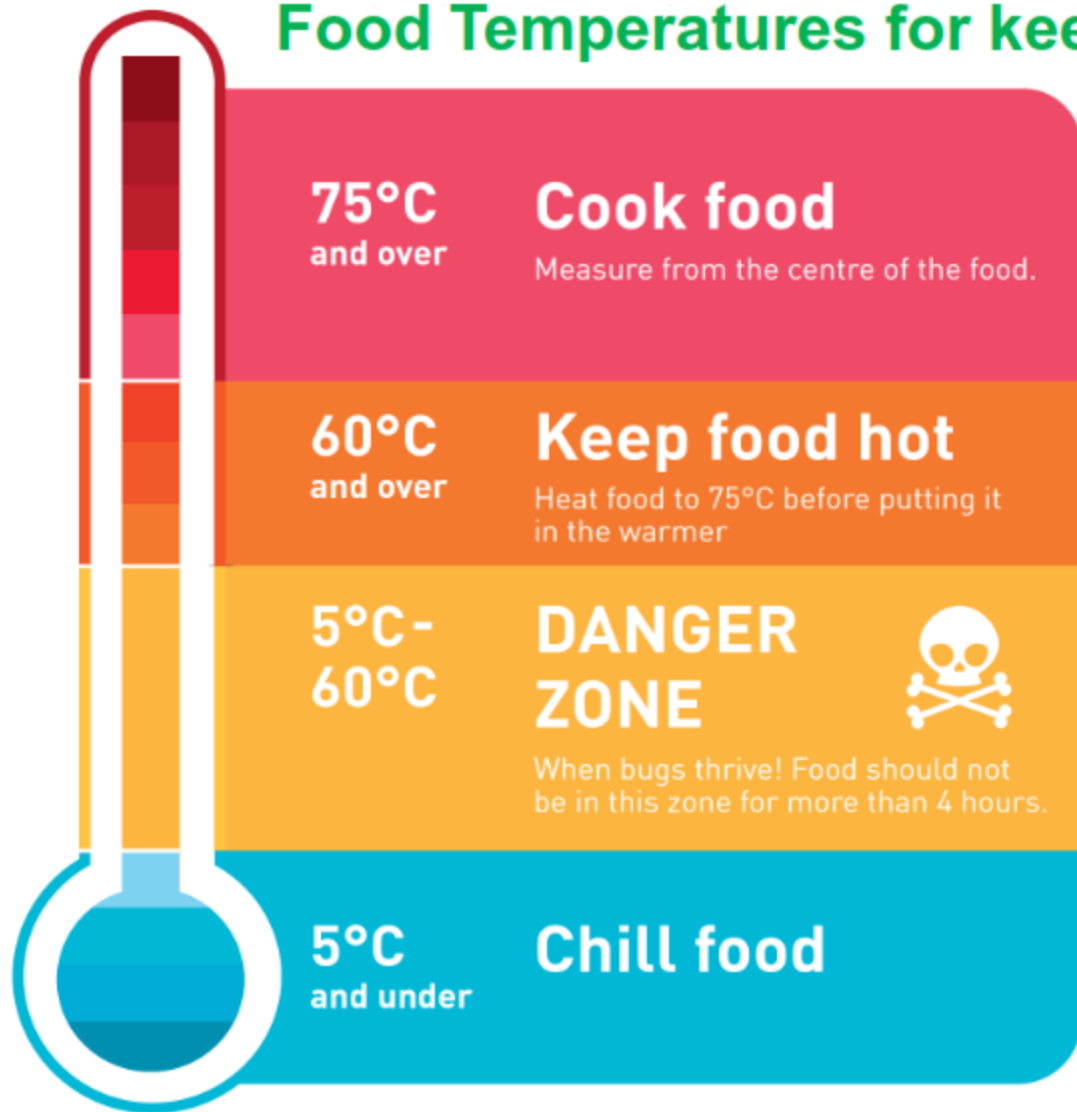
When preparing high risk foods, you must ensure that:

- they are not contaminated, especially if they are eaten with no further cooking, or only lightly cooked and;
- they are not left at room temperature for any longer than two hours. Keep food that must be kept hot above 60°C and cold foods below 5°C. Reheat food to 75°C. Cook food to 75°C



When in doubt throw it out

Food Temperatures for keeping food safe



75°
**75 degrees for at least
30 Seconds**
Cook or Reheat

Freezer -18c
Bacteria does not die
it stays dormant

Explaining the Danger Zone

Total time food is in the danger zone (5°C-60°C)	What to do
More than 4 hours	Throw out
2-4 hours	Serve, or heat to 75°C Do not chill
0-2 hours	Serve, or chill, or heat to 75°C

Why do you need to keep high risk food out of the danger zone.
- ***Bacteria thrive and multiply in the danger zone.***

That's why knowing the temperature Danger Zone is important.

You must not keep food in the danger zone for more than 4 hours it must be thrown out.

Keeping Food Cold

If your fridge is not working or not at right temperature what would you have to do.



1. Take the temperature of all the food

If the temperature of the food is higher than 5°C - do you know how long the fridge has not been working?

2. If under 2 hours then you can move all food to a working fridge, serve it or cook it immediately
3. If 2-4 hours you can cook it or serve it but not chill
4. If 4 hours or over it must be thrown away.

It is not ok to defrost and re freeze food it is very dangerous as bacteria will have woken up and started to grow.

Cooling Freshly Cooked Food?

Lets say you made a giant boil-up in a big heavy pot – When you are cooling fresh food like that you have **2** hours max to let it cool down to 21° put it into the fridge.

Innovative Hospitality Course - Food Control Plan. Policy and Procedures.

People.

Personal Hygiene.

All candidates will ensure that they will wear clean clothing. Long hair will be tied up, nail polish, rings and watches will be removed (gloves may be worn) while handling food. Disposable gloves, hats and aprons will be provided. These will be removed when candidates use the bathroom.

Hands:

Handwashing supplies will be provided. Hands will be washed and sanitised but not limited to after breaks, after using the bathroom, handling rubbish, using cleaning chemicals, smoking, scratching, handling raw meat, between changing gloves.

Sickness:

If a candidate is sick, they will arrange to undertake training at another time. For a cold or flu, return when the candidate is feeling better. In the case of vomiting and diarrhoea candidate will not return until symptoms have stopped for a period of 48 hours. If a candidate suffers from a skin disorder, or hepatitis, glandular fever or other communicable disease. They must present a doctor's clearance before starting work in a kitchen.

Places.

Cleaning Removes Grease and Grime, Sanitising Kills any Bacteria that remain. Candidates will ensure all cleaning tasks are complete and the Kitchen/Preparation Area, and all equipment and dishes used are left clean. Chemicals will be pre-mixed, and colour coded cloths provided to prevent cross contamination. In the case of spills, single use cloths or paper towels will be disposed of after use.

Rubbish bins are covered (pedal bins). Kitchen Rubbish is removed to exterior bins daily, and collected by the management of the premises and council.

Temperature Controls:

Fridge Temperatures will be checked and noted at the beginning of the Practical activity, also the freezer will be checked to be sure it is operational.

Maintenance A log for training premises included periodic maintenance and cleaning tasks.

Product.

Suppliers: All Food will be handpicked and purchased from the nearest supermarket. It will be transported directly to the regular assessment kitchen in a chiller bag.

Defrosting Frozen Food: This will be done allowing sufficient time in the fridge overnight. All foods will be covered and labelled

Transport:

Food Transported to an alternative training venue will be done in a chilly bin on ice, with a temperature gauge and will be treated as a delivery.

Quality Checks:

Details of temperatures and condition, packaging and expiry dates will be noted on Evidence record. It may be likely the fridge at the venue is not working

Dry Storage:

Any dry ingredients will be stored in labelled, closed containers.

Cold Storage

Fridge will be at 5°C or less. Temperatures will be checked using a probe and a jar of water, and a temperature gauge. Chilled product will be checked as well. Cooked foods will be stored above raw product. Everything will be covered and labelled. Perishable foods used will be disposed of following the course.

Sub Zero storage:

The deep freeze will be checked to ensure food is frozen, with no signs of freezer burn. Packets must be intact. The freezer should be at -18°C.

Cooking.

Perishable food will be cooked from raw to at least 75°C

Cooling Foods will be done as quickly as possible, using small containers, cold water bath or spreading on a tray. Acceptable for refrigeration at 21°C, food must not take longer than 2 hours in the temperature danger zone and no longer than a total of 4 hours before refrigeration.

Reheated food will reach at least 75°C in the middle. Food will only be reheated once. Stir food to ensure it is heated evenly (microwaving, boiling)

Holding Hot Foods:

Once cooked or reheated to at least 75°C, Food may be transferred to a holding cabinet (pie warmer) which should be set to hold food over 60°C. Checks should be made every 2 hours. Hot food that is kept below this temperature for less than 2 hours can be thoroughly reheated to above 60°C or cooled to below 5°C within 4 hours and held at this temperature till eaten. Do not mix batches of old and new foods. Hot food held for longer than 2 hours below 60deg C should be discarded. All food used in the course will be disposed of.

Service:

All foods will be served in food grade packaging, using gloves, tongs and if necessary clean tasting utensils. All equipment will be operational. Any money and Food service should be undertaken as separate activities.

Animals/Pests.

The kitchen will be free of any domestic pets, and signs of pests will be promptly dealt with. Doors and screened windows will be kept closed. Rubbish will be kept away from Kitchen, buildings and gardens maintained. If the problem persists a Pest Control Company will be contacted.

Corrective Action: If there is any changes to this food business or any problems arise at any stage of operation, review and reassess. Critical controls may need to be modified.