TRAINEE WORKBOOK

USE HYGIENIC PRACTICES FOR FOOD SAFETY

SITXFSA001

HOSPITALITY GROUP TRAINING

ELEMENTS AND PERFORMANCE CRITERIA

1. Follow hygiene procedures and identify food hazards.	1.1 Follow organisational hygiene procedures 1.2 Report unsafe practices that breach hygiene procedures promptly 1.3 Identify food hazards that may affect the health and safety of customers, colleagues and self. 1.4 Remove or minimise the hygiene hazard and report as appropriate for follow up
2. Report any personal health issues.	2.1 Report any personal health issues likely to cause a hygiene risk. 2.2 Report incidents of food contamination resulting from personal health issues. 2.3 Cease participation in food handling activities where a health issue may cause food contamination
3. Prevent food contamination	3.1 Maintain clean clothes, wear required personal protective clothing and only use organisation-approved bandages and dressings. 3.2 Prevent food contamination from clothing and other items worn. 3.3 Prevent unnecessary direct contact with ready to eat food. 3.4 Ensure hygienic personal contact with food or food contact surfaces. 3.5 Use hygienic cleaning practices that prevent food-borne illnesses.

FOUNDATION SKILLS

Skill	Description
Reading skills to:	Interpret organisational documents or diagram relating to: • Organisational food safety programs • Hygiene and food safety procedures • Hazard analysis and critical control points (HACCP) practices
Oral communication skills to:	• Report hygiene hazards and non-compliant organisational practices accurately

PERFORMANCE EVIDENCE

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- demonstrate use of safe food handling practices in food handling work functions in line with organisational hygiene procedures on at least three occasions
- demonstrate procedures to:
    - identify food hazards
    - report unsafe practices
    - report incidents of food contamination

KNOWLEDGE EVIDENCE

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- basic aspects of commonwealth, state or territory food safety laws, standards and codes as follows:
- meaning of contaminant, contamination and potentially hazardous foods as defined by the Australia New Zealand Food Standards Code
    - employee and employer responsibility to participate in hygienic practices
    - reasons for food safety programs and what they must contain
    - role of local government regulators
    - ramifications of failure to observe food safety law and organisational policies and procedures
- health issues likely to cause a hygiene risk relevant to food safety:
    - airborne diseases
    - food-borne diseases
    - infectious diseases
- hygiene actions that must be adhered to in order to avoid food-borne illnesses
- hand washing practices:
    - before commencing or recommencing work with food
    - immediately after:
    - handling raw food
    - smoking, coughing, sneezing or blowing the nose
    - eating or drinking
    - touching the hair, scalp or any wound
    - using the toilet
- basic aspects of hazard analysis and critical control points (HACCP) method of controlling food safety
- specific industry sector and organisation:
    - major causes of food contamination and food-borne illnesses
    - sources and effects of microbiological contamination of food
    - workplace hygiene hazards when handling food and food contact surfaces

- basic content of organisational food safety programs
- contents of organisational hygiene and food safety procedures
- hygienic work practices for individual job roles and responsibilities.

FOOD SAFETY LEGISLATION

Food Act 2008
Food Regulations 2009
Food Standards Australia and New Zealand

For up to date information on the above act the following website can be accessed www.foodstandards.gov.au Federal level
www.health.wa.gov.au State level (Western Australia)

The Food Act of 2008 and the Food regulations 2009 apply to all hospitality establishments in Western Australia. The Act and regulations are the state legislation which incorporates all the standards listed for the Australian component of the Australian and New Zealand Food standards code, which operates at federal level. The legislation exists to ensure that the general public can be assured that it is safe to eat at all food outlets.

In essence the Food Act and regulations provide rules and legislate on the following:

- An Operational Framework of Health Inspectors
- False representation, labelling, advertising
- Sale of unsafe foods
- Food hygiene
- Protection of food and appliances from contamination
- Food premises and vehicles
- Licensing of food sales
- Sampling and analysis

The sale of unsafe foods and issues such as labelling and advertising are furthermore regulated by the Australian Food Standards Code.

Organisational Hygiene Procedures

Food Standards Australia New Zealand (FSANZ) is an independent legislative agency that develops food standards to cover the food industry in Australia and New Zealand. FSANZ has developed the Australia New Zealand Food Standards Code (ANZFSC) which makes food in Australia and New Zealand is safe and suitable to eat.

The code sets out standards for food additives, food safety, labelling and foods that need pre-approval such as genetically modified foods. The food safety standards include legal requirements for safe hygiene practices.

Under the code employers must make sure:

- All staff who have contact with food or food surfaces in the organisation have the knowledge and skills to handle food
- That the workplace is safe and that there are safe systems of work.
- Machinery, equipment, tools and substances are in a safe condition.

Using safe hygiene practices is a practical example of the health and safety responsibilities of employers and employees in action. They help to ensure employees work in a clean, hygienic and safe manner. This reduces the risk of injury and illness to workers and customers.

Organisations must have hygiene procedures which identify food hazards. This is communicated to employees through policies, procedures or standard operating procedures (SOPs). For example, an organisation might have a SOP for hand washing that sets out step-by-step instructions for how to thoroughly wash hands to avoid contaminating food.

Food Safety Programs

A food business owner is legally required to sell safe food. The legislation governing the sale of safe food is the *Food Act 1984*, which incorporates the *Australia and New Zealand Food Standards Code*. The Act adopts a preventative approach to food safety. It groups food premises into separate 'classes', and sets out different food safety requirements for each class based on the food safety risks of its ***highest risk*** food handling activity.

A food safety program is a written plan that describes how you will manage food safety in your business. It is a legal requirement for food premises who directly serve the elderly, children, people who are ill, or with immune deficiencies in WA. It is a legal requirement to have a food safety program for all other food businesses across the rest of Australia.

Your food safety program documents how you will identify and control hazards in the production, preparation and handling of food as described in the Hazard Analysis and Critical Control Point (HACCP) system. This program also specifies the records that your business must maintain to demonstrate the implementation of the program and actions taken to keep food safe.

The food safety program will:

- Identify when food can become unsafe
- Take steps to avoid food becoming unsafe
- Follow practices in your business to keep food safe
- Use records to monitor food safety and to demonstrate that your business routinely follows these practices
- Ensure staff has the knowledge and skills to handle food safely.

A food safety program must:

- Systematically identify the food safety hazards that are reasonably likely to occur in food handling operations of the food business, and
- Identify where, in a food handling operation of the food business, each hazard identified can be controlled and the means of control, and
- Provide for the systematic monitoring of the means of control, and
- Provide for appropriate corrective action to be taken when a hazard identified is not under control, and
- Provide for the regular review of the program to ensure it is appropriate for the food business, and
- Provide for the keeping of appropriate records for the food business, including records about action taken to ensure the business is carried on in compliance with the program, and
- Contain other information, relating to the control of food safety hazards, prescribed under a regulation.

Quality Assurance

There are many different types or versions of food safety programs. One of the most effective methods is to identify and list the critical steps in the food production process. By critical, we mean that if a particular step was not undertaken, food may be unfit for consumption e.g. a health hazard. The technical term given to this type of quality assurance program is hazard analysis and critical control points (HACCP). Food inspection programs have been based on a "see, smell and touch" approach that relies more on detection of potential hazards than prevention. HACCP is a more scientific approach. The control system has been internationally adopted in the food production industry and is a key requirement in the accreditation of quality assurance.

HACCP

Hazard Analysis and Critical Control Points (HACCP)

HACCP is the prevention of biological, chemical or physical hazards to food safety in production processes that can cause the finished product to be unsafe. Measurements are designed and implemented to reduce these risks to a safe level. . Most Food Safety programs are based on the 7 HACCP principles:

1. Conduct Hazard Analysis
2. Identify Critical Control Points
3. Establish Critical Limits
4. Monitoring
5. Implement corrective Actions
6. Establish effective record keeping
7. Verification – is the system adequate, compliant and working as it should?

Hazard Analysis

This involves identifying the potential hazards associated at all stages of the food production cycle.
Any hazard or critical control point should be measured and recorded using the

S -specific
M -measurable,
A- achievable
R- realistic
T-time specific

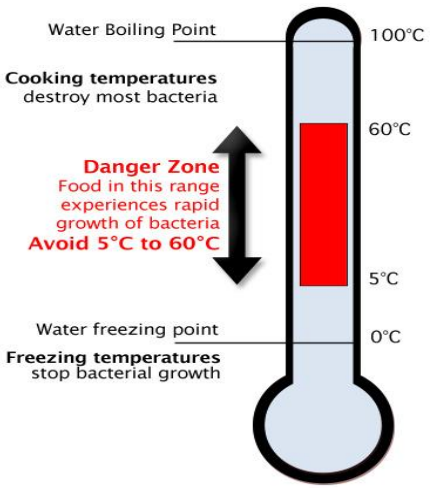
Technique

This includes:

- Receiving e.g. quality and temperature checks
- Storing e.g. correct temperature, storage area, cleanliness
- Preparing e.g. minimising risk of cross contamination by using colour coded boards, ensuring food prepared quickly and either cooked or returned to temperature controlled storage
- Processing (cooking) e.g. Correct cooking temperatures, control and monitoring
- Displaying and/or Serving e.g. correct temperature and duration(time)
- Packaging e.g. ensuring clean, undamaged
- Transporting e.g. under temperature control
- Disposal e.g. safe disposal minimising cross contamination

You then need to identify all the hazards which could occur at each step and implement controls or preventative measures to ensure food doesn't become contaminated and then dangerous for public consumption.

E.g. At delivery controls are put into place in regards to temperature and quality of the delivered goods. A delivery checklist and/or a Good Received form are completed checking the quality of the food delivered and the temperatures. Any food delivered outside the parameters set by the organisation in terms of quality and temperature is noted on the form and the goods are returned to the supplier.



HACCP chart example 1

Crumbed Chicken							
Production Steps	Hazard analysis	Critical Control Points	Control Measure	Critical Limits	Monitoring Procedures	Corrective Action	Documentation and Verification Procedures
Receiving chicken	Biological growth of micro-organisms Physical Foreign particles	Yes	Temperature Visual inspection	Temperature not to exceed 4°c Packaging should be intact no foreign bodies If vacuum packed bag should be tight	Use Probe thermometer to check temperature Visual check for physical contamination	Return to supplier	Record on goods received log Discuss action at regular meeting
Storing of chicken	Biological growth of micro-organisms	Yes	Temperature	Temperature not to exceed 4°c	Refrigerator thermometer check (2 x day)	Discard all product	Record results of check in Log book
Preparation Crumbing of chicken	Physical Foreign particles Biological growth of micro-organisms	Yes Yes	Visual Inspection Sieve crumbs prior to processing Time	No visible contaminants Complete task and return to refrigerator (less than 4°c) within 2 hours	Visual inspection prior to commencing task Clock	Discard contaminated product If over 2 hours cook immediately.	Stock control sheet Inform supervisor Date and time sticker applied to prepared food
Storage of crumbed chicken	Biological growth of micro-organisms	Yes	Temperature	Temperature not to exceed 4°c	Refrigerator thermometer check (2 x day)	Discard all product	Record results of check in Log book
Processing Shallow frying of chicken	Biological growth of micro-organisms	Yes	Temperature Time	Must exceed 75°c 4 minutes per side follow standard recipe	Check temperature of oil and visual check to ensure oil is sizzling prior to frying chicken Clock Visual inspection and use of temperature probe to ensure cooked	Heat oil further and recheck Cook further and recheck temperature	Discuss action at regular meeting

Displaying/Serving Hot hold of chicken	Biological	Yes	Temperature Time	Temperature must exceed 60^{o}c No more than 2 hours	Bain Marie Thermometer Time record labels	Discard all product	Record results of check in temperature log book
Packaging	Physical	Yes	Temperature Time	Temperature not to exceed 4^{o}c Packaging should be intact Complete task and return to refrigerator (less than 4^{o}c)	Visual inspection prior to commencing task Clock	Discard contaminated product If over 2 hours dispose	
Transporting	Biological	Yes	Temperature	Temperature not to exceed 4^{o}c	Delivery truck internal thermometer	Dispose of damaged or incorrect temperature product	Delivery temp log book
Disposing	Biological	Yes	Time	Dispose of contaminated food as quickly as possible, isolate from other food	Visual inspection		Complete wastage log

HACCP chart example 2

Milk and Bar Garnishes							
Production Steps	Hazard analysis	Critical Control Points	Control Measure	Critical Limits	Monitoring Procedures	Corrective Action	Documentation Procedures
Receiving lemons	Biological Physical	Yes	Visual inspection	Not blemishes or evidence of insect infestation, no soft spots or discolouration	Visual check	Return to supplier	Record on goods received log
Receiving milk	Biological Physical	Yes	Temperature Use by date Visual inspection	Temperature not to exceed 4^{o}c At least 7 days before expiry Packaging should be intact	Probe thermometer Visual check	Return to supplier	Record on goods received log
Storing of lemons	Biological	Yes	Temperature	Temperature not to exceed 4^{o}c	Refrigerator thermometer check (2 x day)	Discard all product	Record results of check in Log book
Storing of milk	Biological	Yes	Temperature Use by date	Temperature not to exceed 4^{o}c At least 7 days before expiry	Refrigerator thermometer check (2 x day)	Discard all product	Record results of check in Log book
Preparation Slicing lemons for bar garnishes	Biological	Yes	Visual inspection	Not blemishes or evidence of insect infestation, no soft spots or discolouration	Refrigerator thermometer check (2 x day)	Discard contaminated product	Stock control sheet Inform supervisor
Preparation using milk for coffee or cocktail	Biological	Yes	Temperature Use by date	Temperature not to exceed 4^{o}c Should have at least 1	Refrigerator thermometer check (2 x day)	Discard contaminated product	Stock control sheet Inform supervisor

				days before expiry Should not be out of fridge for more than 2 hrs	 If out of fridge for more than 2 hours		
Storage of lemon	Biological	Yes	Temperature	Temperature not to exceed 4^{o}c Time record labels	Refrigerator thermometer check (2x day) Check labels no more than 3 days since preparation	Discard all product	Record results of check in Log book
Storage of milk	Biological	Yes	Temperature Time	Temperature not to exceed 4^{o}c Time record labels	Refrigerator thermometer check (2x day)	Discard all product	Record results of check in Log book

AN INTRODUCTION TO FOOD HYGIENE

Every year millions of Australians are affected by disease caused by food contamination. The statistics show that that this figure has been on the rise over the past decade.

There are a variety of reasons for this:

- An increase in mass catering
- Rapid increase in the consumption of take away meals
- Large scale factory production of foods
- Increase in factory farming
- Staff are untrained, careless or not conscious of hygiene requirements.

Hygiene Procedures

Based on the above information hospitality establishments therefore have to have hygiene procedures and policies in place to ensure they are meeting legislative requirements this may include:

- Personal hygiene procedures
- Suitable dress and personal protective clothing
- Regular hand washing
- Correct food storage
- Avoidance of cross contamination
- Hygienic cleaning practices to avoid cross contamination
- Use of cleaning equipment, cloths and materials to avoid cross contamination
- Appropriate handling and disposal of garbage
- Cleaning and sanitising
- Procedures documents in the organisation food safety program
- Procedures covered by staff training programs
- Procedures covered by the national food safety code

Personal Hygiene

Personal hygiene and grooming are extremely important. You need to take pride in your appearance for yourself but also because you are representing the organisation that you work for. Poor personal hygiene can cause sickness and body odour that can be offensive to the people you work with, or worse, to the customers you come in contact with.

Examples of good Personal Hygiene

- Clean tidy hair, tied back if possible
- Clean hands, short clean nails, permitted jewellery
- Clean nicely ironed uniform
- Daily showers
- Use of deodorant
- Clean teeth
- Fresh Breath

Reporting Health Issues

Food handlers have a **legal** responsibility for doing whatever is reasonable to make sure that they do not make food unsafe or unsuitable for people to eat including maintaining high personal standards of health and hygiene.

Food handlers are legally obliged to report any personal health issues to their supervisor.

Personal health issues include:

- Vomiting, diarrhoea, fever or sore throat with fever
- A doctor who has diagnosed a foodborne illness.

Food handlers must not handle any food where there is a chance they might contaminate the food because of illness. Food handlers must cease handling food until they are cleared to return to their tasks by the supervisor or medical practitioner.

If you become ill whilst at work it is very important to cease working with food an report to your supervisor. Follow their instructions, which may include that other people working with you will have to dispose of the food you were handling, as it may have become infected.

Bandages and Dressings

If you cut yourself whilst at work you need to report this and seek first aid. Bandages used to treat your wound need to be organisation approved, so as to comply with food safety legislation and within a food room the use of coloured band aids e.g. blue, green; are encouraged as should they come off during preparation and cooking they can be easily seen within the food.

Appropriate clothing and jewellery

Most organisations provide their staff with a uniform, whether working in the kitchen or front of house. If your organisation doesn't provide a uniform, they must provide Personal Protective equipment such as an apron and hat. Never wear or carry outdoor clothes into food preparation areas because they could contaminate food or surfaces

Personal Protective Equipment (PPE) is clothing or equipment that protects employees, and within Hospitality, the food, while working. It is anything used or worn by a person to minimise risk to the person's health and safety and the health and safety of others.

Health and Safety legislation requires employers to:

- Provide workers with PPE
- Train workers in how to use it properly
- Replace PPE if it is broken
- Make sure PPE fits workers.

What you need to wear depends largely on the type of work you do but typical examples are:

- Overalls, jackets, trousers aprons
- Hats hair nets, beard or moustache nets (snoods)
- Non-slip shoes or boots
- Gloves

Jewellery

Organisations vary as to what jewellery, if any can be worn by a food handler. Jewellery and watches can harbour bacteria, and items such as stones etc might fall into food causing contamination.

Find out what your establishment's policy is and ensure you follow it.

WASHING HANDS

Washing your hands regularly is imperative to Food Safety. There are many times when you should wash your hands:

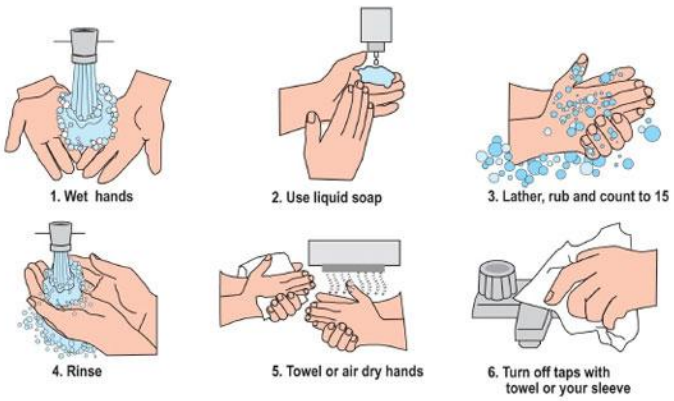
- Before starting work, or after a break
- Immediately after handling raw food
- Immediately after smoking, coughing, sneezing or blowing your nose
- Immediately after eating or drinking
- Immediately after touching your hair, scalp or any wound
- Immediately after going to the toilet
- After handling money

Hand washing should be carried out in a designated hand wash sink, where there is access to antibacterial liquid soap and paper hand towels. This sink should not be used for anything else, and hand washing should not be carries out in any other sink.

How do you wash your hands?

Bacteria can form in between the fingers and especially under the nails. Attention needs to be directed to these areas. The following routine should be adopted for a food handler.

- Wet your hands
- Use antibacterial soap
- Lather and scrub for15 - 20 seconds, playing close attention to in between the fingers and under nails
- Rinse thoroughly
- Dry with paper towel.



Correct delivery and food storage

To minimise issues of food contamination it is important that food coming into the business is delivered at the correct temperature, and that is it then stored away in the correct place.

Food being delivered into the business will either be:

- Chilled - between 0 to 5°C
- Frozen – below -18°C
- Dry – below 18°C

If food comes into the business that is supposed to be chilled, frozen or dry, that is outside the temperatures listed above, they can be rejected on food safety grounds. Food can also be rejected if it is damaged or out of date.

Once it is delivered and signed for, it becomes the responsibility of the business, so it is very important that it is stored away in the correct storage area and the correct temperature, immediately. Food delivered that is left to get warm in the delivery area will harbour bacteria that could cause food poisoning, the longer it is left out of temperature control, the more bacteria will multiply. (We will be looking at this in more detail later in the workbook)

Typical storage areas within a commercial kitchen are:

- Refrigerators - between 0 to 5°C
- Cool rooms - between 0 to 5°C
- Freezers - below -18°C
- Dry stores - below 18°C

AVOIDANCE OF CROSS CONTAMINATION

Before we look at cross contamination it would be useful to understand some important terms that relate to this. The Australia New Zealand Standards code define the following terms as:

Contaminant
Any biological or chemical agent, foreign matter, or substance that might compromise food safety or suitability.

Contamination
The introduction or occurrence of a contaminant in food.

Cross contamination
The transference of microorganisms from contaminated foods and areas to cooked or prepared foods.

Potentially Hazardous Foods
Food that has to be kept at certain temperatures to minimise the growth of any pathogenic microorganisms that may be present in the food or to prevent the formation of toxins in food.

There are also 3 main types of contamination. These are:

- **Chemical** – Cleaning chemicals, pesticides
- **Physical** – Hair, glass, plastic, band aid, dandruff
- **Biological** – this can food poisoning bacteria such as Salmonella or Staphylococcus Aureus, or food spoilage bacteria such as moulds

So how do we avoid cross contamination? There are many ways to do this.

Keep Raw and Cooked Food Stored Separately
Several nasty food bugs are spread from raw and cooked food by cross contamination. For instance, the juice from defrosting poultry could drip onto the pre-cooked rice stored below it. It is essential to store raw and cooked items separately. In large hotels and restaurants most food categories have dedicated fridges and freezers.

Keep food above floors and away from walls
To minimise contamination, no food should be stored directly on the floor or against the wall.

Prepare raw and cooked food separately.
In many kitchens, there are separate areas for the preparing of raw and cooked foods, to minimise the risk of cross contamination. In kitchens where this is not possible due to size the staff need to ensure that they regularly clean down between tasks and use different equipment such as colour coded chopping boards to ensure raw and cooked food remain separate.

Ensure all equipment used in preparation and cooking is kept clean and hygienic

Equipment such as tongs, trays and temperature probes need to be used during the cooking process, but they must be clean and hygienic. Use different tongs for different foods, never use them to place raw food onto the grill, then use the same tongs to turn over during the cooking process. The temperature probe is a very useful piece of equipment, as you need to regularly check the temperature of cooked food to ensure that it is at the correct temperature – above 75°C in most cases. The probe should be cleaned and sanitised before and after use to avoid cross contamination.

Cover all food well

Any food not being served straight away needs to be covered to protect the food. This can be done using cling wrap or by using the proper container lids.

Cooling food

Cool the food as quickly as possible. The Food Safety Standards require you to cool potentially hazardous food in the following times:

- From **60ºC to 21ºC** in a maximum of **2** hours
- From **21ºC to below 5ºC** in a maximum of **4** hours.

How can I cool food rapidly?

- Place food to cool in the refrigerator or cool room as soon as it stops steaming
- Portion food before cooling for example, slice meats and cut large poultry into smaller portions
- Place liquid foods such as stews and casseroles in shallow containers no more than 5 cm deep

Again, all food needs to be covered to prevent any cross contamination.

Label and date all food

To ensure that stock is rotated and to keep bacteria growth low, all refrigerated food should have labels identifying what the food is and the date that it was processed.

Re-heat Foods as quickly as possible

To avoid the food danger zone, food must be re-heated rapidly and then kept above 75 Degrees Celsius. This control of temperature ensures that bacteria growth is minimal.

Re-heat in small quantities

The splitting up of food that is to be re-heated into small amounts ensures that the food quickly re-heats to the desired temperature.

When the food is being re-heated, it helps to stir it frequently. By doing this there are no parts that reside in the danger zone for longer than needed. When re-heating stews and sauces, this prevents burning at the bottom of the pot.

Use a microwave oven where possible
Microwave ovens are able to penetrate into the core of the food very rapidly. This is what is needed to ensure that the whole item is re-heated as quickly as possible.

Reheated food may not be frozen
Do Not to attempt to freeze food that has already been re-heated once. The repetition of defrosting and the excessive amount of time in storage almost guarantee that it is not safe to eat. While the short-term benefit may be a cost saving, think of the high price that will be paid if you poison your customers.

Bain Maries
A bain marie is a piece of equipment designed to keep hot food hot.

Some guidelines for using Bain Maries
- Always re-heat foods above 75 Degrees Celsius before placing it in a bain marie
- Check bain marie temperatures as the temperature should be at least 60 degrees Celsius
- Throw away leftovers
- Do not mix old and fresh food
- Do not put large quantities of food in the bain marie

Ready to Eat Food
Once food has been prepared and ready to eat we have to ensure we minimise or prevent unnecessary direct contact. This is to ensure that the food does not get contaminated from the time it is ready to be served till the time the customer consumes it. This include food such as take away being packaged, food being plated in the kitchen directly from the grill, oven, stove or Bain Marie. To prevent direct contact, we should.

- Limit food handlers
- Use utensils
- Wear gloves
- Cover the food
- Determine the position of the food on the plate or platter prior to placing it on the plate
- When carrying plates of food to customers carry it on the rim without touching any food items

HYGIENIC CLEANING PRACTICES TO AVOID CROSS CONTAMINATION

Cleaning is a very important part of keeping food safe, as if food was prepared and cooked in a filthy kitchen, with dirty equipment many people would get ill.

It is important to know what cleaning is:
Cleaning is the removal of dirt, grease and grime. Cleaning by itself is not enough to keep bacteria away. You need to sanitise too.

What is Sanitising?

Sanitising kills bacteria, or reduces them to a safe level. This can be done with a food grade sanitiser (chemical) or with hot water (above 77°C)

Cleaning is an essential part of professional food service. For effective, efficient cleaning the method set by a supervisor must be followed accurately. Take care to use the correct detergent and sanitiser.

An effective cleaning and sanitation program is necessary in hospitality premises.

Use of cleaning equipment, cloths and materials to avoid cross contamination

The cleaning equipment used to clean, including buckets, mops, brooms and cleaning cloths need to be clean in order not to cause cross contamination. Many organisations use colour coding to help reduce the risk of cross contamination between areas. Some examples can include:

- Blue mop and bucket to clean the toilets, Red for the kitchen.
- Colour coded cloths for different areas – yellow for steam wand on the coffee machine, red for benches.

Further information on cleaning, and chemicals and equipment that can be used within a kitchen environment can be found in the unit SITHKOP001 Clean Kitchen Premises and Equipment.

How to Clean

Cleaning and sanitising procedures will vary in detail for different surfaces but a basic cleaning methodology could be summarised as follows:

Pre-Clean: Remove loose dirt, sweep, wipe, rinse and so on. Unless soaking is needed, rubbing, scrubbing, jet sprays and so on remove dirt from the surface.

Wash with Hot Water and Detergent: Always follow the detergent manufacturer's directions precisely. Rinse with clean, drinkable water and drain.

Sanitise: Sanitise with heat or a chemical sanitiser. If a chemical is used, it's again important to follow directions precisely. (Some sanitisers don't need to be rinsed – check with the manufacturer or on the SDS to be sure)

Rinse: Rinse with clean, drinkable water, then dry, if necessary.

Air Dry: Air drying is preferable to using cloths. Cloths can be a source of cross contamination.

Working with Chemicals
Take care when handling chemicals. Some are toxic; some are corrosive and damage surfaces, clothing and the body. Some react with each other to give off toxic gas (especially chlorine) or neutralise each other's effectiveness.

Safety Data Sheet (SDS)
A Safety Data Sheet (SDS) is a document that provides information about a hazardous substance and how to safely use it at the workplace. It must contain information on:

- the identity of the chemical,
- health and physicochemical hazards,
- safe handling and storage procedures,
- emergency procedures, and
- disposal considerations

For more information on SDS go to:

http://www.safeworkaustralia.gov.au/sites/swa/whs-information/hazardous-chemicals/sds/pages/sds

Cleaning Programs
Maintaining a clean, sanitised environment can be achieved only with a regular, well-planned and documented program. Standard procedures for cleaning operations should be established, written out and placed where they can be read.

All areas should be cleaned regularly, including:

- Benches and cutting boards
- Floors and walls
- Utensils
- Equipment and machines
- Refrigerators and cool rooms
- Storerooms
- Sinks and wash basins
- Crockery and cutlery
- Linen e.g. tea towels and cloths

What a cleaning program should include:

- Who is to perform a certain task
- What equipment should be cleaned
- When the area or equipment is to be cleaned
- Who is responsible for the overall implementation of the cleaning program

Appropriate handling and disposal of garbage
Rubbish is a source of bacteria, odours and contamination. It attracts pests, so it must be handled in a way that avoids these problems. Attention to detail will help.

THE COST OF POOR FOOD HYGIENE

Health and Personal Suffering

Poor handling of food can lead to spread of disease or food poisoning. One small mistake in regard to food safety can lead to mass suffering. Imagine a large convention or the entire mass of daily customers that is fed by an airline, it could mean hundreds, if not thousands of people suffering with food poisoning.

Did you know that some strains of food poisoning bacteria can kill, young children and the elderly are particularly at risk?

Financial

Mishandled food deteriorates quickly in quality. Customers become ill and the word will quickly spread. Unclean and pest ridden places are unattractive to eat in. All these can cause financial losses for the establishment.
Both you and your employer can be fines, as mentioned earlier in the workbook.

Legal

If you prepare food for sale you need to obey the requirements set out under the various government regulations and Acts such as the Food Act 1991.
You trust your mechanic, plumber or doctor to do a professional job for you. People who eat food trust the food handler to have a professional approach when preparing food.
You and/or you employer can be held accountable, this can mean prosecution and/or imprisonment, as mentioned earlier in the workbook.

Handling food in an unsafe manner

A person must not handle food intended for sale in a manner that the person knows will render, or is likely to render, the food unsafe. Fine: $100,000 and imprisonment for 2 years for an individual, and $500,000 for a business

Sale of unsafe food

A person must not sell food that the person knows is unsafe. Fine: $100,000 for an individual and imprisonment for 2 years, and $500,000 for a business.

Unsuitable food

A person must not handle food intended for sale in a manner that will render, or is likely to render, the food unsuitable. Fine: $40,000 for an individual, and $200,000 for a business.

False description of foods
You may not falsely describe food items. This includes a false or misleading labelling of foods. It is an offence to place an item on the menu that is not actually contained in the product. If you are for instance offering fresh snapper on the menu when you are in fact serving hake from the freezer, then you are breaking the law. The fine for this offence is up to $100,000 for an individual and 2 years' imprisonment. For a business, the fine is up to $500,000.

There are many other fines, for further information please read the Food Safety Act 2008.

Licensing and Inspector's Powers
All establishments offering food for sale must be licensed to do so. Selling food without a licence carries large fines.

Environmental Health Officer
Responsible for carrying out measures for protecting public health. They administer and enforce legislation related to environmental health and provide support to minimise health and safety hazards.

If the Environmental Health Officer finds that it is necessary to enter any premises, they may enter by force. The inspector is entitled to take samples and measurements to inspect any room, container or vehicle. Video and photographic evidence may also be taken.

It is an offence to hinder or obstruct an inspector's activities. Health inspectors have the power to close down the food business.

In practice, all local government authorities (on a regular basis) carry out routine health department inspections. During these routine inspections, the inspector and restaurant proprietor (or chef) works together. Any food safety problem areas are addressed and the establishment is then given time to improve or fix those areas. It is wise to co-operate with the Environmental Health Officer.

Types of diseases
There are three main types of disease that can affect food safety:

Airborne
Any disease that is caused by pathogens and transmitted through the air E.g. Influenza (flu) Chicken pox and measles

Food Borne- Food Spoilage
Food spoilage is a change that deteriorates the normal state of a food product. These changes can be recognised through smell, taste, touch, or sight. They happen for to a number of reasons -- air and oxygen, moisture, light, microbial growth, and temperature. For example curdled milk, mould, slimy lettuce, brown apples and green potatoes.

Food Borne- Food Poisoning
Any illness resulting from the food spoilage of contaminated food, pathogenic bacteria, viruses, or parasites that contaminate food, as well as chemical or natural toxins such as poisonous mushrooms and various species of beans. For example Salmonella, Campylobacter

Infectious
These are disorders caused by organisms – such as bacteria, viruses, fungi or parasites. Many organisms live in and on our bodies. They're normally harmless or even helpful, but under certain conditions, some organisms may cause disease. Some infectious diseases can be passed from person to person. E.g. Boils, cold sores, Meningococcal disease.

FOOD POISONING

Food Poisoning is caused by bacteria, viruses or toxins in the food we eat.

Symptoms associated with food poisoning are:

- Nausea
- Vomiting
- Fever and chills
- Stomach cramp/diarrhoea
- Gastro-enteritis and dehydration
- Double vision
- Paralysis of vocal chords and paralysis of the digestive system.

Generally, we distinguish between three types of food poisoning:

1. Bacteriological Food Poisoning

Harmful bacteria and micro-organisms cause contamination of foods. An example of this type of food poisoning is Salmonella.

Food Poisoning Bacteria

1. Salmonella

This bacterium is probably the most well known cause of food contamination. One thing to note is that salmonella is easily destroyed by heat.
Source of Contamination:

- In the gut of mammals and poultry. Insects, pets and birds.
- Spread by poor food handling.

Foods Involved:

- Raw meat,
- fish, sausages,
- chicken,
- egg powder.

Onset up to 48 hours considered a slow reaction

Precautionary Measures:

- Wash your hands after visiting the toilet and after handling the above raw foods
- Cook all the foods involved to an internal minimum temperature of 70 degrees Celsius
- Do not use cracked eggs
- Thaw foods out in the fridge
- Ensure the kitchen is free from insects, rodents and pets

2. Staphylococcus Aureus

Staphylococcus Aureus poisoning is caused from the by-product poisons of the bacterium. Its toxin cannot be destroyed by heat. Food affected is poisonous even when it no longer contains live bacteria.

Source of Contamination:

- Nasal passages, mouth, boils, pimples,
- Infected skin and open wounds.
- Sneezing and coughing.

Foods Involved:

- Cooked as opposed to raw foods.
- Foods eaten cold or after only mild re-heating.
- Cream dishes,
- custards and milk products,
- convenience foods,
- hams and small goods,
- Hollandaise sauce.

Onset between 1-8 hours considered a rapid reaction

Precautionary Measures:

- A high standard of personal hygiene, making sure you wash your hands after touching the 'reservoir' parts of the body
- Use tongs and gloves when handling food
- Do not taste food with your fingers
- Keep foods well chilled and out of the danger zone.

3. Campylobacter

Similar in activity to salmonella this bacterium causes illness by invading the body. Symptoms are characteristic of influenza in the early stages followed by acute cramps and diarrhoea.

Source of Contamination:

Primarily animals and poultry

Foods Involved:

Milk, poultry, oysters and red meats

Onset Between 2-5 days can take up to 10 days

Precautionary Measures:

- Store and handle foods correctly
- Good personal hygiene
- Proper sanitation and hygiene of cooking equipment.

4. Listeria

Those most at risk are people that are immuno compromised (e.g. on radiation therapy, chemotherapy, kidney dialysis etc.) and pregnant women. Pregnant women are a high-risk group because Listeria infection can be transmitted to the foetus and may cause miscarriage, stillbirth, premature birth or a very ill new-born baby.

Source of Contamination:

Listeria infection (listeriosis) is an illness caused by eating food contaminated with bacteria called Listeria monocytogenes.

Foods Involved:

Listeria can be found:

- On the surface of raw unwashed vegetables and in
- Certain processed foods including soft cheeses, pâté and
- Some meat products.

Onset Between 2 days – 3 weeks

Precautionary Measures:

- Avoid commercial pâté
- Avoid commercially made ready-to-eat cold meats
- Avoid raw seafood e.g. oysters, sashimi.
- Avoid cold smoked seafood e.g. smoked salmon.

High Risk Foods

High risk foods are particularly susceptible to bacterial growth and are more likely to cause food poisoning.

These are foods that need to be kept a certain temperatures to minimise the growth of bacteria, they also usually have a high moisture content.

5. Biological Food Poisoning

Food can contain toxins. We can begin to understand why it is important that a knowledgeable, trained professional be responsible for the preparation of food.

Moulds

Moulds multiply by means of spore formation. The spores are airborne. All food can be attacked by mould (sweet, bitter, and sour), although mould usually prefers pastry, small goods, fruit and vegetables and dairy products.

Guidelines to control mould:

- Keep foods cool, dry and covered
- Discard mouldy food items immediately
- Do not store foods too long
- Wipe shelving and storage containers with vinegar. Acidity inhibits moulds
- Mould spores are destroyed at 100 degrees Celsius

Micro-organisms
Micro-organisms are very small living things. They're found everywhere in our environment. Some knowledge of micro-organisms is necessary for a clear understanding of the reasons for hygiene rules and practices.

Viruses
Viruses are the smallest, simplest microorganisms. Scientists argue about whether to call them microorganisms because they don't have the same characteristics as other living organisms and can only grow by infecting living things. Different viruses affect plants, animals and people. Some viral diseases, Hepatitis A and Gastroenteritis, can be passed from an infected food handler via food to a person eating the food.

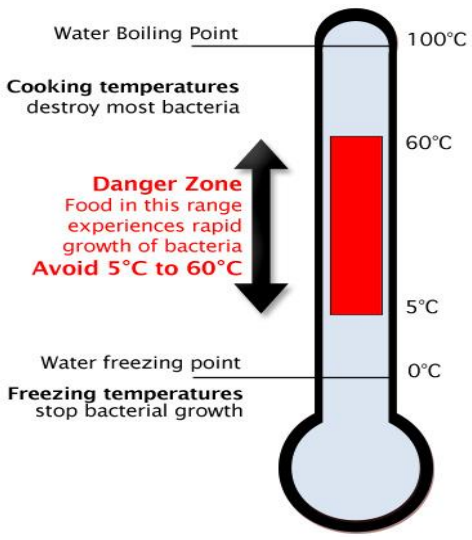
Temperature
Note: Food poisoning bacteria can grow best between 5 and 60 degrees and grows effectively at **37 degrees**, the normal body temperature of mammals. The above temperature range is also known as the **'food danger zone'**. It is of the utmost importance that you remember this.

Temperature control is the easiest and most useful method you will use to slow or stop microbes growing.

- At 60º and above bacteria will start to die
- Between 4º- 60º bacteria will grow most rapidly at 37º temperature
- Below 5º bacteria will become dormant

The main high-risk foods are:

- Cooked meat and poultry
- Cooked meats products such as stews, gravy and soups
- Meat or fish pates or spreads
- Milk and eggs
- Shellfish and seafood
- Cooked rice



We have already looked under avoiding cross contamination at storage temperatures and cooking, holding and cooling temperatures.

IDENTIFYING POOR ORGANISATIONAL WORK PRACTICES AND HYGIENE HAZARDS

While working in Hospitality establishments we might come across poor organisational work practices such as:

- Poor personal hygiene practices
- Poor food handling practices that may result in the contamination of food
- Poor cleaning practices that may result in the cross contamination of food and other items
- Practices inconsistent with the organisations food and safety program
- Outdated practices not in keeping with current organisational activities.

Reporting Hazards

Should you observe or identify any of the above poor workplace practices or hygiene hazards in your workplace it should be reported to your supervisor or manager. You cannot lose your job for reporting a hygiene hazard, however if you suspect that the hygiene hazard or practice is serious enough to cause serious illness or food poisoning and you fear for your job, you have the option to contact your local council.

You should follow your organisations procedures for reporting hazards, this may be verbal, or written dependant on the severity.

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