

**COOKING AND FOOD PREPARATION**

**MAINTAIN AND  
PROMOTE FOOD  
HYGIENE**

**LEARNER GUIDE**

**Maintain and promote food hygiene****Learner Information**

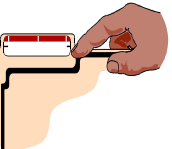
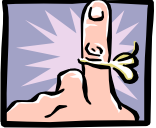


<b>Details</b>	<b>Please Complete details</b>
Name of learner	
Name of in manager	
Work Unit	
Facilitator	
Date started	
Date of completion	
Date of Assessment	

## Table of Contents

Maintain and promote food hygiene .....	1
Table of Contents .....	2
KEYS TO ICONS .....	3
Maintain a cleaning program for kitchen areas .....	4
Introduction.....	4
Specific Outcomes and Range of Learning .....	4
Credits of this Module .....	7
1. Basic Hygiene Practises .....	7
1.1 Food Hygiene Requirements .....	7
1.2 Personal Hygiene .....	8
1.3 Range of Unhygienic Activities.....	8
1.3 Reporting Illness and Injuries .....	10
1.4 Corrective Action.....	10
1.5 Time Management Skills.....	11
2. Food Deliveries .....	14
2.1 Hygiene Checks .....	14
2.2 Lifting Heavy or Bulk Items.....	15
3. Food Storage.....	17
3.1 Hygienically Clean Storage Areas .....	17
3.2 Contamination Threats, continued .....	17
3.3 Cross-Contamination Prevention.....	18
3.4 Range of Food Items .....	18
3.5 Range of Food Types .....	20
3.6 Stock Rotation.....	22
3. Food Storage.....	22
3.7 Pest Infestation .....	22
4. Food Preparation and Hygiene .....	25
4.1 Food Preparation and Cooking Areas .....	25
4.2 Time-Temperature Principle.....	26
4.3 Defrosting Food .....	26
4.4 Cooking Food.....	27
4.5 Waste.....	27
5. Situations and Actions.....	29
5.1 Range of Unexpected Situations and Actions .....	29
Signatures required on successful completion of this module .....	31

## KEYS TO ICONS

The following icons are used throughout the study guide to indicate specific functions:

	<p><b>FOLDER ENCLOSURES</b> This includes all examples, handouts, checklists, etc.</p>
	<p><b>DON'T FORGET/NOTE</b> This icon indicates information of particular importance.</p>
	<p><b>EXERCISES</b> Practical activities to do , either individual or in syndicate groups during the training process</p>
	<p><b>BOOKS</b> Additional resource information for further reading and reference.</p>

## Maintain and promote food hygiene

### Introduction

<b>Purpose</b>	The purpose of this training programme is to provide you with the applied competence according to the Unit Standard. In order to achieve the credits and qualify for this appropriate registered standard, you are expected to have demonstrated specific learning outcomes.
<b>Specific Outcomes</b>	Specific outcomes describe what the learner has to be able to do successfully at the end of this learning experience.
<b>Assessment Criteria</b>	<p>The only way to establish whether a learner is competent and has accomplished the specific outcomes, is through the assessment process. Assessment involves collecting and interpreting evidence about the learners' ability to perform a task.</p> <p>This module may include assessments in the form of self-test, group exercises, quizzes, projects and a practical training programme whereby you are required to perform tasks on the job and collect as portfolio of evidence, proof signed by your supervisor that you have successfully performed these tasks.</p>
<b>Range of Learning</b>	This describes the situation and circumstance in which competence must be demonstrated and the parameters in which the learner operates.
<b>Responsibility</b>	<p>The responsibility of learning rest with you, so . . .</p> <ul style="list-style-type: none"> <li>• Be proactive and ask questions.</li> <li>• Seek assistance and help from your coach, if required.</li> </ul>

### Specific Outcomes and Range of Learning

<b>Demonstrated</b>	1. Explain the health and safety procedures to be followed when
---------------------	---

<b>KNOWLEDGE and UNDERSTANDING:</b>	<p>storing food.</p> <ol style="list-style-type: none"><li>2. Explain the importance of lifting heavy or bulk items in accordance with safety procedures.</li><li>3. Describe methods to detect signs of pest infestation.</li><li>4. Explain reasons for maintaining good personal hygiene when handling and storing food and the impact of not doing so.</li><li>5. Explain the importance of keeping storage areas and equipment hygienically clean and the impact of not doing so.</li><li>6. Describe the main contamination threats when storing food.</li><li>7. Explain the importance of covering cuts and grazes and reporting any illness promptly and the impact of neglecting to do so.</li><li>8. Explain the importance of the relationship between time and temperature when storing and cooking food.</li><li>9. Describe the checks that should be carried out upon delivery to ensure that food items are in a good hygienic condition.</li><li>10. Explain reasons for keeping raw and cooked food separately during storage.</li><li>11. Describe methods to prevent cross contamination.</li><li>12. Describe the correct procedures for defrosting food items and explain the impact of following incorrect procedures.</li><li>13. Explain reasons for always storing food in the correct place.</li><li>14. State organisational requirements when maintaining and promoting food hygiene.</li></ol>
-------------------------------------	---

<p><b>Demonstrated ability to make DECISIONS about practice and to ACT accordingly:</b></p>	<p>15. Given a range of unhygienic activities, wash hands using antiseptic soap after carrying out such activities. (<b>Range of unhygienic activities:</b> handling waste / food waste, visit to toilet, touching of face and hair, blowing nose, handling unwashed fresh foods, smoking, handling cleaning fluids / materials)</p> <p>16. Maintain storage area in a clean and hygienic condition.</p> <p>17. Carry out appropriate checks upon delivery to ensure that food items are in good hygienic condition.</p> <p>18. Store a range of food demonstrating the correct procedures and explain the importance of doing this in accordance with the food type. (<b>Range of food items:</b> meat , poultry, fish, dairy products, vegetables, fruit, eggs, dry goods) (<b>Range of food types:</b> chilled, frozen, uncooked, cooked)</p> <p>19. Rotate stock following correct operational and hygienic procedures.</p> <p>20. Carry out appropriate operational procedures to minimise risk of pest infestation.</p> <p>21. Maintain food preparation, cooking areas and equipment in a hygienic condition.</p> <p>22. Prepare raw and high-risk foods separately, using separate equipment.</p> <p>23. Remove all unfit or waste food from the food preparation and cooking area promptly.</p> <p>24. Keep all waste bins covered and away from food.</p> <p>25. Maintain food items at a safe temperature throughout the cooking process in line with safe hygiene practices.</p> <p>26. Take corrective measures to address unhygienic practices within food preparation, cooking and storage areas.</p> <p>27. Given a range of unexpected situations and problems, decide what action to take and give reasons for that choice. (<b>Range of unexpected situations and problems:</b> equipment faults, problems with food, customer/staff problems, problems with deliveries)</p> <p>28. Prioritise, delegate as appropriate and complete all work in an organised and efficient manner according to priorities and deadlines.</p>
---	--

<p><b>Demonstrated ability to learn</b></p>	<p>29. Given a kitchen where there are inadequate storage facilities, describe how to adapt performance in safely storing different</p>
---	---

from our actions and to ADAPT PERFORMANCE:	food types
--	------------

## Credits of this Module

<b>Credits</b>	The Unit Standard - FP 59 - has a total credit value of 6.
----------------	--

## Purpose of Module

<b>Overall Outcome</b>	The learner will be able to maintain and promote food hygiene and safety procedures during food preparation, cooking and storage according to organisational requirements.
------------------------	--

## 1. Basic Hygiene Practises

### 1.1 Food Hygiene Requirements

<b>Guidelines</b>	Below are guidelines for organisational food hygiene requirements
-------------------	---

No.	
1.	The leader of a team, regardless of its size, is responsible for ensuring that the standards of work required are being met.
2.	Action needs to be taken if these standards are not being met.
3.	Hygiene standards are extremely important, because they impact on the quality of the food served and on the health of the customer.
4.	No food service operation can afford to take chances on the standards of hygiene practised because it places customers at risk - they may become ill, or even die.
5.	Ensure that all staff receive training on personal hygiene and the dangers of food contamination by poor personal hygiene
6.	Ensure that the kitchen is fitted with a wash basin, towel rail, soap dish, clean hand towel and anti-septic soap. Check that hand towels are replaced after every shift or when dirty / wet. Check that soap dispensers are cleaned and filled regularly.

## 1.2 Personal Hygiene

<b>Rationale</b>	<p>It is important to emphasise the importance of personal hygiene to all food handlers to prevent the contamination of food. Food-borne contaminants can cause illness, long-lasting disease, or even death.</p> <p>Contaminants are usually transported by people and passed onto food. Food handlers can transfer biological, chemical and physical contaminants to food while processing, preparing, cooking or serving it.</p> <p>It is therefore essential to take action on unacceptable personal hygiene every time the problem arises.</p>
------------------	---

## 1.3 Range of Unhygienic Activities

<b>Handling waste/ food waste</b>	Train all staff to wash their hands after handling waste food products.
<b>Visit to toilet</b>	Place signs in all change/rest rooms reminding staff to wash their hands after visiting the toilet.
<b>Touching of face/ hair</b>	<p>Train all staff to wash their hands after touching their face and hair. Hair is a particularly unclean aspect of personal hygiene:</p> <ul style="list-style-type: none"> <li>• It constantly falls off</li> <li>• Contains dandruff</li> <li>• Finds its way into food.</li> </ul> <p>Suitable head gear must be worn, and masks/nets for beards.</p> <p>Any food handler suffering from discharges from the nose (even eyes and ears) can contaminate food and they must report colds, sneezing etc to their supervisor</p>
<b>Blowing nose</b>	<p><i>Staphylococci</i> (pl) contribute to many cases of food poisoning and are spread very easily when sneezing, coughing and blowing your nose.</p> <p>Always use a single, disposable tissue when blowing you nose.</p>

<b>Handling unwashed fresh food</b>	Always wear protective clothing Keep raw food away from cooked food to prevent cross-contamination. Wash hands thoroughly with a sanitiser after handling unwashed food.
<b>Smoking</b>	Ensure the following: <ul style="list-style-type: none"><li>• there are "no-smoking" signs placed in visible areas of the kitchen.</li><li>• staff are aware of the no-smoking rule in the food preparation areas</li><li>• all staff receive education on the dangers of smoking in the kitchen.</li></ul>
<b>Handling cleaning fluids/ materials</b>	Cleaning materials and fluids can contaminate foods with flavours / odours. Make sure that staff wash their hands after handling these materials.

## 1.3 Reporting Illness and Injuries

<b>Importance</b>	<p>Train all staff to report any sores, cuts or injuries to the kitchen supervisor. Ensure that these are properly cleaned using the correct medical supplies.</p> <p>Train all staff to report any colds or infections to the kitchen supervisor. Staff must be cleared by a medical practitioner before resuming work responsibilities.</p>
-------------------	---

<b>Consequences</b>	<p>The consequences of not adhering to such policies could result in a food poisoning outbreak i.e.: one or more of the following:</p> <ul style="list-style-type: none"> <li>• Nausea</li> <li>• Vomiting</li> <li>• Abdominal pain</li> <li>• Diarrhoea</li> </ul>
---------------------	--

## 1.4 Corrective Action

<b>Guidelines</b>	Below are guidelines for discussing unhygienic activities with staff concerned.
-------------------	---

No	
1.	The discussion <b>must be held in private</b> . If a staff member is embarrassed in front of other staff, this may create more problems than the attempting to solve the personal hygiene problem.
2.	<b>Be specific</b> about what has been noticed. If the person has bad body odour or bad breath, say so without being aggressive. Don't be vague and refer to "a bit of a problem with your personal hygiene". The person may not understand what is meant, so the problem is unlikely to be solved.
3.	<b>Establish whether there is a reason for the problem</b> . It is possible that the laundry is not washing the uniforms properly, or the staff member may have a medical problem.
4.	Once the reason has been established, encourage the employee to <b>find a solution</b> , and to agree on a deadline for solving the problem. Offer suggestions if necessary.
5.	<b>Thank the employee</b> for finding a solution, and get on with the day. Do not be awkward with the employee after the discussion.



<b>Guidelines</b>	Below are guidelines completing all work in an organised and efficient manner in accordance with priorities and deadlines.:
-------------------	---

No	
1.	List the people available to carry out the required work, and the types of tasks to which they are most suited.
2.	List the tasks to be completed by each individual in order of preparation.
3.	Under each task, list the specific actions to be taken and the standards to be met. Also list the equipment required, and the ingredients to be used.
4.	The tasks for each person should be on one piece of paper, so that you can hand this to them for easy reference.
5.	Remember that you will have to monitor the work of your team to ensure that the tasks allocated are being performed on schedule.
6.	An important aspect of time management is the subject of "ergonomics". This considers the use of time and energy, and the principle is to allocate your time so that each task is completed in the shortest possible time and with the least amount of effort.
7.	Effective time management will prevent fatigue. Tiredness reduces productivity, and the quality of your work also deteriorates.



## Self Assessment 01

---

<b>Instructions</b>	<ul style="list-style-type: none"><li>• In the following assessment you will be required to answer all questions.</li><li>• You are required to obtain 100% to pass.</li><li>• If you do not obtain the pass mark, revise all the learning material and redo the assessment.</li></ul>
---------------------	--



### Question 1

Describe the rationale for high personal hygiene standards for food handlers.

### Question 2

List 5 unhygienic activities and prevent measures.

### Question 3

Describe how you would address non-compliance of hygienic standards with staff.

---

---

## 2. Food Deliveries

### 2.1 Hygiene Checks

Procedures	Below are procedures for checking goods received:
------------	---

Step	Action
1.	From time to time, check the condition of deliveries and comment on the condition of the supplies received.
2.	Check the hygiene of the delivery person, the truck and the packaging.
3.	Practice HACCP (Hazards Analysis Critical Control Point) principles to ensure that standards are consistently applied
4.	When purchases are delivered, find the relevant Purchase Order before accepting the goods
5.	Using the temperature probe, check that the food products comply with the required temperatures. Record these temperatures on the HACCP chart. (refer to folder enclosure)
6.	Check that the reference number on the delivery corresponds with the reference number on the Purchase Order. (refer to folder enclosure)
7.	Check that the items delivered agree with the Purchase Order Agree in terms of quality, specifications and quantity
8.	Ensure that the delivery is accurately tagged with the relevant information
9.	Ensure price charged agrees with the quoted price on the Purchase Order.
10.	Inspect for the following: <ul style="list-style-type: none"> <li>• The packaging in which the products will be stored - it must comply with the requirements of the contract between the supplier and the company.</li> <li>• Any signs of pest infestations in the packaging or crates - reject immediately.</li> <li>• Weight - use the weighing machine to ensure that the delivery agrees with the specifications on the Purchase Order.</li> </ul>
11.	Tick off each item on the Invoice as it is checked. Also make a note of any damaged or missing stock as you go along. <b>Do not rely on memory.</b> (Refer to folder enclosure)
12.	If there are any discrepancies with the order (quantity, quality, price), contact the Exec. / Sous Chef who signed the Purchase Order with the

	details of the problem. He / she will decide whether the goods should be accepted or not.
13.	Reject all goods that are not of the required quality or specifications, as well as items with damaged or contaminated packaging. Do not accept items if you cannot read the labels properly - particularly chemicals and food items with illegible sell-by and use-by dates.
14.	Any problems must be noted on the Delivery Note/Invoice, and a Credit Note must be made out to be returned to the supplier with the details of unacceptable items. (refer to folder enclosure)
15.	When satisfied that the delivery is correct, sign the copy of the Delivery Note/Invoice.
16.	Attach this to the Purchase Order. Place these in the "out tray" to be sent to the Creditors Clerk at the end of the shift.

## 2.2 Lifting Heavy or Bulk Items

<b>Importance</b>	It is important to comply with health and safety standards when lifting heavy or bulk items to prevent back injuries and accidents.
-------------------	---

<b>Procedures</b>	Below are procedures for lifting heavy or bulk items
-------------------	--

<b>Step</b>	<b>Action</b>
1.	Never move heavy objects from one place to the next. Use trolleys to move goods around
2.	Only carry goods to lift them and place them onto and off the trolleys
3.	Bend the knees. Lift and hold the package close to the body to prevent back injuries



## Self Assessment 02

---

<b>Instructions</b>	<ul style="list-style-type: none"><li>• In the following assessment you will be required to answer all questions.</li><li>• You are required to obtain 100% to pass.</li><li>• If you do not obtain the pass mark, revise all the learning material and redo the assessment.</li></ul>
---------------------	--

### Question 1

Describe the hygienic checks to be carried out when receiving goods.

---

---

## 3. Food Storage

### 3.1 Hygienically Clean Storage Areas

<b>Importance</b>	<p>It is important to keep storage areas clean to ensure that:</p> <ul style="list-style-type: none"> <li>• Shelves are free from dust and grime. This may harbour bacteria/germs and contaminate food when they are being used</li> <li>• Cross contamination between food is reduced</li> <li>• The area is free of pests such as flies, ants, cockroaches and rodents which cause contamination</li> <li>• Floors are not sticky/slippery - this reduces accidents</li> </ul>
-------------------	--

### 3.2 Contamination Threats, continued

<b>Direct and Cross-Contamination</b>	<p>Food contamination refers to the presence of harmful organisms or substances in food. When consumed in sufficient quantities, food-borne contaminants can cause illness, long-lasting disease, or even death.</p> <p>Contamination occurs in two ways:</p> <ul style="list-style-type: none"> <li>• <b>Direct contamination:</b> the contamination of raw food or the plant/animal from which they come. Contaminants (bacteria and fungi) are present in the air, soil and water so food can become easily contaminated by exposure to the environment.</li> <li>• <b>Cross contamination:</b> contaminants are usually transported by people and passed onto food. Food handlers can transfer biological, chemical and physical contaminants to food while processing, preparing, cooking or serving it. It is therefore necessary to prevent cross-contamination during processing and service through proper sanitation.</li> </ul>
---------------------------------------	--

### 3.3 Cross-Contamination Prevention

Prevention	<p><b>Potentially hazardous foods</b> are those on which bacteria thrive and include high protein food such as meat, poultry, seafood, dairy products and eggs.</p> <p>Dishes comprised mostly of these ingredients must therefore be handled with great care during storage, processing and cooking by:</p> <ul style="list-style-type: none"> <li>• Storing food in the correct place e.g. refrigerator, freezer or dry storage</li> <li>• Storing raw and cooked food separately</li> <li>• Maintaining food at the correct temperatures</li> <li>• Sanitising work surfaces and equipment between different food preparation</li> </ul>
------------	---

### 3.4 Range of Food Items

Meat	<p>Meat should be stored wrapped in plastic in the refrigerator at below 5°C or tightly wrapped and frozen:</p> <ul style="list-style-type: none"> <li>• Offal, minced meat and cuts such as veal escalope are best eaten within a day.</li> <li>• Chops, steak and small pieces can be left for two to three days, and large roasts for up to five days.</li> <li>• Red meats keep better than white meats, and lean cuts better than fatty cuts as the fat turns rancid first.</li> <li>• Beef, lamb and venison can be frozen for up to a year depending on the cuts. Veal and pork should not be frozen for longer than 8 months.</li> </ul>
------	--

Poultry	<p>Poultry, Game Birds, Rabbit and Hare:</p> <ul style="list-style-type: none"> <li>• Poultry and small game can be stored in the refrigerator for two days, and four days for goose and turkey.</li> <li>• The fattier the product, the less time it can be frozen. As a general rule don't freeze for longer than 6 months.</li> <li>• To freeze a whole bird, remove the fat from the vent end and remove the giblets. Wrap the bird completely in plastic. Do not freeze game birds until they have been cleaned and drawn.</li> </ul>
---------	--

Fish	<p>Consider the following:</p> <ul style="list-style-type: none"> <li>• Fresh fish should be stored for a short a time as possible - no more than a day or two, provided it is well wrapped in plastic.</li> <li>• It is essential to ensure that fish has been gutted, as it will spoil more quickly if it has not.</li> <li>• Oily fish will spoil the most quickly.</li> <li>• Fish may be frozen at below <math>-10^{\circ}\text{C}</math> for no more than 3 months.</li> </ul>
------	--

Dairy products	<p><b>Dairy Items</b></p> <ul style="list-style-type: none"> <li>• Milk and cheese should be stored in the refrigerator. Milk will keep for about a week, while cheese will keep for much longer.</li> <li>• Milk can be frozen for up to three months. Cheese should not be frozen.</li> <li>• Icecream must be frozen at temperatures below <math>-10^{\circ}\text{C}</math>.</li> </ul> <p><b>Dairy products</b> generally freeze well, with the exception of those that have a fat content of less than 40%.</p> <ul style="list-style-type: none"> <li>• Cream with a fat content of less than 40% tends to separate.</li> <li>• <b>Pasteurized milk</b> does not freeze well because it separates into fat globules, and protein changes cause precipitation on thawing. However, homogenized or pasteurized homogenized milk does freeze well.</li> <li>• <b>Blue cheeses</b> such as Blaaukrantz, becomes very crumbly if frozen.</li> <li>• <b>Cream cheese</b> does not freeze well and tends to crumble on thawing. However, hard cheeses do freeze quite successfully.</li> </ul>
----------------	---

Vegetables and Fruit	<p>Fresh fruit and vegetables should be stored in the refrigerator as follows:</p> <ul style="list-style-type: none"> <li>• They should be packed into appropriate storage containers according to type.</li> <li>• They should be stored below other foods to prevent any cross-contamination from soil residue on the vegetables.</li> <li>• Bananas, onions and potatoes should be stored at room temperature.</li> <li>• Wash and trim leafy vegetables and rhubarb and place them in containers before refrigerating them.</li> </ul>
----------------------	--

	<ul style="list-style-type: none"> <li>• Potatoes, carrots and other root vegetables should be scrubbed in cold water and then rinsed in clean, cold water.</li> <li>• All other fruit and vegetables must be washed in cold water to remove all soil and dust and any chemicals.</li> </ul>
--	--

<b>Eggs</b>	<ul style="list-style-type: none"> <li>• Store in the refrigerator with the pointed end down to make sure that the yolk is centred.</li> <li>• Store for a maximum of three weeks.</li> </ul>
-------------	---

<b>Dry goods</b>	<p>These include: flour, sugar, rice, maize meal, salt and should be stored in dry goods stores as follows:</p> <ul style="list-style-type: none"> <li>• These store rooms should be dry and cool, with good ventilation. They must be free of pests (such as cockroaches and mice), and must be kept clean and tidy.</li> <li>• Store food and drinks on pallets, shelves or in bins designed for the purpose - not on the floor.</li> <li>• Any spillages must be cleaned up immediately.</li> <li>• Check storage, food and drink containers to ensure that they are not damaged, rusted, or leaking.</li> <li>• Check the expiry dates on all containers before the food and drinks are stored.</li> <li>• Clean the dry goods stores at least weekly.</li> <li>• Store fruit and vegetables separately from other food. Check fruit for mould as the spores are carried in the air and spread very easily.</li> </ul>
------------------	--

### 3.5 Range of Food Types

<b>Chilled</b>	<p>Ensure the following when storing chilled food:</p> <ul style="list-style-type: none"> <li>• All chilled food products must be stored immediately after delivery. Record the delivery time and the storage time on the "HACCP Temperature Control Sheet" to control that food products are not out of cold storage for any length of time</li> <li>• Chilled food products must be stored at 3 - 5°C within 10 minutes of removal from the delivery vehicle.</li> <li>• Also check that goods are correctly tagged with product name, delivery date, function date, time and venue.</li> </ul>
----------------	---

	<ul style="list-style-type: none"> <li>When chilled products are stored in the kitchen fridges, make sure that the time at which this happens is recorded on the "HACCP Temperature Control Sheet" in the HACCP Receiving Office.</li> </ul>
--	--

<b>Frozen</b>	<p>Ensure the following when storing frozen food:</p> <ul style="list-style-type: none"> <li>All chilled and frozen food products must be stored immediately after delivery. Record the delivery time and the storage time on the "HACCP Temperature Control Sheet" to control that food products are not out of cold storage for any length of time</li> <li>Frozen food products must be stored at -18°C within 10 minutes of removal from the delivery vehicle.</li> <li>Also check that goods are correctly tagged with product name, delivery date, function date, time and venue</li> <li>When frozen products are stored in the kitchen freezers, make sure that the time at which this happens is recorded on the "HACCP Temperature Control Sheet" in the HACCP Receiving Office.</li> <li>If for any reason food products cannot be sent to the kitchen storage immediately, place them in the holding fridge and freezer at Goods Receiving.</li> </ul>
---------------	--

<b>Uncooked</b>	<p>When storing uncooked food, ensure the following:</p> <ul style="list-style-type: none"> <li>Food is stored in the correct place</li> <li>Raw and cooked food are stored separately to prevent cross-contamination</li> </ul>
-----------------	--

<b>Cooked</b>	<p>For storing cooked, plated food, note the following:</p> <ul style="list-style-type: none"> <li>Wrap the trolley with cling wrap and tag as required.</li> <li>Wheel the trolleys into the holding cold room, ensuring that trolleys are packed according to FIFO - the trolleys to be removed from the cold room first must be nearest the door, and those to be removed last must be furthest from the door.</li> </ul>
---------------	--

	<ul style="list-style-type: none"> <li>• Check that the holding fridge is holding a temperature of 3°C.</li> <li>• Record the trolley, and the time and temperature at which the trolley was stored in the holding fridge on the "HACCP Temperature Control Sheet".</li> </ul>
--	--

### 3.6 Stock Rotation

<b>Procedures</b>	Below are procedures for practising FIFO (First-In First-Out) principles of stock rotation:
-------------------	---

<b>Step</b>	<b>Action</b>
1.	Wheel trolleys to the appropriate storage shelf, fridge or freezer, making sure that they are stored in FIFO (First-In First-Out Cycle) order.
2.	Trolleys containing goods to be used first must be closest to the door.
3.	Trolleys containing goods to be used last must be furthest from the door.
4.	As trolleys are removed from the storage shelf, fridge or freezer, the trolleys behind them must be moved forward so that new deliveries can go into the back.

## 3. Food Storage

### 3.7 Pest Infestation

<b>Detection</b>	<p>Pest infestation is detected by looking for the following signs:</p> <ul style="list-style-type: none"> <li>• pest droppings (faeces)</li> <li>• holes in skirtings / brickwork</li> <li>• cracks behind equipment</li> <li>• holes chewed in bags, sacks, packets</li> </ul> <p>In addition, to this hire a pest control companies to conduct formal checks once a month.</p>
------------------	---

<b>Preventative measures</b>	Below are guidelines for minimising the risk of pest infestation:
------------------------------	---

No.	
1.	Never allow waste food to lie on the floor for any length of time. Check that floors are swept and washed down at least twice per shift.
2.	Ensure that all storage areas (floors, shelves and containers) are swept, wiped and washed out every day
3.	Arrange for a professional pest control company to inspect the kitchens regularly to detect and control pests. This should be done once per month
4.	Regularly check for signs of pest droppings (faeces), holes in skirtings / brickwork, cracks behind equipment or holes chewed in bags, sacks, packets.
5.	Make sure that pest control contractors fulfil their terms of contract, and take action if necessary.
6.	Conduct checks to determine if there is any pest infestation. If a problem is noticed, say what has been seen. For example, "I see there are mice droppings under this shelf".



## Self Assessment 03

<b>Instructions</b>	<ul style="list-style-type: none"><li>• In the following assessment you will be required to answer all questions.</li><li>• You are required to obtain 100% to pass.</li><li>• If you do not obtain the pass mark, revise all the learning material and redo the assessment.</li></ul>
---------------------	--

### Question 1

Explain the importance of maintaining hygienically clean storage areas.

### Question 2

Describe the 2 ways in which contamination occurs

### Question 3

List the range of food items and storage procedure

### Question 4

List the range of food types

### Question 5

Describe how to detect pest infestation

## 4. Food Preparation and Hygiene

### 4.1 Food Preparation and Cooking Areas

<p><b>Hygiene Principles</b></p>	<p>All staff must receive training in the preparation of food according to hygiene principles. Ensure the following:</p> <ul style="list-style-type: none"> <li>• <b>Cooked foods</b> are not cut, mixed, portioned, served or rested on any equipment previously used in the preparation of uncooked food, unless the equipment has been thoroughly washed in hot soapy water.</li> <li>• <b>Raw and cooked food</b> are handled separately and according to hygienic principles. Do not ignore bad work habits, such as wiping knives on aprons.</li> <li>• <b>Equipment and utensils</b> are washed in hot soapy water and water is changed as soon as the soap starts to lose effect or gets dirty. Check that staff do not simply add detergent to dirty water in order to save having to empty and refill the wash sink. This will allow fats to build up on the equipment and cause food poisoning.</li> <li>• <b>Food temperatures</b> are either kept very hot (above 63°C) or very cold (below 5°C) to minimise the multiplication of food poisoning bacteria.</li> <li>• <b>Staff must be trained</b> to check that food deliveries are hygienically packed and delivered. Any food suspected of being in an unhygienic condition should be returned to the supplier.</li> <li>• <b>Food preparation areas are disinfected</b> by washing with very hot water / steam and a chemical disinfectant.</li> </ul>
----------------------------------	--

<b>Raw and High Risk Foods</b>	Train all staff to wash their hands after handling raw or uncooked foods. These high risk foods carry food poisoning bacteria which can be transferred other foods. This process is called <i>cross contamination</i> and is the major cause of all food poisoning incidents in the kitchen.
--------------------------------	--

## 4.2 Time-Temperature Principle

<b>Importance</b>	<p>Most bacteria that cause food-borne disease multiply rapidly between 16-49°C. The broad range of temperatures between 4-60°C is referred to as the <b>temperature danger zone</b>. By keeping pasta dishes out of the temperature danger zone, the bacteria's ability to reproduce is decreased.</p> <p><i>It is important to keep hot food, hot and cold food, cold.</i> This is known as the <b>time-and-temperature principle</b>. Potentially hazardous food should be heated or cooled quickly so they are within the temperature danger zone as briefly as possible.</p>
-------------------	---

## 4.3 Defrosting Food

<b>Procedures</b>	Below are correct procedures for defrosting/thawing frozen foods:
-------------------	---

<b>Step</b>	<b>Action</b>
1.	Small items pieces of meat and poultry, pre-cooked and reformed items of fish, meat and poultry can be cooked straight from the freezer.
2.	Large joints of meat and ALL frozen, whole birds must be thawed/defrosted in the refrigerator before cooking.
3.	NEVER place frozen food under warm running water as this thaws out the outside faster than the inside and can result in the food being placed in the oven without the inside being cooked properly

4.	Avoid handling meat as until it needs to be cooked as this could increase the risk of cross-contamination.
----	--

## 4.4 Cooking Food

<b>Safe Temperatures</b>	Safe temperatures for cooking food are above 74°C and food should be maintained at this temperature until served.
--------------------------	---

## 4.5 Waste

<b>Guidelines</b>	Below are guidelines for handling waste:
-------------------	--

No.	
1.	Check that waste food products are stored away from the food preparation areas.
2.	Waste food must be removed from food preparation areas immediately.
3.	Stress to staff the importance of removing contaminated or waste food from food preparation areas immediately, and to ensure that the area is disinfected/ sanitised immediately.
4.	Waste food must be placed into the correct containers, which should be lined with plastic bags, which will be easy to remove when full
5.	Make sure that full waste containers are removed from the kitchen to the correct storage areas.
6.	Check that refuse bins are kept covered, and that they are washed and sanitised each time they are emptied



## Self Assessment 04

---

<b>Instructions</b>	<ul style="list-style-type: none"><li>• In the following assessment you will be required to answer all questions.</li><li>• You are required to obtain 100% to pass.</li><li>• If you do not obtain the pass mark, revise all the learning material and redo the assessment.</li></ul>
---------------------	--

### Question 1

List and explain the hygienic principles in food preparation and cooking areas.

### Question 2

Describe the defrosting procedure.

### Question 3

List the safe cooking temperatures

---


## 5. Situations and Actions

### 5.1 Range of Unexpected Situations and Actions

<b>Equipment Faults</b>	<p>Bring these to the attention of the Maintenance Manager immediately so that repairs can be done.</p> <p>If there are problems with refrigeration equipment, keep them closed so that the internal temperature does not increase.</p>
-------------------------	---

<b>Problems with Food</b>	<p>Remove spoiled food from storage areas immediately and wash and sanitise the area. Mould creates spores, which can contaminate other food in the area, so it is important to minimise the chances of cross-contamination.</p>
---------------------------	--

<b>Customer/ Staff Problems</b>	<p>Consider the following:</p> <ul style="list-style-type: none"> <li>• <b>Untrained Staff:</b> The Senior Chef must ensure that staff are competent to carry out all work in an hygienic manner. Organise and conduct hygiene training through cleaning equipment and chemicals suppliers. Clearly display "memory prompts" all over the kitchen, reminding staff to wash hands, etc.</li> <li>• <b>Guest Complaints:</b> Any guest complaints relating to food hygiene must be treated extremely seriously. The mere rumour of poor hygiene standards can result in severe damage to the business.</li> </ul>
---------------------------------	---

<b>Problems with Deliveries</b>	<p>Food deliveries that do not comply with exact standards in terms of quality, packaging, use-by date and internal temperature must be returned to the supplier.</p> <p>If delivery problem persist over a period of time, consider changing suppliers to reduce time wastage and shortages.</p>
---------------------------------	---



## Practical exercise

Practical Exercise	Task Type	Date Completed	Comments by Supervisor
Task No. 1	Inspect food hygiene practices in a food preparation environment and compile a report on: <ul style="list-style-type: none"> <li>• Food items i.e. meat, poultry etc.</li> <li>• Food types i.e. chilled, frozen, etc.</li> <li>• Unhygienic activities</li> </ul>		
Task No. 2	As a project research, describe the best resources of how to adapt performance in safety storing different food types in the case of inadequate storage facilities.		

<b>Signatures required on successful completion of this module</b>
--

<b>Comments &amp; Review by coach</b>	

<b>General comments from learner</b>	

I ..... have (Supervisor / Coach) hereby certified that I have examined the learners' workbook and that the learner has successfully completed this section of the practical training programme.

\_\_\_\_\_  
SIGNATURE SUPERVISOR

\_\_\_\_\_  
SIGNATURE LEARNER

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_