



Chapter - III

Safe practices in lifting and storing goods

- Do not lift overweight equipment. Ask for assistance if the item is too heavy.
- Heavy goods should always be lifted with the knees bent so that the legs take the weight and the spine is protected.
- Use trolleys and other lifting equipment if required.
- Heavy items should be placed on lower shelves to minimise lifting and reduce muscle strain.
- Before moving a load, check your path for obstacles and danger zones.

Hygiene when storing food

It is important to keep food storage areas clean and hygienic to eliminate the risk of contamination and food spoilage.

Food storage areas need to be kept clean and hygienic to prevent or protect them from the following:

Causes	Precautions	Reasons
Harmful Bacteria	<ul style="list-style-type: none"> • Store different food types in different areas of the fridge, e.g. cooked meat above raw meats. • Wrap or place food items on trays or in containers. • Clean up spills or drips immediately. 	<ul style="list-style-type: none"> • Cross-contamination can occur if food is stored unwrapped or in same containers. Blood from raw products can drip onto cooked items.





<p>Dangerous Substances</p>	<ul style="list-style-type: none"> Remove all cleaning products and chemicals from food storage areas. Always rinse surfaces and equipment after cleaning using water to remove cleaning residue. 	<ul style="list-style-type: none"> Chemicals can contaminate food if residues or products have not been removed from storage areas.
<p>Physical Contamination</p>	<ul style="list-style-type: none"> Remove food items from cardboard boxes, paper and hessian bags and place them in clean plastic tubs or food containers. Remove damaged packaging and replace with cling wrap or in a sealed food container. 	<ul style="list-style-type: none"> Food spoilage can occur when bacteria is passed from the packaging of one food item to another, e.g. potatoes in hessian bags to fruits.
<p>Pests</p>	<ul style="list-style-type: none"> Keep food covered above floor level and at correct temperatures. Keep areas clean and free from rubbish or food scraps. 	<ul style="list-style-type: none"> Pests are attracted to food scraps and rubbish. Any food products at ground level are at risk of infestation. Pests harbour deadly bacteria on their legs and bodies.
<p>Unsuitable Temperatures</p>	<ul style="list-style-type: none"> Frozen food should be stored in the freezer at -15°C. Perishable food should be refrigerated at 0°C to 5°C. Those foods which are dry, canned, preserved or 	<ul style="list-style-type: none"> Food that is not stored at the correct temperature will spoil. Spoilage occurs when bacteria grow to high levels. Food poisoning can occur once bacteria reach these high levels.





	require room temperature should be stored at 10 – 20°C.	
Excessive humidity or dryness	<ul style="list-style-type: none"> • Ensure proper ventilation (either natural or mechanical) and adequate lighting (not direct sunlight) to your storage area. 	<ul style="list-style-type: none"> • Humidity can lead to sugar becoming lumpy, bread mouldy and fruit not ripening properly. Direct sunlight can cause deterioration of coloured food ingredients.

Store food items hygienically

All food items have recommended storage procedures that look at temperature, shelf life and place of storage. Time and temperature are important when storing food because if food items that are held before service or stored at the incorrect temperatures, they could spoil causing your customers to suffer from food poisoning.

Incorrect storage of foods will also impact on food hygiene. Foods such as chicken, eggs, pork, dairy products and sauces are all high-risk foods that quickly spoil and can lead to cross-contamination of other foods if not stored properly.

Types of storage

DRY STORAGE

Dry storage is recommended for those products that are best kept at room temperature (10 – 20°C) and have a long shelf life. Examples of these products include:

- preserved or dry goods
- canned, bottled, bagged or boxed items and cakes and biscuits.
- Ensure that dry stores are kept clean and free of garbage and food scraps.
- Ensure that all products are raised above floor level and stored on suitable shelving.



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- The storage area should have adequate lighting and be well ventilated to allow air circulation for removal of odours. It is recommended that these areas not be subject to direct sunlight.
 - Apply stock rotation techniques, using old stock first.
 - Chemicals should not be kept in food storage areas.

REFRIGERATED STORAGE

Food items that are stored in refrigerated conditions generally have a short shelf life and are highly perishable. All food items should be kept between 0 – 5°C. Temperatures outside this range promote spoilage of food and high bacteria growth leading to possible food poisoning outbreaks.

Items that require refrigerated storage include uncooked food such as meat, seafood, dairy products, poultry, eggs and cooked or prepared foods. Also vegetables and some fruits should be refrigerated.

- Refrigerators should be cleaned and sanitised on a regular basis.
- Maintain correct temperature (use internal thermometer to crosscheck temperature).
- Ensure all products are raised above floor level on suitable shelving that allows air to circulate and cool all products.
- Prevent cross-contamination by providing item specific storage areas, e.g. dairy section, raw meat section, seafood section.
- Food should be cooled as rapidly as possible to prevent food spoilage before being refrigerated.
- Label and date all food items to aid in correct stock rotation.
- Always observe use-by dates.

FREEZER STORAGE

Highly perishable and short shelf life food products can be stored in a freezer to extend their shelf life.





Freezers should be maintained at a temperature of -18°C or below. Food items such as meat, poultry, seafood and cooked or prepared foods can be frozen.

Items stored in paper, cardboard or tin should not be stored in a freezer, as defrosting will cause paper products to breakdown and become soggy and tins to corrode.

- Freezers should be cleaned and sanitised on a regular basis.
- Maintain correct temperature of freezers. Use thermometers to crosscheck operating temperature.
- All food items should be adequately chilled prior to freezing.
- All items should be completely covered or wrapped in cling wrap to prevent freezer burn. Freezer burn is caused by moisture being drawn out of exposed or incorrectly wrapped items by subzero temperatures, resulting in food spoilage.
- When meat and poultry products are defrosted or thawed, they should be covered and refrigerated and never re-frozen.
- Meat, poultry and fish products should be handled as little as possible after defrosting/thawing.
- Label and date all products to be frozen.
- Apply stock rotation techniques, using old stock first.

Points to remember when freezing food

- Frozen meats will not keep indefinitely.
- Beef will keep 9 – 12 months at minus 18°C .
- Veal & Lamb will keep for 6 months at minus 18°C .
- Poultry will keep for 4 – 6 months at minus 18°C .
- Pork will keep for 4 months at minus 18°C .
- Thaw frozen meat carefully under refrigeration.



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- Frozen poultry should be tightly wrapped in cling wrap and stored at minus 18°C.
 - Frozen fish should be tightly and individually wrapped and stored at minus 18°C.

Pest infestations

Pests, otherwise known as vermin are attracted to food storage areas, as there are large amounts of foodstuffs present, which are easily accessible. They may carry disease and bacteria, which will lead to food poisoning and/or loss of stock.

Signs of pests:

- Droppings
- Chewed boxes and packaging
- Visible cockroaches or mice/rats

Personal hygiene when handling the food

Personal hygiene is about keeping your body clean and healthy. This is important because your body carries bacteria on the skin and in body fluids that can be transferred to the things you touch especially food.

To present a clean and tidy image you must:

- shower, use deodorant and change your underwear everyday
- wear a clean work uniform everyday
- clean your teeth everyday
- have neat and clean fingernails
- wash your hands regularly with soap and warm water
- wash your hair regularly
- keep your hair tidy - if it is long you must tie it back from your face
- keep facial hair neat and trim





WASH HANDS HYGIENICALLY

Hands are the most common cause of cross-contamination and the largest carrier of food poisoning bacteria. It is important to remember that everyday hand actions and subconscious body habits like scratching your nose can help to spread bacteria from one place to another.

Personal hygiene is important when handling food to stop cross-contamination, the risk of food poisoning and to ensure good quality food is served to customers. It also eliminates unnecessary food wastage resulting from cross-contamination and spread of bacteria.

You must wash your hands before and after handling food.

- Use a hand basin, never a food sink.
- Use anti-bacterial soap from a soap dispenser and a scrubbing brush to get fingernails clean.

Unhygienic activities include:

- handling waste/food waste
- visiting the toilet
- handling unwashed fresh food
- smoking
- handling cleaning fluids/materials
- using a handkerchief or tissue
- touching your ears, nose, mouth or hair
- handling animals
- handling money.

CUTS, GRAZES AND ILLNESS

When you are sick the germs or bacteria you carry can be harmful to other people, causing illness and disease. Good personal hygiene is important when





you are working with food to avoid transferring germs or bacteria that cause vomiting and/or diarrhoea. If you have recently been sick with an illness that causes vomiting and/or diarrhoea, washing your hands properly especially after you have used the toilet is very important to prevent the spread of that disease to other people.

Generally you know when you are sick because you feel run down and have symptoms such as a sore throat, coughing, runny nose and aching body.

When you are sick you are infectious and dangerous to other people. Diseases like Tuberculosis, colds and influenza are very infectious diseases that are passed onto other people by the germs released into the air when you cough or sneeze. Each time you cough, sneeze or blow your nose into a handkerchief or tissue you must wash your hands thoroughly. If you find out that you have any of these diseases you must tell your supervisor straight away and see a doctor.

Cuts, burns, grazes, sores or other wounds are also a breeding ground for bacteria. If you have any wounds on your hands or other parts of your body, wash your hands each time you dress or touch the wound.

Cuts and grazes that happen at work should be washed, treated with disinfectant and covered with a waterproof dressing. Do not handle food if you have wounds, cuts on your hands.

Maintain equipment, preparation and cooking areas

Maintaining clean and hygienic preparation and cooking areas and equipment is necessary to prevent the spread of harmful bacteria through cross-contamination. Food poisoning bacteria can be found anywhere in water, soil, raw food products, and animals to soiled equipment and bench tops. Cross-contamination, or the transferring of bacteria from one item to another, occurs when food products come into contact with unclean slicers, chopping boards, bench tops, bowls etc. It is important to remember that food poisoning bacteria are microscopic and cannot be seen by the naked eye. When they infect food, we cannot smell or taste the difference and symptoms such as nausea and cramps can start between 1 – 72 hours later. This is why it is necessary to prevent bacteria growth by following cleaning programs.





Work surfaces should be cleaned in the following way:

1. Wipe off food debris and loose dirt.
2. Wash down with detergent and water at a temperature of 50 – 60°C. Use disposable cloths or disinfect cloths daily to stop them from spreading bacteria from one surface to another.
3. Rinse thoroughly with sanitiser and water. Remember to leave solution in contact with surface for the time recommended by the manufacturer's instructions so that all bacteria can be killed.
4. Wipe surfaces down with clean cloth and allow to air dry.

Other equipment

A cleaning routine should be established for all large pieces of equipment used in the kitchen. As a general rule, all equipment that comes into contact with food should be taken apart and cleaned after every use. To ensure that cleaning is not neglected, draw up a schedule that lists:

- the items to be cleaned
- how often they must be cleaned
- how they must be cleaned
- who must clean them.

It is important to note that all rubbish should be removed at the end of each shift and that all cleaning equipment is thoroughly cleaned and stored away correctly.

Time and temperature when cooking different food items

Proper care should be taken and health and safety procedures followed during the preparation and cooking of different food items:

It is firstly important to identify those food groups that are at most risk of bacterial contamination. Foods in which bacteria multiply rapidly are known as potentially hazardous foods.

Some examples of potentially hazardous foods are raw and cooked meats, cooked





potatoes, rice and pasta, stocks, gravies and sauces, egg products, cream and milk products.

Tips:

Conditions for bacteria

Oxygen	Bacteria can reproduce and grow with or without oxygen
Temperature	Bacteria like warm conditions, especially room temperature. Food poisoning bacteria usually only grow between 5 – 60° C. This temperature range is known as the “danger zone”.
Acidity	Bacteria cannot grow in high acid levels. Lemon juice and vinegar are quite often used to preserve foods to help stop bacterial contamination
Moisture	All living things need moisture to grow
Time	Given the right conditions, bacteria can reach large numbers over time. Bacteria are able to double in numbers every 20 minutes.

Working hygienically when preparing different food types

When preparing foods for cooking, it is necessary to keep a clean and hygienic work environment. All work surfaces, equipment and utensils should be sanitised before preparing food and no utensil or piece of equipment should be used on two different products. For example, cross-contamination can occur when cooked beef is cut on a chopping board straight after cutting up raw chicken. It is necessary to use either two cutting boards or clean and sanitise between tasks. Some suppliers are now producing different coloured cutting boards to help eliminate cross-contamination. For example, red chopping board for raw meats, green for vegetable production etc.

TIPS

- Prepared food should not remain at room temperature for too long.
- Do not prepare food too far in advance.
- Clean all food items in a separate ‘food only’ sink.





- Never defrost items at room temperature; place them in the refrigerator on a tray. (It is recommended that you allow enough time for food to defrost in a fridge as the temperature is below 4°C and out of the danger zone. Simply placing food on a bench allows bacteria to multiply as it defrosts in a warm environment, increasing the risk of food poisoning.)

Cooking food types

The cooking of all food types can be done using a variety of cooking methods (deep-frying, boiling etc). Cooking not only allows the combining of flavours and makes food more edible, it is a major factor in reducing the risk of food poisoning. Bacteria found in soils covering vegetables, water that vegetables have been washed in and in meat and meat products can be easily destroyed by heating or cooking to a temperature above 75°C. A thermometer is recommended. Some foods can be boiled, knowing that boiling point is 100°C.

Important points

- Serve cooked food as quickly as possible and at a recommended temperature of 63°C.
- Cook food products at 75°C and above, to kill all bacteria.
- Preheat cookery equipment to help reduce cooking time and to make sure product does not remain in the danger zone too long.
- If holding or cooking food items in a hot box or bain-marie, make sure the temperature remains on at least 75°C.
- If cooked food is to be served later, cool rapidly and place in the refrigerator.

Waste disposal

Food waste is an ideal breeding ground for bacteria. If not properly maintained it can attract flies, rats, mice and other pests that can transfer bacteria on their legs and bodies back to the kitchen area.

Listed below are some basic rules for pest control:

- Keep the premises clean at all times.



- Always be on the lookout for pests and look for telltale signs such as mouse droppings or footprints, holes in walls and fly screens.
- Do your best to keep them out, deny access to food preparation areas by closing doors and installing fly zappers.
- Use professional pest controllers to regularly inspect premises.

It is most important to make sure that the health and safety of staff and customers is not compromised by the build up of overflowing bins and refuse. Make sure it is collected and removed frequently, especially during peak trading times. Some businesses have specific cool rooms for garbage to be stored in until collection. These help to reduce bad smells and pest infestation.

Listed below are general rules for garbage disposal.

- Wash your hands immediately after handling garbage or garbage containers.
- Line all garbage bins with plastic liners and replace as needed.
- Clean and sanitise garbage containers frequently.
- Provide lids for all bins.
- Ensure lids are sealed when not in use to protect from vermin and control odours.
- Make sure there are enough garbage bins located in your immediate area.

UNEXPECTED SITUATIONS

Observing and following standard procedures is the best way to prevent the unexpected from happening. However, these situations do arise and they should be reported to your supervisor in accordance with organisational requirements.

Unexpected situations can include:

- equipment faults
- problems to do with food





- problems to do with deliveries
- injuries.

Rules to be followed !

- Report all unexpected situations to your supervisor.
- All breakage's and damaged goods should be removed from circulation and particulars recorded.
- Spillage's can present a safety issue if not cleaned straight away. Use warning signs whenever wet cleaning and mopping is taking place.
- When dealing with faulty equipment, it is important to:
 - turn off or unplug faulty item
 - attach a warning note to item advising that equipment is faulty
 - fill out a maintenance requisition form and inform supervisor.
- Report all illness to your supervisor.
- Cover cuts and grazes to protect food from contamination and poisoning that could result if a food handler suffers from an infectious disease or sore on his/her body.

