PERSONAL HYGIENE FOR FOOD HANDLERS

ACITIVITIES/INFORMATION

The standards of good personal hygiene covered during the session apply to all personnel within the industry.

Remember that the appearance of staff reflects the standards of the establishment in the eyes of the public, and that prior to starting duty your last look in the mirror will be the customer’s first look.

Most people carry some kind of harmful bacteria their body and staff have a responsibility to respect themselves and others by observing the highest standards of personal cleanliness. Cleanliness itself starts with people and good personal hygiene habits will eliminate a major cause of potential contamination.

HOW TO WASH HANDS CORRECTLY:
Always wash your hands in the special wash-hand basins provided. Never in other sinks, i.e. in washing-up water, or in sinks used to prepare food.
Use hot water and disinfectant soap, and wrists and forearms.
Rub hands together thoroughly, then rinse under clean running water.
Dry hands thoroughly, using a clean paper towel, or hot air dryer.
Avoid touching anything that will contaminate your hands before returning to work (E.g. cleaning cloths, dirty dishes, and cigarettes).
Wash your hands frequently, to prevent the transfer of bacteria from your hands to the work area.

A SEVEN POINT GENERAL PERSONAL HYGIENE CODE FOR STAFF.

1. Always wash your hands before commencing work, and always after using the toilet.
2. Tell your supervisor at once of any skin, nose, throat or stomach trouble.
3. Cover cuts, sores with waterproof
4. Always wear appropriate, clean clothing and be
5. Keep your work area, equipment and utensils clean and
6. Keep to a daily routine of personal cleanliness.
7. Never spit, cough or sneeze openly uses a handkerchief.
**Hands should be washed:**

- Immediately after using the toilet. - before coming on duty.
- After sneezing or blowing your nose. - after your break.
- After handing dirty equipment - after smoking.
- After using cleaning materials. - after handling raw food.
HOW TO DEVELOP A PERSONAL HYGIENE ROUTINE:

Develop a daily routine of essential personal hygiene habits:

e/shower every day: change socks and underclothing every day.

Brush teeth at least twice a day, preferably after every meal.

Wash hair frequently, preferably daily. Keep hair and beards neatly trimmed and covered (i.e. wear a hairnet/hat when handling food).

Keep fingernails short and clean. Avoid using excessive amounts of nail varnish, make-up or perfume.

Keep uniform/ protective clothing clean; hang up your outdoor clothing in the staff room not in their work areas.
Keep cuts and burns covered with a clean, waterproof dressing.

Tell your supervisor if you are suffering from a cold, sore throat, boils, skin rash, diarrhea, upset stomach, or a septic cut. Your supervisor will decide whether you should be on duty or not.

When you are working, pay special attention to the personal habits of which you may be unaware, but can easily spread bacteria, i.e.:

- Do not comb your hair or put on make-up in the food or public areas.
- Do not spit, cough or sneeze openly in food or public areas, use a tissue and wash your hands afterwards.
- Do not pick your nose or teeth, or scratch your head.
Do not smoke in the work or public areas.

Does not your apron or part of your uniform to wipe your hands, as this will contaminate your hands?

Do not lean or sit on work surfaces.

Do not leave rubbish and waste material lying around, put into covered refuse bin.

Only frequent hand-washing will keep your hands clean!

PERSONAL HYGIENE “DOS”:
HOW TO HANDLE EQUIPMENT AND UTENSLS:

When handling crockery, glassware, utensils or equipment, remember to pick them up so that your hand does not touch the “food contact surface”, i.e. the part on the food will be placed, or which a customer would touch. This will help avoid cross-contamination between you and the equipment you are handling. Handle plates by outer rim or underside; cups by the handle; glasses by the stem or base, and cutlery by the handle.

Remove and destroy cracked and broken crockery/ glassware or kitchen utensils. Use forks or tongs to pick up food if practical, - not your hands. Avoid handling food Unnecessay. Use a special spoon for tasting - Not your figures.

Make sure that all crockery, Glassware, equipment and, Utensils are washed thoroughly, and are stored on clean surfaces.

Keep your work table/ area, Clean. Clean it well at the end, of the day, keep all utensils clean and put away neatly after use.

FOOD POISONING

THE TEN MAIN REASONS FOR FOOD POISONING One: Food prepared too far in advanced and stored at room temperature, i.e. not under refrigeration.

Two: Cooling food too slowly prior to refrigeration.

Three: Not reheating food to high enough temperatures to destroy food poisoning bacteria.

Four: The use of looked foods contaminated with food poisoning bacteria.

Five: Undercooking.

Six: Not thawing frozen poultry for Sufficient time.
Seven: Cross-contamination from raw to cooked food.

Eight: Storing hot food at too low a temperature.

Nine: Contamination from infected food handler.

Ten: Re-use and reheating of leftover food items.

Remember: bacteria need:

WARMTH: FOOD AND MOISTURE: TIME.

Remember: Keep high-risk foods out of the “DANGER – ZONE”

WHAT ARE THE HIGH RISK FOODS

All cooked meat and poultry; cooked meat products and gravies / sauces. Milk, cream, custards, dairy produce: cooked rice. Cooked eggs, egg products, I.e mayonnaise: shellfish and other seafood.

WHAT CAUSES FOOD POISONING?


HOW DOES FOOD BECOME CONTAMINATED?

The people commonly harbor germs, and directly contaminate food with their hands, sneezing, coughing or though sewage contaminating water.
Raw food is particularly dangerous, red meat and poultry are heavily infected, milk, eggs and shellfish also. Liquid from defrosted poultry must not be allowed to contaminate wiping cloths, high-risk food or equipment.

Soil on raw vegetables must also be removed.

Insects and dust carry bacteria into food areas and on to food and food surfaces.

Dead files can fall into food, and cockroaches carry bacteria.

Rodents and animals carry bacteria around can contaminate food and food surfaces.

Refuse and waste attracts files and must not be allowed to contaminate food or food surfaces.

Sometimes, harmful bacteria pass directly from the source to high-risk food. You must be aware of the risk of transferring harmful bacteria by hands. Cloths, foods surfaces and contact surfaces.
TO PRODUCTS FOOD FROM CONTAMINATION do:

Keep food covered whenever possible.

Only handle food using tongs, plants and trays. Separate
raw from high risk foods at all times. Separate equipment
for use with raw and high
Risk food at all times.

Prevent insects, animals and birds entering food
Room or touching food.

Store food in tightly lidded rodent proof containers. Maintain
the highest standards of personal hygiene
at all times.

Wear suitable protective clothing provided for food handlers.

Remove unfit or waste food promptly and keep apart from high-risk food.

Keep food and equipment off the floor.

Ensure that liquid thawed frozen meat / poultry does not come into contact with high-risk food or food
surfaces.

Use the correct cleaning and disinfection procedures. Use
suitable, appropriate and clean equipment.

Use clean wiping cloths.

Avoid handling parts of crockery or cutlery that come into contact with food. Never use
wash-hand basins for washing food or food equipment.

All food will contain some bacteria, though it is important that apart from preventing further contamination
from harmful food poisoning bacteria, actions is taken to prevent bacteria in food from multiplying.
**Do:** store food out of the “danger zone”, i.e. +5 c to +63 c.

Keep foods in the refrigerator or in a heated oven/brain Marie, or not at all. During preparation keep high risk foods out of the “danger-zone”.

Keep dried food free from moisture.

No food must be at temperatures which would result in risk to health.

**GENERAL RULES FOR FOOD HANDLERS**

All equipment, fixtures and fitting must be clean before preparation begins.

Raw food must always be kept separate from high-risk food at all stages of food preparation. Frozen meat must be completely thawed before cooking.

Thawing must be cooked thoroughly.

All reheated foods must be thoroughly reheated and consumed immediately. Cooked food must be protected from contamination at all times.

Food must not be rotated from the refrigerator until required for service.

Stored food must be rotated to prevent spoilage, waste and infestation. Drying cloths must be kept clean. spillages must not be allowed to enter food rooms. Animals must not be allowed to enter food rooms. Infestations of insects or rodents must be reported immediately.

**Food standards in India**

To meet a country’s sanitary and phytosanitary requirements, food must comply with the local laws and regulations to gain market access. These laws ensure the safety and suitability of food for consumers, in some countries; also govern food quality and composition standards.

The Indian Parliament has recently passed the *Food Safety and Standards Act, 2006* that overrides all other food related laws. It will specifically repeal eight laws:

- The Prevention of Food Adulteration Act, 1954
- The Fruit Products Order, 1955
- The Meat Food Products Order, 1973
 Prevention of Food Adulteration Act

A basic statute (Prevention of Food Adulteration Act (PFA) of 1954 and the PFA Rules of 1955, as amended) protects India against impure, unsafe, and fraudulently labeled foods. The PFA standards and regulations apply equally to domestic and imported products and cover various aspects of food processing and distribution. These include food color, preservatives, pesticide residues, packaging and labeling, and regulation of sales. Further details are available from the Ministry of Health and Family Welfare. All imported products must adhere to the rules specified in the Act and its regulations, including those covering labeling and marketing requirements. The PFA focuses primarily on the establishment of regulatory standards for primary food products, which constitute the bulk of the Indian diet.

CLEARING THE KITCHEN AND EQUIPMENT AND PREPARING FOR WORK

OBJECTIVES: After completing this unit, you should be able to:

- Describe the correct method / s of cleaning the various kitchen equipment.
- Explain how to clean the kitchen area correctly
- Describe how the working area is prepared for work
YOUR WORKING AREA

All kitchen areas will vary in shape, size and location. You will be responsible for keeping the Work area clean. You need to be familiar with your own working area/kitchen. You also need to understand that all the kitchen and kitchen equipment needs to be kept clean at all times.
<table>
<thead>
<tr>
<th>EQUIPMENTS</th>
<th>DESCRIPTION</th>
<th>PHOTOGRAPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>rat pan&lt;br&gt;Other names: braising pan, tilting pan</td>
<td>A brat pan is widely used in volume cooking operations, it is usually available in different sizes are measured in terms of its capacity to hold the liquid. The small table-top models can be as small as 60 liters and the larger sizes could be of 1,000 litres. It is usually operated on electricity; it can be tilted to empty the contents. It is widely used for preparing gravies and sauces and even for braising and stewing.&lt;br&gt;Also helps in commercial establishments. The size of the burners and the ranges would depend on the type of operations involved. For bulk cooking one could have low-height stock pot ranges with burners placed at a distance to accommodate large pots. The low height also helps in lifting and removing heavy pots from the range, the burners for volume cooking are also large and the size of the burners is usually mentioned in inches.</td>
<td><img src="image1.jpg" alt="Photograph" /></td>
</tr>
<tr>
<td>Gas burner&lt;br&gt;Other name: gas range, cooking stove</td>
<td></td>
<td><img src="image2.jpg" alt="Photograph" /></td>
</tr>
<tr>
<td>Oven&lt;br&gt;Other names: batch oven, rotator oven</td>
<td>Ovens are traditionally used for baking purposes. They come in various shapes and sizes. The type of oven to use largely depends on the kind of operations involved. In large operation, where baked products are required to be made in bulk, large rotary ovens are a good choice. There are also; large ovens with automatic feeding belts, in these all the products are loaded and removed from the oven with the help of an automatic feeder. Such an oven is known as a batch oven as big batches of products are baked in them.&lt;br&gt;Convection ovens come in various sizes</td>
<td><img src="image3.jpg" alt="Photograph" /></td>
</tr>
<tr>
<td>Equipment</td>
<td>Description</td>
<td></td>
</tr>
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<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Walk-in</td>
<td>Combi ovens as they have the facility of using moist as well as dry heat. Walk-ins are refrigerated compact areas where one could walk inside, and hence the name walk-in. They can be custom-made to any size suited for an operation. One could have walk-in refrigerators or freezers depending on the requirement. Certain companies are now specializing in modular shelving so that the storage of food can be as per food safety norms and the hazard analysis and critical control points (HACCP).</td>
<td></td>
</tr>
<tr>
<td>Freezer</td>
<td>Freezers are available in various sizes and are very important for any bulk-cooking involves planning and advance mise en place, one needs sample refrigerated space to store the same until it is ready for cooking. These are available in requirement. You could have the roll-in trolley style or the once which have shelving.</td>
<td></td>
</tr>
<tr>
<td>Deep fat fryer</td>
<td>Deep fat fryers are safer in bulk cooking for deep-frying as they are available from small table-top models to large ones that can hold up to 30 liters of oil. It is always safe to use deep fat fryers rather than open pots and kadhai while frying large quantities.</td>
<td></td>
</tr>
<tr>
<td>High-pressure steamer</td>
<td>High-pressure steamers are efficient as they require less cooking time and also maintain the nutrition of the food commodities. They are available in various sizes and one could chose from them depending on the type of operation involved.</td>
<td></td>
</tr>
<tr>
<td>Potato peeler</td>
<td>This is one equipment that is a boon to every chef. This equipment rubs the potatoes against a coarse inner lining of its cylinder, with a continuous jet of water that washes away all the residual peels and dirt. About 8-10 kg of potatoes can be</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Masala grinder</td>
<td>Peeled in less than a minute by using this equipment. The masala grinder can be of two types: dry and wet. The one shown in the photograph could be used for any type. It has stone rollers inside which crush the masala into a very fine powder. It comes in very handy for grinding masalas and pastes when cooking in bulk.</td>
<td></td>
</tr>
<tr>
<td>Dough mixer</td>
<td>Dough mixers are available in various sizes and one could choose depending on the size of operation involved. Some dough mixer can easily kneed up to 100 kg of flour and even more.</td>
<td></td>
</tr>
<tr>
<td>Salamander</td>
<td>This equipment is mainly use for gratinating. It has a heating element on the top surface and the food is kept under it. The radiated from the hot element helps in grilling, broiling, or gratinating the food comodities.</td>
<td></td>
</tr>
<tr>
<td>Barbeque trolley</td>
<td>This is a complete unit comprising a grill, a gas burner, and a small area which is used as a workstation. It is mostly used outdoors for banquet function. Since it is mobile, It is very useful for outdoor events.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th>WASH-UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dish Washing Machine</td>
<td>Switch off. Scrub the inside with a stiff brush. Clear food particl trays. Wash with hot water in the usual way. Check the water valves to see they are functioning properly. Check water pump for possible leaks. Inspect curtain, conveyors, all working parts. Report any damage. Wipe exterior.</td>
</tr>
<tr>
<td>Preparation Tables</td>
<td>Wash with soap and water.</td>
</tr>
<tr>
<td>Waste Trap</td>
<td>Remove rubber waste trap, wash with hot soap and water. Dry thoroughly and replace.</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Waste Bin</td>
<td>Check that it is emptied after each meal period.</td>
</tr>
<tr>
<td>Floor</td>
<td>Brush floor with dry stiff broom. Mop with hot water and Detergent solution. Clean all corners, behind doors. Under Table supports and under machine.</td>
</tr>
<tr>
<td>Dish/Equipment Racks</td>
<td>Scrub with stiff hand brush: rinse in hot water.</td>
</tr>
<tr>
<td>Walls</td>
<td></td>
</tr>
</tbody>
</table>

**CLEANING FLOORS**

The floor of the kitchen/food preparation and working areas should be cleaned at least twice a day. Particular attention should be given to the floors prior to the close of the kitchen at night, so that work can begin promptly the next day. Remember to frequently rinse and wash the mop, change the water frequently.

The manner of cleaning depends on the type of floor but all floors should be swept at least three times a day and scrubbed and mopped a minimum of twice (using hot water and detergent).

When sweeping the floor, as a rule dust will rise off the floor. Ensure all food items are covered, before scrubbing the floor all furniture that can be moved should be moved.

**CLEANING WORK SURFACES**

All work surfaces should be scrubbed with hot water and detergent but remember table legs and shelving also get dirty. Do not forget to clean these.

**CLEANING VENTILATORS**

All ventilators and grease filters must be cleaned regularly. Daily cleaning is very important and inside cleaning of ventilators should be carried out each week.

**CLEANING OF REFRIGERATORS AND DEEP FREEZERS**

All refrigerators should be cleaned out on a weekly basis with hot soda water (all food items to be removed) this includes the outside of the refrigerator.

**REFRIGERATOR**

REMEMBER

Neglect in the care and cleaning of the premises and equipment can lead to a risk of food infection. Kitchen hygiene is of great importance. We all benefit from a clean kitchen.

☐ Employees: it makes you proud of your job and shows the right professional attitude.
☐ The customer: no one wants to eat food prepared in a dirty kitchen and they won’t get sick!
☐ The owners, because custom should increase when the public know the kitchen is clean, and they won’t get sued!

CLEANING DISH ROOM

Stacking Shelves: Wash shelves. Dry thoroughly.

Table: Wash and dry thoroughly. Scrub shelves and tables with hot water and detergent solution. Weekly

Walls: As previously given. Daily

CLEANING PASTRY ROOM

Pastry Oven: Switch off. Brush out oven with a stiff brush. Wipe the exterior with a damp cloth. Dry well. Daily

Mixing Machine: Switch off. Wash all external parts with detergent Solution: rinse and wipe dry. Clean all mixing blades, Beaters, etc, and dry thoroughly. Daily

Scales: Brush off all flour and food particles from the scales. Wipe with a damp cloth. Dry thoroughly. Wash in Detergent solution. Dry well. Daily

Cooling Racks: Brush racks with a dry stiff brush. Daily

Flour Bin: Brush surplus flour onto floor. Check that the bin-lid is in place. Daily

Store Cupboard: Tidy store cupboard, see that all foodstuffs are in proper containers and that there are no split bags, etc. Daily

Work Tables: Scrub tables with proper solution and dry well. Daily
<table>
<thead>
<tr>
<th>Area</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinks</td>
<td>Scrub with scouring powder. Clean and deposit a from waste Trap and remove any dirty or grease from around taps. Clean draining boards with detergent solution. Mop dry.</td>
</tr>
<tr>
<td>Floor</td>
<td>Brush floor with dry stiff broom. Mop with hot detergent solution, cleaning all corners, etc.</td>
</tr>
<tr>
<td>Utensils</td>
<td>See that all clean utensils are in place.</td>
</tr>
<tr>
<td>Weekly</td>
<td></td>
</tr>
<tr>
<td>Pastry Oven</td>
<td>Switch off. Clean all baked food deposits from the interior of oven with a metal scraper. Check on gas taps and see that gas jets are clean.</td>
</tr>
<tr>
<td>Mixing Machine</td>
<td>Switch off. Remove top; check that there is sufficient grease in Working parts. Clean with soapy water, rinse, wipe dry.</td>
</tr>
<tr>
<td>Daily</td>
<td></td>
</tr>
<tr>
<td>Walls</td>
<td>As previously given</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>As stated previously</td>
</tr>
<tr>
<td>Walls</td>
<td>As stated previously</td>
</tr>
<tr>
<td>POT/CONTINER WASH-UP</td>
<td>Daily</td>
</tr>
<tr>
<td>Rack</td>
<td>Wash racks down with hot detergent solution.</td>
</tr>
<tr>
<td>Sink (Galvanized)</td>
<td>Clean sink and remove all food particles from bottom.</td>
</tr>
<tr>
<td>Weekly</td>
<td></td>
</tr>
<tr>
<td>Racks</td>
<td>Scrub, rinse and dry.</td>
</tr>
<tr>
<td>Walls</td>
<td>As previously given.</td>
</tr>
<tr>
<td>Weekly</td>
<td></td>
</tr>
<tr>
<td>STILL-ROOM</td>
<td>Daily</td>
</tr>
<tr>
<td>Beverage Machine</td>
<td>Switch off. Empty coffee and milk containers. Swill out with hot water and scrub with brush. Clean taps and interior of taps with brush provided. Wash exterior with soapy sponge. Dry and polish.</td>
</tr>
<tr>
<td>NOTE</td>
<td>If not in constant use, leave coffee and milk containers half-filled with clean water.</td>
</tr>
</tbody>
</table>
Hygiene Notes

Stacking Racks  Wipe all bars with wet, clean cloth. Dry.

Storage Racks  As previously given.

Tables  As previously given.

Bread Slicer  Switch off. Brush crumbs away from machine. Wipe exterior with damp cloth. Dry off.

Toasters  Remove power plug from wall socket. Turn toasters upside down and tap gently to remove crumbs and toast deposits. Wipe exterior with soapy sponge. Dry thoroughly.

STARTING WORK

Starting the work shift properly is a very important factor in the smooth daily operation of the kitchen.

At all times, keep in mind the two main factors:

- Safety
- Security

So when turning on main services, a quick check that all is in order. No accidents during the night. Perhaps water leaking or electric items faulty. Be vigilant at all times.

When you start the work shift, you need to:

- Unlock doors, cupboards
- Switch on electricity
- Turn on gas/water
- Light gas stoves, ovens, salamanders if needed straight needed.
- Switch on power-driven machines and equipment if needed
- Fill the Bain-Marie and switch on
- Stock the kitchen
- Arrange tools, utensils and equipment
1. Requisition and arrange raw materials
2. Confer on the day’s work plan
3. Always be on time to start work

KITCHEN RULES

1. Be in uniform and ready to start work on time
2. Wash hands before commencing work.
3. Work quickly but maintain control, remember safety comes first.
4. Keep the work area clean and tidy at all times.
5. Stand upright with good posture to avoid fatigue.
7. Be smart and clean in your appearance.
8. Discard waste in bin and remember to replace lid.

SKILL UNIT 5

CLEANING OF KITCHEN EQUIPMENTS

OBJECTIVE: After completing this unit, you should be able to:

- Describe the correct method of cleaning kitchen equipments.
- Explain how to clean kitchen properly.
- Describe how the working area is prepared.
Kitchen equipment should be so designed that it can be:
1. Cleaned easily
2. Readily inspected to see that it is clean
Failure to maintain equipments and utensils hygienically and in good repair may cause food poisoning.
The material used in the construction of equipment must be:
1. hard so that it does not absorb food particles
2. Smooth so as to be easily cleaned
3. resistant to rust
4. resistant to chipping.

HERE ARE SOME POINTS TO BE CONSIDERED WHILE WASHING EQUIPMENTS:

NORMAL CLEANING OF MATERIALS:

1. METALS: as a rule all metal equipments should be cleaned immediately after use.
2. PORTABLE ITEMS: remove food particles and grease. Wash by immersion in hot detergent water. Thoroughly clean with a hard bristle brush or soak until this is possible. Rinse in water at 77oc, by immersing in the water in wire racks.
3. ABRASIVES: should only be used in moderation as their constant scratching of the surface makes it more difficult to wash it the next time
4. MARBLE: scrub with a bristle brush and hot water and then dry.
5. WOOD: scrub with a bristle brush and with hot detergent water and then dry.
6. PLASTIC: wash in reasonably hot water.
7. CHINA, EARTHENWARE: avoid extremes of heat and do not clean with an abrasive. Wash in hot water and rinse in very hot water.
8. COPPER: remove as much food as possible. Soak; wash in hot detergent water with the aid of a brush. Clean the outside with a paste made of sand, vinegar and flour. Wash well rinse and dry.
9. ALUMINIUM: do not wash in water containing soda as the protective film which prevents corrosion may be damaged. Wash in hot detergent water. Clean with steel wool or abrasive.
10. TAMMY CLOTHS, MUSLINS AND PIPING BAGS: after use they should be emptied, food particles scraped out, scrubbed carefully and boiled. They should be then rinsed and allowed to dry. Certain piping bags made of plastic should be washed in very hot water and dried. Nylon piping bags should not be boiled.

11. SAWS, CHOPPERS AND MANDOLINS: these items should be cleaned in hot detergent water, dried and greased slightly.

12. STAINLESS STEEL: is very easy to clean. Soak in hot detergent water. Clean with a brush, rinse and dry.

**BASIC FIRST AID**

**OBJECTIVES:** After completing this unit, you should be able to:

- List the aims of first aid and the priorities of treatment for a minor injury or accident
- Recognize the basic techniques that may be used to preserve life, prevent injuries from worsening, and promote initial recovery.

**ACTIVITIES/INFORMATION**

It is important to note at the commencement of this unit, that as a basic entrant into the industry, the level of knowledge and application of specialist first aid skills will need only to be limited.

This knowledge unit sets out to increase your awareness of basic first aid techniques and responsibilities to help you in your role as a member of staff.

**THE EMPHASIS FOR YOU WILL BE TO ASSESS THE EMERGENCY OR ACCIDENT SITUATION AND TO SEEK HELP IMMEDIATELY.**
At any accident or sudden injury situation you must be aware of the four key steps to follow:

1. **ASSESS THE SITUATION**
   - Appear calm in front of colleagues or guests.
   - Take charge—do not panic—stay “cool”.
   - Ensure safety— if the situation is dangerous to the casualty or yourself—be careful.
   - Get help immediately—if you cannot leave the casualty, get another person to call for assistance and also to help you, i.e. to clear the area; or control traffic, etc.

2. **DIAGNOSE THE SITUATION**
   - Listen to the casualty and others to find out what happened.
   - Smell—can you detect burning; gas; or alcohol.
   - Look— is there any sign of blood or vomit, does the casualty wear any warning bracelet or locket; do they have containers or packets of drugs or medicines; are any unusual showing (blood, awkward limbs, swelling, bruising, or sweating).
3. **TREAT THE SITUATION (If possible) WHILE Awaiting Qualified Specialist Assistance:**

   Calm the causality, protect them from cold and damp, handle gently whilst making them comfortable.

   The urgent Treatment, i.e. easing problems of breathing; heart or severer Bleeding difficulties; and important Treatments of dressing wounds and Supporting injured bones may be attempted only qualified first aiders.

4. **THE MEDICAL SITUATION**

   - As early as possible after the accident/injury arrangements must be made to move the casualty to a doctor/nurse or to hospital. Any important facts or details about the causality or circumstances of the accident must be given to the ambulance person; medic or doctor.
   - As soon as possible after the incident, a report giving details of the accident/injury must be made to the supervisor/ manager.
BASIC TREATMENT OF WOUNDS, MINOR BURNS, SCALDS AND OTHER MINOR INJURIES:

The following guidelines are for the basic treatment of minor injuries:

**WOUNDS**
- pressing directly on a wound flattens the blood vessels and stems the flow of blood.
- pressure needs to be applied for 5 - 15 Minutes to allow blood to clot.
- ensure no foreign bodies are present i.e. bone, glass, dirt etc before pressing.
- press on the wound with a clean dressing, i.e. towel (NOT cotton wool).
- raise 5/10 minutes, apply a bandage or Plaster depending upon size of wound.
- arrange for medical attention as soon as possible if necessary.

**BURNS:**
There are various types of burns:

**DRY**
*From:* flame, hot electrical equipment.

**COLD**
*From:* ice.

**SCALD**
*From:* wet heat (steam or fat)

**CHEMICAL**
*From:* acid.

**ELECTRICAL**
*From:* electrical current.
RADIATION

From: sun

MINOR BURNS AND SCALDS:

Do’s
- Reassure the casualty.
- Immerse area of burn in clean cold running water for at least 10 minutes. (If there is no water available use milk/lemonade).
- Remove any rings, clothing (unless stuck) before area swells.
- Cover burn with a clean dressing or cling film/clean plastic bag.
- If in doubt seek medical assistance.

Do not’s
- Use creams, fat or lotion.
- Use adhesive dressings or plasters.
- Burst blisters or remove loose skin.

ELECTRICAL INJURY: SIGNS AND SYMPTOMS:

- Casualty may not be breathing and the heart may have stopped.
- Possible burns and shock.
NEVER TOUCH CASUALTY WITH BARE HANDS.
SWITCH OFF THE POWER AT MAINS IF POSSIBLE.

**Treatment:** ONLY BY QUALIFIED FIRST AIDER!
- Commence mouth-to-mouth and/or chest compression.
- Arrange for removal to hospital.
- Treat any burns.

**CHEST COMPRESSION:**

THIS DOES THE WORK OF THE HEART WHEN IT HAS STOPPED
AND YOUR HANDS MUST BE DIRECTLY ABOVE THE HEART
WHEN PRESSING DOWN.

1. Kneel to side of casualty at the ribs.
2. Place one hand on top of other, over the heart (in centered of breastbone).
3. Press 2” approximately every second.
4. Continue until medical help arrives.

**CHOKING**

1. Act quickly, speed is essential. (If casualty can speak, cough or breathe they
   are not choking. If not:

2. Give FOUR quick back blows with the heel of your hand. Deliver these sharp
   blows rapidly and forcefully between the shoulder blades, while supporting the
   chest of the casualty with the other hand on the breastbone.

3. If unsuccessful give four upward abdominal thrusts, stand behind casualty and
   wrap your arms around their waist. Grasp one fist with your other hand and
   place the thumb side of your wrist in the mid-line between waist and rib cage.
   Press fist into abdomen with four quick upward and inward thrusts. Do not
   Use this procedure for pregnant women or overweight casualties. If necessary
   repeat sequence. Send for medical help if required.
**Fainting:**

If casualty feels faint, sit them down and help them to learn forward with head between the knees, taking deep breaths. If unconscious but breathing normally, lay them down with legs raised. Loosen any tight clothing at neck, chest and waist. Reassure casualty as they recover, raise to sitting position. Do not: give casualty anything by mouth until fully conscious, and then only sips of water.

**No Alcohol.**

**Stings and Bites:**

- Keep the casualty calm.
- If the sting is still in the skin, remove it with a pair of tweezers.
- Avoid squeezing the sac at the top of the sting as this will force more poison into the casualty.
- If they develop an allergic reaction SEEK MEDICAL HELP.

**Snake Bites:**

- Reassure the casualty.
- Clean the area around the puncture.
- Place a sterile dressing around the puncture marks.
- If on hand or upper limb, immobilize the limb with a sling.
- If on lower limb, tie both legs together.
- Carry the casualty to a car, or wait for an ambulance/doctor to arrive.

**Scorpion Bites:**

- Treat as for snake bite.
- Immobilize the affected limb.
- SEEK IMMEDIATE MEDICAL AID.

**Fractures and Sprains: SEEK MEDICAL HELP**

**Shock:**

1. If casualty’s breathing or heart has stopped start chest compression.
2. If breathing becomes difficult or vomiting seems likely, place casualty in recovery position.
3. Check breathing and pulse every 10 minutes.
4. Search for and if possible treat cause of shock (burn/ bleeding/ fracture).
5. Reassure if casualty conscious, lie them down, keep warm.
Do not:

1. Give casualty a hot water bottle.
2. Move them unnecessarily.
3. Give casualty anything to eat or drink.
4. Allow the casualty to smoke.

GARBAGE TREATMENT

Solid Waste
Garbage or swill is the waste matter resulting from the preparation cook and consumption of food. Waste matter from preparation will include vegetable and fruit peels and trimmings, rotten food stuffs, spoilt can food, etc. cooking wastes/include peels. Skin and bones, charn preparations and spoilt food. Sometimes food is wasted after it is serve plate waste also accounts for a large portion garbage.
Refuse refers to any waste material, either non-food or swill. Non food waste from the kitchen includes all cans, bottles, paperbags, polythene items, papernapkins and straws toothpicks, etc. also contribute significantly to the overall solid waste matter.
If waste is allowed to accumulate it is dangerous to health. This is because of the following reasons:
(1) organic portions of solid waste ferments and gives off foul odours.
(2) Piled up waste favours the breeding of insects and rodents, especially flies.
(3) Pathogens present in waste may be conveyed to humans through pests and dust.
(4) It may pollute the water supply.
(5) There is a risk of air pollution in case of accidental or spontaneous combustion of rotting refuse because of the production of gas.
(6) Hogs, cattle and dogs feed on garbage and spread it still further. (7) Heaps of refuse lying around is an unattractive sight.

Collection
Refuse should always be collected from the place where it is produced, i.e. near pre-preparation tables, meat blocks, kitchen sinks, dishwashing area, pantry table etc.
Storage of garbage

Garbage should be tilled in bins should be kept in the coolest place. care should be taken to ensure easy cleaning and absence of pests. The garbage storage area should be large enough for the amount of garbage that will accumulate.

The garbage bin

The garbage bin should have the following characteristics: (1) it should be
made of metal, preferably galvanized.
(2) Stoutly constructed and durable
(3) Painted or treated with bitumen to prevent rusting. (4) Unrigged.
(5) Covered with tightly fitting lids, preferably with a clip to prevent the lid from blowing off.
(6) Leak proof
(7) Easy to clean
(8) Pest proof

The bins should be placed on cemented platforms approximately 35 cm (14 inches) to 45cm (18 inches) above the ground and 23 cm (9 inches) away from the wall. this will prevent legged pests from reaching the bin.
The top of the platform should be slatted to avoid accumulation of moisture around the base of the bin. The bins should not be exposed to the sun or rain.

Cleaning the Bins

After the bins are emptied they, should ideally be rinsed with warm and scrubbed with a long handed brush using soap and disinfectant. The floors of the disposal area should be clean and free from any spare refuse.
Kitchen waste and plate scraping should be collected in closed container or a stronger polythene bag or disposable cartons. To check pilferage transparent bags may be used. After the bag is full, it should be tied up. These can be directly emptied into or placed in the main bins at regular intervals. This waste should never be carried through the dining areas. The containers should always be covered and cleaned thoroughly as soon as they are empty.

**Methods of Disposal**

Before selecting a method for proper disposal of wastes, it is necessary to understand the value of the waste matter which is to disposed off and the nuisance it is likely to cause if improperly disposed.

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Methods of disposal</th>
<th>Types of Waste</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Land filling(dumping and controlled dumping)</td>
<td>All types of solid waste</td>
<td>Select low lying site at least 45m away from habitation, start filling at one end garbage should be properly compacted and covered with earth</td>
</tr>
<tr>
<td>2.</td>
<td>Burial</td>
<td>Dry garbage, wet garbage, dead pests</td>
<td>Dig deep trenches, cover garbage with soil, deposit garbage daily.</td>
</tr>
<tr>
<td>3.</td>
<td>Incineration</td>
<td>Dry garbage, dry leaves soiled cotton, dirty rags, outdated pesticides</td>
<td>Burn away from building</td>
</tr>
<tr>
<td>4.</td>
<td>Composting</td>
<td>Garbage, toilet waste or sludge, dry plant matter</td>
<td>Area should be located away from habitation; use composite manure in fields.</td>
</tr>
<tr>
<td>5.</td>
<td>Mechanically disposing (pulpers, compacters)</td>
<td>Soft food waste, dry bulky waste, i.e. cartoons, cans</td>
<td>Food residue which remains in the pulper should be disposed off with garbage; store dry and wet wastes separately</td>
</tr>
<tr>
<td>6.</td>
<td>Vermiculture</td>
<td>Food waste, sewage</td>
<td>Crush or shred food waste and spread it in layers</td>
</tr>
<tr>
<td>7.</td>
<td>Biogas</td>
<td>Toilet waste, agriculture waste, dung</td>
<td>Amount of water used should be controlled</td>
</tr>
<tr>
<td>8.</td>
<td>Recycling</td>
<td>Paper, cardboard cartoons, plastic, polythene, glass, metal, waste food</td>
<td>Store each type separately; do not mix with wet garbage; process waste food adequately to kill pathogens</td>
</tr>
<tr>
<td>9.</td>
<td>Sewers and drainpipes</td>
<td>Wastewater, sewage, crushed soft food waste</td>
<td>Drains should not get blocked; drains should have a grease trap; sewers should have no leakage</td>
</tr>
<tr>
<td>10.</td>
<td>Soakpits</td>
<td>Wastewater from kitchen, bathroom and wash up area</td>
<td>The container which receives the wastewater should be cleaned fortnightly</td>
</tr>
<tr>
<td>11.</td>
<td>Exhaust fans and ventilator hoods</td>
<td>Strong fumes, smoke, food odour and grease</td>
<td>Exhaust fumes discharge into the air should not cause a nuisance; filter on hoods should be cleaned regularly</td>
</tr>
</tbody>
</table>

The methods of disposing garbage may be broadly classified as follows: Land
filing Dumping: Refuse is dumped in low lying land or in land depressions like pits and hollows for reclaiming low lying land. This is the easiest method of disposing dry refuse. Bacterial action reduces the volume of the refuse and gradually converts it to humus. This method however, has the following disadvantages:

1. Loose refuse may be dispersed by wind
2. garbage is exposed to files and rodents
3. it is unsightly in appearance and produces an unpleasant
4. surface water as well as ground water may get polluted

Controlled dumping: if dumping is done during the season and under proper supervision, it is called controlled dumping. It is used to fill land depressions, disused quarries and empty pits. The land selected should be outside town limits, at least 45 m (150 feet) away from the nearest habitation. The work of filling up should start at one end of depression. Refuse is dumped, adequately compacted and covered with earth at the error of the day or after a maximum period of 72 hours. The refuse is deposited uniform layer up to 1.8 m (6 feet) in eight. Each layer is sealed with mud cover of at least 23 cm (9 inches) m thickness. Dumping is done till the level reaches 60 cm (2 feet) above ground level to allow for subsequent settlement. This made soil should be used for cultivation for 10 years another only then used as residential land.

Burial: A trench is prepared to collect the garbage. At the end of the day the refuse is covered with 20 to 30 cm of earth. Alternate layers of refuse no earth are formed. When the trench is filled up till it is only 40 cm deep, it is filled with each and sealed. A new trench is then dug.
**Composting:** This is a method of combined disposal of refuse and sludge. Sludge is the solid precipitate in the sewage tank, which settles at the bottom.

**Incineration:** it is a hygienic method involving burning of refuse and converting it into harmless waste. It is burned in especially constructed incinerator. The incinerator should be maintained in perfect working condition.

**Disadvantages**
1. If refuse does not burn properly, too much offensive smoke is produced which in turn, pollutes the air.
2. Organic nitrogen, which could have been returned to the soil is converted into inorganic nitrogen and is returned to the atmosphere.
3. This method cannot be used during the rainy season or if the refuse is wet
4. Although incineration is ideal from the sanitary point of view. It is costly compared to other methods and the fuel and fertilizer value of the waste is lost.

Simpler forms which can be easily assimilated by plants: The burring action of the worm tills the soil ten times deeper then the traditional plough.

The worm feeds on garbage and excretes it as manure, known as vermicastings, which is a highly enriched kind of bio fertilizer and contains hundreds of tiny earthworm cocoons to continue the process. It restores fertility to degraded soils and wastelands.

Biogas Generation: Human excreta, animal droppings and plant and agricultural wastes can be processed in a biogas or gobar gas plant to produce fuel gas and rich manure. The plant consists of a circular tank shaped like a well. The tank is divided into two sections by a partition wall. It is covered on top by a cylindrical dome for the collection of gas.

The two main products formed by anaerobic digestion are:

1. Fuel gas which is approximately 55 percent methane 45percent carbon dioxide.
2. Manure, which is rich nitrogen and humes. the gas produced can be used for cooking, lighting and running engines. Many companies are working towards large scare production of biogas and manure from refuse collected by municipal corporations.
Recycling: Recycling is the reprocessing of waste products so that they can be re-used.

Recycling food waste one way of utilizing the energy from waste food is by using it as feed for pigs and poultry. Recycling non-biodegradable waste all kinds of glass, plastic, polythene, paper and metal can be recycled. The use of recycled plastic is, however, not permitted in the food industry. One volume of refuse is reduced to one-fourth its original weight. The residue is a mass of hard material called clinkers and is used for road making. The cost of transporting refuse is minimized. This is one of the best methods of garbage disposal.

**Mechanical Disposers:** Mechanical disposers include pulpers or disintegrators and mechanical compactors.

**Pulpers or disintegrators:** The latest way of disposing kitchen waste as soon as it is produced is, through an automatic garbage disposal machine. These machines are filled under the existing sink or may be purchased as a self-contained unit. The pulper or disintegrator grinds food waste into tiny particles, which is then flushed with water. This machine is useful because it helps in preventing accumulation of soft, wet garbage, which would otherwise decay very quickly. Mechanical compacting dry bulky wastes, which occupy a large volume of space in the garbage bin such as cartons and cans, could be reduced in volume before disposal of garbage can be reduced to one-fifth its original volume.

**Disposal of Biodegradable wastes**
Bacteria act on organic matter and decompose it either aerobically or anaerobically.
In aerobic decomposition complete combustion takes place and is accompanied with
the production of methane gas.

**Vermiculture:** This is achieved with the help of the earthworm *Pheretima oblongata*. Aerobic bacteria multiply in the gut of the earthworm and decompose waste like sugars, starch, cellulose and protein into humus.