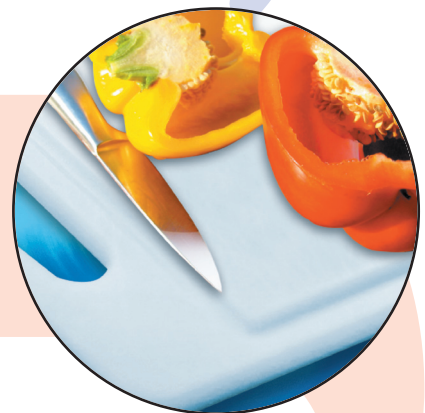
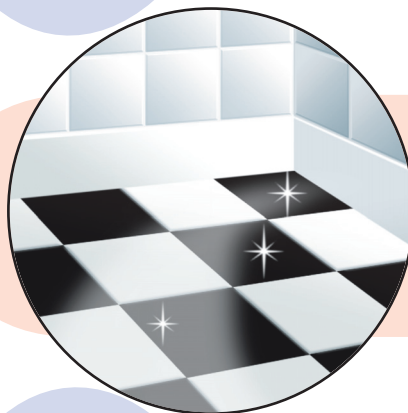




JANGRO

Guide to Kitchen Hygiene



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Kitchen Hygiene

Introduction

It goes without saying that cleaning in kitchens needs to be approached in a way that not only ensures the highest standards of cleanliness but also minimises the risk of spreading harmful bacteria. To do this you will need to thoroughly examine all of the processes undertaken within the kitchen environment and carefully consider how they could contribute to their spread.

The handling of foods from harvest to slaughter through to human consumption provides many opportunities for the food to become contaminated with micro-organisms. It is often either poor hygiene practices by food handlers

or unhygienic working conditions that can sometimes lead to the contamination of foods with pathogens. Any lapse in hygiene standards in the food chain, or indeed improper food storage and preparation procedures, can have serious consequences for both the customers and the future success of a business.

As you are responsible for hygiene standards in kitchens, this guide aims to build your understanding of the importance of hygiene and provide you with the knowledge required to develop the high standards of hygiene inherent in a successful catering business.

Kitchen Hygiene - The Law

The importance of hygiene to both humans and the business cannot be over emphasised. The effective cleaning of commercial kitchens is not only important from the aspect of safety. The hygiene standards required are set down in a number of Acts of Parliament, the most notable of which is the Food Hygiene (General) Regulations 1970 the latest amendment of which was in 2006. This amendment places greater emphasis on Hazard Analysis and Critical Control Points (HACCP) as a method for ensuring hygiene standards. This will be covered in more detail later in the Guide.

In broad terms, the regulations impose a duty on the owner or occupier to keep the premises, equipment, containers and all utensils used in the preparation of food, clean. Individual food handlers have duties in respect of personal hygiene standards and managers have a legal duty to ensure that all staff complies with the regulations at all times. Your Local Authority is responsible for monitoring compliance and enforcing the regulations usually via Environmental Health Officers.

Aspects of Kitchen Safety

Before carrying out your cleaning duties within the kitchen environment, operatives and managers must consider the aspects of the job that present risks to the person carrying out the individual task. These are matters not dealt with specifically under any set of regulations but which must be considered when various cleaning operations are undertaken.

Examples of these are:

Handling Knives and Other Sharp Implements

- When handling single knives, hold them by the handle with the blade pointing downwards. Hold the knife with your arm straight and close to the body.
- When moving multiple knives, they should be placed in a deep tray or basket and transported in a trolley if there is significant weight.
- All sharp items should be separated away from other utensils and cleaned separately, one at a time.
- Wherever soaking is required, all sharp items should be placed in clearly identifiable containers and not left in dishwashing water with other utensils.
- If facilities are available, all sharp items should be cleaned in isolation from other utensils in a designated, clearly marked area of the kitchen.
- All staff should be trained in the safe processes for cleaning sharp items that reduces the risk of injuries to the hand being sustained.

Cleaning Glassware

The same procedures as outlined for cleaning knives and other sharp items apply.

In addition, the following points would apply:

- Whenever a glass item breaks during manual washing, the container used must be drained of all liquid and the broken glass removed. The container must then be thoroughly cleaned.
- When handling broken glass, the use of a dust pan and brush is preferred. Where they are unavailable staff should be issued with heavy duty PVC or canvas gloves.

Handling, Storing and Disposing of Refuse

- Make sure that all refuse is removed from site as soon as possible.
- Do not place broken glass or other sharp items with normal refuse. They must be segregated and placed in rigid-walled containers i.e. cardboard boxes and clearly marked as to their content.
- Never attempt to burn refuse unless you have access to an incinerator specifically designed for the purpose.
- If an incinerator is used, make sure that the refuse does not contain any flammable chemicals, solvents or pressurised containers.
- Never dispose of any food materials that may be considered infected or unsafe. Refer these to the relevant local authority for advice on safe disposal.

Electrical Wiring and Safety

- All electrical fittings and associated wiring must only be repaired and maintained by qualified and competent electricians.
- Before commencing any cleaning task, all operatives should visually check that there is no obvious damage to the machine being used and that the electrical parts are in good condition.
- If any faults are detected by the operative, the machine should be marked as "Out of Order" and placed in a secure area whilst awaiting repair.
- All items that are not in use or left unattended for any period should be disconnected from the mains, removed from the work area and their cables mounted correctly.
- If the operative notices a significant change in the performance of any piece of electrical equipment, or notices a burning or "fishy" smell during use, they should treat it as a fault and decommission the machine immediately.
- Make sure that all machine wires are kept clear of the work area at all times and are not allowed to become taut and raised above floor level.

Gas Supplies and Appliances

- Staff should always ensure that gas taps are switched off during cleaning.
- Care should be taken when cleaning around gas ovens that gas taps are not accidentally switched on.
- If a machine being cleaned has recently been disconnected from the gas main or had parts replaced, make sure that it is safe to use.
- If, when cleaning, operatives detect a smell of gas, where the source cannot be accounted for, raise the alarm immediately and leave the building.

Cleaning of Stairs, Raised Platforms and Floor Openings.

- Make sure that banisters and handrails near areas being cleaned are in good repair.
- Never attempt to climb on or stretch over banisters or handrails.
- Ensure that any equipment placed on stairs is kept to minimum and never left unattended.
- Always restrict access to areas being cleaned.
- If there is an unguarded opening to a floor, i.e. drainage cover, man-hole, take extra care when cleaning and close off using cleaning warning barriers for extra safety.
- Always work from the top to the bottom of stairs.

Lifting, Carrying and Reaching.

- All staff should be trained in the safe Manual Handling techniques specific to the tasks they are required to perform.
- Lifting and carrying should be avoided in preference to safer alternatives such as trolleys.
- Where a load is being moved in a fashion that it restricts the view of the carrier, another operative should guide him/her in safe passage.
- Operatives should never over-stretch, especially from ladders or over hot surfaces.

Cleaning within the Kitchen Environment

As food is handled and prepared in a kitchen, it is inevitable that surfaces and equipment will become soiled from a variety of sources. External soil can be carried in on staff shoes or clothing, food residues can be left on chopping boards and equipment, grease can accumulate on walls and ceilings.

If left to accumulate, these soils would prove a serious risk not just to food contamination but to the health and safety of the staff and customers.

Although a legal requirement, an effective cleaning regime should be seen in terms of the genuine benefits it will bring to the business:

- Reduce risk of food spoilage or food poisoning – less waste and more satisfied customers, less risk of business closure or failure
- Promote effective working practices – faster delivery of food to customer.
- Reduce favourable environment for pests – less risk of food contamination
- Help prompt discovery of pest infestation – can eradicate quickly
- Provide safe and pleasant working environment for staff and encourage morale – less injuries and absenteeism. Slips and trips are the biggest cause of accidents in kitchens.
- Promote positive customer perception – leads to more return business and word of mouth recommendation.
- Prolong life of equipment and premises – higher return on investment.
- Less risk of fire from grease build up in ventilation unit.

Ultimately if a kitchen is not kept clean then it could be closed down by the Environmental Health Authorities, suffer serious loss of business or those responsible may find themselves in court liable for a serious food poisoning outbreak.

Within the kitchen there are several distinct areas that each have their own specific cleaning requirements.

Food Contact Surfaces - Areas in the kitchen that come into contact with food can present a particularly high level of risk if food residues are not removed and any bacteria present destroyed, as residues will attract pests and encourage further bacterial growth. These surfaces not only include work surfaces used for food preparation and equipment such as mincers and slicers but also any equipment touched by the food handler such as refrigerator door handles.

Floors and walls do not need to be sanitised necessarily, but they do need to be cleaned with an all purpose detergent on a regular basis to prevent the build up of grease, dirt and food residues, which would otherwise provide the bacteria with an environment in which to thrive and multiply.

Oven residues can be quite difficult to remove and traditionally the job has been viewed as one requiring fairly strong chemicals to remove the residues from the oven's inner surfaces.

Manual dishwashing can provide satisfactory cleaning and disinfection of crockery, cutlery and utensils, if carried out correctly.

Automatic dishwashing can achieve a much higher temperature on the rinse cycle and therefore offer a much higher level of disinfection than manual dishwashing. This can prove particularly useful with smaller high risk items such as equipment parts and chopping boards.

Maintaining Hygiene Standards

Food Contact Surfaces

These are areas where cross contamination can easily occur if hygiene standards are not maintained.

An important differentiation to make at this stage is between disinfectants and sanitisers, which are often mistakenly interchanged terms.

In catering, the word 'sanitiser' means a product that both cleans and disinfects in one operation such as **Jangro Kitchen Cleaner Sanitiser**. In other areas, sanitiser is often confusingly used with the same meaning as disinfectant. A disinfectant is a chemical which will reduce micro-organisms to a level that is not normally harmful. Most catering operations prefer to use a sanitiser as it speeds up the cleaning routines and reduces the number of products in use. When using any sanitiser or disinfectant, the final application must be on a cleaned surface for the necessary contact time. Always refer to the manufacturer's instructions to ensure effective germ kill.

Floors and walls

Regular cleaning is needed to prevent the build up of grease, dirt and food residues, which would otherwise provide the bacteria with an environment in which to thrive and multiply.

When cleaning walls you should always work from top down to avoid contamination of clean areas, and with floors, particular attention should be paid to corners and areas around the edges of equipment.

Manual Washing Up

Typically, manual washing up has been characterised by short contact times, high soil loads and low detergent levels and, although there are many manual washing up liquids containing bactericides, these should not be relied upon solely to provide the high bactericidal effect needed. They

can however, provide some extra hygiene when used neat on a sponge. Where high risk utensils are specially required to be disinfected eg cream mixing utensils and chopping boards, a detergent sanitiser can be used such as Jangro Bactericidal Detergent, making sure you follow the manufacturer's recommended dosing and contact times.

Following the key principles of manual washing up will ensure a high level of hygiene within your unit:

- Using water of 50°C, make up a solution of diluted washing up liquid in the washing up sink following the manufacturer's instructions.
- Scrape off any loose debris into the bin.
- Place articles to be cleaned in the sink and scrub with a clean brush, cloth or scouring pad depending on the item. Change water regularly.
- Using a second sink (where available), rinse clean articles with hand hot water.
- Allow to air dry on a clean sanitised surface, or dry with disposable paper towels.

Automatic Dishwashing

Commercial dishwashers generally fall into one of three main categories depending on the volume of washing up required by the end user.

- Where the volume requirements are relatively low, such as in small cafes, bars and guest houses, a front loading machine with integral or manual dosing would be sufficient.
- Where the volume of dishwashing is higher, you will need to consider single tank pass through machines.
- For extremely large and busy catering operations such as large hotels and in-flight catering continuous conveyor or 'flight' machines are used. These are multi tank machines where the dishes travel continuously through the machine, emerging clean and dry on exit.

Depending on the machine you use there will be two or three cycles within the programme. Some machines offer a pre-wash cycle (40 – 50°C) and all machines provide a wash cycle (55 – 65°C) and a rinse cycle (82 – 90°C).

To ensure the dishwasher runs effectively and efficiently it is important that it is regularly maintained and operated in line with the manufacturer's recommendations.

Particular attention should be paid to making sure the detergent used matches the level of water hardness and that the dosing equipment is functioning and adjusted correctly.

Regular checks should be made to ensure sprayer arm jets are clear from obstruction, arms rotate freely, strainers are in place and water changed after each session.

Loading the dishwasher correctly will also help get the best results and avoid having to spend additional time re-cleaning crockery and utensils. Washing items as soon as possible after soiling is also highly recommended.

1. Pre-soak cutlery
2. Remove food scraps from plates and dishes into bin
3. Pour tea and coffee residues down sink/drain
4. Correctly rack all plates neatly and according to size
5. Rack all cups neatly and inverted over a sink or drainer
6. Stack knives, forks and spoons in the correct baskets. Mix cutlery in each basket, handles down.
7. Change water regularly and after each section
8. Wash glassware when water is fresh.

Importance of Personal Hygiene

One of the greatest potential sources of food contamination in a kitchen comes from the kitchen staff themselves, or indeed anyone who visits the kitchen environment, including managing staff, delivery staff and visitors.

Even as healthy humans we will often be carrying a number of pathogens e.g. Staphylococcus aureus, on our skin, in our nose, throat and mouth, and these pathogens can easily be transferred to food through lack of thought or understanding of good personal hygiene.

When we are ill or have cuts and wounds, we carry potentially millions of pathogens and in these circumstances are often required to temporarily cease working in an open food environment.

The contamination of food by the transfer of pathogens from humans is well understood, and in fact the procedures for minimising the risk are relatively simple in theory. In practice, however, it requires staff to be constantly aware of the threat they pose to contaminating the food and for them to potentially change their habits. What starts as a normal reaction, scratching an itchy nose for example, could end in a food poisoning outbreak affecting both customers and staff.

Hand Washing

The regular washing of hands is probably the single most important aspect of personal hygiene as it is our hands that are in actual contact with the food, and therefore the most likely source of pathogens if they are not clean.

It is crucial that all staff get into the habit of washing their hands regularly and thoroughly, particularly at these critical risk points:

Before entering the open food area at the beginning of a shift

After visiting the toilet
handling raw meat, poultry or eggs
taking a break
handling waste
smoking
blowing their nose

Facilities should be provided to make it easy for staff to wash their hands at the appropriate times. Hand wash basins should be available in convenient places and serviced with plenty of soap (preferably liquid soap from cartridge dispenser to avoid communal handling) and a hygienic method of hand drying, either hot air dryer, disposable paper towels or linen roller towel. Nylon nail brushes should also be provided and cleaned regularly, particularly at the end of each day.

Steps to Effective Hand Washing

Staff should be trained in the correct method of washing hands to ensure effective soil removal, bacterial kill and to minimise any detrimental effects to their skin.

The key steps in effective hand washing are:

- Wet hands with warm water (not too hot)
- Dose with non-perfumed bactericidal soap
- Wash hands thoroughly, over all parts of hands
- Rinse to remove all lather
- Dry hands with disposable paper towel, hot air dryer or clean linen roller towel.

It would be a false economy to use a poor quality soap as this could lead to skin problems for operatives. A specialised non-perfumed bactericidal soap should be used to avoid harming the food handler's skin.

An after work re-moisturising cream can help issues with dry skin and should be available to staff at the hand washing station.

Personal Hygiene

There are a number of other important aspects of personal hygiene that pose a considerable risk to food contamination and staff should be well trained in minimising those risks:

Hair often carries pathogens that can be transferred to food in two ways. Firstly the handlers may touch their hair, often an unconscious reaction, transferring the pathogen to their hands. Secondly, and more importantly is loose strands of hair or dandruff can fall out on to food and contaminate it directly.

Regular hand washing will help minimise the risks from touching hair, and regular hair washing combined with the use of hairnets and hats will help prevent loose hair and dandruff from contaminating food.

Food handlers should only groom their hair in the cloakrooms and never in the kitchen.

Jewellery worn by food handlers can pose a problem by either falling onto food and being partially or completely ingested, or by harbouring pathogens on the skin under the jewellery that can be transferred through hand contact.

Generally only plain wedding rings are permitted to be worn in the kitchen.

Food handlers should be encouraged to avoid using excessive make-up and strong smelling personal toiletries as these can taint or contaminate the food.

Smoking is not allowed in the kitchen or food preparation areas, as there is a risk of physical contamination of ash and cigarette ends along with an increased risk of bacterial infection from saliva on cigarette ends and fingers.

Smoking can also encourage coughing which can release infected saliva and mucus onto hands, food surfaces and food itself.

Food handlers should not eat sweets or food in a kitchen because of the likelihood of transferring bacteria from their mouth to fingers and then potentially onto food surfaces, utensils and food itself.

When tasting, food handlers should use a clean spoon each time they taste any food to avoid any risk of contamination.

Protective clothing is designed for either protecting the wearer from some type of personal injury such as a burn or knife cut, or more commonly to protect food from contamination from handlers' general clothing, which will often be contaminated with staphylococci. Protective clothing is not, as many food handlers believe, to protect their own clothing. Protective clothing should completely cover a handler's personal clothing and should always be clean. The use of a light colour is advised as this shows up dirt and soilage easily and encourages cleaning and replacement.

Gloves should be worn for handling chemicals and washed regularly if used in food areas.

Eye or face protection is necessary for oven cleaning because of the caustic nature of the chemicals involved.

Food Handlers Health

It is an offence for people to be working in a kitchen or any other food handling area if they are suffering from, suspected to be suffering from, or carrying a disease that could be transmitted through food. This also applies to boils and septic cuts as they can contain *Staphylococcus aureus*.

The food handler has a legal as well as a moral obligation to inform the catering management of any symptoms of food poisoning eg diarrhoea or vomiting, or any suspicion they may have that they are carrying any food poisoning organisms.

Anyone exhibiting these symptoms should be excluded from the food handling area until they are deemed fit to return, guidance for which can

be found in the Code of Practice Food Handling – Fitness to Work.

Where a wound is uninfected it will need to be protected from either contaminating the food or being contaminated itself. A waterproof plaster should be used with a highly visible colour to allow easy detection if it falls into the food; green or blue is generally recommended.

Environment

Ultimately it is the individuals who are responsible for their personal hygiene habits, but a lot can be done to influence those habits by providing an environment that encourages good hygiene practice.

Training – Ensure staff are adequately trained in the essentials of food hygiene.

Clean Premises – Providing a clean and tidy environment in which to work will encourage staff to adopt clean and tidy practices.

Facilities – Make sure facilities needed for good hygiene practices are available and convenient e.g. hand wash basins near key risk points with plenty of liquid soap and hand drying facilities.

Uniforms – Clothing and apparel supplied should be clean and light coloured to show up soilage. Encourage the use of clean garments.

Developing the Cleaning Regime

In all of the critical areas within the kitchen environment, there are many cleaning tasks that need to be carried out that would not necessarily be associated with normal cleaning regimes. These include cutlery and crockery cleaning, cutlery and utensil sterilisation, equipment cleaning (including dismantling) and commercial oven cleaning.

On top of this, the kitchen itself needs to be cleaned periodically to prevent the build up of grease, grime and dirt. As you can see, it is no easy task to keep clean and as such cannot be considered in the same way as other areas of the building. Indeed, in larger commercial premises and schools, the responsibility for the cleaning of kitchens falls onto the kitchen staff and not designated cleaners.

Due to the unique nature of the kitchen environment we will need to look at the various aspects that, taken together, will help you develop an effective cleaning regime.

Cleaning Process

Let's first look at the Cleaning Process. Cleaning requires two key elements, namely energy and time.

Energy can be supplied in three different forms:

- Chemical – supplied by detergents
- Physical or Mechanical – supplied by scrubbing or sweeping, and by machines such as dishwashers and floor scrubbers.
- Heat – Supplied by hot water or steam.

There are two elements to time in this instance; the time it takes to complete the task and the contact time needed for any chemicals, or indeed hot water, to affect the desired results.

When developing a cleaning regime we need to consider:

The Items to be Cleaned

Within a commercial kitchen environment you will find food preparation areas, toilets, offices, storerooms, cold rooms etc. Within these areas, normal cleaning procedures found in other Jangro Guides apply. However, in kitchen-specific areas, cleaning of the following items needs to be carefully considered:

Small items – kitchen utensils, crockery, pots and pans.

Kitchen Appliances – cookers, fridges, hot cupboards, freezers and canopies.

All Surfaces – contact and non-contact

The Type and Level of Soiling Present

The type and level of soiling within the kitchen is dependent on the level of its usage and the type of food processing being undertaken. For instance a school kitchen geared towards a midday serving will differ greatly from a hotel serving up to four meals a day, the main one being the availability of adequate time to carry out effective cleaning. Also if raw food is being prepared and stored, there is a higher probability that harmful bacteria will be present within the kitchen.

Therefore, you must carefully consider the type of soiling that will be present before deciding upon the types of chemicals required to support your cleaning regime.

Organic Soil

Organic soils originate from animal or vegetable material and include blood, fat, starches, sugars and cooking oils and they occur in three forms. These are:

Natural – soils that appear in their natural unchanged form.

Polymerised – soils whose original physical properties are changed by moderate heating and will physically toughen and darken.

Carbonised – soils that have become bonded to a surface through high levels of heating and will appear black, burnt and brittle.

In a kitchen all three types can be found on the same surface.

Although most of the dirt, grease and grime found within a kitchen can be cleaned in accordance with normal procedures, some soiling is resistant to detergent and water action and requires specialist cleaners.

Cleaning Products Used

Detergents

Within the kitchen environment, degreasing agents and oven cleaning detergents are used extensively.

Sanitisers

Sanitising solutions have been developed for use within the kitchen environment and are suitable for use on all surfaces. Note: sanitisers do not necessarily disinfect. They will kill virtually all of the harmful bacteria known to breed within kitchens and are critical in ensuring that exacting hygiene standards are achieved and maintained.

Washing Up Liquid

Washing up liquid is provided for hand dishwashing. It can be added to water manually by the operative or by means of a dosing system connected to a large container.

Washing up liquid can incorporate an anti bacterial ingredient to provide germ-killing properties and all types are generally neutral.

Automatic Dishwashing Machine Detergents

Crockery, pots and pans are usually cleaned in commercial kitchens with the aid of a dishwasher. Dishwashing detergents are provided in liquid, powder and solid forms.

Detergents are usually fed into the machine using automatic dosing systems which accurately and safely dispense a solution for maximum efficiency.

The Systematic Approach to Cleaning Kitchen Equipment

The type of task will determine the amounts of the various types of energy needed as well as the correct time, and total time required to complete the task.

We have seen when looking at the difference between manual washing up and machine dishwashing how the different elements change.

Any cleaning task can generally be broken down into six common steps, which if followed, should ensure effective results and minimise the risks of food contamination.

1. Remove loose debris – This tends to be a manual operation whether it is sweeping a floor, wiping a surface with a cloth, rinsing or scraping plates prior to putting in the dishwasher. An important step as it makes subsequent steps easier.
2. Apply a detergent solution – The main job of the detergent is to loosen any remaining soil from the soiled surface and stop soil re-depositing. To ensure the most effective results always dose detergents according to manufacturers' instructions.
3. Rinse – Removes the remaining dirty detergent solution and avoids detergent de-activating the subsequent disinfectant.
4. Apply disinfectant and contact time – Disinfecting will reduce the bacteria to a level which is safe for human health. It should be noted that disinfectant will require a level of contact time to work effectively. Always follow manufacturers' instructions for concentration and contact time, typically 30 seconds to 15 minutes.
5. Rinse – Removes disinfectant.
6. Dry – Should be either through air drying, using disposable paper towels, or a clean, dry cloth to avoid contaminating the surface.

6. The Cleaning Programme

Kitchen Cleaning Programme

Having considered the cleaning requirements, we can now look at frequencies and methods to be adopted which will make up the overall cleaning programme.

Cleaning tasks will essentially fall into one of four categories in terms of the frequency they are carried out:

- After each use
- Weekly
- Daily
- Monthly

Frequencies will depend on the operation but the following can be used as a guide for kitchen tasks

While there is some scope in the frequency of the weekly and monthly cleans, these should be at a frequency adequate to control the level of soil and micro-organisms to an acceptable level and would be dependent on the size of the kitchen.

Some surfaces will need to be cleaned at all four frequencies and possibly utilising different products at each frequency, for example, bains maries may be cleaned both after use and then descaled monthly.

Task	Frequency	Cleaning Method
Chopping boards and food preparation surfaces	After each use	<ul style="list-style-type: none"> • Make a solution of cleaner sanitiser • Brush off and remove debris • Load a clean cloth with clean, warm water and wipe the surface • Load a clean cloth with cleaning solution and liberally wet the surface • Allow time for the solution to act on the surface • Wipe the surface clean, rinse well with clean water and allow to air dry.
Manual Dishwashing	After each use	<ul style="list-style-type: none"> • Prepare a solution of hot water and concentrated washing-up liquid • Scrape off any waste foodstuffs into a waste food bin • Place dishes in the solution and allow to soak • Remove residual waste using a clean scrubbing brush or abrasive pad • Rinse with clean hot water and allow to air dry
Food Processing Machinery - Slicers, mincers, mixers, peelers and can openers	After each use or maintenance procedure	<ul style="list-style-type: none"> • Switch off power and remove the plug from electrical supply • Protect electrical parts using a waterproofing kit • Prepare a solution of hot water and cleaner/sanitiser • Place any removable parts in the solution or spray and allow to soak • Clean all parts by brushing or wiping • Rinse well with clean water and allow to air dry and reassemble

Task	Frequency	Cleaning Method
<p>Fryers (always refer to manufacturer's cleaning guidelines)</p>	<p>Weekly</p>	<ul style="list-style-type: none"> • Switch off power and remove plug from the electrical supply • Drain fat into a waste container and wipe away any residual grease with disposable paper tissue • Fill fryer with a solution of water and cleaner/degreaser • Submerge all baskets and utensils in the solution • Switch on and boil • Check on progress of cleaning and switch off when satisfied • Remove any film of deposits from the inside of the fryer with a brush or spatula and deposit in a waste food bin • Empty the fryer and rinse thoroughly with clean hot water • Allow to air dry
<p>Dishwashers (always refer to manufacturer's cleaning guidelines)</p>	<p>Daily (if not self-cleaning)</p>	<ul style="list-style-type: none"> • Switch off power and remove the plug from the electrical supply • Drain machine of any residual waste water • Remove spray arms and check holes are not blocked • Remove filters and empty out any debris into a waste bin • Prepare solution of hot water and degreaser in a bucket or bowl • Clean filters with solution and rinse well with clean hot water • Clean interior then exterior with solution using a clean cloth • Rinse all surfaces with clean, hot water • Replace all removable parts and allow to air dry
<p>Refrigerators, freezers and cold rooms</p>	<p>Weekly (or more frequently if required)</p>	<ul style="list-style-type: none"> • Prepare a solution of hot water and cleaner/sanitizer in a bucket or bowl • Switch of power and remove the plug from the electrical supply • Transfer food to alternative cool storage • Remove racks and soak in solution • Clean all surfaces, handles and seals with the solution using a clean cloth • Rinse well with clean, hot water and allow to air dry • Reconnect appliance and allow it to reach correct temperature before replacing food

Task	Frequency	Cleaning Method
Shelves, drawers and food storage racks	Weekly	<ul style="list-style-type: none"> • Prepare a solution of hot water and cleaner/sanitiser in a bucket or bowl • Remove contents of drawers or shelves • Brush/wipe off all loose debris • Clean all surfaces with solution using a clean cloth • Rinse with clean, hot water and replace all contents
Bains Maries, hot cupboards, refrigerated display cabinets and hot/cold serveries	Daily	<ul style="list-style-type: none"> • Prepare solution of hot water and cleaner/sanitiser in a bucket or bowl • Brush up and remove all loose debris • Clean all surfaces with solution using a clean cloth • Rinse thoroughly and allow to air dry
Microwave/Combi-ovens	After each use	<ul style="list-style-type: none"> • Switch off power and remove plug from electrical supply • Prepare solution of hot water and cleaner/degreaser in a bucket or bowl • Prepare a solution of hot water and washing-up liquid in a kitchen sink and rinse with clean, hot water • Take all removable parts and place and clean in solution in sink • Clean all interior then exterior surfaces with the cleaner/degreaser solution using a clean cloth • Replace all removable parts • Rinse all surfaces using clean, hot water and allow to air dry
Ovens/Grills	After each use	<ul style="list-style-type: none"> • Spray surfaces with Oven Cleaner or Liquid Griddle Cleaner (supplied ready-to-use) • Allow adequate contact time • For stubborn deposits use an abrasive cleaning pad • Rinse thoroughly using clean, hot water and allow to air dry
Floors	Daily	<ul style="list-style-type: none"> • Place warning signs at the extremes of the work area • Prepare a solution of hot water and cleaner/degreaser in a mop bucket • Apply solution to the floor using a clean mop • Rinse the floor using clean, hot water with a clean mop • Allow to air dry before removing warning signs

Task	Frequency	Cleaning Method
<p>Canopies, ventilation ducting and pipe work</p>	<p>Spot clean as required, full clean monthly</p>	<ul style="list-style-type: none"> • Assess work area for the use of appropriate access equipment (ladders, extension poles) • Place warning signs at the extremes of the work area • Remove any build ups of dust from high levels using a cobweb duster and wash down using damp cloth soaked in warm water • Prepare a solution of hot water and cleaner/degreaser in a bucket or bowl • Clean all surfaces with solution using a clean cloth • Allow all areas to air dry before removing warning signs
<p>Walls and paintwork</p>	<p>Spot clean as required, full clean monthly</p>	<ul style="list-style-type: none"> • Assess work area for the use of appropriate access equipment (ladders, extension poles) • Place warning signs at the extremes of the work area • Remove all items from walls and protect all electrical sockets and other fittings • Remove any build ups of dust from high levels using a cobweb duster and wash down using damp cloth soaked in warm water • Prepare a solution of hot water and cleaner/degreaser in a bucket or bowl • Clean all surfaces with solution using a clean cloth making sure you clean from bottom to top • Rinse all surfaces with clean, hot water making sure you do so from top to bottom • Allow all areas to air dry before removing warning signs
<p>Drains and gullies</p>	<p>Weekly</p>	<ul style="list-style-type: none"> • Place warning signs at extremes of work area • Remove all drain/gully covers from areas to be cleaned • Remove all excess debris and place in waste bin • Prepare a solution of hot water and cleaner/sanitizer in a bucket or bowl • Clean all surfaces and covers with solution using a clean cloth • Replace all covers and allow to air dry before removing warning signs.

7. Monitoring Standards

As we mentioned at the start of this section, hygiene standards throughout the kitchen should be maintained at all times. Commercial kitchens are subject to regular inspections by Environmental Health Officers, who, in addition to checking that kitchen operators are meeting their legal obligations, will rigorously check the effectiveness of the cleaning regime.

Therefore, it is a good idea to adopt a monitoring programme that checks the levels of cleanliness within the kitchen against an agreed standard. We have already identified that certain items need to

be cleaned periodically to prevent the build-up of dirt and grease and these should also be monitored separately upon completion as part of the overall planned monitoring programme.

Cleaning Checklists

These can be produced to cover individual areas, items, tasks etc. and usually take the form of a table which allows the inspector to decide whether or not the item is satisfactory or not. It should also allow the inspector to make comments and set deadlines for improvement or compliance. Finally, it should also allow for the inspector to check progress at subsequent visits. For example, the form could look something like this:

Task/Item	Satisfactory	Details	Action Required
Floors	No	Build up of dirt around edges of floor	Floor requires machine scrubbing
Walls	No	Finger marks on tiles above worktops	Remove immediately
Appliance (outside surface)	No	Grease marks on side of main oven	Pull out oven and clean all exterior surfaces
Appliances (inside)	No	Build up of burnt deposits on oven walls and base	Thoroughly clean using oven cleaner as per agreed procedures.

Inspected by:	
Date of Inspection:	
Date of reinspection:	

All companies are different and, as such, there are no hard and fast rules governing the way in which work should be monitored. Suffice to say that as long as the monitoring checklist covers all of the

activities undertaken and is considered against a set of agreed cleaning standards, this should do the trick... but only if action is taken on the findings, quickly and efficiently.

Cleaning – General Rules

Given the variety of equipment and surfaces within the kitchen, it is not feasible to discuss the detailed cleaning methods for each task. However, there are a number of general rules which can be applied to all items and surfaces.

The degree to which these rules are followed will depend on the frequency of the clean ie daily clean or a deep monthly clean.

Although the following list may seem lengthy; failure to follow these rules, at least at the monthly deep clean, could result in pest infestation and food poisoning.

You will find a 'clean as you go' policy will make best use of effort and yield the highest standard of hygiene.

General Rules

- For deep clean, work in the direction from the ceiling to the floor.
- Clean from clean to dirty e.g. for preparation table, work from the top surface to the floor.
- Dismantle equipment as far as possible e.g. remove doors, trays/shelves, gas rings, cooker knobs, filters, mixing paddles, etc.
- Be aware of legislative requirements, such as age limits for handling meat slicers.
- Drain items such as deep fat fryers, ice-cream makers etc.
- If possible, pull out large items such as ovens and refrigerators and clean behind and under these items.
- Look for signs of infestation such as droppings and nests.
- Remove gross debris by hand, e.g. by brushing.
- Check that all electrical equipment functions prior to and after cleaning.
- Ensure that all electrical equipment is isolated during cleaning.
- Use products in accordance with manufacturers' directions.

- Take care with blades and sharp edges.
- If necessary, wear appropriate personal protective equipment.
- Use the correct dilution of the product to aid cleaning/achieve required sanitation.
- Ensure that sanitiser is in contact with surface for the required period to ensure sanitation standards. Typically this is 5 minutes; from 30 seconds for cleaned surfaces up to 15 minutes for a soak.
- Soak heavily soiled items to loosen dirt and aid cleaning.
- Pay particular attention to corners, ledges, rims, wheels, runners etc.
- Ensure that hidden surfaces, such as under preparation tables, oven doors and the seals of refrigerators and freezers are not overlooked and are cleaned/sanitised.
- Ensure that pilot lights, refrigerators etc are re-lit/switched on after cleaning.
- Report and repair/replace damaged items/surfaces.

As we have seen cleaning in kitchens needs to be approached in a way that not only ensures the highest standards of cleanliness but also minimises the risk of spreading harmful bacteria. We now know that to do this you will need to thoroughly examine all of the processes undertaken within the kitchen environment and carefully consider how they could contribute to the spread of infection.

HACCP

No Guide to Kitchen Hygiene would be complete without mentioning HACCP.

HACCP stands for **Hazard Analysis Critical Control Points** and is a Food Safety methodology that relies on the identification of Critical Control Points (CCP's) in food production and preparation processes. The CCPs are the closely monitored in order to ensure that food is safe for consumption

Although it sounds complicated, it is not, and really just requires a large measure of common sense.

The key is firstly to identify any potential hazards in the kitchen, which is something that may do somebody harm; secondly you need to identify the risks i.e. where there is a possibility of the hazard actually harming someone.

Once the risk has been identified, measures need to be put in place that will control the risk so that it does not become harmful to human health. As an example, salmonella, which often occurs naturally on raw chicken would be a hazard and, if the chicken is undercooked or stored incorrectly, would allow the bacteria to multiply and increase the risk of somebody becoming ill. To control the risk you must therefore store at the right temperature and cook thoroughly.

Hazards fall into three main categories:

Chemical, such as cleaning materials can present a hazard and should be stored out of food preparation areas and away from food altogether. Surfaces should be rinsed off after chemicals have been used.

Physical contamination can occur from items such as broken glass, hair and jewellery, and care should be taken to:

- Ensure pests are excluded (e.g. mice, rats, cockroaches, flies)
- Keep your food areas clean
- Keep food covered and ensure packaging is intact
- Keep rubbish in closed bins
- Ensure that food handlers do not wear jewellery (or watches)

Bacteria are the third type of hazard and need to be either stopped from growing in numbers or killed, through cooking and storing at the right temperatures. Bacteria can double their numbers every 20 minutes and can grow from one to 16 million in eight hours overnight.

Food Hygiene (England) Regulations 2005

New food hygiene laws were applied in the UK from 1 January 2006. They affect all food businesses, including caterers, primary producers (such as farmers), manufacturers, distributors and retailers. They put into law the use of HACCP for the first time.

Further Information

Detailed and qualified advice into all aspects of kitchen hygiene and compliance with the law can be obtained from your local Environmental Health Office. Your local Jangro distributor is on hand to offer advice on the specific products used in the kitchen and can offer guidance on appropriate cleaning practices and frequencies needed to maintain hygiene standards within the kitchen.

The following charts and tables can be found in the Appendices section of the Guide:

Common Disease-Causing Bacteria	i
Suggested Jangro Products	ii
Kitchen Cleaning – Equipment & Material Checklist	iii

Common Disease Causing Bacteria

Appendix i

Micro-organism	Source	Method of Transmission
<p>Staphylococcus Aureus <i>associated with:</i></p> <ul style="list-style-type: none"> • food poisoning • nose and throat infections • open wound infections 	<ul style="list-style-type: none"> • Mucous membranes and skin of animals and humans. 	<ul style="list-style-type: none"> • Touching the nose and mouth of infected individuals. • Contact with infected skin and puss from boils, rashes and other conditions. • Contact with infected wounds. • Transferred from raw to cooked foods via hands and infected catering equipment.
<p>E.Coli <i>associated with:</i></p> <ul style="list-style-type: none"> • food poisoning • diarrhoea • bladder infections • gastro intestinal disorders 	<ul style="list-style-type: none"> • Found in the intestines of humans and animals. The bacteria has many strains, some of which cause infections and disease. • Foul water and sewage. 	<ul style="list-style-type: none"> • Transferred from raw to cooked foods via hands and infected catering equipment. • Infrequent changing of cleaning water or allowed to stand for long periods before being used. • Pests, especially flies can transfer the bacteria from infected excrement to contact surfaces and food.
<p>Shigella Sonnei <i>associated with:</i></p> <ul style="list-style-type: none"> • dysentery 	<ul style="list-style-type: none"> • Found in human intestines 	<ul style="list-style-type: none"> • Failing to wash hands after using the toilet. • Pests, especially flies can transfer the bacteria from infected excrement to contact surfaces and food. • Contaminated toilet contact surfaces.

Common Disease Causing Bacteria

Appendix i

Micro-organism	Source	Method of Transmission
<p>Salmonella Group <i>associated with:</i></p> <ul style="list-style-type: none"> • food poisoning • typhoid • paratyphoid 	<ul style="list-style-type: none"> • Found in human and animal intestines. • Foul water and sewage. • Poultry, shell fish, meat and dairy products. 	<ul style="list-style-type: none"> • Introduced into buildings via infected foodstuffs. • Failing to wash hands after using the toilet. • Water polluted by sewage. • Transferred from raw to cooked foods via hands and infected catering equipment. • Introduced into buildings by birds, insects, vermin and domestic pets.
<p>Pseudomonas Aeruginosa <i>associated with:</i></p> <ul style="list-style-type: none"> • wound infections 	<ul style="list-style-type: none"> • Soil. • Foul water and sewage. 	<ul style="list-style-type: none"> • Infrequent changing of cleaning water or allowed to stand for long periods before being used. • Dirty water used in cleaning can deposit the bacteria onto surfaces being cleaned.
<p>Clostridium Perfringens <i>associated with:</i></p> <ul style="list-style-type: none"> • food poisoning • wound infections 	<ul style="list-style-type: none"> • Found in human and animal intestines. • Soil • Flies • Meat and dairy products 	<ul style="list-style-type: none"> • Introduced into buildings via infected foodstuffs. • Transferred from raw to cooked foods via hands and infected catering equipment. • Failing to wash hands after using the toilet. • Introduced into building via soil e.g. root vegetables.

Suggested JANGRO Products

Appendix ii

Suitable products that can be used for cleaning kitchens include:

Catering Descaler

A powerful, penetrating formula which is both fast-acting and effective and is safe to use on all stainless steel surfaces. This formulation is non-tainting and non-perfumed.



Heavy Duty Cleaner Odourless

A powerful and effective heavy duty cleaner for cleaning hard surfaces. This odourless and non-tainting cleaner is quick acting, effectively removing grease and heavily ingrained soilage. Recommended for use in canteens, restaurants and food processing.



Detergent

10% active green detergent for use on all types of crockery. Leaves a clean sparkle on all crockery and glasses whilst being kind to the skin.



Heavy Duty Kitchen Degreaser

A powerful multi-purpose cleaner, and degreaser which has bactericidal properties and is both non-perfumed and non-tainting. The quick acting degreaser removes heavy soiling and grease and is ideal for cleaning 'Altro' type non-slip flooring.



Washing Up Liquid

A 20% active lemon washing-up liquid that is ideal for both manual dishwashing and general hard surface cleaning.

Concentrated Detergent

20% active detergent with a fresh lemon aroma made from high quality ingredients which are both effective and mild to the skin. Ideal for both manual dishwashing and as a general hard surface cleaner.

Bactericidal Detergent

A bactericidal liquid detergent for the manual washing of crockery, kitchen utensils and all general cleaning. With a biodegradable formulation, which is both non-tainting and has a neutral pH, this can cut through the heaviest grease and grime.

Kitchen Cleaner Sanitiser (Odourless)

A multi-purpose cleaner sanitiser and terminal disinfectant that removes general soiling and kills bacteria. Jangro Kitchen Cleaner Sanitiser passes British and European test methods and has been specially formulated to be odourless and non-tainting, making it ideal for use in all kitchens.



Oven Cleaner

A powerful, effective and penetrating formulation which has been thickened to cling to vertical surfaces, and remove baked and burnt-on grease. It is safe to use on all stainless steel, cast iron and enamel surfaces.



Kitchen Cleaning - Equipment & Material Checklist

Appendix iii

<p>The highlighted boxes indicate the materials suitable for use when carrying out the cleaning tasks indicated.</p> <p>The most appropriate choice of product will depend on the type and level of soiling present.</p>	Floor-Manual	Floors - Machine	Washing Up - Manual	Washing Up - Machine	Pots, Pans & Crockery	Aluminium Equipment	Cutting Boards	Work Surfaces	Slicing Machines	Refrigerators	Deep Friers	Cookers - Routine	Cooker - Heavy	Grills	Bains Marie	Hot Cupboards	Wall tiling	Ceilings	Canopies
SUGGESTED JANGRO PRODUCT																			
JANITORIAL EQUIPMENT																			
Dish Cloths																			
Dust Pan and Brush																			
Flat Mopping System																			
Floor Cloths																			
Floor Scraper																			
Floor Squeegee																			
Griddle Cleaner Pads																			
Mops (ball or Kentucky)																			
Rotary Cleaning Machine																			
Sweeping Brush																			
Trigger Spray Bottles																			
Wet Pick-up Vacuum																			
PERSONAL PROTECTIVE EQUIPMENT																			
Dust Mask																			
Neoprene Gloves (standard)																			
Neoprene Gloves (with Gauntlet)																			
Overalls																			
Protective Goggles																			
Waterproof Apron																			