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CODE OF HYGIENIC PRACTICE FOR CATERING ESTABLISHMENTS (FIRST REVISION)

SRI LANKA STANDARDS INSTITUTION

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Sri Lanka Standard CODE OF HYGIENIC PRACTICE FOR CATERING ESTABLISHMENTS (First Revision)

FOREWORD

This standard was approved by the Sectoral Committee on Food Products and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2016-10-06.

Food safety has to be ensured at all stages of the food chain. In the case of catering services, hygienic requirements have to be established in organizations which, as applicable, prepare, process, cook, store, transport, distribute and serve food for human consumption at the place of preparation or at a satellite unit.

This code was first published in 1992. The need for a revision is considered based on,

- recent epidemiological data show that many outbreaks of food poisoning are caused by food produced in mass catering;
- large-scale catering operations are particularly hazardous because of the way the food is stored and handled;
- outbreaks can involve large numbers of people;
- persons fed by catering establishments are often especially vulnerable for instance children, the elderly and hospital patients, especially those who are immuno compromised. Catering operations are diverse in nature and not all of the requirements specified in this Code apply to an individual establishment or process. Also, for very small and medium catering establishments, it is possible that some requirements may not be applicable.

Properly trained inspectors and personnel and an adequate sanitary infrastructure are necessary in order to implement the Code satisfactorily.

This Code is subject to the restrictions imposed under the Food Act No. 26 of 1980 and the regulations framed thereunder, wherever applicable.

In revising this code, the assistance derived from the publications of the Codex Alimentarius Commission (CAC) and the International Organization for Standardization (ISO) is gratefully acknowledged.

1 SCOPE

- **1.1** This Code is applicable to all organizations which are involved in the processing, preparation, cooking, storage, distribution, transport and serving of food and meals.
- 1.2 It includes catering, banquets, among others, in central and satellite units, school and industry catering facilities, hospitals and healthcare facilities, hotels, restaurants, coffee shops, food services, and food stores.

2 REFERENCES

SLS 143 General principles of food hygiene

SLS 614 Potable water

3 **DEFINITIONS**

For the purpose of this Code, definitions given in **SLS 143** and the following should apply:

- **3.1 catering:** The preparation, storage and, where appropriate, delivery of food for consumption, at the place of preparation or at a satellite unit.
- 3.2 cleaning: The removal of soil, food residues, dust, grease or other objectionable matter.
- **3.3 contamination:** The introduction or occurrence of a contaminant (3.4) in food or food environment.
- **3.4 contaminant:** Any biological or chemical agent, foreign matter, or other substances not intentionally added to food which may compromise food safety or suitability.
- 3.5 i) cooked food: Foods cooked and kept hot or reheated and kept hot for serving.
 - ii) precooked food: Foods cooked, rapidly cooled and kept refrigerated or frozen.
- **3.6 cross contamination:** The contamination of cooked and pre cooked foods by direct or indirect contact with material at an earlier stage of the process.
- **3.7 disinfection:** The reduction, without adversely affecting the food, by means of hygienically satisfactory chemical agents and/or physical methods, of the number of microorganisms to a level that will not lead to harmful contamination of food.
- **3.8 establishment:** Any building(s) or area(s) in which food is handled and the surroundings under the control of the same management.
- **3.9 food handler:** Any person who directly handles packaged or unpackaged food, food equipment and utensils, or food contact surfaces and is therefore expected to comply with food hygiene requirements.
- **3.10 food handling:** Any operation in the preparation, processing, cooking, packaging, storage, transport, distribution and serving of food.
- **3.11 food ingredient:** Any substance, including food additives, used in the manufacturing or preparation of food and which is present, whether maintaining its original aspect or modified, in the end product.
- **3.12 lot:** A set of units of a product which have been produced or processed or packaged under similar circumstances.
- **3.13** packaging material: Any food grade containers, such as cans, bottles, cartons, boxes, cases and sacks, or wrapping and covering material such as foil, film, metal, paper, waxpaper.
- **3.14 pests:** Insects, birds, rodents and any other animal capable of directly or indirectly contaminating food.
- **3.15 portioning:** Division of food into single or multiple portions.

- 3.16 potable water: Water conforming to SLS 614.
- **3.17 potentially hazardous food:** Food capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms.
- **3.18** satellite/satellite kitchen: Kitchen where food from a central kitchen is portioned, reheated if needed, and made ready for service.
- **3.19 vector** (epidemiology): Organism which does not cause disease itself but which transmits infection by conveying pathogens from one host to another.
- **3.20 visitor**: A person who is not a permanent staff member of the establishment, including external visitors and service support staff.

NOTE: Examples of external visitors are auditors, enforcement officers, suppliers and contractors. Service support staff includes any other person who is not working in that particular area, eg. maintenance, management staff, and cleaners.

4 ESTABLISHMENT: DESIGN AND FACILITIES

4.1 Layout of premises

4.1.1 Infrastructure

4.1.1.1 Location

The establishment and its facilities should be located away from areas which may cause contamination from objectionable odours, smoke, dust or other contaminants and areas susceptible to pest infestations (e.g. dumping grounds, sewage drains, sewage treatment plants, livestock farms, etc..) and are not subject to flooding.

4.1.1.2 Buildings and facilities

The establishment and its facilities should be of solid construction and maintained in good condition. All materials should be such that they do not transmit any undesirable substances to the food.

Buildings and its facilities should be designed and constructed with the functional characteristics, location, and layout that are suitable for the needs of each working area. It should be designed to permit easy and adequate cleaning and to facilitate proper supervision of food hygiene.

Buildings and facilities should be designed to prevent the entrance and harbouring of pests and the entry of environmental contaminants such as smoke, dust, etc,.

Buildings and facilities should be designed to provide separation, by partition, location or other effective means, between those operations which may cause cross contamination.

NOTE: Cross-contamination is an important factor that contributes to foodborne outbreaks. Food can be contaminated with harmful organisms after cooking sometimes from a food handler, and often directly or indirectly from raw food. Operations such as, cleaning and

washing of raw materials, washing up of equipments, utensils, crockery and cutlery, and the unpacking, storage or refrigeration of raw materials should be performed in separate rooms or locations especially designed for that purpose. Managers and food inspectors should regularly check that the separation principle is properly applied.

Buildings and facilities should be designed to facilitate hygienic operations by means of a controlled and regulated flow in the process from the arrival of the raw material at the premises to the finished product, and should provide for appropriate temperature for the process and product. The layout should ensure that the product flows in one direction.

The areas or facilities incompatible with any hygienic operation of catering, such as housing areas, toilets/bathrooms, laundries, cleaning material warehouses, machinery rooms, and waste storage rooms, should be completely separated to avoid the risk of contamination of the food and food contact surfaces.

4.1.2 Workspace

4.1.2.1 General

Different areas should be designed in order to allow the proper arrangement of equipment and materials to avoid cross-contamination. For that purpose, work areas should be clearly identified and marked, physically or functionally.

All areas should be appropriately designed with adequate space to facilitate the food operations, as well as their cleaning and maintenance.

The reception of materials should be performed in a protected and clean area. The establishment should have a designated area for receipt of goods and this area should ensure the hygienic management of all goods.

Effective measures should be taken by the establishment in order to avoid cross-contamination, e.g. ready-to -eat food should be kept separate from raw or uncooked food.

Potentially hazardous raw products should be processed in a separate room, or in areas that are separated by a barrier, from areas used for preparing ready-to-eat foods.

4.1.2.2 Food handling areas

- *Floors*, where appropriate, should be waterproof, non-absorbent, washable, and non-slip materials without crevices, and should be easy to clean and disinfect. Where appropriate, floors should slope sufficiently for liquids to drain to trapped outlets.
- *Walls*, where appropriate, should be of waterproof, non-absorbent and washable materials and should be light coloured. Up to a height appropriate for the operation they should be smooth and without crevices, and should be easy to clean and disinfect. Where appropriate, angles between walls, between walls and floors, and between walls and ceilings should be sealed and coved to facilitate cleaning.
- *Ceilings*, should be designed, constructed and finished to prevent accumulation of dirt and minimize condensation, mould development and flaking, and should be easy to clean.
- *Windows*, and other openings should be constructed to avoid accumulation of dirt and those which open should be fitted with insect-proof screens. Screens should be easily

movable for cleaning and should be kept in good condition. Internal window sills, if present, should be sloped to prevent use as shelves.

- **Doors**, should have smooth, non-absorbent, undamaged surfaces, and be self-closing and close fitting.
- Stairs, lift cages and auxiliary structures, such as platforms, ladders, chutes, should be situated and constructed to prevent contamination of food. Chutes should be constructed with inspection and cleaning hatches.

An adequate drainage system should be provided, especially with regards to areas where a high volume of operations and continual transit of personnel and equipment takes place, eg. wash-up areas, areas where dishes, utensils, and other equipments are washed.

In food handling areas all overhead structures and fittings should be installed in a manner to avoid contamination directly or indirectly of food and raw materials by condensation and drip, and should not hamper cleaning operations. They should be insulated where appropriate and be so designed and finished as to prevent the accumulation of dirt and to minimize condensation, mould development and flaking. They should be easy to clean.

The use of material which cannot be adequately cleaned and disinfected, such as wood, should be avoided unless its use would clearly not be a source of contamination.

Living quarters, toilets and areas where animals are kept should be completely separated from and should not open directly into food handling areas.

Where appropriate, establishments should be designed so that access to food handling areas can be controlled.

4.1.3 Lighting and ventilation

All the areas should be provided with an adequate lighting system. Lighting systems should be designed so that they do not adversely affect food. Light bulbs and fixtures should be protected to ensure that materials, product or equipment are not contaminated in case of breakage. The lighting provided (natural or artificial), should allow personnel to operate in a hygienic manner.

Appropriate ventilation systems should be designed for the particular process or product, and should be capable of maintaining the temperature and humidity requirements for the process or products. Adequate ventilation should be provided to prevent excessive build-up of heat, steam condensation and dust and to remove contaminated air. The direction of airflow, whether natural or artificial, should pass from a clean area to a dirty area. Ventilation openings should be provided with a screen or other protecting enclosure of non-corrodible material. Screens should be easily removable for cleaning.

Good ventilation should be provided in food preparation areas, eg. cooking areas, in order to dissipate high thermal loads and vapour effectively.

Exhaust hoods that are easy to clean should be provided to remove all vapour generated in the process.

4.1.4 Changing facilities and toilets

Adequate, suitable, and conveniently located changing facilities and toilets should be provided in all establishments. Toilets should be designed to ensure hygienic removal of waste matter. These areas should be well lit, ventilated and should not open directly to food handling areas. Hand washing facilities with potable water, a suitable hand cleaning/disinfection preparation, and with suitable hygienic means of drying hands, should be provided adjacent to toilets and positioned so that the employee must pass them when returning to the processing area. Where paper towels are used, a sufficient number of dispensers and receptacles should be provided near to each washing facility. Taps of a non-hand operable type (preferably be operated by foot, knee, elbow or sensor) are desirable. Notices should be posted directing personnel to wash their hands after using the toilet.

4.1.5 Hand washing facilities in processing areas

Adequate and conveniently located facilities for hand washing and drying should be provided wherever the process demands. Where appropriate, facilities for hand disinfection should also be provided. Potable water and suitable hand-cleaning preparation should be provided. There should be suitable hygienic means of drying hands. Where paper towels are used, a sufficient number of dispensers and receptacles should be provided adjacent to each washing facility. Taps of a non-hand operable type (preferably be operated by foot, knee, elbow or sensor) are desirable and sinks designated for hand washing should not be used for food use and equipments/utensils cleaning purposes. The facilities should be furnished with properly trapped waste pipes leading to drains.

4.1.6 Refrigeration

Establishments should have refrigerating and/or freezing cabinets large enough to accommodate raw materials at adequate temperature.

Cross contamination of pathogens from raw commodities to prepared foods frequently occurs in the refrigerator. Therefore, raw foods, particularly meat, poultry, egg products, fish and shellfish, should be strictly separated from prepared foods, preferably by the use of different refrigerators.

Establishments should have refrigerating and/or freezing cabinets or equipments for chilling and/or freezing of food.

A specially designed rapid chilling system is desirable. Rapid chilling or freezing of large quantities of food requires proper equipment capable of extracting the heat rapidly from the largest quantity of food likely to be produced.

Establishments should also have refrigerating and/or freezing cabinets or equipments for chilled and/or frozen storage of prepared food corresponding to the maximum daily activity of the establishment.

All refrigerated cabinets or equipments should be equipped with temperature measurement devices. Where appropriate the use of temperature recording devices is recommended. The accuracy of the temperature recording devices should be checked at regular intervals and tested for accuracy against a standard thermometer of known accuracy. A dated record of such tests should be kept.

4.1.7 Effluent and waste disposal

Establishments should have an efficient effluent and waste disposal system which should at all times be maintained in good order and repair. All effluent lines (including sewer systems) should be constructed to avoid contamination of potable water supplies. All wastepipes should be properly trapped and lead to a drain.

4.1.8 Facilities for storage of waste and inedible material

Facilities should be provided for the storage of waste and inedible material prior to removal from the establishment. These facilities should be designed to prevent access to waste or inedible material by pests and to avoid contamination of food, potable water, equipment, building or roadways on the premises.

4.2 Water supply

4.2.1 Potable water

Potable water, conforming to **SLS 614** should be used.

Potable water supply at adequate pressure and temperature should be provided, as well as suitable facilities for its storage. The potable water storage facilities should have adequate protection against contamination and should be cleaned and periodically monitored.

4.2.2 Steam

Steam used in direct contact with food or food contact surfaces should be made from potable water, conforming to **SLS 614**.

4.2.3 *Ice*

Ice used in direct contact with food or food contact surfaces should be made from potable water, conforming to **SLS 614** and be transported, handled, and stored in a manner that protects it from contamination.

The facilities used to make and store ice should be suitable to prevent contamination and should be cleaned, disinfected and maintained in accordance with the manufacturer's instructions.

Mechanisms for confirming the microbiological quality of the ice, whether purchased or made on site, should be established.

4.2.4 Non-potable water

All non-potable water used in refrigeration, steam production, fire control and other purposes not connected with food, should be carried in completely separate lines from those carrying potable water, without any transversal connections among them or the possibility of non-potable water refluxing to potable water pipes. Such pipes should be clearly identified, preferably with standardized colours.

4.3 Equipment and utensils

4.3.1 All equipment and utensils used in food handling areas and which may contact food should be made of material which does not transmit toxic substances, odour or taste to food.

The equipment and utensils should be non-absorbent, resistant to corrosion and capable of withstanding frequent cleaning and disinfection. Surfaces should be smooth and free from holes, crevices or cracks. Suitable materials include stainless steel, synthetic wood, rubber substitutes. The use of wood and other materials which cannot be adequately cleaned and disinfected should be avoided except when their use would clearly not be source of contamination.

NOTE: Equipment and utensils constitute a source of potential cross-contamination. In addition to regular routine cleaning, it is essential that all equipment and utensils used for raw foods be thoroughly disinfected before they are used for cooked and precooked foods. If possible, separate utensils should be used for raw and cooked products. If this is not possible, thorough cleaning and disinfection is necessary.

- 4.3.2 All equipment and utensils should be designed and constructed to prevent hygienic hazards and permit easy and thorough cleaning and disinfection and, where practicable, be visible for inspection. Stationary equipment should be installed in a manner to permit easy access and thorough cleaning.
- 4.3.3 Equipment and utensils used for inedible materials or waste should be so identified and should not be used for edible products.

Containers for inedible material and waste should be leak proof, constructed of metal or other suitable impervious material which should be easy to clean or disposable and able to be closed securely.

- 4.3.4 Portable equipments, such as spoons, beaters, pots, and pans, etc., should be protected from contamination during storage.
- 4.3.5 Equipment at catering establishments should be subjected to maintenance programs including the calibration of measuring instruments such as thermometers and devices for registering temperature. There should be control and identification records kept of the equipment and utensils according to their manuals. (see **5.1**).

5 ESTABLISHMENT - HYGIENE REQUIREMENTS

5.1 Maintenance

The building, equipment, utensils, and all the establishment facilities, including drainage systems, should be kept in an appropriate state of maintenance and condition to facilitate all hygiene procedures, function as intended and not cause contamination of food.

The establishment should ensure that food safety is not affected during maintenance operations.

A preventive maintenance programme should be in place.

The preventive maintenance programme should include all devices used to monitor and/or control food safety hazards.

Corrective maintenance should be carried out in such a way that production on adjoining lines or equipment is not at risk of contamination. If there is risk of contamination in adjoining lines or equipment during corrective maintenance, food processing in adjoining lines and equipment should be suspended to prevent contamination. Maintenance requests which impact product safety should be given priority.

Temporary repairs should not affect food safety. A request for replacement by a permanent repair should be included in the maintenance schedule.

Lubricants and heat transfer fluids should be food grade where there is a risk of direct or indirect contact with the product.

The procedure for releasing maintained equipment for return to production should include cleaning and disinfection procedures, and pre-use inspection.

Local hygienic requirements should apply to maintenance areas and maintenance activities in process areas.

Maintenance personnel should be trained in the food safety hazards associated with their activities.

5.2 Cleaning and disinfection

Equipment and utensils should be cleaned as frequently as needed and disinfected if necessary by using products and methodologies ensuring their hygiene. Appropriate measures should be taken when rooms, equipment, and utensils are being cleaned or disinfected in order to prevent contamination of the food, eg. by water, washing-up liquids, or disinfecting agents. Products used for cleaning operations, cleaning products, and disinfecting agents, should be suitable for their intended use and used in accordance with the manufacturer's instructions, properly identified, stored away from processing areas and used in a manner that does not cause food contamination and not be stored in food packages and containers.

Immediately after work is finished or as frequently as necessary, the floors, including drains, the ancillary structures, and the walls in the rooms used for food handling should be carefully cleaned. This operation should not take place during food preparation activities.

The equipment or items used for cleaning and disinfection should be kept and stored separately so that they do not contaminate food, utensils, equipment or the personnel clothes. Changing rooms and toilets should be kept clean at all times. Equipment used for cleaning as well as personnel protective uniforms should be used only for cleaning toilets and changing rooms.

Access areas and yards neighbouring catering facilities should be kept clean and clear.

Checks on inspection should be carried out to verify that the cleaning process was carried out in accordance with established procedures and that it has achieved the standard of cleanliness required (eg. checking for cleaning-related records, microbial tests for the already cleaned facilities and equipment).

Any equipment which has been in contact with raw material or contaminated substances should be cleaned and, if necessary, disinfected, and should comply with a cleaning and disinfection programme before being used for contacting and/or serving food. The equipment used in food preparation, eg. for peeling, slicing, and grinding, should not be used to prepare ready-to-eat foods.

Personnel handling raw materials or semi-processed products which are likely to contaminate the end product should clean their hands and the utensils between operations, eg. employees at a grill should use one utensil for raw meat and another for serving cooked meat.

Cleaning and disinfection devices and agents should be kept separately in such a way that they do not contaminate food, utensils, equipment, and clothes.

5.3 Waste management

5.3.1 Effluent and waste disposal

The establishment should have collecting bins in adequate numbers and capacity to contain waste.

Where it is not possible to have distinct areas for food entry and exit of waste, different times for the such entry and exit should be determined.

The collecting bins used for waste disposal in preparation and storage areas of food should be provided with hands free covers.

Suitable provision should be made for the removal and storage of waste. Waste should not be allowed to accumulate in food-handling, food storage, other working areas and the adjoining environment. Waste stores should be kept appropriately clean.

All the disposal ducts should be constructed so as to prevent the contamination of the potable water supply. All the ducts for residual water disposal should be thoroughly siphoned and should flow into a drainage system.

Areas both inside and outside food premises should be kept clean.

Grease traps and sewer should be of compatible dimension for the volume of waste and should be located outside the area of food preparation and storage and should have adequate maintenance.

Accumulated waste should be managed so that it does not become a source of contamination.

5.3.2 Waste handling

In kitchens or rooms where food is prepared, waste should be placed in detachable, impervious and resistant rubbish bags within properly identified containers. Those containers should be kept covered with a lid and removed from the work area as soon as they are filled or after each work shift and disposed into covered containers which should not be stored in the processing area. Re-usable containers should be cleaned and disinfected each time they are taken back into the food preparation area.

Waste containers should be kept in an enclosed area reserved for that specific purpose and separately from food stores. The temperature should be maintained as low as possible and the area should be provided with good ventilation, lighting, and protection from insects and rodents. It should be easy to clean, wash and disinfect. Waste containers should be cleaned and disinfected each time after use.

Empty packages and wrappers should be disposed in the same conditions as waste materials and should not be stored in the food-handling areas.

Food waste should be stored in pest-proof containers and/or stacked above the ground and away from walls. Where appropriate, refuse should be stored in covered, pest-proof containers. Used oil should be stored in a suitably identified covered container until its removal. The establishment should ensure the proper storage and disposal of used oil.

5.4 Pest and animal control

5.4.1 Pest control

A continuous and effective pest control programme should be implemented and documented. The programme should include a set of effective and continuous actions to control the vectors and pests, to prevent their attraction, access, shelter, and/or proliferation. The establishment and surrounding areas should be inspected periodically to ensure there is no infestation.

Where pests invade the building, eradication measures should be adopted and verified for effectiveness, and the results should be recorded. Buildings should be well maintained to prevent ingress by pests and all pest entry points should be sealed.

NOTE: Insects and rodents are known carriers of pathogenic bacteria from areas of contamination to prepared foods and food contact surfaces. Therefore, their presence in food preparation areas should be prevented.

Pest control measures comprising treatment with mechanical, biological or chemical agents that have been approved for use by the competent authorities should be put into practice at the food business by a suitably qualified or trained person. Adequate records of the use of pesticides should be kept.

Chemical agents should be used only if other measures cannot be adopted and these products should be suitable or approved for use in food production areas. Prior to the application of pesticides, care should be taken to protect food, equipment and utensils against contamination. The pesticide application should be carried out without posing a threat to the safety or suitability of food. After the pesticide application, the equipment and utensils exposed should be thoroughly cleaned so that any residue is removed before their subsequent use. Pesticides should be adequately labelled and stored in an enclosed area intended for that specific purpose.

5.4.2 Exclusion of domestic animals

Domestic animals should be excluded from areas where food is prepared, stored and handled as they are a source of contamination.

5.5 Hazardous substances handling

These products should be adequately labelled and stored in key-locked rooms or cabinets exclusively designated for that purpose.

Hazardous substances should be stored in their original packaging and adequately labelled with information about their identity, use and toxicity. Such products should be reserved for specific purposes only and should be used or handled only under the supervision of authorized and properly trained personnel. Extreme care should be taken to avoid contamination of food.

New or used food packaging materials/containers should not be used for measuring, diluting, dividing or storing hazardous substances.

No hazardous substances should be used or stored within the food-handling area where there is a potential risk for contamination.

5.6 Storage

Refrigerated raw materials of animal origin should be stored at a temperature less than or equal to 4 °C. Other raw materials requiring refrigeration, e.g. certain vegetables, should be stored at the lowest temperature allowing their quality to be maintained. Stored raw materials or ingredients should be kept in adequate conditions to avoid deterioration, protect them from contamination, and prevent damage. Stocks of raw materials and ingredients should be subject to effective stock rotation (e.g. FIFO — first in, first out).

Raw materials, ingredients, and packaging materials should be stored off the floor (eg. on pallets) and with sufficient space between the material and the walls to allow inspection and pest control activities to be carried out.

Raw materials and ingredients that need to be transferred from their original packages should be handled in an appropriate manner so that they remain protected and with the original label of the product intact; if this is not possible, the label information should be transcribed on to another label or any other effective method to ensure the traceability of the product.

Raw materials and ingredients should be inspected and selected before cooking and, if necessary, laboratory tests should be carried out to establish fitness for use. Only suitable raw materials and ingredients in good conditions should be used in the preparation of food.

Frozen raw materials not to be used immediately should be kept or stored at -18 °C or below. Catering establishments should be provided with cooling and/or freezing equipment of sufficient capacity to keep food at the required temperature.

The refrigeration equipment should have devices for measuring and monitoring the temperature of the air or products being cooled and the devices should be calibrated at regular intervals. Records of temperature monitoring should be maintained.

Dry supplies store should be kept under adequate temperature and humidity conditions.

Food packaging materials and food contact materials should be protected from dust and from any other type of contamination.

5.7 Management and supervision

All catering-related activities should be controlled and supervised by the management, regardless of volume and the type of food involved.

The top management of the catering establishment should ensure that good manufacturing practices for food processing are being implemented effectively in the catering facility. The top management should also ensure that the potential hazards are correctly assessed and ensure the effective supervision of catering operations.

All supervision should be carried out by a competent person.

5.8 Documentation and records

The catering establishment should keep adequate records.

Records that should be kept for the appropriate time on procedures relating to:

- hygiene of water tanks;
- hygiene of facilities, equipment, furniture and utensils, including cleaning and disinfection operations;
- integrated controls of transmission vectors and pests;
- hygiene, health and training of food handlers;
- temperature control according to law and establishment procedures (food and equipment);
- others as needed or required.

All documented procedures should contain the sequential operations and their frequency, specifying the name, position and/or role of those responsible for the activities, monitoring, verifying, and correcting procedures. They should be approved, dated and signed by the personnel responsible for the establishment and be available whenever needed.

5.9 Product recall procedures

Product recall procedures should be established.

6 PERSONNEL HYGIENE AND HEALTH REQUIREMENTS

6.1 General

Responsibility for ensuring compliance by all personnel with all requirements should be specifically allocated to competent supervisory personnel.

Visitors should be given access to the food-handling areas on a restricted basis. These visitors should use protective clothing and comply with the food safety requirements of the catering establishment.

6.2 Hygiene training

Adequate, relevant, and continuing training should be given to all personnel of the catering establishment in personal hygiene. Records of training should be retained.

The training should include a description of personnel illnesses or states of health that may affect the safety of the food product, and of which the management should be informed. Effectiveness of training should also be evaluated.

6.3 Health status

6.3.1 General

The management of the food establishment should ensure that the health of the personnel engaged in the activity does not have an adverse effect on the food. Any individual affected by a contagious illness or exposed wounds should not be allowed to work in food-handling areas where there may be a risk of contamination of food.

6.3.2 Medical examination

Medical examination of staff in the food catering should be carried out according to the Sri Lanka Food Act No.26 of 1980 and Regulations framed thereunder.

6.3.3 Communicable diseases

The management should take care to ensure that no person, while known or suspected to be suffering from, or to be a carrier of a disease likely to be transmitted through food or while afflicted with infected wounds, skin infections, sores, or with vomiting or diarrhea, is permitted to work in any food handling area in any capacity in which there is any likelihood of such a person directly or indirectly contaminating food.

Personnel should be encouraged to report to management any illness or state of health that may affect the safety of the food product.

If an employee is restricted from working in a food-handling area because of a communicable disease, he/she should receive clearance from a competent medical professional before returning to work.

6.3.4 Injuries

Any person who has a cut or wound should not continue to handle food or food contact surfaces until the injury is completely protected by a waterproof covering which is firmly secured. Adequate first aid facilities should be provided for this purpose.

6.4 Personal cleanliness

6.4.1 General

Every person engaged in a food-handling area should maintain a high degree of personal cleanliness while on duty, and should wear suitable protective clothing including hair, moustache and beard covering. If necessary, suitable footwear should also be used. All protective clothing should be cleanable unless it is disposable. Protective clothing should be maintained in a clean condition consistent with the nature of the work in which the person is engaged. All protective clothes should be used exclusively in the catering establishment. If necessary, surgical masks should be used.

Aprons and similar items should not be washed and/or dried in food-handling or preparation areas. When food is manipulated by hand, rings should be removed from the hands or covered. Personnel should not wear other jewellery items when engaged in food handling.

6.4.2 Hand washing

Every person engaged in a food handling area should wash their hands frequently and thoroughly with a soap and/or disinfectant agent under running, potable water while on duty. Hands should always be washed before beginning work in food area, immediately after using the toilet, after handling contaminated material, and whenever necessary.

Hands should be washed, and disinfected where appropriate, immediately after handling any material which might be capable of transmitting disease, or contaminating food or equipment. Notices requiring hand-washing and disinfection should be displayed. There should be adequate supervision to ensure compliance with this requirement.

Catering personnel should wash their hands thoroughly at the different stages of food preparation, between one food-handling operation and another where risk of cross-contamination exists.

NOTE: The use of alcohol, gels or gloves does not replace the hygienic washing of hands, but it may be complementary.

6.4.3 *Gloves*

Gloves, if used in the handling of food, should be made from materials suitable for food contact and should be maintained in clean and hygienic conditions. The wearing of gloves does not exempt the operator from having thoroughly washed hands. Torn or punctured gloves should be discarded.

6.5 Personal behaviour

Any behaviour which could result in contamination of food, such as eating, use of tobacco, chewing (e.g. gum, sticks, betel nuts) contacting with their hair, face, nose, etc. or unhygienic practices such as spitting should be prohibited in food-handling areas.

Clothes or personal belongings as well as office materials, tools, etc., should not be placed in the food storage or handling areas.

6.6 Personnel effects and clothing

Personnel effects and clothing should not be deposited in food handling areas.

7 HYGIENIC PROCESSING REQUIREMENTS

7.1 Purchasing management

7.1.1 Supplier assessment

The catering establishment should set criteria for the evaluation of suppliers and keep records on their compliance with the established criteria.

The degree of control an organization exerts on their suppliers depends on the nature and the intended use of each material.

Specifications for raw materials to be purchased should take into account the variability inherent to those products and the requirements for specific controls.

7.1.2 Incoming material requirements (raw materials, ingredients, and packaging)

The conditions of raw materials, ingredients, and packaging, in addition to the established criteria, expiration date, and packaging integrity should be inspected, verified, and approved at point of receipt. Raw materials and ingredients requiring special storage conditions (e.g. temperature), should be controlled and records should be maintained to demonstrate that the proper storage conditions were provided.

Raw materials, ingredients or packaging batches that are non - compliant should be immediately returned to the supplier. If this is not possible, these items should be properly identified, labelled and stored separately until further action can be decided.

7.2 Prevention of cross-contamination

Effective measures should be taken to prevent contamination of prepared food during receipt of raw materials. Raw food should be effectively separated from cooked and pre-cooked foods.

NOTE: Raw meat, poultry, eggs, fish and shellfish and rice are frequently contaminated with food-borne pathogens when they reach food service establishments. Poultry, for example, frequently harbours Salmonella which may be spread to surfaces of equipment, to the hands of workers and to other materials. The possibility of cross-contamination should always be considered.

Persons handling raw materials or semi-processed products capable of contaminating the end product should not come into contact with any end product unless and until they have changed into clean protective clothing.

Hands should be washed thoroughly between handling products at different stages of processing.

NOTE: Food handlers can be a source of contamination. For example, cooked ingredients in a salad can become contaminated by food handlers during mixing and preparation. Hazard analysis should therefore include observations of food handling and hand washing practices of the kitchen staff.

Potentially hazardous raw products should be processed in separate rooms, or in areas that are separated by a barrier, from areas used for preparing ready to eat foods.

All equipment which has been in contact with raw materials or contaminated material should be thoroughly cleaned and disinfected prior to being used for contact with cooked or precooked foods. It is preferable to have separate equipment for raw materials and cooked, precooked foods, in particular apparatus for slicing and mincing.

7.3 Thawing

The pre-prepared products should be kept under refrigeration or frozen conditions, properly protected and identified in an appropriate manner before it is used or prepared.

When the raw materials and ingredients are not used entirely, these should be properly packaged and identified (e.g. product description, date of fractioning, date of validity after opening or withdrawal of the original packaging depending on the raw materials and ingredients).

The food thawing area should be kept clean, and/or physical barriers developed that prevent cross- contamination, such as separate areas or separation by schedules. Work in small batches rapidly under suitable refrigerated conditions in order to maintain the products at a safe temperature.

During the thawing process, food should be maintained in sealed containers, wrappers or protective packages where possible those used at the freezing stage. Large pieces of meat or large poultry carcasses should be thawed before cooking.

When thawing is carried out as an operation separated from cooking this should be performed in:

- a) a refrigerator or thawing chamber constructed for that purpose capable of maintaining a temperature of less than or equal to 4 °C; or
- b) running potable water maintained at a temperature not above 21°C for a period not exceeding 4 hours; or
- c) a commercial microwave oven only when the food will be immediately transferred to conventional cooking units as part of a continuous cooking process or when the entire, uninterrupted cooking process takes place in the microwave oven.

Food should be thawed in conditions which ensure that no part of the food reaches a temperature above 4 °C. For ready-to-use products, food should be checked to ensure that thawing is complete and no ice crystals remain throughout the products prior to service. Where specified by the manufacturer, some frozen food may be cooked or served without thawing.

NOTE: Hazards associated with thawing include cross-contamination from drip and growth of micro-organisms on the outside before the inside has thawed. Thawed meat and poultry products should be checked frequently to make sure the thawing process is complete before further processing or the processing time should be increased to take into account the temperature of the meat.

7.4 Preparation

7.4.1 Fresh fruits and vegetables

The preparation should be performed under suitable conditions in a well illuminated area. The pre-prepared products should be kept under suitable conditions (eg. refrigeration), and adequately labelled where appropriate.

Depending on the product and its intended use, selected, pre-washed, and, if necessary, precut fruits and vegetables should be:

- washed with potable water, with added disinfectant where appropriate and legally permitted;
- rinsed with potable water, where appropriate.

7.4.2 Other raw materials

Depending on the product and its intended use, the product should be:

- selected and pre-cut, if necessary; and
- washed with potable water.

7.5 Cooking process

The cooking process should be designed to maintain as far as possible best nutritional value of the food.

The time and temperature of cooking should be of adequate duration at specified minimum temperature to ensure the destruction of vegetative cells of pathogenic microorganism that may be present in food.

In frying operations, only cooking fats and oils manufactured for that purpose should be used. Frying fats and oils should not be overheated (above 180 °C). Where cooking fats and oils are reused, they should be assessed to ensure they are fit for purpose.

Prior to each operation, reused fats and oils should be filtered using a specially designed filter in order to eliminate food residues. Food-frying pans should be designed in order to facilitate emptying (e.g. presence of a spigot). The quality of fats and oils should regularly be checked for odour, colour, flavour, and floated elements, and if necessary, changed. Other quality characteristics to be considered are, for example, the smoke point, free fatty acid contents, amount of polar compounds.

NOTE: Frying fats or oils can become dangerous for consumer's health. Quality of frying fats or oils should be strictly controlled and should be changed immediately as soon as any changes in colour, flavour or odour are evident.

When products treated through dry, wet or mixed thermal processes (grilled, roasted, braised, fried, blanched, boiled, cooked, etc.,) are not intended to be consumed immediately, the cooking process should be followed by cooling as quickly as possible, or the temperature maintained at or above 63 °C with an adequate core temperature. (see 7.7) for cooling conditions.

7.6 Portioning process

Strict hygiene conditions should be in place when portioning food. When portioning refrigerated product, the product should be portioned in a refrigerated area or if not, should be completed within the minimum practicable period of time not exceeding 30 min.

Food portions should be placed in single-use or reusable packages made of food grade materials that have been properly washed and disinfected.

Portioned food should be covered with suitable food contact materials. In large-scale food preparation systems where cooked and refrigerated food cannot be divided into portions within 30 min, the portioning should be carried out in a separate area with an air temperature of 15 °C or below. The product should be served immediately or cold-stored at 4 °C. Alternatively and in accordance with work needs, a portioning system for portions may be implemented, indicating preparation and due dates and the identification of the portions.

7.7 Cooling and storage

Immediately after preparation, food should be cooled as quickly and effectively as possible. The core temperature of the product should be lowered to 10 °C within 2 h. After this period, the product should be stored immediately at 4 °C or below.

As soon as the cooling phase has been completed, products should be stored in cold storage equipment. The product temperature should not exceed 4 °C at any point and the product temperature should be maintained until end use. The storage temperature of the product should be periodically verified.

Where cooked cooled food is stored at 4 °C or below, it should be consumed as soon as possible, ideally within 24h or otherwise within a defined time, following suitable evaluation (eg. shelflife studies).

7.8 Freezing, storage and thawing

Immediately after cooling, the product should be frozen as rapidly as possible.

Cooked frozen food should be stored at - 18 °C or below. The temperature of stored food should be verified frequently.

Cooked frozen food should be thawed at 4 °C or below and should not be refrozen.

7.9 Transport

Hygienic requirements inside vehicles transporting cooked and precooked foods should be appropriate for the purpose.

During transportation, food should be protected from dust and from any other types of contamination.

Vehicles and/or containers intended for the transportation of cooked and/or cooled food should be capable of maintaining the required temperature.

The temperature for hot food should be maintained at 63 °C or above. Food should be kept hot during transport at 63 °C or above.

Vehicles and/or containers intended for transporting cooked-chilled food should be appropriate for this transport. The temperature for food requiring refrigeration should be maintained at 4 °C or below. Food should be transferred to the transporting vehicle already cooled to the temperature at which it is to be transported.

Vehicles and/or containers intended for transporting cooked-frozen food should be suitable for that purpose. Cooked-frozen food temperature should be maintained at -18 °C or below. Records to demonstrate correct transport should be available.

During transportation, control measures should be set up to ensure that the food safety is maintained, e.g. the transfer time between the transportation means (e.g. truck) and the storage facility should be less than 20 min. if there are no methods to control temperature.

7.10 Reheating

Reheating the food should be carried out rapidly. The reheating process should be adequate, and the core temperature of the product should reach 75 °C within 1 h after removal from the refrigerator. Lower temperatures may be used for reheating providing the time/temperature combinations used are equivalents in terms of destruction of microorganisms to heating to a temperature of 75 °C.

The temperature of the heated food should be monitored at regular intervals.

NOTE: Reheating must also be rapid so that the food passes quickly through the hazardous temperature range between 4 °C and 63 °C. For this purpose, high pressure air ovens, microwave or infrared reheaters are generally used.

The reheated food should reach consumers as soon as possible, at a temperature 63 °C or above.

NOTE: To minimize the loss of the organoleptic properties of the food it must be kept at or above 60 °C for as short a time as possible

7.11 Food service

Any food not consumed should be discarded; therefore it should be neither reheated nor returned to cooling units (refrigerator or freezer).

In self-service establishments, the distribution system should be such that the products offered are protected from direct contamination that may derive from the proximity or actions of the individual who serves and who is served. The food temperature should be 4 °C or below for cool-stored food or 63 °C or above for heated food. Clean dishes should be used for new servings. Dishes on which food remains should not be used for new servings.

In hot food display, equipment such as water-baths, thermal balconies such as electric or gas, stoves and other forms may be used. All alternatives should be adjusted so that the food is maintained at the temperature required in this Code, i.e. above 63 °C for up to 6 h, discounting the time that food remains in hot maintenance, prior to exposure. For food whose temperature may be difficult to maintain, eg. during frying and grilling, among others, the control of time (for up to 3 h or, in accordance with laws, discounting the time that food remains in hot maintenance before exposure) can be used as an alternative provided it is proven safe.

The equipment should be of appropriate size and be in appropriate state of hygiene, maintenance, and operation.

In cold-food display, appropriate measures should be used, eg. use of cold electric tracks, ice beds, cold showcases, refrigerators or refrigerated balcony of support.

The equipment should be adjusted in order to keep the food cold at temperatures up to 4 °C and should be of appropriate size and state of hygiene, maintenance and operation.

If the temperature exceeds 4 °C but is below 10 °C, ensure that the maximum time of exposure is 2 h.

The areas where food is consumed should be kept organized and in proper hygienic conditions.

The equipment, furniture and utensils available in these areas should be compatible with the activities, in sufficient quantity and in appropriate maintenance conditions.

The change or cleaning and disinfection of utensils should be performed at least every 4 h if necessary.

New food should not be mixed with that which is already exposed, unless both are at a temperature of 63 °C or above or 4 °C or below and there is no food safety risk.

The decorations or plants should not contaminate the exposed foods.

The establishments should keep employees responsible for payment (cash, card, etc.) in this specific function, without simultaneously handling prepared foods. If this is unavoidable, then procedures should be in place to keep food safe.

7.12 Identification and hygiene control system

A label indicating preparation date, food type, manufacturing establishment name, instructions for use, conservation, and "consume before" date should be present. Hygiene control procedures should be carried out by technically competent personnel who possess an understanding of the principles and practice of food hygiene.

Samples of meals should be kept available for further investigation if there is a suspicion of a food-borne outbreak associated with their consumption. When it is not possible to keep samples for all meals, the establishment should select meals to be sampled according to specific or potential hazards of each meal.

Food prepared in the establishment should be subjected to a microbiological sampling system for quality control and/or investigation purposes if there is suspicion of food-borne illnesses.

Where appropriate for safety, samples should be kept in a sterile container at 4 °C or below until at least 3 days after that whole lot has been consumed.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI which includes surveillance inspection of the factory, testing of both factory and market samples.

Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.



SRI LANKA STANDARDS INSTITUTION

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The Principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote Standardization and quality control by educational, consultancy and research and research activity.

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