

Caribbean Community

EDICT OF GOVERNMENT

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CRCP 5 (2010) (English): Food Hygiene



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CARICOM REGIONAL CODE OF PRACTICE

General principles of food hygiene

CRCP 5: 2010



Caribbean Community



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Foreword

This CARICOM Regional Code of Practice was developed in an effort to:

- a) identify the essential principles of food hygiene applicable throughout the food chain; and
- b) ensure that food is safe and suitable for human consumption.

This standard was approved by the Twenty-ninth Council for Trade and Economic Development (COTED) on 8-9 February 2010.

In the development of this standard, assistance was derived from the following:

- a) CODEX Alimentarius Commission, CAC/RCP 1-1969, Rev. 2003, Recommended International Code of Practice: General Principles of Food Hygiene.

NOTE During the development of this standard, the CARICOM Regional Standard for Labelling of Pre-packaged Foods was still under development.

1 Scope

This Code of Practice details the essential principles of food hygiene within the food chain from primary production to the final consumer, stipulating the acceptable hygienic conditions for producing food that is safe and suitable for consumption.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

World Health Organization, Guidelines for Drinking Water Quality
CARICOM Regional Code of Practice for Prepackaged Foods

3 Terms and definitions

For the purposes of this code of practice, the following terms and definitions shall apply:

3.1

cleaning

removal of soil, food residue, dirt, grease or other objectionable matter

3.2

contaminant

biological or chemical agent, foreign matter, or other substances not intentionally added to food which may compromise food safety or suitability for consumption

3.3

contamination

introduction or occurrence of a contaminant in food or food environment

3.4

disinfection

reduction, by means of chemical agents and or physical methods, of the number of microorganisms in the environment to a level that does not compromise food safety or suitability for consumption

3.5

establishment

any building or area in which food is handled and its immediate surroundings which are under the control of the same management

3.6

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

3.7

food hygiene

all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain

3.8

food safety

assurance that food will not cause harm to the consumer when it is prepared and or consumed according to its intended use

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3.9

food suitability

assurance that food is acceptable for human consumption according to its intended use

3.10

hazard

biological, chemical or physical agent in food, or the condition of the food, with the potential to cause an adverse health effect

3.11

Hazard Analysis Critical and Control Point

HACCP

system which identifies, evaluates, and controls hazards which are significant for food safety

3.12

potable water

water fit for human consumption as established in the latest edition of the “Guidelines for Drinking Water Quality” of the World Health Organization (Volumes 1 and 2) or established by national legislation which shall take precedence

3.13

primary production

initial steps in the food chain for the production of food for consumption

EXAMPLE harvesting, slaughtering, fishing, milking

4 Requirements

4.1 Primary production

4.1.1 Objectives

Primary production shall be managed in a way that ensures that food is safe and suitable for its intended use, traditionally including the following:

- a) avoiding the use of areas where the environment poses a threat to the safety of food;
- b) the control of contaminants, pests and diseases of animals and plants, in a manner that poses no threats to food safety; and
- c) the adoption of practices and measures to ensure food is produced under appropriately hygienic conditions.

4.1.2 Environmental hygiene

4.1.2.1 Potential sources of contamination from the environment shall be considered.

4.1.2.2 Primary food production shall not be carried out in areas where there are potentially harmful materials which could lead to unacceptable levels of undesirable substances in food.

4.1.3 Hygienic production of food sources

4.1.3.1 The potential effects of activities within primary production shall be the focus at all times and includes the identification of any specific points of the production process associated with a high probability of contamination and devising measures to minimize this.

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NOTE The HACCP-based approach may assist in assessing these measures.

4.1.3.2 Producers shall implement measures to:

- a) control contamination from air, soil, water, feedstuffs, fertilizers (including natural fertilizers) pesticides, veterinary drugs or any other agent used in primary production;
- b) control plant and animal health so that it does not pose a threat to human health through food consumption or adversely affect the suitability of the product; and
- c) protect food sources from faecal and other contamination.

4.1.3.3 Care shall be taken to manage wastes and the storage of harmful substances appropriately.

4.1.4 Handling, storage and transport

4.1.4.1 Procedures shall be in place to:

- a) sort food and food ingredients to segregate material which is evidently unfit for human consumption;
- b) dispose of any rejected material in a hygienic manner; and
- c) protect food and food ingredients from contamination by pests, or by chemical, physical or microbiological contaminants or other objectionable substances during handling, storage and transport.

4.1.4.2 Care shall be taken to prevent deterioration and spoilage through appropriate measures which may incorporate temperature, humidity and or other such controls.

4.1.5 Cleaning, maintenance and personnel hygiene at primary production

Appropriate facilities and procedures shall be in place to ensure that:

- a) any necessary cleaning and maintenance is carried out effectively; and
- b) an appropriate degree of personal hygiene is maintained.

4.2 Establishment – design and facilities

4.2.1 General

Dependent upon the nature of the operations, and the risks associated with them, premises, equipment and facilities shall be located, designed and constructed to ensure that:

- a) contamination is minimized;
- b) design and layout allow for appropriate maintenance, cleaning and disinfection, and air-borne contamination is minimized;
- c) surfaces and materials, in particular those in contact with food are non-toxic in intended use and where necessary, suitably durable and easy to maintain and clean;
- d) suitable facilities are available for temperature, humidity and other controls, where appropriate; and

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- e) there is effective protection against pest access and harbourage.

4.2.2 Location

4.2.2.1 Establishments

4.2.2.1.1 Consideration shall be given to potential sources of contamination when deciding on the location of food establishments, in addition to the effectiveness of any reasonable measures that might be taken to protect food.

4.2.2.1.2 Establishments shall not be located in areas where threats to the safety or suitability of food exist, which include:

- a) environmentally-polluted areas and industrial activities which pose a serious threat of contaminating food;
- b) areas subject to flooding unless sufficient safeguards are provided;
- c) areas prone to infestation of pests; and
- d) areas where wastes, either solid or liquid, cannot be effectively removed.

4.2.2.2 Equipment

The location of equipment shall:

- a) permit adequate maintenance and cleaning;
- b) maintain functionality in accordance with its intended use; and
- c) facilitate good hygiene practices, including monitoring activities.

4.2.3 Premises and rooms

4.2.3.1 Design and layout

Where appropriate, the internal design and layout of food establishments shall promote good food hygiene practices including protection of food and food ingredients against cross-contamination between and during operations.

4.2.3.2 Internal structures, fixtures and fittings

4.2.3.2.1 The structures within food establishments shall be sound in construction and be easy to maintain, clean and where appropriate, able to be disinfected.

4.2.3.2.2 The following conditions shall be satisfied, where necessary, to protect the safety and suitability of food:

- a) surfaces of walls, partitions and floors shall be constructed of impervious materials with no toxic effect in intended use;
- b) walls and partitions shall have a smooth surface up to a height appropriate to the operation;
- c) floors shall be constructed to allow adequate drainage and cleaning;
- d) ceilings and overhead fixtures shall be constructed and finished to minimize the build-up of dirt and condensation and the shedding of particles;

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- e) windows shall be easy to clean, constructed to minimize the build-up of dirt and where necessary, fitted with removable and cleanable insect-proof screens. Where necessary, windows shall be fixed;
- f) doors shall have smooth, non-absorbent surfaces, and shall be easy to clean and where necessary, disinfect; and
- g) working surfaces that come into direct contact with food shall be in sound condition, durable, easy to clean, maintain and disinfect. They shall be made of smooth, non-absorbent materials, and be inert to food, detergents and disinfectants under normal operating conditions.

4.2.3.3 Temporary or mobile premises and vending machines

4.2.3.3.1 Temporary or mobile premises and vending machines shall be sited, designed and constructed to avoid, as far as reasonably practicable, the contamination of food and harbourage of pests.

NOTE These premises and structures include market stalls, mobile sales, street vending vehicles, and temporary premises such as tents.

4.2.3.3.2 In the application of these conditions and requirements, any food hygiene hazards associated with these facilities shall be adequately controlled to ensure the safety and suitability of food.

4.2.4 Equipment

4.2.4.1 General

4.2.4.1.1 Equipment and containers (other than single use containers and packaging) coming into contact with food shall be designed and constructed to ensure that, where necessary, they can be adequately cleaned, disinfected and maintained to avoid the contamination of food.

4.2.4.1.2 Equipment and containers shall be made of non-toxic materials.

4.2.4.1.3 Where necessary, equipment shall be durable and movable or capable of being disassembled to allow for maintenance, cleaning, disinfection, and monitoring.

4.2.4.2 Food control and monitoring equipment

4.2.4.2.1 Equipment used to cook, heat treat, cool, store or freeze food shall be designed to achieve the required food temperatures as rapidly as necessary in the interests of food safety and suitability, and maintain them effectively.

4.2.4.2.2 Such equipment shall be designed to allow temperatures to be monitored and controlled.

4.2.4.2.3 Such equipment shall have effective means of controlling and monitoring humidity, air-flow and any other characteristic likely to have a detrimental effect on the safety or suitability of food, as necessary.

NOTE These requirements are intended to ensure that:

- a) harmful or undesirable micro-organisms or their toxins are eliminated or reduced to safe levels or their survival and growth are effectively controlled;
- b) where appropriate, critical limits established in HACCP-based plans can be monitored; and
- c) temperatures and other conditions necessary to food safety and suitability can be rapidly achieved and maintained.

4.2.4.3 Containers for waste and inedible substances

4.2.4.3.1 The containers used for the disposal of waste, by-products and inedible or dangerous substances, shall be specifically identifiable, suitably constructed and where appropriate, made of impervious material.

4.2.4.3.2 Containers used to hold dangerous substances shall be identified and where appropriate be lockable in order to prevent malicious or accidental contamination of food and or food ingredients.

4.2.5 Facilities

4.2.5.1 Water supply

4.2.5.1.1 An adequate supply of potable water with appropriate facilities for its storage, distribution and temperature control shall be available whenever necessary to ensure the safety and suitability of food.

4.2.5.1.2 Potable water shall comply with the requirements set out in the latest edition of the World Health Organisation (WHO) Guidelines for Drinking Water Quality, or higher standard.

4.2.5.1.3 Non-potable water shall have a separate system from potable water systems. Non-potable water systems shall be identified and shall not connect with, or allow reflux into, potable water systems.

EXAMPLE Uses of non-potable water include use in fire control, steam production, refrigeration and other similar purposes where it would not contaminate food.

4.2.5.2 Drainage and waste disposal

4.2.5.2.1 Provision shall be made for adequate drainage and waste disposal systems and facilities.

4.2.5.2.2 Such drainage and waste disposal systems and facilities shall be designed and constructed so that the risk of contaminating food or the potable water supply is avoided.

4.2.5.3 Cleaning

4.2.5.3.1 Adequate and suitably designed facilities shall be provided for the cleaning of food, utensils and equipment.

4.2.5.3.2 Such facilities shall have an adequate supply of hot and cold potable water where appropriate.

4.2.5.4 Personnel hygiene facilities

4.2.5.4.1 Personnel hygiene facilities shall be available to ensure that an appropriate degree of personal hygiene can be maintained and to avoid contaminating food. These facilities shall be suitably located and designed.

4.2.5.4.2 Where appropriate, facilities shall include:

- a) adequate means of hygienically washing and drying hands , including wash basins and a supply of hot and cold (or suitably temperature controlled) water;
- b) lavatories of appropriate hygienic design; and
- c) adequate changing facilities for personnel.

4.2.5.5 Temperature control

Depending on the nature of the food operation to be undertaken, adequate facilities shall be available for:

- a) heating, cooling, cooking, refrigerating and freezing food;
- b) storage of refrigerated or frozen foods;
- c) monitoring of food temperatures; and
- d) controlling ambient temperatures, when necessary, to ensure the safety and suitability of food.

4.2.5.6 Air quality and ventilation

4.2.5.6.1 Adequate means of natural or mechanical ventilation shall be provided particularly to:

- a) minimize air-borne contamination of food;

EXAMPLE Contaminants from aerosols and condensation droplets

- b) control ambient temperatures;
- c) control odours which might affect the suitability of food; and
- d) control humidity where necessary to ensure the safety and suitability of food.

4.2.5.6.2 The ventilation systems used shall be designed and constructed so that air is not allowed to flow from contaminated areas to clean areas, and where necessary, allow for easy maintenance and cleaning.

4.2.5.7 Lighting

4.2.5.7.1 The lighting employed, whether natural or artificial, shall be adequate for the operations to be undertaken in a hygienic manner.

4.2.5.7.2 Where necessary, lighting shall not be such that the resulting colour is misleading to the operation.

4.2.5.7.3 The intensity shall be adequate to the nature of the operation.

4.2.5.7.3 Light fixtures shall, where appropriate, be protected so as to ensure that food is not contaminated by breakages.

4.2.5.8 Storage

4.2.5.8.1 Adequate facilities for the storage of food, ingredients and non-food chemicals shall be provided where applicable and necessary.

EXAMPLE Cleaning materials, lubricants and fuels are non-food chemicals

4.2.5.8.2 Where appropriate, food storage facilities shall be designed and constructed to:

- a) permit adequate maintenance and cleaning;
- b) avoid pest access and harbourage;
- c) enable food to be effectively protected from contamination during storage; and

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- d) provide an environment which minimizes the deterioration of food, where necessary.

EXAMPLE By temperature and humidity control

NOTE The type of storage facilities required will depend on the nature of the food.

4.2.5.8.3 Where necessary, separate, secure storage facilities for cleaning materials and hazardous substances shall be provided.

4.3 Control of operation

4.3.1 General

The operation shall produce food that is safe and suitable for human consumption by:

- a) formulating design requirements with respect to raw materials, composition, processing, distribution and consumer use to be met in the manufacture and handling of specific food items; and
- b) designing, implementing, monitoring and reviewing effective control systems.

4.3.2 Control of food hazards

4.3.2.1 Food business operators shall control food hazards through the use of systems such as HACCP and shall involve:

- a) identification of any steps in the operations which are critical to the safety of food;
- b) implementation of effective control procedures at those steps;
- c) monitoring control procedures to ensure their continued effectiveness; and
- d) review of control procedures periodically and whenever there is a change in operation procedure.

4.3.2.2 These systems shall be applied throughout the food chain to control and ensure good food hygiene throughout the shelf-life of the product via proper product and process design.

NOTE Control procedures may be simple, such as checking stock rotation, calibrating equipment, or correctly loading refrigerated display units. In some cases a system based on expert advice, and involving documentation may be appropriate.

4.3.3 Key aspects of hygiene control systems

4.3.3.1 Time and temperature control

4.3.3.1.1 Systems shall be in place to ensure that temperature is controlled effectively where it is critical to the safety and suitability of food.

4.3.3.1.2 Temperature control systems shall take into account: the nature of the food;

EXAMPLE Water activity, pH and the likely initial level and types of micro-organisms

- b) the intended shelf-life of the product;
- c) the method of packaging and processing; and
- d) how the product is intended to be used.

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EXAMPLE Further cooking or processing or ready-to-eat

4.3.3.1.3 Such systems shall also stipulate the tolerable limits for time and temperature variations.

4.3.3.1.4 Temperature recording devices shall be checked at regular intervals and tested for accuracy.

NOTE 1 Inadequate food temperature control is one of the most common causes of food borne illness or food spoilage. Such controls normally involve the time and temperature of processes such as cooking, cooling, processing and storage.

NOTE 2 Other process steps which contribute to food hygiene may include chilling, thermal processing, irradiation, drying, chemical preservation, and or vacuum or modified atmospheric packaging.

4.3.3.2 Microbiological and other specifications

Where microbiological, chemical or physical specifications are used in any food control system, such specifications shall be based on sound scientific principles and state, where appropriate, the monitoring procedures, analytical methods and the action limits to be employed.

NOTE Management systems as described in 4.3.2 offer an effective means of ensuring the safety and suitability of food.

4.3.3.3 Microbiological cross-contamination

4.3.3.3.1 Raw, unprocessed food shall be effectively separated, either physically or by time, from ready-to-eat foods, with effective intermediate cleaning and where appropriate disinfection.

NOTE Pathogens can be transferred from one food to another either by direct contact or by food handlers, contact with surfaces or the air.

4.3.3.3.2 Access to processing areas shall be restricted or controlled as appropriate. Where there is a high risk of contamination, access to processing areas shall be via a changing facility only.

NOTE Personnel may be required to wear clean protective clothing including footwear and wash their hands before entering processing areas.

4.3.3.3.3 Surfaces, utensils, equipment, fixtures and fittings shall be thoroughly cleaned and where necessary disinfected after raw food, particularly meat and poultry, has been handled or processed.

4.3.3.4 Physical and chemical contamination

4.3.3.4.1 Systems shall be in place to prevent contamination of food by foreign bodies such as glass or metal shards from machinery, dust, harmful fumes and unwanted chemicals.

4.3.3.4.2 In manufacturing and processing, suitable detection or screening devices shall be used where necessary.

4.3.4 Incoming material

4.3.4.1 All raw materials and or ingredients accepted by the establishments shall be free of parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic, decomposed or extraneous substances which would not be reduced to an acceptable level by normal sorting and or processing.

4.3.4.2 Where appropriate, specifications for raw materials shall be identified and applied.

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4.3.4.3 Raw materials or ingredients shall, where appropriate, be inspected and sorted before processing.

4.3.4.4 Where necessary, laboratory tests shall be conducted to establish fitness for use. Only sound, suitable raw materials or ingredients shall be used.

4.3.4.5 Stock of raw materials and ingredients shall be subject to effective stock rotation.

4.3.5 Packaging

4.3.5.1 Packaging design and materials shall provide adequate protection for products to minimize contamination, prevent damage and accommodate proper labelling.

4.3.5.2 Packaging materials or gases where used shall be non-toxic and not pose a threat to the safety and suitability of food under the specified conditions of storage and use.

4.3.5.3 Reusable packaging shall be suitably durable, easy to clean and, where necessary, easy to disinfect.

4.3.6 Water

4.3.6.1 Water in contact with food

4.3.6.1.1 Only potable water shall be used in food handling and processing with the following exceptions:

- a) for steam production, fire control and other similar purposes not connected with food; and
- b) in certain food processes, such as chilling and in food handling areas, provided this does not constitute a hazard to the safety and suitability of food.

EXAMPLE The use of clean sea water

4.3.6.1.2 Water re-circulated for use shall be treated and maintained in such a condition that no risk to the safety and suitability of food results from its use. The treatment process shall be effectively monitored.

4.3.6.1.3 Re-circulated water which has received no further treatment, and water recovered by evaporation or drying from the processing of food, may be used provided its use does not constitute a risk to the safety and suitability of food.

4.3.6.2 Water used as an ingredient

Potable water shall be used to avoid food contamination.

4.3.6.3 Water used for ice and steam

4.3.6.3.1 Ice shall be made from water that complies with 4.2.5.1. Ice and steam shall be produced, handled and stored to protect them from contamination.

4.3.6.3.2 Steam used in direct contact with food or food contact surfaces shall not constitute a threat to the safety and suitability of food.

4.3.7 Management and supervision

Managers and supervisors shall have a sound knowledge of food hygiene principles and practices to be able to make judgments regarding potential risks, take appropriate preventive and corrective action and ensure that effective monitoring and supervision occurs.

NOTE The type of control and supervision needed will depend on the size of the business, the nature of its activities and the types of food involved.

4.3.8 Documentation and records

Where necessary, appropriate records of processing, production and distribution shall be kept and retained for a period that exceeds the shelf-life of the product.

NOTE Documentation can enhance the credibility and effectiveness of the food safety control system.

4.3.9 Recall procedures

4.3.9.1 Management shall ensure effective procedures are in place to deal with any food safety hazard and to enable the complete rapid recall of any implicated lot of the finished food from the market.

4.3.9.2 Where a product has been withdrawn because of an immediate health hazard, other products which are produced under similar conditions and which may present a similar hazard to public health shall be evaluated for safety and may need to be withdrawn. The need for public warning shall be considered.

4.3.9.3 Recalled products shall be held under strict supervision until they are destroyed, used for purposes other than human consumption, determined to be safe for human consumption or reprocessed in a manner to ensure their safety.

4.4 Establishment – maintenance and sanitation

4.4.1 General

Food business operators shall establish effective systems to:

- a) ensure adequate and appropriate maintenance and cleaning;
- b) control pests;
- c) manage waste; and
- d) monitor effectiveness of maintenance and sanitation procedures.

4.4.2 Maintenance and cleaning

4.4.2.1 General

4.4.2.1.1 Establishments and equipment shall be kept in an appropriate state of repair and condition to:

- a) facilitate all sanitation procedures;
- b) function as intended, particularly at critical steps (see 4.3.2); and
- c) prevent contamination of food.

EXAMPLE Contamination from metal shards, flaking plaster, debris and chemicals

4.4.2.1.2 Procedures for cleaning shall remove food residues and dirt which may be a source of contamination.

NOTE The appropriate cleaning methods and materials will depend upon the nature of the food operation. Disinfection may be necessary after cleaning.

4.4.2.1.3 Chemicals used in cleaning procedures shall be handled with care and in accordance with manufacturers' instructions and stored where necessary, in a separate area from food, in clearly marked containers to avoid the risk of contamination of food.

4.4.2.2 Cleaning procedures and methods

4.4.2.2.1 Cleaning is permitted through the separate or combined use of physical methods, such as heat, scrubbing, turbulent flow, vacuum cleaning or other methods that avoid the use of water, and chemical methods using detergents, alkalis or acids.

4.4.2.2.2 Cleaning procedures shall involve, where appropriate:

- a) removing gross debris from surfaces;
- b) applying a detergent solution to loosen soil and bacterial film and hold them in solution or suspension;
- c) rinsing with water which complies with 4.2.5, to remove loosened soil and residues of detergent;
- d) dry cleaning or other appropriate methods for removing and collecting residues and debris; and or
- e) disinfection with subsequent rinsing unless the manufacturers' instructions indicate on scientific basis that rinsing is not required.

4.4.2.3 Cleaning programmes

4.4.2.3.1 Cleaning and disinfection programmes shall ensure that all parts of the establishment are appropriately clean and shall include the cleaning of cleaning equipment.

4.4.2.3.2 Cleaning and disinfection programmes shall be continually and effectively monitored for their suitability and effectiveness and, where necessary, documented.

4.4.2.3.3 Where written cleaning programmes are followed, they shall specify:

- a) areas, items of equipment and utensils to be cleaned;
- b) responsibility for particular tasks;
- c) method and frequency of cleaning; and
- d) monitoring arrangements.

4.4.2.3.4 Programmes shall be drawn up in consultation with a relevant specialist or expert, where necessary.

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4.4.2.4 Pest control systems

4.4.2.4.1 General

Good hygiene practices shall be employed to avoid creating an environment conducive to pests.

NOTE There is a possibility of pest infestations where there are breeding sites and a supply of food. It is possible to minimize the likelihood of infestation through good sanitation, inspection of incoming materials and good monitoring, thereby limiting the need for pesticides.

4.4.2.4.2 Preventing access

Buildings shall be kept in good repair and condition to prevent pest access and to eliminate potential breeding sites. Holes, drains and other places where pests are likely to gain access shall be kept sealed. Animals shall, wherever possible, be excluded from the grounds of factories and food processing plants.

NOTE Wire mesh screens, such as on open windows, doors and ventilators, will reduce the problem of pest entry.

4.4.2.4.3 Harborage and infestation

There is an associated risk of harborage and infestation of pests in areas of available food and water. Potential food sources shall be stored in pest-proof containers and or stacked above the ground and away from walls. Areas both inside and outside food premises shall be kept clean. Where appropriate, refuse shall be stored in covered, pest-proof containers.

4.4.2.4.4 Monitoring and detection

Establishments and surrounding areas shall be regularly examined for evidence of infestation.

4.4.2.4.5 Eradication

Pest infestation shall be addressed immediately and without adversely affecting food safety or suitability. Treatment with chemical, physical or biological agents shall be carried out without posing a threat to the safety or suitability of food.

4.4.2.5 Waste management

4.4.2.5.1 Suitable provision shall be made for the removal and storage of waste.

4.4.2.5.2 Waste shall not be allowed to accumulate in food handling, food storage and other working areas or adjoining environments except, so far as is unavoidable, for the proper functioning of the business.

4.4.2.5.3 Waste stores shall be kept clean.

4.4.2.6 Monitoring effectiveness

Sanitation systems shall be monitored for effectiveness, periodically verified by means such as audit, pre-operational inspections or, where appropriate, microbiological sampling of environment and food contact surfaces, and regular review and adaptation to reflect any changed circumstances.

4.5 Establishment – personal hygiene

4.5.1 General

4.5.1.1 Food business operators shall ensure that those who come directly or indirectly into contact with food are not likely to contaminate food by:

- a) maintaining an appropriate degree of personal cleanliness; and
- b) operating and behaving in an appropriate manner.

4.5.1.2 There is a possibility of contamination to food and transmission of illness to consumers from persons who do not maintain an appropriate degree of personal cleanliness, who have certain illnesses or conditions, or who behave inappropriately. Such persons shall be immediately restricted from involvement in the food chain so as to ensure food safety or suitability.

4.5.1.3 Treatment with chemicals, physical or biological agents shall be carried out without posing a threat to the safety or suitability of food.

4.5.2 Health status

4.5.2.1 Persons known or suspected to be carriers or to be suffering from a disease or illness, likely to be transmitted through food shall not be allowed to enter any food handling or processing area if there is a likelihood of their contaminating food. Any person so affected shall immediately report illness or symptoms of illness to management.

4.5.2.2 Medical examination of a food handler shall be carried out if clinically or epidemiologically indicated.

4.5.3 Illness and injuries

4.5.3.1 Conditions which need medical examination and or possible exclusion from food handling shall be reported to management, and include:

- a) jaundice;
- b) diarrhea;
- c) vomiting;
- d) fever;
- e) sore throat with associated fever;
- f) visibly infected skin lesions including boils and cuts; and
- g) discharges from the ear, nose or eye.

4.5.4 Personal cleanliness

4.5.4.1 Food handlers shall maintain a high degree of personal cleanliness and where appropriate wear suitable protective clothing, head covering and foot wear.

4.5.4.2 Cuts and wounds shall be covered with suitable waterproof dressings where personnel are permitted to continue working.

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4.5.4.3 Personnel shall wash their hands when personal cleanliness affects food safety, especially:

- a) at the start of food handling activities;
- b) immediately after using the lavatory; and
- c) after handling raw food or any material where there is risk of contamination of other food items.

4.5.4.4 Personnel shall also avoid handling ready-to-eat food where possible.

4.5.5 Personal behaviour

4.5.5.1 Persons engaging in food handling activities shall refrain from behaviour which may result in contamination of food including:

- a) smoking;
- b) spitting;
- c) chewing or eating; and
- d) sneezing or coughing over unprotected food.

4.5.5.2 Personal effects such as jewellery, watches, pins or other such items shall not be worn or brought into food handling areas.

4.5.6 Visitors

Visitors to the food manufacturing, processing or handling areas shall, where appropriate, wear protective clothing and adhere to all the other personal hygiene provisions set out in this section.

4.6 Transportation

4.6.1 General

Food business operators shall ensure that measures are taken during transport, where necessary, to:

- a) protect food from potential sources of contamination;
- b) protect food from damage likely to render the food unsuitable for consumption; and
- c) provide an environment which effectively controls the growth of pathogenic or spoilage micro-organisms and the production of toxins in food.

NOTE Food may become contaminated, or may reach its destination in an unsuitable condition for consumption, unless effective control measures are taken during transport, even where adequate hygiene control measures have been taken earlier in the food chain.

4.6.2 Conveyances and containers

4.6.2.1 Food shall be adequately protected during transport using conveyances and containers.

NOTE The type of conveyances or containers required depends on the nature of the food and the conditions under which it has to be transported.

4.6.2.2 Conveyances and bulk containers should be designed and constructed so that they shall:

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- a) prevent contamination of foods or packaging;
- b) permit effective separation of different foods or foods from non-food items where necessary during transport;
- c) permit effective protection from contamination, including dust and fumes;
- d) permit effective maintenance of the temperature, humidity, atmosphere and other conditions necessary to protect from harmful or undesirable microbial growth and deterioration likely to render it unsuitable for consumption; and
- e) permit temperature, humidity and other conditions to be monitored.

4.6.2.3 Conveyances and containers for transporting food shall be kept in an appropriate state of cleanliness, repair and condition.

4.6.2.4 Where the same conveyance or container is used for transporting different foods or non-foods, effective cleaning and, where necessary, disinfection should take place between loads.

4.6.2.5 Where appropriate, particularly in bulk transport, containers and conveyance should be designated and marked for food use only and be used only for that purpose.

5 Product information and consumer awareness

5.1 General

5.1.1 Products shall bear appropriate information to ensure that:

- a) adequate and accessible information is available to the next person in the food chain to enable them to handle, store, process, prepare and display the product safely and correctly; and
- b) the lot or batch can be easily identified and recalled if necessary.

5.1.2 Products shall provide sufficient information to enable consumers to:

- a) understand the importance of product information;
- b) make informed choices appropriate to the individual; and
- c) prevent contamination and growth or survival of food borne pathogens by storing, preparing and using it correctly.

5.1.3 Information for industry or trade users shall be clearly distinguishable from consumer information, particularly on food labels.

NOTE Insufficient product information, and or inadequate knowledge of general food hygiene can lead to products being mishandled at later stages in the food chain. Such mishandling can result in illness or products becoming unsuitable for consumption, even where adequate hygiene control measures have been taken earlier in the food chain.

5.2 Lot identification

Each container of food shall be permanently marked to identify the producer and the lot.

NOTE Lot identification is essential to product recall and also helps effective stock rotation.

5.3 Labelling

The labelling of prepackaged foods shall be in compliance with requirements of the most recent version of the CARICOM Regional Standard for Labelling of Prepackaged Foods.

5.4 Consumer education

5.4.1 Health education programmes shall cover general food hygiene.

5.4.2 Health programmes shall enable consumers to understand the importance of any product information and to follow any instructions accompanying products, and make informed choices.

5.4.3 In particular, consumers shall be informed of the relationship between time/temperature control and food borne illness.

6 Training

6.1 General

Persons engaged in food operations who come directly or indirectly into contact with food shall be trained and or instructed in food hygiene to a level appropriate to the operations being performed.

NOTE The absence of adequate hygiene training and or instruction and supervision of all staffers involved in food related activities poses a potential threat to the safety of the food and its suitability for consumption.

6.2 Awareness and responsibilities

6.2.1 All personnel shall be aware of their role and responsibility in protecting food from contamination or deterioration.

6.2.2 Food handlers shall have the necessary knowledge and skills to enable them to handle food hygienically.

6.2.3 Persons handling strong cleaning chemicals or other potentially hazardous chemicals shall be instructed in safe handling techniques.

6.3 Training programmes

When accessing the level of training required, factors to be considered shall include:

- a) the nature of the food, in particular its ability to sustain growth of pathogenic or spoilage micro-organisms;
- b) the manner in which the food is handled and packed, including the probability of contamination;
- c) the extent and nature of processing or further preparation before final consumption;
- d) the conditions under which the food will be stored; and
- e) the expected length of time before consumption.

6.4 Instruction and supervision

6.4.1 Periodic assessment of the effectiveness of training and instruction programmes shall be made, as well routine supervision and checks to ensure that procedures are being carried out effectively.

6.4.2 Managers and supervisors of food processes shall have the necessary knowledge of food hygiene principles and practices in order to assess potential risk and take appropriate action to remedy deficiencies.

6.5 Refresher training

6.5.1 Training programmes shall be routinely reviewed and updated as necessary.

6.5.2 Systems shall be in place to ensure that food handlers are updated and reminded of all procedures necessary to maintain the safety and suitability of food.

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CARICOM REGIONAL ORGANISATION FOR STANDARDS AND QUALITY

The CARICOM Regional Organisation for Standards and Quality (CROSQ) was created as an Inter-Governmental Organisation by the signing of an agreement among fourteen Member States of the Caribbean Community (CARICOM). CROSQ is the regional centre for promoting efficiency and competitive production in goods and services, through the process of standardization and the verification of quality. It is the successor to the Caribbean Common Market Standards Council (CCMSC), and supports the CARICOM mandate in the expansion of intra-regional and extra-regional trade in goods and services.

CROSQ is mandated to represent the interest of the region in international and hemispheric standards work, to promote the harmonization of metrology systems and standards, and to increase the pace of development of regional standards for the sustainable production of goods and services in the CARICOM Single Market and Economy (CSME), and the enhancement of social and economic development.

CROSQ VISION:

The premier CARICOM organisation for the development and promotion of an Internationally Recognised Regional Quality Infrastructure; and for international and regional harmonized CARICOM Metrology, Standards, Inspection, Testing and Quality Infrastructure

CROSQ MISSION:

The promotion and development of standards and standards related activities to facilitate international competitiveness and the sustainable production of goods and services within the CARICOM Single Market and Economy (CSME) for the enhancement of social and economic development



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