

# CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

E-mail: [codex@fao.org](mailto:codex@fao.org) - [www.codexalimentarius.org](http://www.codexalimentarius.org)

---

## GUIDELINES FOR FOOD HYGIENE CONTROL MEASURES IN TRADITIONAL MARKETS FOR FOOD

**CXG 103-2024**

**Adopted in 2024**

## 1. INTRODUCTION

Traditional markets for food are dedicated spaces for food wholesalers, retailers and consumers to sell and purchase food for direct consumption, preparation and other uses. These markets have many names around the globe that include, but are not limited to, street food markets, local markets, public markets, community markets, municipal markets, open-air markets, wet markets and farmers' markets. These markets could either be open air or enclosed and vary widely in size and the number of people who trade in them. They could also have formal or informal management structures with varying levels of infrastructure. Handling, preparation, artisanal processing and packaging also take place in these markets.

Traditional markets for food are important food sources that supply affordable and readily-accessible food to households, both raw and ready-to-eat foods. They also provide employment opportunities in the various nodes of the food value chain.

Despite the benefits derived from traditional markets for food, hygienic handling practices in these markets are often inadequate. These guidelines will provide competent authorities, food business operators (FBOs) and consumers with the necessary knowledge to strengthen food hygienic capacities in these markets to assure food safety in the framework of a One Health approach.

## 2. OBJECTIVES

The guideline is intended to provide guidance in developing and implementing policies and regulations to ensure that traditional markets for food are designed and managed effectively to promote food safety.

The guidelines provide FBOs, consumers, market authorities and other stakeholders with advice on food hygiene – including food handling, personnel health, training and education, environment and hygiene relevant to ensuring food safety.

## 3. SCOPE AND USE

### 3.1 Scope

These guidelines provide guidance on food safety regulation and hygienic handling activities to all stakeholders relevant to traditional markets for food where raw, prepared and/or ready-to-eat foods are sold.

### 3.2 Use

These guidelines are intended for use by competent authorities and other stakeholders in the development and/or implementation of food safety control measures in traditional markets for food where:

- Competent authorities have an overall responsibility to decide how this guideline is applied, in coordination with the market authorities, where they exist.
- FBOs should apply the hygienic practices set out in this document to provide food that is safe and suitable for consumption.
- Consumers should follow relevant instructions and apply appropriate hygiene measures.

This guideline should be used in conjunction with relevant Codex texts, including but not limited to the *General principles of food hygiene* (CXC 1-1969).<sup>1</sup>

## 4. DEFINITIONS

For the purposes of these guidelines, the terms used herein should have the following definitions:

**Competent authority:** The government authority or official body authorized by the government that is responsible for the setting of regulatory food safety requirements and/or for the organization of official controls including enforcement (CXC 1-1969).<sup>1</sup>

**Consumer:** Persons and families purchasing and receiving food in order to meet their personal needs (*General standard for the labelling of prepackaged foods* [CXS 1-1985]).<sup>2</sup>

**Crockery/Cutlery:** All tools used for food preparation, serving and consumption (whether non-disposable or disposable), and they include glasses, plates, dishes, cups, saucers, spoons, forks, ladles, chopsticks, etc. (*Regional code of hygienic practice for street-vended foods in Asia* [CXC 76R-2017]).<sup>3</sup>

**Equipment:** The whole or part of any apparatus, vessels, containers, utensils, machines, instruments or appliances for use in preparing, storing, handling, cleaning, selling, or supplying/delivering food (CXC 76R-2017).<sup>3</sup>

**Food:** Any substance, whether processed, semi-processed or raw, which is intended for human consumption, and includes drinks, chewing gum and any substance which has been used in the manufacture, preparation or treatment of “food” but does not include cosmetics or tobacco or substances used only as drugs (*General standard for the labelling of prepackaged foods* [CXS 1-1985]).<sup>2</sup>

**Food business operator (FBO):** The entity responsible for operating a business at any step in the food chain (*General principles of food hygiene* (CXC 1-1969)).<sup>1</sup>

**Food handler:** Any person who directly handles packaged or unpacked food, food equipment and utensils used for food, or surfaces that come into contact with food and that is expected, therefore, to comply with food hygiene requirements (CXC 1-1969).<sup>1</sup>

**Food hygiene:** All conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain (CXC 1-1969).<sup>1</sup>

**Food grade:** Refers to materials and products that are safe for use in food handling, processing, storage, packaging, and serving.

**Food safety:** Assurance that food will not cause adverse health effects to the consumer when it is prepared and/or eaten according to its intended use (CXC 1-1969).<sup>1</sup>

**Food vendors:** Refers to those who sell food in a traditional market for food.

**Hazard:** A biological, chemical or physical agent in food with the potential to cause an adverse health effect (CXC 1-1969).<sup>1</sup>

**Market authority:** The entity or person responsible for the administration of the traditional market which may include market committees and associations of FBOs.

**Perishable food:** Food which is subject to rapid decay, spoilage and or growth of microorganisms with or without the production of toxins or metabolites when not kept under the required storage conditions (e.g. milk and milk products, eggs, meat, poultry, fish, etc.) (*Regional code of hygienic practice for street-vended foods in Asia* [CXC 76R-2017]).<sup>3</sup>

**Potable water:** Water fit for human consumption (*Guidelines for the safe use and reuse of water in food production and processing* [CXG 100-2023]).<sup>4</sup>

**Traditional markets for food:** Spaces open to the public with physical infrastructures including premises or individual stalls for the food trade, generally from local FBOs, such as fruits, vegetables, food of animal origin, seeds/grains, ready-to-eat foods, street foods, preparation, and other uses. Examples include, but are not limited to, street food markets, local markets, public markets, community markets, municipal markets, open-air markets, wet markets and farmers’ markets.

## 5. GENERAL REQUIREMENTS

### 5.1 Policies and regulations

Appropriate policies and regulations should be formulated and implemented with the aim of guiding operations to ensure food safety during food purchase, preparation, processing, storage, packaging, and consumption. Such requirements should be elaborated either separately or incorporated into existing food regulations with an outcome-based approach.

The general hygienic requirements and practices to be followed by the FBOs should be translated by the competent authorities which can be applied considering the conditions and risk factors specific to each operation and/or locality.

The risk of the operation should be evaluated in terms of market size, especially the size of the population of the city or town where it is placed, infrastructure, type of food sold and kind of activities.

Competent and /or market authorities should approve the types of food that can be marketed, the location and characteristics of the points of sale, and incorporate details regarding the sanitary conditions that should be met.

Competent authorities should:

- regulate and promote food safety controls and the use of the guidelines established in this document in addition to CXC 1-1969.<sup>1</sup>
- put in place and implement surveillance systems to detect and support foodborne illness outbreak investigations and management; and
- implement and enforce regulatory measures including, but not limited to, the issuance of permits and licences, and where applicable, apply sanctions.

Roles and responsibilities of competent authorities, and market authorities, FBOs and consumers should be clearly defined and documented, including their legal obligations.

Market authorities in coordination with the FBOs should be responsible for day-to-day operations of the traditional market for food.

Where applicable, market authorities should be empowered to assist the competent authorities with licensing and registration through a mutually agreed mechanism to oversee and promote food safety by FBOs.

## **5.2 Market infrastructure**

The traditional markets for foods should be designed and built to provide the basic infrastructure that promotes good hygienic practices for food handling and business operations as provided for by competent and/or market authorities to ensure food safety.

The infrastructure should be suitable (e.g. smooth, easy to clean, free of cracks, not accumulating dirt etc.) for maintenance and sanitation activities.

When planning market infrastructure, high-risk areas, such as where live animals, raw meat, poultry and fish are handled, should be physically separated from incompatible activities to prevent cross-contamination of foods.

## **5.3 Conditions for licensing/registration**

FBOs should meet the minimum requirements as set by competent authorities.

It is essential that food handlers are competent in food hygiene practices before the FBO is issued with an operating licence/registration.

The frequency and the type of training should be agreed upon by stakeholders considering the market requirements, kind of food products offered, FBO practices, and other aspects as appropriate.

## **5.4 Pest, animal and zoonotic foodborne agents control**

The market authorities and FBOs in traditional markets for food should provide effective mechanisms for the control of animals and pests (rats, mice, pigeons, insects, etc.).

Any food found to have become contaminated/infested by animals and/or pests should be hygienically disposed of in a manner to prevent contamination/infestation of other foods.

Pest and animal control with chemical, physical or biological agents should be carried out without posing a threat to the safety or suitability of food and people.

Zoonotic foodborne agents should be managed with appropriate preventive measures, which may include washing hands after touching animals; cleaning and disinfection; and other steps necessary to prevent infection.

In line with the One Health approach, handlers of wild animals and meat of wildlife should be made aware of the hazards associated with regional trade thereof, especially in order to prevent known and emerging zoonoses.

# **6. FOOD BUSINESS OPERATORS**

## **6.1 Health status of food handlers**

Food handlers in traditional markets should be healthy. Where necessary, they should have regular health checks, medical examinations, and immunizations and medical certificates to support their health status.

No food handlers shall be allowed to perform their duties if showing any symptoms of jaundice, diarrhoea, vomiting, fever, sore throat with fever, discharge from ear, eye, and nose, visibly infected skin lesions such as boils and cuts. In such cases, they shall cease from handling food in any capacity and seek medical treatment.

Any food handler who has been identified as or is known to be a carrier of foodborne disease organism(s), shall not be involved in any food handling activity until certified fit by a medical practitioner.

## **6.2 Personal hygiene and behaviour**

Food handlers, during the conduct of their business, should observe the following:

- wear clean clothing and appropriate personal protective equipment;
- wash hands with soap and water, rinse, and dry them in a manner that does not re-contaminate the hands. Hand sanitizers should not replace hand washing and should be used only after hands have been washed;

- keep fingernails short and clean at all times and avoid wearing jewellery or ornaments during food preparation;
- keep the hair, including facial hair clean, tidy, and covered during food handling;
- cover cuts and wounds with suitable waterproof plasters;
- smoking or chewing gum should not be allowed while preparing or serving food;
- refrain from any unhygienic practices such as spitting and picking nose, ears, or touching any body part while handling food;
- avoid sneezing or coughing over or onto the food; and
- use food stalls exclusively for their intended purpose.

### **6.3 Training and competence**

Food handlers should undergo adequate training in food hygiene and demonstrate competence in safe food handling.

Training on food hygiene should be provided by the competent authorities or other institutions recognized by the competent authorities. Food vendors should also be trained on their responsibility to offer safe and suitable food products to consumers.

Relevant authorities, including extension and community health workers as appropriate, should engage market authorities and other stakeholders to assist in food handler training, especially those that are required before licensing, to facilitate the adoption of food handler training by FBOs.

Simple posters illustrating the “dos” and “don’ts” of food handling during vending should be widely and prominently displayed in relevant places for the benefit of both food handlers and consumers.

The training material should incorporate pictorials. The key information should be reinforced in short and crisp messages and where possible translated into the local languages. The training material may be waterproof so that food vendors can refer to it/ keep it/hang it on their food vending cart/stall

Training programmes should take into consideration the knowledge and skills levels of the food handlers being trained.

### **6.4 FBO associations**

The formation of FBO associations or cooperatives may be encouraged to provide support and a liaison point with the relevant authorities to facilitate the implementation of hygiene measures.

FBO associations should encourage continuous capacity building and self-regulation for improved adherence to food safety requirements.

### **6.5 FBOs responsibilities**

FBOs are responsible for the hygiene and protection of the food they handle and for all aspects related to its safety including:

- developing, implementing, and verifying processes that provide food that is safe and suitable for its intended use;
- providing an efficient record-keeping system, as appropriate to support food safety;
- ensuring personnel are competent as appropriate to their job activities;
- ensuring there is a simple one-step forward, one-step back traceability system in the food chain where applicable;
- implementing a complaint management system for consumers;
- building a positive food safety culture by demonstrating their commitment to providing safe and suitable food and encouraging appropriate food safety practices;
- ensuring that consumers have clear and easy-to-understand information on use and to enable them to identify the presence of food hazards including allergens, protect their food from contamination, and prevent the growth/survival of foodborne pathogens during storage, handling, and preparation of food hygienically;

- taking appropriate measures to keep market stalls free from animals, pests and insects to prevent contamination of food. However, animals such as guide dogs may be allowed but precautions should be taken to avoid food contamination; and
- immediately taking all practicable measures to get rid of the identified pest or harbourage sites and to prevent re-infestation.

## **7. LOCATION, DESIGN, LAYOUT, AND STRUCTURES**

### **7.1 Location**

Competent authorities have overall responsibility for setting standards to ensure the adequacy of the location, infrastructure and utilities. Market authorities and FBOs should therefore comply with the set standards. Where market improvements are required, they should be done in consultation with food safety experts, which may include relocation advice for FBOs.

The traditional markets for food should be located away from:

- environmentally polluted areas and industrial activities that are reasonably likely to contaminate food;
- areas prone to flooding;
- areas prone to infestations of pests; and
- areas where waste, either solid or liquid, cannot be removed effectively.

### **7.2 Design and layout**

The design and layout of the traditional market for food should:

- be reviewed and approved beforehand by the competent authority and/or market authority, FBO associations, where necessary;
- provide adequate space for food vendor stalls, carts, display cases, food preparation, handling, storing, serving, and selling areas;
- allow for the flow of materials and goods, in and out of the markets, in a manner which will prevent food contamination;
- have graded and compacted pathways such that they allow adequate drainage of expected levels of rainfall;
- have stalls with access to an inlet and outlet of a drainage system or other suitable means of hygienic disposal of wastewater;
- allow for market segmentation/demarcation to separate areas for sale of high-risk foods from areas allocated to low-risk foods;
- allow for the proper placement of client and vendor facilities, such as toilets, handwashing basins, and eating facilities in a manner that prevents food contamination;
- provide suitable, sufficient, and properly placed areas for solid waste collection and storage, crockery/cutlery and appliance cleaning, washing, and disinfecting;
- be adequately ventilated to remove hazardous gases and offensive odours such as cooking fuel fumes and provide a continuous and sufficient supply of fresh air;
- provide adequate power supply to operate appliances, processing and cooling equipment, and other implements used in the preparation, handling, storage, serving, and selling of food;
- have provision for an ample supply of potable water, under adequate pressure and of suitable temperature, with adequate facilities for its storage, distribution, and protection against contamination;
- be designed in such a way that it allows for adequate lighting;
- provide space in and around the food stalls which should be free of unnecessarily stored goods or items to permit easy access for cleaning; and
- provide adequate space for loading/offloading.

### 7.3 Structures

Structures in traditional markets for food should be reviewed and approved by the competent authority and/or the market authority, FBO association when necessary and should be made of impervious materials that can be cleaned, disinfected, and maintained in a good state of repair.

Food preparation areas should be made of smooth, non-absorbent materials, and be inert to the food, detergents, and disinfectants under normal operating conditions.

Surfaces that come into direct contact with food should be made from food-grade materials, be in sound condition, durable, and easy to clean, disinfect, and maintain.

All cooking areas, washing equipment, working tables, shelves, and cupboards on or in which food is placed should be at an appropriate height above the ground.

There should be adequate light to ensure reasonable illumination in every part of a food stall to facilitate all activities in the traditional market for food.

Structures in traditional markets for food should have appropriate facilities to minimize the effects of extreme weather conditions on food and the build-up of dirt and condensate from the atmosphere and to protect from flying animals overhead.

Where appropriate, suitable facilities should be available for temperature, humidity and moisture controls to maintain food safety and food product integrity.

Effective protection against pest access and harbourage should be provided for.

Floor drains for purposes of removing surface water to facilitate cleaning and disinfection should be provided.

Where applicable, provide for smoke hoods and flues above cooking areas to enable the removal of cooking gases, smoke, and fumes into the open air.

Provide for centralized or individualized appliances, crockery/cutlery, and other implements' washing facilities, equipped with potable water (see *Guidelines for the safe use and reuse of water in food production and processing* [CXG 100-2023])<sup>4</sup> and where necessary hot potable water, with appropriate drains to an approved sewer or drain system, to ensure thorough cleaning.

Traditional markets for food should comply with any other requirements by the competent authority.

### 7.4 Food storage equipment

Equipment used for storage of food should be appropriately designed using food-grade materials that are easy to clean and disinfect.

Refrigerator and freezer temperatures should be monitored. Where ice is used for cooling raw food, i.e. fishery products, it should be made from potable water in order not to be a source of contamination for the food in direct contact. It should be added in adequate quantity and replenished to keep the products chilled and covered.

Monitoring devices and any other equipment that could impact food safety should not be used for purposes other than their intended use.

Monitoring devices such as thermometers, refrigeration unit controls, weighing scales and recording thermometers should be calibrated.

Frequency of calibration, responsible person, monitoring and verification procedures, appropriate corrective actions, and record-keeping should be specified.

### 7.5 Water and sanitation

#### 7.5.1 Water supply

Traditional markets for food should ensure a sufficient supply of potable water.

#### 7.5.2 Liquid waste disposal

Traditional markets for food should have an efficient wastewater disposal system compliant with national regulations, which should be maintained in a good state of repair and working condition. The system should be large enough to carry peak loads and be provided with traps to prevent solid waste material from being discharged into the drain/sewer.

### 7.5.3 *Solid waste disposal*

Traditional markets for food should ensure:

- solid waste material is handled in such a manner as to avoid contamination of food and/or potable water;
- solid waste is removed from the working area of the stalls as often as necessary and at least once daily;
- provision of waste receptacles and/or containers at strategic places within the markets;
- all solid waste is segregated and properly disposed into suitable containers, including recycling bins or waste receptacles and/or containers which are secured with tight-fitting lids;
- the waste receptacles and/or containers are emptied and cleaned as often as necessary to ensure a hygienic environment;
- in areas without garbage collection service, solid waste is disposed of in a sanitary manner, as recommended or approved by the competent authority;
- waste equipment and waste storage areas are cleaned and disinfected as and/or when required by the competent authority;
- only appropriate disinfecting agents are used; and
- routine inspection of solid waste disposal areas for the presence or harbourage of pests, taking any practical measures to eliminate and further prevent any infestation by either market and/or competent authorities or FBO associations.

### 7.5.4 *Toilets and sanitary facilities*

Every traditional market for food should have sufficient and easily accessible toilets and other sanitary facilities which should be kept clean and operational.

## 8. **FOOD PREPARATION**

### 8.1 **Requirements**

Every FBO involved in food preparation should ensure the following:

- supply of all raw materials and ingredients including ice be from appropriate known and reliable sources;
- freshness and wholesomeness of ingredients;
- containers for raw materials and other ingredients should be dedicated for food and should not be used for other purposes;
- transportation of raw materials and other ingredients be done in a manner to prevent contamination;
- cold chain transportation of foods should be implemented where necessary; and
- only permitted food additives are to be used and the amount added should be as per the relevant national, regional or international specifications such as the *General standard for food additives* (CXS 192-1995).<sup>5</sup>

Maintain traceability/product tracing and record-keeping systems, as appropriate to support food safety.

### 8.2 **Equipment maintenance, cleaning and sanitation/disinfection**

All equipment used in food preparation should be kept clean and disinfected, when necessary, before and after use. Only food-safe cleaning agents should be used.

The equipment, including containers for storing potable water, should be food grade, resistant to corrosion, and capable of withstanding repeated cleaning and disinfection.

FBOs should ensure that all defective, damaged, cracked, rusted, chipped and unsuitable equipment and crockery/cutlery are removed from use and discarded. All food handling equipment should be maintained in a good state of repair and working condition.

Every cutting surface used in the preparation of food should be free from cracks and crevices and should be easy to clean and disinfect.



All non-disposable utensils should be regularly cleaned by thoroughly washing them in potable water using soap or other suitable detergents.

Disposable utensils should be used only once and properly disposed of.

### 8.3 Cooking and handling

Food handlers should thoroughly wash fresh fruits and vegetables with potable water to remove surface contamination, as required.

When appropriate, and approved by competent authority, food handlers should also disinfect fresh fruits and vegetables which will be consumed raw.

To prevent cross-contamination, food vendors should not store or wash raw food including raw meat, fish and poultry with other foods that will be consumed raw or in a semi-cooked state. There should be at least an area for handling, storing, cleaning, and preparing raw food, separate from the cooked food handling, display and serving areas.

Utensils used for cooked and uncooked food should be handled separately to prevent cross-contamination.

Thawed meat, fish, 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 initial temperature of the products. Frozen foods should be thawed once using appropriate methods (e.g. under refrigeration, cold potable water) and used immediately for food preparation. Thawed foods should not be frozen again.

Food that requires refrigeration should be maintained in those conditions during handling and storage until its use.

The time and temperature of cooking should be sufficient to destroy or reduce to safe levels any pathogens that may be present in the food.

Oil and grease used for frying should be replaced on a regular basis whenever there is an apparent change in physical/chemical characteristics, such as dark colour, intense foaming, smoke formation, or sensory changes, such as aroma and taste.

Potable water should be used for drinking, and preparation of hot or cold drinks and beverages.

Ice should be made from potable water, handled and stored to prevent contamination.

Containers used to transport or store ice should meet the requirements for potable water containers.

Food should be reheated until piping hot but not more than once and only the portion of the food to be served should be reheated.

Utensils used for tasting food should be washed immediately after each use or if disposable, discarded after use.

### 8.4 Serving food

Every food handler should comply with the following:

- Cooked or ready-to-eat foods should not be touched with bare hands. If gloves are worn, appropriate measures should be applied to ensure the gloves do not become a source of contamination.
- Clean tongs, forks and spoons should be used when handling, serving or selling food.
- All utensils used should be clean and dry and not handled by touching the food contact surfaces.
- Plates filled with food should not be stacked one on top of the other during display, storing, or serving.
- Food-grade packaging materials should be used when packaging and serving ready-to-eat food.
- Printed material such as newspapers, magazines etc.-shall not be used as a primary packaging for food wrapping or serving food.
- Polythene bags and wrappers should not be used to serve warm or heat food.
- Food handlers shall not blow into plastic bags, wrappers, or packages used for food.

- All beverages offered for sale should be dispensed only in their individual, original, sealable containers or from taps fitted to bulk containers and made of food-grade material. Bulk containers should be covered with tight-fitting lids.
- Cut fruit or other foods ordinarily consumed in the state in which they are sold should be set out in an enclosed display case, cabinet, or similar type of protective device and should be displayed in a manner to protect the food from contamination and at appropriate temperatures.
- Food handlers should avoid handling money. If this is unavoidable, the food handler should wash their hands and/or change gloves before handling food.
- Ready-to-eat foods intended for continuous serving should be protected from environmental contamination.
- Where appropriate, food intended for continuous serving should be kept at the following recommended holding temperatures to minimize or prevent the growth of pathogens and spoilage microorganisms:
  - a) above 60 °C for food served hot;
  - b) below 5 °C for food served cold; and
  - c) -18 °C or below for food served frozen.
- A food warmer should be used to maintain continuous holding temperatures and should not be used for re-heating purposes.

### **8.5 Unsold food**

Unsold cooked/prepared food should be properly packaged and chilled/frozen and stored under conditions that do not contaminate or cause deterioration.

All unsold cooked food and prepared beverages that cannot be properly preserved should be safely disposed of at the end of the day.

Cooked chilled/frozen unsold foods should be reheated until piping hot before serving or consumption.

### **8.6 Transportation of raw/fresh/prepared/cooked foods**

Food requiring transportation to the point of sale/stall should be placed in a well-protected, covered and clean container to avoid contamination.

Any means used in transporting food should be clean and in good hygienic condition, appropriately equipped to accommodate any special requirements of the food being transported and provide protection from environmental contamination.

Vehicles used to transport prepared/cooked food should be exclusively used for that purpose.

Perishable food should be transported under temperature control to minimize or prevent the growth of harmful microorganisms or cause deterioration.

Prepared/cooked food should not be transported together with raw food, ingredients, and any other materials which may contaminate the food.

All equipment in contact with food used for transportation should be of food-grade material.

### **8.7 Food storage**

Food should be adequately protected from pests, environmental contaminants and stored at recommended temperatures.

Readily perishable food should be placed or stacked so that it is not likely to be contaminated by contact with pet food, toxic materials, or any other materials which may cause contamination.

The bulk of readily perishable foods should be stored in clean containers at recommended temperature.

All dry and non-dry ingredients should be stored and maintained in their original labelled commercial container where possible. Any other container used for storing dry ingredients should be properly labelled and designed to prevent moisture absorption.

All non-perishable food should be stored in a clean, protected, and closed container/cupboard to prevent cross-contamination by pests.

Perishable raw food and non-dry ingredients including wet milled legumes, cereals and pulses, ginger and garlic pastes should be stored in separate clean containers, preferably placed in a clean ice box, a refrigerator or a freezer to prevent spoilage and/or pathogen growth.

Low moisture foods such as cereals and dry legumes should be stored in air-tight packages and elevated from the floor using pallets.

Refrigerators and freezers should not be overloaded, and their food temperatures should be maintained as low as necessary in the interest of food safety and suitability.

All enclosed spaces, cupboards, shelves, and racks used for the storage of food should be made in such a way that they are easily accessible for routine cleaning and inspection. All bulky food should be stored in an orderly fashion to facilitate ventilation, inspection, and the detection of pests.

In stock rotation, the principles of 'first in, first out' and 'first expiry, first out' should be applied considering labelling and storage date information to avoid food wastage.

Date marking on all food containers should be checked before the food is used. Expired food shall not be sold or used for the preparation of food.

## **9. CONSUMERS**

### **9.1 General requirements**

All consumers in the traditional markets for food should adhere to general hygienic practices which include but are not limited to:

- prevention of contamination of food;
- washing or disinfecting hands before touching food;
- avoidance of unnecessary contact with ready-to-eat food;
- avoidance of spitting, sneezing, coughing, littering, smoking, or use of tobacco in areas where there is unprotected food or surfaces likely to contact food;
- proper disposal of leftovers in waste receptacles and/or containers;
- report to the market authorities any unhygienic behaviour of any food handler if noted; and
- report and seek medical attention whenever foodborne illness-related symptoms such as diarrhoea, vomiting and stomach pain is experienced.

### **9.2 Consumer awareness**

All consumers should:

- obtain sufficient information from relevant sources on guidance and instructions for food handling, preparation, storage, and waste disposal;
- be aware of the importance of reading and understanding information on product label;
- be aware of the need for proper hand washing before handling food;
- understand the intended use of the food e.g. whether it is ready-to-eat or whether it is intended for further processing;
- be informed of their responsibility of not contaminating food vending areas; and
- be informed of the presence of allergens in food.

Competent authority should provide adequate communication and guidance to consumers in order to raise consumer awareness.

### **9.3 Waste disposal**

All consumers should:

- dispose waste appropriately into the designated waste disposal systems and facilities; and
- comply with any other relevant authority requirements related to liquid and solid waste disposal.

## **10. MONITORING AND EVALUATION**

### **10.1 Monitoring and evaluation programmes**

Competent and/or market authority and FBOs should use monitoring and evaluation systems to assess the food hygiene and safety practices in traditional markets for food and request and/or take corrective actions when needed.

Competent authorities must implement a water safety management plan in accordance with current regulatory requirements.

Market assessments should be regularly employed to identify areas for improvement and determine priorities and pathways to improve food hygiene control measures in traditional markets for food. Market authorities can support regular monitoring activities.

### **10.2 Stakeholder committee**

Each market, whether in permanent or temporary premises, should be encouraged to form a stakeholder committee consisting of FBOs, competent authorities, consumers associations, and market authorities, where they exist, to advise on regular market cleaning, repairs, and access to critical services like potable water and waste management.

### **10.3 Incentive programmes**

Incentive-based programmes can be used to facilitate and improve FBOs and consumer food safety practices.

## NOTES

---

<sup>1</sup> FAO and WHO. 1969. *General principles of food hygiene*. Codex Alimentarius Code of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome.

<sup>2</sup> FAO and WHO. 1985. *General standard for the labelling of pre-packaged foods*. Codex Alimentarius Standard, No. CXS 1-1985. Codex Alimentarius Commission. Rome.

<sup>3</sup> FAO and WHO. 2017. *Regional code of hygienic practice for street-vended foods in Asia*. Codex Alimentarius Code of Practice No. CXC 76R-2017. Codex Alimentarius Commission. Rome.

<sup>4</sup> FAO and WHO. 2023. *Guidelines for the safe use and reuse of water in food production and processing*. Codex Alimentarius Guideline, No. CXG 100-2023. Codex Alimentarius Commission. Rome.

<sup>5</sup> FAO and WHO. 1995. *General standard for food additives*. Codex Alimentarius Standard, No. CXS 192-1995 Codex Alimentarius Commission. Rome.