

# Food Hygiene Requirements

## اشتراطات صحة الغذاء

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# Food Hygiene Requirements

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# Introduction

Pursuant to Article 4, 27, and 28 under the bylaws of the Saudi Food Act, these requirements lay down common rules and principles, in particular in relation to the manufacturers 'and competent authorities' responsibilities, structural, operational and hygiene requirements for establishments, procedures for licensing and approval of establishments, requirements for storage and transport of foodstuff.

These Guidelines constitute a common basis for the hygienic production of all food, including products of animal origin. In addition to this common basis, specific hygiene rules are necessary for food of animal origin and water.

In addition to the provisions and rules laid down in these Guidelines, all approved regulations in connection with the safety and wholesomeness of food have to be taken into account.

# Chapter I: General Subject Matter, Scope and Definitions



## Article 1: Aim and scope

These Guidelines have its main objective, to achieve a high level of protection for human health and lay down general and specific rules and responsibilities for Food Business Operators on the hygiene of foodstuffs and the requirements for food premises and establishments. In addition to these guidelines, the following principles shall be taking into consideration:

- Primary responsibility for food safety rests with the food business operator;
- It is necessary to ensure food safety throughout the food chain starting with primary production;
- General implementation of procedures based on the HACCP principles;

2. These Guidelines apply to all KSA-based food premises, and foreign facilities intending to export their products to Saudi Arabia, taking into account the import requirements and conditions as well as the framework for approving competent authorities and establishments (for products of animal origin) in the exporting country.



## Article 2: Definitions

The definitions of the Food Act apply also to these Guidelines

- 1) The Authority means Food & Drug Authority,
- 2) Food Act means the approved Saudi Food Act,
- 3) Food Business means any undertaking, whether profit or nonprofit, public or private, carrying out any activities at any stage of production, processing, distribution and placing on the market of food, with the exception of household kitchens
- 4) Food safety measures are steps taken to protect human and human health from the risks associated with food additives, food contaminants, foodborne and plant-borne diseases. They also include any further measures, regulations, policies or procedures directly related to food safety.

- 5) Food Business Operator is a natural or legal person responsible for ensuring that the requirements of food law are met within the food business under their control.
- 6) Movable and/or temporary premises mean premises that are not permanent structures or not used exclusively for food processing activities. This includes marquees, market stalls, mobile sales vehicles, vending machines and premises used primarily as private dwelling-houses but where foods are regularly prepared for placing on the market
- 7) Equipment includes any apparatus, furnishings and utensils used for the storage, preparation and distribution of food and drink;
- 8) Food hygiene, hereinafter called 'hygiene', refers to measures and conditions necessary to prevent hazards and to ensure fitness for human consumption of a foodstuff taking into account its intended use;
- 9) Risk means a probability function of an adverse health effect and the severity of that effect, as a consequence of exposure to a food hazard;
- 10) Contaminants refer to substances introduced inadvertently to food at any production stage and render food unfit for human consumption.
- 11) Traceability refers to the process of tracing food or any substance intended to be or expected to be incorporated into food through all stages of production.
- 12) Packaging is the process of placing one or more wrapped foodstuffs in a container;
- 13) Wrapping means the placing of a foodstuff in a wrapper or container in direct contact with the foodstuff concerned, and the wrapper or container itself;
- 14) Hermetically sealed container is a container that is designed to seal off the content from the entry of hazards;
- 15) Processing means any action that substantially alters the initial product, including heating, smoking, curing, maturing, drying, marinating, extraction, extrusion or a combination of those processes;
- 16) Processed products means foodstuffs resulting from the processing of unprocessed products. These products may contain ingredients that are necessary for manufacturing or to give specific characteristics;
- 17) Unprocessed products are foodstuffs that have not undergone processing, but have been divided, parted, severed, sliced, boned, minced, skinned, ground, cut, cleaned, trimmed, husked, milled, chilled, frozen, deep-frozen or thawed;

- 18) Primary products means products of primary production including products of the soil, of stock farming, of hunting and fishing;
- 19) Products of Animal Origin means
- a. Food of animal origin, including honey
  - b. Live bivalves, live echinoderms, live tunicates and live marine gastropods intended for human consumption
  - c. Other animals destined to be prepared with a view to be supplied alive to the final consumer
- 20) Minced Meat refers to meat (beef, mutton, or meat of goat camel or poultry), whether fresh frozen or chilled, which have been, after thawing, minced and possibly kept chilled or frozen. It may contain one or more of the approved added ingredients.
- 21) Processed meat means fresh meat, including minced meat, containing food ingredients, seasonings or additives added to it and/or which has undergone processes insufficient to alter the internal muscle fiber structure and which therefor still has the characteristics of fresh meat;
- 22) Meat Products means processed products resulting from the processing of meat or further processing of processed meat, so that the cut surface no longer has the characteristics of fresh meat;.
- 23) Mechanically Deboned Meat (MDM) is a paste-like meat product obtained mechanically by forcing high pressure to separate and remove bones and cartilages connected to the muscle tissues of carcasses.
- 24) Dairy Products means processed products resulting from the processing of raw milk of further processing of such processed products;
- 25) Fishery product means all seawater or freshwater animals (except live bivalves, live echinoderms, live tunicates and live marine gastropods) whether wild or farmed. It includes all edible forms, parts and products of such animals;
- 26) Fresh fishery products mean unprocessed fishery products, whether whole or prepared, that have not undergone any treatment to ensure preservation except chilling. It includes such products packaged under vacuum or in a modified atmosphere;
- 27) Prepared Fishery products means unprocessed fishery products that have undergone an operation affecting their anatomical wholeness such as gutting, heading, slicing, fileting and/or chopping;

- 28) Processed Fishery products means processed products resulting from the processing of fishery products or the further processing of such processed products;
- 29) Potable water means water meeting the minimum requirements of water quality intended for human consumption laid down in KSA law;
- 30) Clean seawater means natural, artificial or purified seawater or brackish water that does not contain micro-organisms, harmful substances or toxic marine plankton in quantities capable of directly or indirectly affecting the health quality of food;
- 31) Clean water means clean seawater and fresh water of a similar quality.
- 32) Food Sanitation Practices refer to the necessary risk control measures applied to ensure that food, considering its intended use, is fit for human consumption through all stages of production.
- 33) Health and Environment Controls refer to the mandatory environment and health conditions and requirements, which food handlers must meet as outlined by the approved relevant regulations.
- 34) Inspection is the examination and monitoring of food at any production stage to ensure its compliance with the regulations.
- 35) Inspector is an individual with the right qualifications to perform a certain inspection duty as part of a general food inspection plan.

## Chapter II Obligations on Food Business Operator



### Article: 3 General Obligations

Food Business Operators shall ensure that all stages of production, processing, distribution and placing on the market of food under their control satisfy the relevant hygiene requirements laid down in these Guidelines.



### Article: 4 General and Specific Requirements

1. Food Business Operators carrying out primary production and those associated operations listed in Annex I shall comply with the hygiene provisions laid down in Annex I, and any additional relevant requirements laid down in the national recognized regulations.
2. Food business owners and food business employees involved in food production, processing, distribution or placing on the market, or any of the subsequent stages covered in paragraph (1), shall meet the general hygienic requirements set out in Section (12-1) of Annex I under Chapter 1, or any other relevant KSA laws.
3. In addition to the general requirements of paragraph 2, the specific requirements laid down in Annex II, Part II, Chapters XIII –XIX shall apply as appropriate, to premises supplying products to other food premises.
4. Some of the chapters included in Part II may apply to food premises supplying other food businesses or the final consumer.
5. Food Business Operators may only import food that complies with the relevant requirements of these guidelines.



## Article 5: Registration and Licencing

1. Without prejudice to Articles 9,10 and 11 of the Food Act, KSA import requirements and conditions as well as the framework for approving foreign food premises (exporting products of animal origin), food businesses shall only handle or export food only if they have:
  - a. Registered with the SFDA
  - b. Received a licence allowing them to carry on such businesses,
2. Food Business Operator may use the official form in Annex III to register with the competent authority. Where a Food Business Operator is responsible for more than one food business, each business must be registered separately. Where a food business operates over more than one site, each site must be registered separately.
3. Upon receipt of the application for registration from the Food Business Operator, a Designated Officer from the SFDA shall make an on-site visit. If the Food Business Operator demonstrates compliance with the relevant requirements of KSA food law, the SFDA must award the appropriate licence.
4. Food Business Operators shall operate their food facilities only after they obtain the appropriate licence/approvals from the competent authorities.
5. Upon receipt of a conditional approval, food business operators shall notify the competent authorities of any changes they might make, including transfer of ownership or any substantial change to their business activities.
6. The license to carry out food business activities for KSA-based establishments shall be valid for one year from the date of issue. However, SFDA may suspend or withdraw the license at any time in case of a violation to KSA food law and its relevant regulations.
7. Local food businesses shall display the license in a visible place at the facility. If the license is hidden, damaged, obliterated, or otherwise poorly maintained, the person(s), or their representatives, to whom the license is issued, shall be subject to penalties.
8. The concerned SFDA department shall establish fees for the registration and licensing of local food establishments.

These data shall be made available to the public, and all the fees incurred must be maintained in a designated payment log.
9. It shall be considered an offense for individuals or groups to operate a food business without a valid license in which the offenders shall be subject to the penalties prescribed in relevant food laws and regulations.



## Article 6: HACCP Principles

1. Food Business Operators shall put in place, implement and maintain permanent operation standards based on HACCP

principles as laid down in the Annex of GSO-1694.

2. The HACCP Principles referred to in paragraph 1 above consist of the following:

- (a) Identifying any hazards that must be prevented, eliminated or reduced to acceptable levels;
- (b) Identifying the critical control points at the step or steps at which control is essential to prevent or eliminate a hazard or reduce it to acceptable levels;
- (c) Setting critical limits at critical control points which separate acceptability from unacceptability to prevent, eliminate or reduce identified hazards;
- (d) Providing for and implementing effective monitoring procedures at critical control points;
- (e) Developing corrective actions when monitoring indicates that a critical control point is not under control;
- (f) Providing food business employees with effective and practical training to ensure meeting the requirements of these guidelines.
- (g) Establishing procedures which shall be carried out regularly to verify that the measures outlined in a) –e) above are working effectively; and
- (h) Establishing documents and records commensurate with the nature and size of the food business to demonstrate effective application of the measures outlined in (a) through (f) above.

3- When any modification is made in the product, process or any step, Food Business Operators shall review the procedure and make the necessary changes.

4. Food Business Operators shall

- (i) Provide the Competent Authority with evidence of their compliance with paragraph 1 above
- (j) Ensure that any documents and records describing the procedures are accurate and up to date at all times
- (k) Keeping a record of all the required documents for a period of time (up to two years) as deemed appropriate and as agreed upon with the Competent Authority.



## Article 7: Traceability

### **Food business operators shall:**

- (a) Be able to identify any person or business from whom they have been supplied with a food, a food-producing animal, or any substance intended to be, or expected to be, incorporated into a food product;
- (b) Be able to identify any other businesses to which their products have been supplied;
- (c) Have in place systems and procedures to make this information accessible to the Competent Authorities;
- (d) Make this information available to the Competent Authority on demand.



## Article 8: Recall

**1. Without prejudice to Articles 20, 33 under Food Act, and Article 73 of Food Act bylaws and the relevant regulations , food business operators, where there are reasons to believe that a food has been imported, produced, processed, manufactured, distributed or sold (placed on the market) in such a way as to constitute non-compliance with the food safety requirements, they shall:**

- (a) Where the food has left the control of that initial food business operator,
  - i. Immediately initiate procedures to recall the food in question from the market and
  - ii. Notify the recall to the competent authority.
- (b) Where the product may have reached the consumer, the operator shall
  - i. Effectively and accurately inform the consumers of the reason for its recall, and
  - ii. If necessary, recall from consumers products already supplied to them when other measures are not sufficient to achieve a high level of health protection and
  - iii. Inform the Competent Authority these additional corrective measures.

### **2. A Food Business Operator**

- (a) Shall immediately inform the Competent Authority if there are reasons to believe that a food already on the market may be injurious to human health; and
- (b) Shall inform the Competent Authority of the action taken to prevent risks to the final consumer; and
- (c) Shall not prevent or discourage any person from cooperating with the Competent Authority where this may prevent, reduce or eliminate a risk arising from the food, in accordance with the requirements of KSA Food Law.

**3. Food Business Operators shall collaborate and cooperate with the Competent Authority on any action taken to avoid or reduce risks posed by a food which they supply or have supplied**



## Article 9: Placing on the Market of Food

1. Without prejudice to the provisions of the Saudi Food Law, the labelling, advertising and presentation of food, including their shape, appearance or packaging, the packaging materials used, the manner in which they are arranged and the setting in which they are displayed, and the information which is made available about them through whatever medium, shall not mislead consumers.

2. GSO 9, 2231, 1863, 150 and 1502- shall be taken into account if relevant and complementary to the requirements applicable to food labelling, food contact materials, and shelf life.

## ANNEX I PRIMARY PRODUCTION

### 1.Scope

This Annex applies to primary production and the following associated operations:

- (a) Transport, storage and handling of primary products at the place of production, provided that this does not substantially alter their nature;
- (b) Transport of live animals, where this is necessary to achieve the objectives of paragraph 3.2 (a) under Section I below.
- (c) In the case of products of plant origin, fishery products and wild game, transport operations to deliver primary products, the nature of which has not been substantially altered, from the place of production to an establishment.

### Section I: General Hygiene Provisions for Primary Production and Associated Operations

### 2.Hygiene provisions

1. Where possible, food business operators shall ensure that primary products are protected against contamination, and take into account any subsequent processing applied to primary products.
2. Food business operators shall comply with any KSA legislative provisions relating to the control of hazards in primary production and associated operations, including:
  - (a) Measures to control contamination arising from the air, soil, water, feed, fertilisers, veterinary medicinal products, plant protection products and biocides and the storage, handling and disposal of waste; and
  - (b) OIE measures relating to animal health and welfare and plant health and their implications for human health, including programmes for the monitoring and control of zoonoses and zoonotic agents.

**3. Food business operators rearing, harvesting or hunting animals or producing primary products of animal origin shall take adequate measures, as appropriate**

- (a) To keep any facilities used in connection with primary production and associated operations, including facilities used to store and handle feed, clean and, where necessary after cleaning, to disinfect them in an appropriate manner;
- (b) To keep clean and, where necessary after cleaning, to disinfect, in an appropriate manner, equipment, containers, crates, vehicles and vessels;
- (c) whenever possible to ensure the cleanliness of animals going to slaughter and, where necessary, production animals;
- (d) To use potable water, or clean water, whenever necessary to prevent contamination;
- (e) To ensure that staff handling foodstuffs are in good health and undergo training on health risks;
- (f) Whenever possible to prevent animals and pests from causing contamination;
- (g) To store and handle waste and hazardous substances so as to prevent contamination;
- (h) To prevent the introduction and spread of contagious diseases transmissible to humans through food, including by taking precautionary measures when introducing new animals and reporting suspected outbreaks of such diseases to the competent authority;
- (i) To take account of the results of any relevant analyses carried out on samples taken from animals or other samples that have importance to human health; and
- (j) To use feed additives and veterinary medicinal products correctly, as required by the relevant legislation.

**4. Food business operators producing or harvesting plant products shall take adequate measures, as appropriate:**

- (a) To keep clean and, where necessary after cleaning, to disinfect, in an appropriate manner, facilities, equipment, containers, crates, vehicles and vessels;
- (b) To ensure, where necessary, hygienic production, transport and storage conditions for, and the cleanliness of plant products;
- (c) To use potable water, or clean water, whenever necessary to prevent contamination;
- (d) To ensure that staff handling foodstuffs are in good health and undergo training on health risks;
- (e) As far as possible to prevent animals and pests from causing contamination;
- (f) To store and handle wastes and hazardous substances so as to prevent contamination;

**5. Food business operators shall take appropriate remedial action when informed of problems identified during official controls.**

### 3. Record-keeping

1. Food business operators shall keep and retain records relating to measures put in place to control hazards in an appropriate manner and for a period of at least two years, commensurate with the nature and size of the food business. Food business operators are to make relevant information contained in these records available to the competent authority and receiving food business operators on request.
2. Food business operators rearing animals or producing primary products of animal origin shall keep a record, particularly on the following:
  - (a) The nature and origin of feed fed to the animals;
  - (b) Veterinary medicinal products or other treatments administered to the animals, dates of administration and withdrawal periods;
  - (c) The occurrence of diseases that may affect the safety of products of animal origin;
  - (d) The results of any analyses carried out on samples taken from animals or other samples taken for diagnostic purposes, that have importance for human health; and
  - (e) Any relevant reports on checks carried out on animals or products of animal origin.
3. Food business operators producing or harvesting plant products shall keep a record, particularly on the following:
  - (a) Any use of plant protection products and biocides;
  - (b) Any occurrence of pests or diseases that may affect the safety of products of plant origin; and
  - (c) The results of any relevant analyses carried out on samples taken from plants or other samples that have importance to human health.

## Section II: Raw Milk – Primary Production

Food business operators producing or, as appropriate, collecting raw milk must ensure compliance with the requirements laid down in this Section, in addition to any general requirements in Section I.

## Chapter I      Health Requirements for Raw Milk Production

1. Raw milk must come from animals:
  - (a) That do not show any symptoms of infectious diseases communicable to humans through milk;
  - (b) That are in a good general state of health, present no sign of disease that might result in the contamination of milk and, in particular, are not suffering from any infection of the genital tract with discharge, enteritis with diarrhoea and fever, or a recognisable inflammation of the udder;
  - (c) That do not have any udder wound likely to affect the milk;
  - (d) To which no unauthorised substances or products have been administered and that have not undergone illegal treatment according to KSA law and
  - (e) In respect of which, where authorised products or substances have been administered, the withdrawal periods prescribed for these products or substances have been observed.
2. In particular, as regards brucellosis, raw milk must come from:
  - (a) Cows or buffaloes belonging to a herd which is free or officially free of brucellosis;
  - (b) Sheep or goats belonging to a holding officially free or free of brucellosis or
  - (c) Females of other species belonging, for species susceptible to brucellosis, to herds regularly checked for that disease under a control plan that the competent authority has approved.
3. As regards tuberculosis, raw milk must come from:
  - (a) Cows or buffaloes belonging to a herd which, is officially free of tuberculosis; or
  - (b) Females of other species belonging, for species susceptible to tuberculosis, to herds regularly checked for this disease under a control plan that the competent authority has approved. If goats are kept together with cows, such goats must be inspected and tested for tuberculosis
4. However, raw milk from animals that do not meet the requirements of paragraph 3 may be used with the authorisation of the competent authority:
  - (a) In the case of cows or buffaloes that do not show a positive reaction to tests for tuberculosis or brucellosis, nor any symptoms of these diseases, after having undergone a heat treatment such as to show a negative reaction to the phosphatase test;
  - (b) In the case of sheep or goats that do not show a positive reaction to tests for brucellosis, or which have been vaccinated against brucellosis as part of an approved eradication programme, and which do not show any symptom of that disease, either:
    - i. For the manufacture of cheese with a maturation period of at least two months; or
    - ii. After having undergone heat treatment such as to show a negative reaction to the phosphatase test; and
  - (c) In the case of females of other species that do not show a positive reaction to tests for tuberculosis or brucellosis, nor any symptoms of these diseases, but belong to a herd where brucellosis or tuberculosis has been detected after the checks referred to in point 2(c) or 3(b), if treated to ensure its safety.

5. Raw milk from any animal not complying with the requirements of paragraphs 1 to 4 –in particular, any animal showing individually a positive reaction to the prophylactic tests vis-à-vis tuberculosis or brucellosis must not be used for human consumption.
6. The isolation of animals that are infected, or suspected of being infected, with any of the diseases referred to in point 2 or 3 must be effective to avoid any adverse effect on other animals' milk.

## Chapter II

### Hygiene on Milk Production Holdings

#### A. Requirements for premises and equipment

1. Milking equipment and premises where milk is stored, handled or cooled must be located and constructed so as to limit the risk of contamination of milk.
2. Premises for the storage of milk must be protected against vermin, have adequate separation from premises where animals are housed and, where necessary to meet the requirements laid down in Part B, have suitable refrigeration equipment.
3. Surfaces of equipment that are intended to come into contact with milk (utensils, containers, tanks, etc. intended for milking, collection or transport) must be easy to clean and, where necessary, disinfect and be maintained in a sound condition. This requires the use of smooth, washable and non-toxic materials.
4. After use, such surfaces must be cleaned and, where necessary, disinfected. After each journey, or after each series of journeys when the period of time between unloading and the following loading is very short, but in all cases at least once a day, containers and tanks used for the transport of raw milk must be cleaned and disinfected in an appropriate manner before re-use.

#### B. Hygiene during milking, collection and transport

1. Milking must be carried out hygienically, ensuring in particular:
  - a. That, before milking starts, the teats, udder and adjacent parts are clean;
  - b. That milk from each animal is checked for organoleptic or physico-chemical abnormalities by the milker or a method achieving similar results and that milk presenting such abnormalities is not used for human consumption;
  - c. That milk from animals showing clinical signs of udder disease is not used for human consumption otherwise than in accordance with the instructions of a veterinarian;
  - d. The identification of animals undergoing medical treatment likely to transfer residues to the milk, and that milk obtained from such animals before the end of the prescribed withdrawal period is not used for human consumption; and
  - e. That teat dips or sprays are used only if the competent authority has approved them and in a manner that does not produce unacceptable residue levels in the milk.

2. Immediately after milking, milk must be held in a clean place designed and equipped to avoid contamination. It must be cooled immediately to not more than 8 °C in the case of daily collection, or not more than 6 °C if collection is not daily.
  3. During transport the cold chain must be maintained and, on arrival at the establishment of destination, the temperature of the milk must not be more than 10°C.
  4. Food business operators need not comply with the temperature requirements laid down in points 2 and 3 if the milk meets the criteria provided for in Chapter III (Criteria for Raw Milk) and either:
    - a. The milk is processed within 2 hours of milking; or
    - b. A higher temperature is necessary for technological reasons related to the manufacture of certain dairy products and the competent authority so authorises.
- C. Staff hygiene**
1. Persons performing milking and/or handling raw milk must wear suitable clean clothes.
  2. Persons performing milking must maintain a high degree of personal cleanliness.
  3. Suitable facilities must be available near the place of milking to enable persons performing milking and handling raw milk to wash their hands and arms.

## Chapter III

### Criteria for Raw Milk

1. A representative number of samples of raw milk collected from milk production holdings taken by random sampling must be checked for compliance with points 3 and 4. The checks may be carried out by, or on behalf of:
  - a. The food business operator producing the milk;
  - b. The food business operator collecting or processing the milk;
  - c. A group of food business operators; or
  - d. In the context of a national or regional control scheme.
2.
  - a) Food business operators must initiate procedures to ensure that raw milk meets the following criteria:
    - i. Raw cows' milk:
 

Plate count at 30 °C (per ml)  $\leq$  100 000 (\*)

Somatic cell count (per ml)  $\leq$  400 000 (\*\*)
    - ii. Raw milk from other species:
 

Plate count at 30 °C (per ml)  $\leq$  1 500 000 (\*)
  - (b) However, if raw milk from species other than cows is intended for the manufacture of products made with raw milk by a process that does not involve any heat treatment, food business operators must take steps to ensure that the raw milk used meets the following criterion:
 

Plate count at 30 °C (per ml)  $\leq$  500 000 (\*)

3. Without prejudice to any other KSA legislation, food business operators must not place on the market any raw milk that contains antibiotic residues in excess of the levels listed below.
4. When raw milk fails to comply with point 2 or 3, the food business operator must inform the competent authority and take measures to correct the situation.

(\*) Rolling geometric average over a two-month period, with at least two samples per month

(\*\*) Rolling geometric average over a three-month period, with at least one sample per month, unless the competent authority specifies another methodology to take account of seasonal variations in production levels

## Annex II

### Part I

#### General Hygiene Requirements for All Food Business Operators

#### (Except When Annex I Applies)

### INTRODUCTION

In addition to the provisions laid down in this part, all relevant regulations shall apply.

Food Premises Type	Applicable Chapters of Annex II
All food premises	Chapters I Chapter III
All rooms where food is prepared, treated or processed	Chapter II Chapter III

Food Premises Type	Applicable Chapters of Annex II
Movable and/or temporary premises	Chapter III
All stages of production, processing and distribution of food	Chapters V to XII
Transportation	(Chapters I & II) Chapter IV
Meat Preparations manufacture and processing	Chapters I & II Chapters V to XII Chapter XIII
Meat Products manufacture and processing	Chapters I & II Chapters V to XII Chapter XIV
Dairy Products manufacture and processing	Chapters I & II Chapters V to XII Chapter XV
Fishery Products manufacture and processing	Chapters I & II Chapters V to XII Chapter XVI
Egg products	Chapters I & II Chapters V to XII Chapter XVII
Honey	Chapters I & II Chapters V to XII and GSO standard 147
Water	Chapters I & II Chapters V to XII and GSO 987; GSO 1928; GSO 1025 ; 149; GSO 2232

## CHAPTER I

### Requirements for food premises (other than movable and/or temporary premises as specified in chapter III)

1. All parts of a food premises are to be kept clean and maintained in good repair and condition.
2. The layout, design, construction, siting and size of food premises are to:
  - (a) Permit adequate maintenance, cleaning and/or disinfection, avoid or minimise air-borne contamination, and provide adequate working space to allow for the hygienic performance of all operations;
  - (b) Be such as to protect against the accumulation of dirt, contact with toxic materials, the shedding of particles into food and the formation of condensation or undesirable mould on surfaces;
  - (c) Permit good food hygiene practices, including protection against contamination and, in particular, pest control; and
  - (d) Where necessary, provide suitable temperature-controlled handling and storage conditions of sufficient capacity for maintaining foodstuffs at appropriate temperatures and designed to allow those temperatures to be monitored and, where necessary, recorded.
3. Food premises are to have adequate natural and/or artificial lighting.
4. There is to be suitable and sufficient means of natural or mechanical ventilation so as to:
  - (a) Prevent airflow from a contaminated area to a clean area
  - (b) Enable filters and other parts requiring cleaning or replacement to be readily accessible.
  - (c) Enable regular maintenance of such parts according to their use and the nature of the premises in which they are installed.
5. An adequate number of flush lavatories, which:
  - (a) Are connected to an effective drainage system,
  - (b) Are kept cleaned and maintained,
  - (c) Are not to open directly into rooms in which food is handled.
  - (d) Have adequate natural and mechanical ventilation,
  - (e) Have a clearly legible notice requesting users to wash their hands after using a sanitary convenience.
6. An adequate number of washbasins are to be available, suitably located and designated for cleaning hands, and they are to be:
  - (a) Provided with hot and cold running water, or hot water at a suitable controlled temperature,
  - (b) Provided with materials for cleaning hands and for hygienic drying,
  - (c) Kept clean and the taps connected with them must be kept clean and in efficient working order,
  - (d) Separate from food washing facilities, where necessary.
  - (e) Resistant to corrosion.

7. Drainage facilities are to be adequate for the purpose intended, and to be:
  - (a) designed and constructed to avoid the risk of contamination,
  - (b) designed where drainage channels are fully or partially open, so as to ensure that waste does not flow from a contaminated area towards or into a clean area, in particular an area where foods likely to present a high risk to the final consumer are handled.
8. Where necessary, adequate changing facilities for personnel are to be provided, including sufficient cupboards or locker accommodation, where needed.
9. Cleaning agents and disinfectants are not to be stored in areas where food is handled.

## CHAPTER II

### Requirements in rooms where foodstuffs are prepared, treated or processed (excluding dining areas and those premises specified in chapter III)

- 1) In rooms where food is prepared, treated or processed (excluding dining areas and those premises specified in Chapter III, but including rooms contained in means of transport) the design and layout are to permit good food hygiene practices, including protection against contamination between and during operations. In particular:
  - (a) Floor surfaces are to be maintained in a sound condition and be easy to clean and, where necessary, to disinfect. This will require the use of impervious, non-absorbent, washable and non-toxic materials unless food business operators can satisfy the food authority that other materials used are appropriate. Where appropriate, floors are to allow adequate surface drainage;
  - (b) Wall surfaces are to be maintained in a sound condition and be easy to clean and, where necessary, to disinfect. This will require the use of impervious, non-absorbent, washable and non-toxic materials and require a smooth surface up to a height appropriate for the operations unless food business operators can satisfy the food authority that other materials used are appropriate;
  - (c) Ceilings (or, where there are no ceilings, the interior surface of the roof) and overhead fixtures are to be constructed and finished so as to prevent the accumulation of dirt and to reduce condensation, the growth of undesirable mould and the shedding of particles;
  - (d) Windows and other openings are to be constructed to prevent the accumulation of dirt. Those which can be opened to the outside environment are, where necessary, to be fitted with insect-proof screens which can be easily removed for cleaning. Where open windows would result in contamination, windows are to remain closed and fixed during production;
  - (e) Doors are to be easy to clean and, where necessary, to disinfect. This will require the use of smooth and non-absorbent surfaces unless food business operators can satisfy the food authority that other materials used are appropriate; and
  - (f) Surfaces (including surfaces of equipment) in areas where foods are handled and in particular those in contact with food are to be maintained in a sound condition and be easy to clean and, where necessary, to disinfect. This will require the use of smooth, washable corrosion-resistant and non-toxic materials, unless food business operators can satisfy the food authority that other materials used are appropriate.

- 2) Adequate facilities are to be provided, where necessary, for the cleaning, disinfecting and storage of working utensils and equipment, and to:
  - (a) Be constructed of corrosion-resistant materials, be easy to clean and be kept clean,
  - (b) Have an adequate supply of hot and cold water or water at a suitable controlled temperature.
- 3) Adequate provision is to be made, where necessary, for washing food. Every sink or other such facility provided for the washing of food is to have an adequate supply of hot and/or cold potable water consistent with the requirements of Chapter VII and be kept clean and, where necessary, disinfected.

## CHAPTER III

### Requirements for movable and/or temporary premises (such as marquees, market stalls, mobile sales vehicles)

1. Premises and vending machines are, so far as is reasonably practicable, to be so sited, designed, constructed and kept clean and maintained in good repair and condition as to avoid the risk of contamination, in particular by animals and pests.
2. In particular, where necessary:
  - (a) Appropriate facilities are to be available to maintain adequate personal hygiene (including facilities for the hygienic washing and drying of hands, hygienic sanitary arrangements and changing facilities);
  - (b) Surfaces in contact with food are to be in a sound condition and be easy to clean and, where necessary, to disinfect. This will require the use of smooth, washable, corrosion-resistant and non-toxic materials, unless food business operators can satisfy the food authority that other materials used are appropriate;
  - (c) Adequate provision is to be made for the cleaning and, where necessary, disinfecting of working utensils and equipment;
  - (d) Where foodstuffs are cleaned as part of the food business operations, adequate provision is to be made for this to be undertaken hygienically;
  - (e) An adequate supply of hot and/or cold potable water is to be available;
  - (f) Adequate arrangements and/or facilities for the hygienic storage and disposal of hazardous and/or inedible substances and waste (whether liquid or solid) are to be available;
  - (g) Adequate facilities and/or arrangements for maintaining and monitoring suitable food temperature conditions are to be available;
  - (h) Foodstuffs are to be so placed as to avoid the risk of contamination so far as is reasonably practicable.
  - (i) Employees working food facilities are to meet the requirements for handling food such as:
    1. To be in possession of a health certificate from the competent authority.
    2. To wear suitable protective hair covers and gloves.

## CHAPTER IV

### Requirements for Transport

1. Conveyances and/or containers used for transporting foodstuffs are to be kept clean and maintained in good repair and condition to protect foodstuffs from contamination and are, where necessary, to be designed and constructed to permit adequate cleaning and/or disinfection.
2. Receptacles in vehicles and/or containers are not to be used for transporting anything other than foodstuffs where this may result in contamination.
3. Where conveyances and/or containers are used for transporting anything in addition to foodstuffs or for transporting different foodstuffs at the same time, there is, where necessary, to be effective separation of products.
4. Bulk foodstuffs in liquid, granulate or powder form are to be transported in receptacles and/or containers/tankers reserved for the transport of foodstuffs. Such containers are to be marked in a clearly visible and indelible fashion, to show that they are used for the transport of foodstuffs, or are to be marked 'for foodstuffs only'.
5. Where conveyances and/or containers have been used for transporting anything other than foodstuffs or for transporting different foodstuffs, there is to be effective cleaning between loads to avoid the risk of contamination.
6. Foodstuffs in conveyances and/or containers are to be so placed and protected as to minimise the risk of contamination.
7. Where necessary, conveyances and/or containers used for transporting foodstuffs are to be capable of maintaining foodstuffs at appropriate temperatures and allow those temperatures to be monitored.

## CHAPTER V

### Requirements for Equipment

1. All articles, fittings and equipment with which food comes into contact are to:
  - (a) Be effectively cleaned and, where necessary, disinfected. Cleaning and disinfection are to take place at a frequency sufficient to avoid any risk of contamination;
  - (b) With the exception of non-returnable containers and packaging, be so constructed, be of such materials and be kept in such good order, repair and condition as to enable them to be kept clean and, where necessary, to be disinfected; and
2. Where chemical additives have to be used to prevent corrosion of equipment and containers, they are to be used in accordance with good practice.

## CHAPTER VI

### Requirements for Food waste

1. Food waste, non-edible by-products and other refuse are to be removed from rooms where food is present as quickly as possible, so as to avoid their accumulation, and at least at the end of each working day or shift.
2. Food waste, non-edible by-products and other refuse are to be deposited in closable containers, unless food business operators can demonstrate to the food authority that other types of containers or evacuation systems used are appropriate. These containers are to be of an appropriate construction, kept in sound condition, be easy to clean and, where necessary, to disinfect.
3. Adequate provision is to be made for the storage and disposal of food waste, non-edible by-products and other refuse. Refuse stores are to be designed and managed in such a way as to enable them to be kept clean and, where necessary, free of animals and pests.
4. All waste is to be eliminated in a hygienic and environmentally friendly way in accordance with KSA legislation, and is not to constitute a direct or indirect source of contamination.

## CHAPTER VII

### Requirements for Water supply

1. There is to be an adequate supply of potable water, which is to be used whenever necessary to ensure that foodstuffs are not contaminated;
  - (a) Clean water may be used with whole fishery products.
  - (b) Clean seawater may be used with live bivalve molluscs, echinoderms, tunicates and marine gastropods; clean water may also be used for external washing. When such water is used, adequate facilities are to be available for its supply.
2. Where non-potable water is used, for example for fire control, steam production, refrigeration and other similar purposes, it is to circulate in a separate duly identified system. Non-potable water is not to connect with, or allow reflux into, potable water systems.
3. Ice which comes into contact with food or which may contaminate food is to be made from potable water or, when used to chill whole fishery products, clean water. It is to be made, handled and stored under conditions that protect it from contamination.

4. Steam used directly in contact with food is not to contain any substance that presents a hazard to health or is likely to contaminate the food.
5. Where heat treatment is applied to foodstuffs it is to be ensured that any water used to cool the containers or food stuffs after heat treatment is not a source of contamination for the foodstuff.

## CHAPTER VIII

### Requirements for Personal hygiene

1. Every person working in a food-handling area is to maintain a high degree of personal cleanliness and is to wear suitable, clean and, where necessary, protective clothing.
2. No person may smoke or use any form of tobacco, including snuff, while working in a food handling area or handling open food.
3. Food Handlers must refrain from eating, drinking and/or spitting while working in a food handling area or handling open food.
4. Food Handlers must keep any open cut or abrasion on any exposed part of his person covered with a waterproof dressing.
5. No Person shall engage in the handling of food unless they are in possession of a certificate of good health from a medical officer
  - (a) Such a certificate shall be valid for a period of twelve months from the date of issue; kept at the principle place of employment and be available for inspection by the food authority.
6. No person suffering from, or being a carrier of a disease likely to be transmitted through food or afflicted, for example, with infected wounds, skin infections, sores or diarrhoea is to be permitted to handle food or enter any food-handling area in any capacity if there is any likelihood of direct or indirect contamination.
  - (a) Any person so affected and employed in a food business and who is likely to come into contact with food is to report immediately the illness or symptoms, and if possible their causes, to the food business operator.
  - (b) The Food Business Operator must inform the Food Authority of the actions taken to prevent transmission of the disease.
7. If the Food Authority has any reason to believe that a food handler is suffering from or a carrier of a disease likely to be transmitted through food or is afflicted, for example, with infected wounds, skin infections, sores or diarrhoea, an authorised officer may require that food handler to submit to a medical examination by a medical officer.
  - (a) The medical officer shall issue a certificate stating whether the person is fit or unfit to come into contact with food.
  - (b) The food handler shall cease handling food during the process of medical examination, including the time required for processing of any specimens.
  - (c) If the certificate states the person is unfit to handle food that person shall cease work until he has obtained a certificate of good health from a medical officer.

## CHAPTER IX

### Requirements applicable to foodstuffs

1. Apart from live animals, FBO shall not accept any raw materials or ingredients, or any other substances used in product processing operations, if there are reasons to believe that such substances are contaminated with parasites, pathogenic microorganisms or toxic, decomposed or foreign substances that may render the final product unfit for human consumption. This condition applies even if normal sorting and/or preparatory or processing procedures ensues.
2. Raw materials and all ingredients stored in a food business are to be kept in appropriate conditions designed to prevent harmful deterioration and protect them from contamination.
3. Raw materials and all ingredients stored in a food business are to be labelled for proper identification.
4. At all stages of production, processing and distribution, food is to be protected against any contamination likely to render the food unfit for human consumption, injurious to health or contaminated in such a way that it would be unreasonable to expect it to be consumed in that state.
5. Adequate procedures are to be in place to control pests. Adequate procedures are also to be in place to prevent domestic animals from having access to places where food is prepared, handled or stored (or, where the competent authority so permits in special cases, to prevent such access from resulting in contamination).
6. Raw materials, ingredients, intermediate products and finished products likely to support the reproduction of pathogenic micro-organisms or the formation of toxins are not to be kept at temperatures that might result in a risk to health.
  - (a) Chill Holding Requirements:
    - i. Any food which is likely to support the growth of pathogenic micro-organisms or the formation of toxins held in a food premises ) must be kept at or below 50C but
      - a) where the food is for service or on display for sale it may be held above 50C for a single period, not exceeding four hours.
    - ii. The cold chain is not to be interrupted. However, limited periods outside temperature control are permitted, to accommodate the practicalities of handling during preparation, transport and storage, of food, provided that it does not result in a risk to health.
  - (b) Hot Holding Requirements
    - i. Food in a food premises which has been cooked or re-heated, which is for service or on display for sale and which is likely to support the growth of pathogenic micro-organisms or the formation of toxins must be kept at or above 630C but
      - a) where the food is for service or on display for sale it may be held below 630C for a single period, not exceeding two hours.
7. Food businesses manufacturing, handling and wrapping processed foodstuffs are to have suitable rooms, large enough for the separate storage of raw materials from processed material and sufficient separate refrigerated storage.

8. Where foodstuffs are to be held or served at chilled temperatures they are to be cooled as quickly as possible following the heat-processing stage, or final preparation stage if no heat process is applied, to a temperature which does not result in a risk to health.
9. The thawing of foodstuffs is to be undertaken in such a way as to minimise the risk of growth of pathogenic microorganisms or the formation of toxins in the foods. During thawing, foods are to be subjected to temperatures that would not result in a risk to health. Where run-off liquid from the thawing process may present a risk to health it is to be adequately drained. Following thawing, food is to be handled in such a manner as to minimise the risk of growth of pathogenic microorganisms or the formation of toxins.
10. Hazardous and/or inedible substances, including animal feed, are to be adequately labelled and stored in separate and secure containers.

## CHAPTER X

### Requirements applicable to the wrapping and packaging of foodstuffs

1. Material used for wrapping and packaging are not to be a source of contamination.
2. Wrapping materials are to be stored in such a manner that they are not exposed to a risk of contamination.
3. Wrapping and packaging operations are to be carried out so as to avoid contamination of the products. Where appropriate and in particular in the case of cans and glass jars, the integrity of the container's construction and its cleanliness is to be assured.
4. Wrapping and packaging material re-used for foodstuffs is to be easy to clean and, where necessary, to disinfect.

## CHAPTER XI

### Requirements for Heat Treatment

The following requirements apply only to food placed on the market in hermetically sealed containers:

- a. Any heat treatment process used to process an unprocessed product or to process a further processed product is
  - i. To raise every part of the product treated to a given temperature for a given period of time AND
  - ii. To prevent the product from becoming contaminated during the process
- b. To ensure that the process employed achieves the desired objectives, Food Business Operators are to check regularly the main relevant parameters (particularly temperature, pressure, sealing and microbiology), including by the use of automatic devices
- c. The process used should conform to an internationally recognised standard (for example, pasteurisation, ultra high temperature or sterilisation)

## CHAPTER XII

### Requirements for Heat Treatment

#### 1. Food business operators are to ensure:

- (a) that food handlers are supervised and instructed and/or trained in food hygiene matters commensurate with their work activity;
- (b) that those responsible for handling food waste, non-edible by-products and other refuse have received adequate training in the application of the HACCP principles; and
- (c) compliance with any requirements of national law and concerning training programmes for persons working in certain food sectors.

## Part II:

**Specific requirements for Production Establishments (food of animal origin and water)**

### **(This part is complementary to the provisions laid down in Chapters I & II and Chapters IV to XII)**

In addition to the provisions laid down in this Part, all approved regulations for meat, milk, fish, egg, honey, water and their products shall apply.

#### **Chapter XIII**

#### **Manufacture of Minced Meat and Meat Preparations**

These requirements shall apply to establishments supplying minced meat or meat preparations to other food businesses. They shall not apply to establishments selling only to the final consumer.

1. Food business operators operating establishments producing minced meat or meat preparations must ensure that they are constructed so as to avoid contamination of meat and products, in particular, by allowing constant progress of the operations.
2. Ensuring separation between the different production batches;
3. Have rooms for the separate storage of packaged and exposed meat and products, unless stored at different times or in such a way that the packaging material and the manner of storage cannot be a source of contamination for the meat or products;
4. Have rooms equipped to ensure compliance with the temperature requirements laid down in Part III;
5. Have equipment for washing hands used by staff handling exposed meat and products with non- hand operable taps; and
6. Have facilities for disinfecting tools with hot water supplied at not less than 82°C, or an alternative system having an equivalent effect.

### **Requirements for Raw Material:**

Food business operators producing minced meat or meat preparations must ensure that the raw materials used satisfy the following requirements.

1. The raw material used to prepare minced meat must meet the following requirements.
  - a. It must comply with the requirements for fresh meat;
  - b. It must derive from skeletal muscle, including adherent fatty tissues;
  - c. It must not derive from scrap cuttings and scrap trimmings (other than whole muscle cuttings); including MDM.
2. The following raw material may be used to prepare meat preparations:
  - a. Fresh meat;
  - b. Meat meeting the requirements of point 1; and
  - c. If the meat preparation is not clearly intended to be consumed without first undergoing heat treatment, meat derived from the mincing or fragmentation of meat meeting the requirements of point 1 other than point 1(c);
3. The following must not be used by food business operators when preparing meat products:
  - a. The genitals of female and male animals except for the testicles;
  - b. The urinary systems except for the kidneys and bladder;
  - c. The cartilage of the larynx, the trachea, the bronchi and the lobular trachea;
  - d. Eyes and eyelids;
  - e. External hearing areas;
  - f. Keratinocyte; And
  - g. In poultry, the head, the excess skins and the fleshy protrusions - the esophagus, the vesicle, the intestine and the genitals.

### **Hygiene During and After Production:**

Food business operators producing minced meat or meat preparations must ensure compliance with the following requirements.

1. The work on meat must be organised in such a way as to prevent or minimise contamination.
2. To this end, food business operators must ensure in particular that the meat used is:
  - (a) At a temperature of not more than 4°C for poultry, 3°C for offal and 7°C for other meat; and
  - (b) Brought into the preparation room progressively as needed.

3. Frozen or deep-frozen meat used in preparing ground meat or prepared meats before freezing must be bone removed, and it may be stored for a limited period only, unless the competent authority allows other appropriate methods.
4. When preparing chilled meat, you must prepare the meat:
  - a. In the case of poultry, within no more than 3 days of slaughtering;
  - b. In the case of animals other than poultry, within no more than 6 days of slaughtering; With the exception of boneless beef or veal, or packed in vacuum containers, it is allowed to be used within a period not exceeding 15 days from slaughter.
  - c. Minced meat and prepared meats must be packed or packed immediately after production and cooled to an internal temperature.
    - i. No more than 2 ° C for ground meat.
    - ii. No more than 4 ° C for processed meat.
    - iii. Or freeze it to an internal temperature not exceeding -18 ° C.
  - d. These temperature conditions must be maintained during storage and transportation.
5. It is not allowed to re-freeze meat and ground meat after defrosting.

## Chapter XIV:

### Thermal Processing

Processed meat products that are usually eaten without further cooking must undergo a process sufficient to eliminate disease-causing bacteria, parasites, and forms of cystic parasites.

## Chapter XV

### Manufacture and Processing of Dairy Products

#### Part I: Requirements Concerning Dairy Products

1. Temperature requirements
  - a. When receiving milk in a processing facility, operators of food establishments should ensure that they are milk is rapidly cooled provided the temperature does not exceed 6 ° C and it is kept at this temperature until it is processed.
  - b. Operators of food establishments may maintain milk at a temperature higher than that mentioned in point (a) above if:
    - i. Treatment started immediately after milking or within 4 hours of reception in the treatment facility; or
    - ii. The competent authority shall declare a higher temperature for technical reasons related to the manufacture of some types of dairy products.

## II. REQUIREMENTS FOR HEAT TREATMENT

1. When raw milk or dairy products undergo heat treatment, food business operators must ensure that this satisfies the requirements of Annex II, Chapter XI above. In Particular they shall ensure, when using the following processes that they comply with the specifications below:

a. Pasteurisation is achieved by a treatment involving:

- i. A high temperature for a short time ( at least 720 C for 15 seconds)
- ii. A low temperature for a long time ( at least 630 C for 30 minutes) or
- iii. Sudden cooling to no more than 40 C
- iv. Any other combination of time-temperature conditions to obtain an equivalent effect such that the products show, where applicable, a negative reaction to an alkaline phosphatase test immediately after such treatment.

b) Ultra high temperature (UHT) treatment is achieved by a treatment:

- i. Involving a continuous flow of heat at a high temperature for a short time ( not less than 1350 C in combination with a suitable holding time) such that there are no viable microorganisms or spores capable of growing in the treated product when kept in an aseptic closed container at ambient temperature and
- ii. Sufficient to ensure that the products remain microbiologically stable after incubating for 15 days at 300 C in closed containers or for seven days at 550 C in closed containers or any other method demonstrating that the appropriate heat treatment has been applied

2. When considering whether to subject raw milk to heat treatment, food business operators must:

- a. Have regard to the procedures developed in accordance with the HACCP principles pursuant to CHAPTER II above; and
- b. Comply with any requirements that the competent authority may impose in this regard.

3. Food business operators manufacturing dairy products must initiate procedures to ensure that, immediately before processing:

- a. Any raw cows' milk used to prepare dairy products has a plate count at 30°C of less than 300 000 per ml; and
- b. Heat-treated cows' milk used to prepare dairy products has a plate count at 30°C of less than 100 000 per ml.

4. When milk fails to meet the criteria laid down in paragraph 1, the food business operator must inform the competent authority and take measures to correct the situation.

## Part II: Special Conditions for Dairy Products Treatment or Processing Establishments

In addition to the general requirements laid down in Chapters I-XII of this Annex, an establishment shall meet the requirements set out below

1. The establishment shall possess equipment for the mechanical filling and proper automatic sealing of containers (except for milk pumps, tanks and bulk packaging of more than 4 liters) which are to be used for packaging Milk or its heat treated products.
2. The facility must have equipment for refrigeration and cold storage of milk and its thermally processed products, if raw milk is stored, purified or calibrated in a facility, then it must have equipment for refrigeration and cold storage for it and refrigerators are equipped with calibrated temperature measuring devices correctly.
3. The facility must own:
  - a. In the event that disposable packages are used to package and package the products, there must be an area for storing these containers and for storing the materials intended for their manufacture; And
  - b. If reusable containers are used for packing and packaging products, there should be a special area for storing them and equipment designed to be cleaned and sterilized automatically.
4. The facility must have containers for storing raw milk and, when needed, calibration equipment and containers for storing milk.
5. The facility should have centrifuges or any other suitable means for disinfecting milk when needed.
6. Subject to subparagraph (2) below, the treatment facility must possess heat treatment equipment approved and licensed by the competent authority to process dairy products, provided that it is equipped with the following:
  - a. Automatic temperature control
  - b. thermometer;
  - c. Automatic safety device to prevent insufficient heating;
  - d. An adequate safety device prevents the thermally treated drinking milk from mixing with milk that has not undergone a complete heat treatment; And
  - e. An automatic recording device that records the operation of the safety system referred to in subparagraph (d) above or establishes a procedure to monitor the effectiveness of the system; It is also permissible for a treatment facility to own equipment different from the above, provided that it performs equivalent performance with equal guarantees regarding cleanliness and the competent authority has authorized its use.

7. The treatment facility should have equipment for heating or heat treatment if these processes are carried out in that facility that meets the sanitary requirements.
8. The facility should have equipment for cooling, packaging and storing frozen milk based products if these operations are carried out in that facility.
9. The establishment must have equipment for drying and packaging dried milk products if these operations are carried out in that establishment.
10. When needed, it is necessary to divide the rooms designated for production operations into wet and dry areas, each with its own operating conditions.
11. Facilities for sterilizing tools with hot water at a temperature not lower than 82 ° C, or an alternative system with a similar effect.

### **Part III: WRAPPING, PACKAGING and LABELLING**

#### **Without prejudice to the requirements of approved legislation:**

1. The product packages must be closed tightly after filling them directly in the facility where the final heat treatment is performed for the liquid dairy products, provided that it is done using devices that prevent leakage and thus prevent contamination.
2. It must be indicated on the cards any milk or milk products offered in the following market:
  - a. The phrase "raw milk" in the case of raw milk;
  - b. The phrase "made from raw milk" in the case of products made from raw milk where the manufacturing process does not include any heat treatment or any physical or chemical treatment.

## Chapter XVI

### Manufacture and Processing of Fishery Products

**With regard to fish products:**

- A. Primary production includes farming, hunting and gathering of live fish products with the aim of placing them on the market; And
- B. Associated operations include the following, which may take place on board a fishing vessel: head cutting, deburring, fin removal, cooling and packing, and also include:
  - 1. Transport and storage of fish products whose nature has not changed substantially, including live fish products, inside fish farms on land, and
  - 2. Transportation and storage of fish products whose nature has not changed substantially, including live fish products, from the place of production to the first intended facility.

#### **PART I: REQUIREMENTS DURING AND AFTER Docking:**

- 1. Food facility operators responsible for unloading and landing fish products:
  - a. Ensure that unloading and unloading equipment that comes into contact with fish products is designed to be easy to clean Disinfected and kept in good working condition and cleanliness; And
  - b. Avoid contamination of fish products during unloading and landing, especially by:
    - i. Rapid implementation of unloading and landing operations;
    - ii. To place fish products without delay in a protected environment at the temperature specified in section 7; And
    - iii. Failure to use equipment and practices that may cause damage to the edible parts of fish products.
- 2. Operators of food establishments responsible for fish landing sites, auction halls, wholesale markets or parts thereof where fish products are put up for sale must ensure compliance with the next requirements.:
  - a. That there be lockable facilities for the cold storage of the retained fish products and separate facilities Lockable for storing fish products that are not suitable for human consumption.
  - b. There must be suitably equipped lockable facilities or, if needed, room for Exclusive use by the competent authority if requested.
- 3- At the time of display or storage of fish products:
  - a. The facilities must not be used for other purposes;
  - b. Vehicles that emit exhaust fumes that are likely to harm the quality of fish products must not reach the facilities;
  - c. Persons with access to the facilities are prohibited from bringing in other animals; And
  - d. The facilities must be equipped with adequate lighting to facilitate official control tasks.

4- Fresh fish products, other than those that have been preserved, must be cooled. After they are lowered and stored at a temperature close to melting ice, when cooling is not possible on board the ship.

## **PART II: REQUIREMENTS FOR ESTABLISHMENTS HANDLING FISHERY PRODUCTS**

**In establishments handling fishery products, food business operators must ensure compliance with the following requirements, where relevant.**

### **A. REQUIREMENTS FOR FRESH FISHERY PRODUCTS**

Operators of fish products handling facilities must ensure that the following requirements are met:

#### **A. special requirements for fresh fish products**

1. In the case of refrigeration, the unpacked products are not distributed, dispatched, prepared or prepared immediately after their arrival at the berth. Heat nears melting ice.
2. Operations such as head and viscera removal are carried out in a safe manner and to ensure the safety of the products. When evisceration is required for any reason, whether commercial or technical, it should be carried out as soon as possible after fishing or unloading the products in the marina, and the products must be completely washed with drinking water or With clean water after carrying out these operations, even if they are carried out on ships.
3. Operations such as vacuuming and cutting to avoid contamination or damage to the slices, must be performed and filled and cooled as soon as possible after preparing them.
4. The containers used for transporting or storing fresh, processed fish products that are not packed under ice, are stored, and it is ensured that meltwater does not come into contact with the products.
5. It is permissible to transport and store whole fresh fish products or their entrails in cooling water on board the ships, and they may continue to be transported in cooled water after landing and transported from the aquaculture facilities until they reach other facilities for other operations.

#### **B. Requirements for frozen fish products:**

Fish processing facilities that freeze fish products should have the following:

- a. Freezing equipment of sufficient capacity to reduce the temperature rapidly in order to achieve a base temperature of no more than  $-18^{\circ}\text{C}$ ;
- b. Trays must be made of stainless materials.
- c. Cooling equipment of sufficient capacity to preserve residential products at more than  $-18^{\circ}\text{C}$ .

f. Conditions related to parasites:

I. Food facility operators must ensure that fish products are subjected to visual inspection for the purpose of discovering visible parasites before they are put on the market, fish products clearly contaminated with parasites are not put on the market for human consumption.

II. The following fish products must be frozen at a temperature not higher than  $-20^{\circ}\text{C}$  in all parts of the product for a period of not less than 24 hours from the date of fishing; This treatment applies to the raw or final product:

i. Fish products to be consumed roughly in their raw or raw state.

ii. Fish products of the following classes, if they are to undergo a cold smoking process in which the internal temperature does not exceed  $60^{\circ}\text{C}$ :

1. Herring
2. Mackerel
3. Sprat
4. Salmon (not farmed) from the Atlantic and Pacific Oceans; And
5. Marinated and / or salted fish products, if treatment is insufficient to destroy nematode larvae.

C. Food facility operators do not need to perform the treatment required by paragraph 1 if:

1. Epidemiological information was available indicating that the basis of origin for hunting does not constitute a health hazard in relation to the presence of parasites; And
2. The regulator has stated this.

D. A document from the manufacturer must be attached indicating the type of process that the fish products referred to in paragraph 1 were subjected to when they were put on the market, except when they are supplied to the final consumer.

### **PART III: REQUIREMENTS FOR PROCESSED FISHERY PRODUCTS**

**Food business operators cooking crustaceans and molluscs must ensure compliance with the following requirements.**

1. Rapid cooling must follow cooking. Water used for this purpose must be potable water. If no other method of preservation is used, cooling must continue until a temperature approaching that of melting ice is reached.
2. Shelling or shucking must be carried out hygienically, avoiding contamination of the product. Where such operations are done by hand, workers must pay particular attention to washing their hands.
3. After shelling or shucking, cooked products must be frozen immediately, or be chilled as soon as possible to the temperature of melting ice.

### **PART IV: HEALTH STANDARDS FOR FISHERY PRODUCTS**

**Food business operators must ensure, depending on the nature of the product or the species, that fishery products placed on the market for human consumption meet the following:**

#### **A. ORGANOLEPTIC PROPERTIES OF FISHERY PRODUCTS**

Food business operators must carry out an organoleptic examination of fishery products. In particular, this examination must ensure that fishery products comply with any freshness criteria.

#### **B. HISTAMINE**

1. Food business operators must ensure that the limits with regard to histamine are not exceeded.
2. Levels of histamine must not exceed 200 mg/kg in any fishery product at any time during its shelf life.

#### **C. TOTAL VOLATILE NITROGEN**

Unprocessed fishery products must not be placed on the market if chemical tests reveal that the limits with regard to TVB-N or TMA-N have been exceeded.

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Unprocessed fishery products must not be placed on the market if chemical tests reveal that the limits with regard to TVB-N or TMA-N have been exceeded.

### E. TOXINS HARMFUL TO HUMAN HEALTH

1. Fishery products derived from poisonous fish of the following families must not be placed on the market: Tetraodontidae, Molidae, Diodontidae and Canthigasteridae.
2. Fishery products containing biotoxins such as ciguatoxin or muscle-paralysing toxins must not be placed on the market.
3. Fishery products derived from bivalve molluscs, echinoderms, tunicates and marine gastropods may be placed on the market if they meet the following criteria:
  - a. They must have organoleptic characteristics associated with freshness and viability, including shells free of dirt, an adequate response to percussion and normal amounts of intravalvular liquid.
  - b. They must not contain marine biotoxins in total quantities (measured in the whole body or any part edible separately) that exceed the following limits:
    - i. For Paralytic Shellfish Poison (PSP), 800 micrograms per kilogram;
    - ii. For Amnesic Shellfish Poison (ASP), 20 milligrams of domoic acid per kilogram
    - iii. For okadaic acid, dinophysistoxins and pectenotoxins together, 160 micrograms of okadaic acid equivalents per kilogram;
    - iv. For yessotoxins, 1 milligram of yessotoxin equivalent per kilogram; and
    - v. For azaspiracids, 160 micrograms of azaspiracid equivalents per kilogram.

## PART VI: WRAPPING AND PACKAGING OF FISHERY PRODUCTS

1. Receptacles in which fresh fishery products are kept under ice must be water-resistant and ensure that melt water does not remain in contact with the products.
2. Frozen blocks prepared on board vessels must be adequately wrapped before landing.
3. When fishery products are wrapped on board fishing vessels, food business operators must ensure that wrapping material:
  - i. Is not a source of contamination;
  - ii. Is stored in such a manner that it is not exposed to a risk of contamination;
  - iii. Intended for re-use is easy to clean and, where necessary, to disinfect.

## **PART VII: STORAGE OF FISHERY PRODUCTS**

**Food business operators storing fishery products must ensure compliance with the following requirements.**

1. Fresh fishery products, thawed unprocessed fishery products, and cooked and chilled products from crustaceans and molluscs, must be maintained at a temperature approaching that of melting ice.
2. Frozen fishery products must be kept at a temperature of not more than  $-18^{\circ}\text{C}$  in all parts of the product; however, whole frozen fish in brine intended for the manufacture of canned food may be kept at a temperature of not more than  $-9^{\circ}\text{C}$ .
3. Fishery products kept alive must be kept at a temperature and in a manner that does not adversely affect food safety or their viability.

## **PART VIII: TRANSPORT OF FISHERY PRODUCTS**

**Food business operators transporting fishery products must ensure compliance with the following requirements.**

1. During transport, fishery products must be maintained at the required temperature. In particular:
  - a. Fresh fishery products, thawed unprocessed fishery products, and cooked and chilled products from crustaceans and molluscs, must be maintained at a temperature approaching that of melting ice;
  - b. Frozen fishery products, with the exception of frozen fish in brine intended for the manufacture of canned food, must be maintained during transport at an even temperature of not more than  $-18^{\circ}\text{C}$  in all parts of the product, possibly with short upward fluctuations of not more than  $3^{\circ}\text{C}$ .
2. If fishery products are kept under ice, melt water must not remain in contact with the products.
3. Fishery products to be placed on the market live must be transported in such a way as not adversely to affect food safety or their viability.

## Chapter XVII: EGGS AND EGG PRODUCTS

### Part I: EGGS

1. At the producer's premises, and until sale to the consumer, eggs must be kept clean, dry and free of extraneous odour, effectively protected from shocks and out of direct sunshine.
2. Eggs must be stored and transported at a temperature, preferably at a constant degree of 25°C, that is best suited to assure optimal conservation of their hygiene properties.
3. Eggs must be delivered to the consumer within a maximum time limit of 21 days of laying.

### Part II: EGG PRODUCTS

#### A. REQUIREMENTS FOR ESTABLISHMENTS

Food business operators must ensure that establishments for the manufacture of egg products are constructed, laid out and equipped so as to ensure separation of the following operations:

- 1) Washing, drying and disinfecting dirty eggs, where carried out;
- 2) Breaking eggs, collecting their contents and removing parts of shells and membranes; and
- 3) Operations other than those referred to in points 1 and 2.

#### B. RAW MATERIALS FOR THE MANUFACTURE OF EGG PRODUCTS

Food business operators must ensure that raw materials used to manufacture egg products comply with the following requirements.

1. The shells of eggs used in the manufacture of egg products must be fully developed and contain no breaks. However, cracked eggs may be used for the manufacture of egg products if the establishment of production or a packing centre delivers them directly to a processing establishment, where they must be broken as soon as possible.
2. Liquid egg obtained in an establishment approved for that purpose may be used as raw material. Liquid egg must be obtained in accordance with the requirements of points 1, 2, 3, 4 and 7 of Part III.

## C. SPECIAL HYGIENE REQUIREMENTS FOR THE MANUFACTURE OF EGG PRODUCTS

Food business operators must ensure that all operations are carried out in such a way as to avoid any contamination during production, handling and storage of egg products, in particular by ensuring compliance with the following requirements.

1. Eggs must not be broken unless they are clean and dry.
2. Eggs must be broken in a manner that minimises contamination, in particular by ensuring adequate separation from other operations. Cracked eggs must be processed as soon as possible.
3. Eggs other than those of hens, turkeys or guinea fowl must be handled and processed separately. All equipment must be cleaned and disinfected before processing of hens', turkeys' and guinea fowls' eggs is resumed.
4. Egg contents may not be obtained by the centrifuging or crushing of eggs, nor may centrifuging be used to obtain the remains of egg whites from empty shells for human consumption.
5. After breaking, each particle of the egg product must undergo processing as quickly as possible to eliminate microbiological hazards or to reduce them to an acceptable level.
  - a. A batch that has been insufficiently processed may immediately undergo processing again in the same establishment, if this processing renders it fit for human consumption.
  - b. When a batch is found to be unfit for human consumption, it must be denatured so as to ensure that it is not used for human consumption.
6. Processing is not required for egg white intended for the manufacture of dried or crystallised albumin destined subsequently to undergo heat treatment.
7. If processing is not carried out immediately after breaking, liquid egg must be stored either frozen or at a temperature of not more than 4 °C. The storage period before processing at 4 °C must not exceed 48 hours. However, these requirements do not apply to products to be de-sugared, if de-sugaring process is performed as soon as possible.
8. Products that have not been stabilised so as to be kept at room temperature must be cooled to not more than 4 °C. Products for freezing must be frozen immediately after processing.

#### D. ANALYTICAL SPECIFICATIONS

1. The concentration of 3-OH-butyric acid must not exceed 10 mg/kg in the dry matter of the unmodified egg product.
2. The lactic acid content of raw material used to manufacture egg products must not exceed 1 g/kg of dry matter. However, for fermented products, this value must be the one recorded before the fermentation process.
3. The quantity of eggshell remains, egg membranes and any other particles in the processed egg product must not exceed 100 mg/kg of egg product.

#### F. LABELLING AND IDENTIFICATION MARKING

1. Consignments of egg products, destined not for retail but for use as an ingredient in the manufacture of another product, must have a label giving the temperature at which the egg products must be maintained and the period during which conservation may thus be assured.
2. In the case of liquid eggs, the label referred to in paragraph 1 must also bear the words: "non-pasteurised egg products - to be treated at place of destination" and indicate the date and hour of breaking.

### Chapter XVIII: Honey

In addition to the general requirements of Chapters I & II and Chapters V to XII

The GSO- standard 147 shall apply insofar they are relevant and complement the requirements of this Chapter.

### Chapter XIX: Water

In addition to the general requirements of Chapters I & II and Chapters V to XII

the standards GSO 987 ; GSO 1928 ; GSO 1025 ; 149 and GSO 2232 shall apply insofar they are relevant and complement the requirements of this Chapter.

