# Preservatives in Food (Amendment) Regulation 2024 Preservatives and Antioxidants User Guidelines

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#### 1 Introduction

#### 1.1 Purpose

The Preservatives in Food (Amendment) Regulation 2024 (the Amendment Regulation) was tabled at the Legislative Council in October 2024 and shall come into operation on 30 December 2024. The Amendment Regulation amended the Preservatives in Food Regulation (Cap. 132BD). These User Guidelines (Guidelines) aim to assist the trade in having a better understanding of the amended Cap. 132BD, and to answer some of the frequently asked questions. The Guidelines also provide detailed description of the categories and sub-categories under the updated food category system for consistent interpretation and application.

The Guidelines make reference to the Codex General Standard for Food Additives (Codex Stan 192-1995) (GSFA), with modifications to cater for the local situation. The Guidelines are subject to revision.

#### 1.2 Background

The regulation of preservatives and antioxidants in food is governed by the Preservatives in Food Regulation (Cap. 132BD). It is set out in the Policy Measures of the Chief Executive's 2022 Policy Address that the Government would review and update by phases the food safety legislation relating to additives in food to further enhance food safety. As the first phase of the review, the Environment and Ecology Bureau and the Centre for Food Safety of the Food and Environmental Hygiene Department had reviewed the food safety standards of preservatives and antioxidants. It was further set out in the Policy Measures of the Chief Executive's 2023 Policy Address that the Government would complete the related legislative exercise within 2024.

With a view to aligning local and international food safety standards, enhancing consumer protection, and facilitating the food trade, the Amendment Regulation was made in October 2024 by adopting the Codex standards as the backbone, supplemented with the relevant standards of the Mainland and that of Hong Kong's other major food trading partners.

#### 1.3 Disclaimer

The Guidelines, which should be read in conjunction with Cap. 132BD and the Amendment Regulation, are intended for use as a general reference only. Information contained in the Guidelines may not be exhaustive or complete. Specific issues should be considered on a case-by-case basis. The Guidelines do not have the force of the law and should not be interpreted in any manner which would override the provisions of the Amendment Regulation

and the amended Cap. 132BD. In case of any inconsistency, the statutory provisions will prevail. The Guidelines should not be regarded as legal advice. If you need legal advice, you must contact your own lawyer.

The Guidelines may be amended or supplemented by the Director of Food and Environmental Hygiene as necessary from time to time.

#### 1.4 Definitions

- 1.4.1 According to the Amendment Regulation, "Antioxidant"
  - (a) means a substance, not normally consumed as food by itself nor normally used as a typical ingredient of food, that, when added to, or used in or on, food at any stage of food processing, is capable of prolonging the shelf-life of the food by protecting against deterioration caused by oxidation; but
  - (b) does not include any vitamins or minerals added to food as nutrients.
- 1.4.2 According to the Amendment Regulation, "Preservative"
  - (a) means a substance, not normally consumed as food by itself nor normally used as a typical ingredient of food, that, when added to, or used in or on, food at any stage of food processing, is capable of prolonging the shelf-life of the food by protecting against deterioration caused by microorganisms; but
  - (b) does not include—
    - (i) common salt (sodium chloride);
    - (ii) sugars;
    - (iii) alcohol or potable spirits, isopropyl alcohol or monoacetin;
    - (iv) herbs or hop extract;
    - (v) spices or essential oils when used for flavouring purposes;
    - (vi) any substance added to food by the process of curing known as smoking; or
    - (vii) any vitamins or minerals added to food as nutrients.

The above updated definitions widen the coverage of preservative and antioxidant in Cap. 132BD, as certain substances previously excluded under the definitions before the amendments now fall within the definitions. As a result, a total of 25 food additives have been brought under the regulatory remit of Cap. 132BD and become permitted preservatives and antioxidants with specified standards under the amended Cap. 132BD.

There exist certain preservatives and antioxidants which are capable of performing functions besides preservation or antioxidation – i.e. the multi-functional food additives. The definitions of antioxidant and preservative cover multi-functional food additives that are capable of functioning as preservative or antioxidant in food. As such, their usage has to comply with the statutory standards specified in Cap. 132BD, regardless of their actual function to be carried out in a particular food. For example, the use of citric acid as an acidity regulator in

fruit juice should comply with the relevant maximum permitted level for the food category "14.1.2.1 Fruit juice" at 3000 mg/kg in the updated Schedule 1 to the amended Cap. 132BD.

#### 2 Conditions of Use of Preservatives and Antioxidants

There are 29 newly added food additives permitted for food use under the amended Cap. 132BD. In addition to the 25 newly added food additives from the updated definitions, four food additives, namely benzol peroxide, lauric arginate ethyl ester, stearyl citrate and rosemary extract have been added to the permitted list; whilst 3 food additives, namely copper carbonate, diphenyl and formic acid, have been removed. All the 29 newly added food additives have been evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) on their safety for use in food.

Under the amended Cap. 132BD, the total number of permitted preservatives and antioxidants increases from 32 to 58; among them, 24 are food additives that are acceptable for general use in foods when used in accordance with the principles of good manufacturing practice (GMP). These 24 food additives are set out in Schedule 1B to the amended Cap. 132BD. On the other hand, Schedule 1C to the amended Cap. 132BD lists out the food categories or sub-categories to which the permitted use of these 24 GMP additives in accordance with GMP principles does not apply.

#### 2.1 Permitted Preservatives and Antioxidants

Permitted preservatives and antioxidants refer to food additives specified in column 2 of Schedule 1 or column 2 of Schedule 1B to the amended Cap. 132BD.

#### 2.2 Foods Permitted to Contain Preservatives and Antioxidants

The preservatives and antioxidants listed in Schedule 1 to the amended Cap. 132BD may be used in the food categories specified, and their use must observe the maximum permitted levels and the notes (if available) specified in Schedule 1.

On the other hand, the preservatives and antioxidants listed in Schedule 1B to the amended Cap. 132BD are permitted to be added to food in accordance with GMP principles, except any relevant food of a scheduled food category that is specified in Schedule 1C.

#### 2.3 Maximum Permitted Levels

Cap. 132BD imposes limits on the level at which certain preservatives and antioxidants may be present in food. The "maximum permitted level" means the greatest proportion of a permitted preservative or antioxidant, specified in column 3 of Schedule 1, that is allowed to be present in the relevant food.

Certain permitted preservatives and antioxidants specified in the updated Schedule 1 to the amended Cap. 132BD are listed in the form of "food additive group" (such as benzoates); and all the permitted food additives that constitute the "food additive group" (i.e. "participating additives" such as benzoic acid, sodium benzoate, potassium benzoate and calcium benzoate) are listed in Column 2 of Schedule 1A, opposite to the corresponding "food additive group" in Column 1. In relation to permitted food additives that are participating additives of a food additive group, the "maximum permitted level" for that group means the proportion applicable to the total amount of the participating additives in that group.

The maximum permitted level is generally expressed as "mg additive/ kg of food". However, there are some exceptions. For example, natamycin (pimaricin) in cheese may be expressed as "mg additive/ dm²" (surface area) of food, in addition to the maximum permitted level expressed as "mg/kg". Besides, the maximum permitted levels for permitted preservatives or antioxidants in food category "13.1 Infant formulae and follow-up formulae" are expressed as "mg additive/ L of food". Unless otherwise specified, all the maximum permitted levels for preservatives and antioxidants indicated in Cap. 132BD refer to the levels in food as sold.

#### 2.4 Good Manufacturing Practice

Maximum permitted levels for certain "preservatives / antioxidants – food pairs" are set at GMP in Schedule 1. On the other hand, preservatives and antioxidants listed in Schedule 1B are permitted to be added to food in accordance with GMP principles, except any relevant food of a scheduled food category that is also specified in Schedule 1C. The GMP principles governing the use of preservatives and antioxidants refer to **good manufacturing practice** that complies with the following:

- (a) the quantity of the food additive added to the food is limited to the lowest possible level necessary to accomplish the desired effect of adding it;
- (b) the quantity of the food additive that becomes a component of the food as a result of its use in the manufacturing, processing or packaging of a food and that is not intended to accomplish any physical or other technical effect in the food itself, is reduced to a reasonably possible extent; and
- (c) the food additive is prepared and handled in the same way as a food ingredient.

In addition, the use of permitted preservatives and antioxidants in food must comply with other relevant legislation in Hong Kong, including the Public Health and Municipal Services Ordinance (Cap. 132) and the Food and Drugs (Composition and Labelling) Regulations (Cap. 132W); and their uses also need to observe the general provision that all food sold must be fit for human consumption.

#### 2.5 Use of Two or More Preservatives and Antioxidants

Unless specified otherwise, the use of two or more preservatives and/ or antioxidants in a food is generally permitted, provided that all relevant preservatives and/ or antioxidants are permitted for use in the relevant food category in Schedule 1 to the amended Cap. 132BD and that the maximum permitted levels for each individual preservative and/ or antioxidant are observed. In some cases, specific provisions are made in Column 4 (i.e. Note) of Schedule 1 concerning combined use of preservatives and/ or antioxidants and they must be observed. For example, according to Note 14 in Column 4 for category 7.2.3 (Mixes for fine bakery wares) of Schedule 1, in relation to butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), propyl gallate, octyl gallate, dodecyl gallate and tertiary butylhydroquinone (TBHQ), 2 or more of these food additives can be used in combination only if the following condition is satisfied: when the quantity of each such food additive present in that food is expressed as a percentage of the maximum permitted level, the sum of those percentages does not exceed 100.

#### 2.6 Nisin in Canned Food

According to section 2 of Cap. 132BD, "canned food" refers to "food in a hermetically sealed container which has been sufficiently heat processed to destroy any Clostridium Botulinum in that food or container or which has a pH of less than 4.5".

Section 3(8) of Cap. 132BD before the amendments permitted (i) any canned food (including canned food that is compounded food) to contain nisin, and (ii) any other food to contain nisin where it is introduced in the preparation of that food by the use of canned food containing nisin. In the amended Cap. 132BD, various "nisin-food" pairs are added to the updated Schedule 1 to specify the maximum permitted levels for nisin in certain food categories or sub-categories. Hence section 3(8) is correspondingly updated so that if there are relevant "nisin-food" pairs in Schedule 1, the proportion of nisin that may be present in (i) and (ii) above is limited to the applicable maximum permitted level.

In other words, the use of nisin in canned food (including compounded canned food) under the amended Cap. 132BD can be interpreted as follows:

- (a) If maximum permitted level for the applicable "nisin-food" pair is specified in the updated Schedule 1 (as shown in the examples below), then the proportion of nisin in the canned food shall not exceed the relevant maximum permitted level.
  - Example 1: Canned tomatoes fall under food category "4.2.2.4 Canned or bottled (pasteurized or heat-sterilized) or retort pouch vegetables and seaweeds" in the updated Schedule 1 with a maximum permitted level of 5 mg/kg for nisin. By virtue of the new section 3(8) of the amended Cap. 132BD, such canned tomatoes may contain nisin in a proportion not exceeding 5 mg/kg.

Example 2: Canned condensed milk falls under food category "1.3.1 Condensed milk (plain), including evaporated milk and sweetened condensed milk" in the updated Schedule 1 with a maximum permitted level of 12.5 mg/kg for nisin. By virtue of the new section 3(8) of the amended Cap. 132BD, such canned condensed milk may contain nisin in a proportion not exceeding 12.5 mg/kg.

(b) If a food category or sub-category has no "nisin-food" pair specified in the updated Schedule 1 (as shown in the examples below), then the canned food product of such food category or sub-category may contain nisin – and in such case, nisin should be used in accordance with GMP principles.

Example 3: nisin is not specified in the updated Schedule 1 for canned fruit salad, which falls under food category "4.1.2.4 Canned or bottled (pasteurized or heat-sterilized) fruit". By virtue of the new section 3(8) of the amended Cap. 132BD, such canned fruit salad may contain nisin. In such case, nisin should be used in accordance with GMP principles.

Example 4: nisin is not specified in the updated Schedule 1 for canned coconut milk, which falls under food category "4.1.2.8 Fruit preparations, including pulps, purees, fruit sauces, fruit toppings, coconut milk and coconut cream". By virtue of the new section 3(8) of the amended Cap. 132BD, such canned coconut milk may contain nisin. In such case, nisin should be used in accordance with GMP principles.

Example 5: food categories 1-16 under the updated Schedule 1 does not provide any maximum permitted level for nisin in certain canned compounded foods (e.g. prepared meals such as canned double-cooked pork (回鍋肉) containing meat, vegetables and sauces). By virtue of the new section 3(8) of the amended Cap. 132BD, such canned compounded food may contain nisin. In such case, nisin should be used in accordance with GMP principles.

It should be noted that the requirements under the updated section 3(8) apply to "canned food" which fits the interpretation as defined in section 2.

#### 2.7 Carry-over of Preservatives and Antioxidants into Compounded Food

A compounded food is one that is prepared using two or more ingredients. Pizza is an example of a compounded food. It is impractical to specify permitted preservatives and antioxidants for all compounded foods and their maximum permitted levels. As stipulated in the amended Cap. 132BD, a compounded food is permitted to contain preservatives and/ or antioxidants, if they are permitted to be used in the individual ingredients of the compounded food. For a permitted preservative or antioxidant specified in Schedule 1 for an ingredient of a compounded food, its proportion present in the compounded food should not exceed, in

relation to the quantity of the ingredient used, the maximum permitted level. For a permitted preservative or antioxidant specified in Schedule 1B, it should be used in an ingredient of the compounded food in accordance with GMP principles provided that the ingredient is not a relevant food of a scheduled food category that is also specified in Schedule 1C.

#### 2.8 Specifications on the Usage of Permitted Preservatives and Antioxidants

Additional specifications on the usage of permitted preservatives and antioxidants may be imposed in certain food categories under Schedule 1 to the amended Cap. 132BD. These specifications are stipulated by Notes in Column 4 of Schedule 1 and must be observed.

#### Examples:

- Note 28 for food category "1.7 Dairy-based desserts, including ready-to-eat flavoured dairy dessert products and dessert mixes (e.g. ice cream, pudding and fruit or flavoured yoghurt), excluding plain fermented milks (e.g. plain yoghurt) of food category 1.2.1 and its sub-categories (if applicable)" states that the level of propyl gallate is calculated on the dry ingredient, dry weight, dry mix or concentrate basis.
- Note 16 for benzoates in food category "8.2.1.2 Cured (including salted) and dried non-heat treated processed meat, poultry and game products in whole pieces or cuts", and food category "8.3.1.2 Cured (including salted) and dried non-heat treated processed comminuted meat, poultry and game products" states that benzoates are for in surface treatment only.

#### 2.9 Preservatives and Antioxidants That Are Naturally Present in Food

As stipulated in section 3(10) of Cap. 132BD, "subsection (1) does not apply to an article of food containing any food additive that is naturally present in that food". In other words, the possible natural occurrence of certain preservatives or antioxidants and their levels in the food concerned would be taken into account during the routine food surveillance and enforcement of Cap. 132BD.

#### 2.10 Exemption

The Amendment Regulation adds a new definition of food to exclude food for special medical purposes from the application of Cap. 132BD.

Codex<sup>1</sup> has defined food for special medical purposes as a category of food for special dietary uses <sup>2</sup> "which are specially processed or formulated and presented for the dietary management of patients and may be **used only under medical supervision**. They are intended for the exclusive or partial feeding of patients with limited or impaired capacity to take, digest, absorb or metabolise ordinary foodstuffs or certain nutrients contained therein, or who have other special medically-determined nutrient requirements, whose dietary management cannot be achieved only by modification of the normal diet, by other foods for special dietary uses, or by a combination of the two."

FSMP includes "formulae for special medical purposes for infants and young children", such as formulae for infants and young children suffering from metabolic disorders (e.g. maple diabetes or phenylketonuria), and formulae for preterm infants or infants and young children suffering from specific groups of diseases such as lactose intolerance. Other FSMPs include products for dietary management of patients with diseases, such as formulae for cancer treatment, formulae for impaired gastrointestinal functions and products for patients with swallowing difficulties.

To ensure that the patients are well-informed about the product is **for special medical purpose** (i.e. for dietary management of patients) and may be **used only under medical supervision**, food for special medical purposes is recommended to be marked or labelled with following conspicuously on the package—

- (i) the words "food for special medical purposes" or "特殊醫用食品", or any other words of similar meaning;
- (ii) the words "USE UNDER MEDICAL SUPERVISION" or "在醫生指示下使用", or any other words of similar meaning; and
- (iii) a statement stating "For the dietary management of (fill in the disease, disorder or medical condition for which the food is intended to be used or known to be effective)", or showing any other words of similar meaning.

For details, please refer to the "Additional Frequently Asked Questions" available at the CFS' website.

Codex Standard for the Labelling of and Claims for Foods for Special Medical Purposes (Codex Stan 180-1991).

Food for special dietary use is those specially processed or formulated to satisfy particular dietary requirements which exist because of a particular physical or physiological condition and/or specific disease and disorders and which are presented as such. The composition of these food stuffs must differ significantly from the composition of ordinary foods of comparable nature, if such ordinary foods exist. It should be noted that the presentation of the product as a food for special dietary use needs to observe relevant provisions in existing law of Hong Kong, including the Undesirable Medical Advertisements Ordinance (Cap. 231) and general food labeling requirements. For details please visit: https://www.cfs.gov.hk/english/programme/programme\_niff/programme\_niff\_fag.html

### 2.11 Use of Antioxidants in "Food Intended to be Consumed Principally by Persons Under the Age of 36 Months"

Section 4 of Cap. 132BD before the amendments prohibited the description or advertisement of any food as being food intended mainly for babies and young children (i.e. persons under the age of 36 months) if it has in it or on it any added antioxidant. In the amended Cap. 132BD, certain antioxidants, originally falling outside the definition of "antioxidant" before the amendments, are included as permitted antioxidants in the updated definitions as mentioned under 1.4.2 of this Guidelines. Some of these (e.g. acetic acid, ascorbic acid, citric acid, etc.) are permitted to be added to the food category "13 food intended to be consumed principally by persons under the age of 36 months" or its sub-categories as specified in the updated Schedule 1. Section 4 of Cap. 132BD is amended to exclude from its application any food falling within food category 13 or its sub-categories in the updated Schedule 1. In other words, the description and advertisement of such food (e.g. infant formula containing ascorbic acid as an antioxidant) would continue to be unaffected by section 4 of the amended Cap. 132BD. On the other hand, antioxidant-containing foods falling under food categories other than food category 13 (e.g. fruit juice-based beverage under food category "14.1.4 Water-based flavoured drinks" containing thiodipropionic acid as an antioxidant), are still not allowed to be described or advertised as being food product intended mainly for babies and young children.

#### 2.12 Transitional Arrangement

To allow sufficient time for the trade to prepare for the changes brought about by the Amendment Regulation, there will be a transitional period of 24 months. During the transitional period, any single food item may be legally imported or sold if it complies wholly with the requirements of either the Cap. 132BD before the amendments or the amended Cap. 132BD. If two food additives are added to a particular food item, it is not acceptable for one food additive to comply with the requirements of the existing Cap. 132BD and the other to comply with the requirements of the amended Cap. 132BD. On the other hand, food products which comply with the existing Cap. 132BD and are already on the shelf before commencement of the Amendment Regulation would be allowed to be sold until the end of the transitional period. During the transitional period, traders may also introduce new food products (including products that have undergone reformulation) that are in compliance with the amended Cap. 132BD.

After the end of the transitional period, the trade should fully comply with the requirements of the amended Cap. 132BD. Transitional period means the period beginning on 30 December 2024 and ending on 29 December 2026 (both dates inclusive).

#### 3 The Food Category System

#### 3.1 Principles of the Food Category System

Use of the food category system is based on the following principles:

- (a) The food category system is hierarchical, meaning that when a food additive is recognised for use in a general category, it is recognised for use in all its sub-categories, unless otherwise stated. Similarly, when a food additive is recognised for use in a sub-category, its use is recognised in any further sub-categories or individual foodstuffs mentioned in a sub-category.
- (b) The food category system is based on product descriptors of foodstuffs as marketed, unless otherwise stated.
- (c) Cap. 132BD adopts the carry-over principle. In other words, if an additive is permitted in one food and that food is subsequently used as an ingredient in another compounded food, the presence of the additive in the compounded food may be permitted under the carry-over principle. As such, the food category system does not need to specifically mention all compounded foodstuffs (e.g. pizza) because they may contain, pro rata, all the food additives permitted for use in their components.

#### 3.2 The Food Category Descriptors

The following food category descriptors are drawn up with reference to the Codex General Standard for Food Additives and provide detailed information on selected food categories and their sub-categories provided in the updated Schedule 1 to the amended Cap. 132BD. The descriptors do not cover all the categories provided in the law but only those that merit further elaboration.

Dairy products and analogues, excluding infant formulae and follow-up formulae of food categories 13.1.1 and 13.1.2 and their sub-categories (if applicable), and products of food category 2 and its sub-categories (if applicable)

This major category includes all types of dairy products that are derived from the milk of any milking animal (e.g. cow, sheep, goat, buffalo). In this category, with the exception of food category 1.1.4, a "plain" product is one that is not flavoured, nor contains fruit, vegetables or other non-dairy ingredients, nor is mixed with other non-dairy ingredients. Analogues are products in which milk fat has been partially or wholly replaced by vegetable fats or oils.

1.1 Fluid milk and milk products, excluding plain fermented milk products and plain renneted milk products of food category 1.2 and its sub-categories (if applicable)

This category includes all plain and flavoured fluid milks based on skimmed, partly skimmed and whole milk, excluding plain fermented products and plain renneted milk products of food category 1.2. Fluid milks are "milk products" that are obtained by the processing of milk, and may contain food additives and other ingredients functionally necessary for processing. Raw milk shall not contain any food additives.

#### 1.1.1 Fluid milk (plain), including skimmed, partly skimmed and whole milk

This category refers to plain fluid milk obtained from milking animals (e.g. cows, sheep, goats, buffalo) that has been processed. It includes pasteurized, ultra-heat treated (UHT), sterilized, homogenized, or fat adjusted milk. It also includes, but is not limited to, skimmed, partly skimmed and whole milk.

1.1.2 Other fluid milk (plain) (e.g. plain reconstituted fluid milks, non-flavoured vitamin and mineral fortified fluid milks, lactose reduced milk and plain milk-based beverages), excluding products of food categories 1.1.1, 1.1.3 and 1.2 and their sub-categories (if applicable)

This category includes all plain fluid milk, excluding products of food categories 1.1.1 Fluid milk (plain), 1.1.3 Fluid buttermilk (plain), and 1.2 Fermented and renneted milk products (plain). It includes, but is not limited to, plain recombined fluid milks, plain reconstituted fluid milks, plain composite milks, non-flavoured vitamin and mineral fortified fluid milks, protein adjusted milks, lactose reduced milk, and plain milk-based beverages. In this food category, plain products contain no added flavouring nor other ingredients that intentionally impart flavour, but may contain other non-dairy ingredients.

#### 1.1.3 Fluid buttermilk (plain)

Fluid buttermilk is the nearly milkfat-free fluid remaining from the butter-making process (i.e. churning fermented or non-fermented milk and cream). Fluid buttermilk is also produced by fermentation of fluid skim milk, either by spontaneous souring by the action of lactic acid-forming or aroma-forming bacteria, or by inoculation of heated milk with pure bacterial cultures (cultured buttermilk). Fluid buttermilk may be pasteurized or sterilized.

# 1.1.4 Flavoured fluid milk drinks, including mixes and ready-to-drink fermented or not fermented milk-based drinks with flavourings, excluding cocoa mixes of food category 5.1.1 and its sub-categories (if applicable)

This category includes all mixes and ready-to-drink fermented or not fermented milk-based drinks with flavourings and/or food ingredients that intentionally impart flavour, excluding mixes for cocoa (cocoa-sugar mixtures of food category 5.1.1). For examples, it includes but is not limited to chocolate milk, chocolate malt drinks, strawberry-flavoured yoghurt drink, lactic acid bacteria drinks, whey-based drinks, and lassi (liquid obtained by whipping curd from the lactic acid fermentation of milk, and mixing with sugar or intense sweetener).

# 1.2 Fermented and renneted milk products (plain), excluding flavoured products of food category 1.1.4 and its sub-categories (if applicable), and desserts of food category 1.7 and its sub-categories (if applicable)

This category includes all plain fermented or renneted products based on skimmed, partly skimmed and whole milk, excluding food category 1.1.4. Flavoured products are included in food categories 1.1.4 (beverages) and 1.7 (desserts).

#### 1.2.1 Fermented milks (plain)

This category includes all plain products, including fluid fermented milk, acidified milk and cultured milk. Plain yoghurt and plain drinks based on fermented milk, which do not contain flavouring or colours, may be found in one of the food sub-categories of 1.2.1 depending on whether it is heat-treated after fermentation or not.

#### 1.2.1.1 Fermented milks (plain), not heat-treated after fermentation

This category includes fluid and non-fluid plain products, such as yoghurt and plain drinks based on fermented milk.

#### 1.2.1.2 Fermented milks (plain), heat-treated after fermentation

This category includes products similar to that in food category 1.2.1.1, except that they have been heat-treated (e.g. sterilized or pasteurized) after fermentation.

### 1.2.2 Renneted milk (plain), excluding flavoured renneted milk products of food category 1.7 and its sub-categories (if applicable)

This category refers to plain, coagulated milk produced by the action of milk coagulating enzymes. It includes curdled milk. Flavoured renneted milk products are found in food category 1.7.

#### 1.3 Condensed milk and analogues (plain)

This category includes plain and sweetened types of condensed milk, evaporated milk, and their analogues (including beverage whiteners). It includes products based on skimmed, partly skimmed and whole milk, blends of evaporated skimmed milk and vegetable fat, and blends of sweetened condensed skimmed milk and vegetable fat.

1.3.1 Condensed milk (plain), including evaporated milk and sweetened condensed milk Condensed milk is obtained by partial removal of water from milk to which sugar may have been added. For evaporated milk, the water removal may be accomplished by heating. This category includes partially dehydrated milk, evaporated milk, sweetened condensed milk, and *khoa* (cow or buffalo milk concentrated by boiling).

#### 1.3.2 Beverage whiteners

This category refers to milk or cream substitute consisting of a vegetable fat-water emulsion in water with milk protein and lactose or vegetable proteins for use in beverages such as coffee and tea. It includes the same type of products in powdered form. It also includes condensed milk analogues, blends of evaporated skimmed milk and vegetable fat and blends of sweetened condensed skimmed milk and vegetable fat.

### 1.4 Cream (plain) and the like, excluding flavoured cream products of food categories 1.1.4 and 1.7 and their sub-categories (if applicable)

Cream is a fluid dairy product, relatively high in fat content in comparison to milk. This category includes all plain fluid, semi-fluid and semi-solid cream and cream analogue products. Flavoured cream products are found in food categories 1.1.4 (beverages) and 1.7 (desserts).

#### 1.4.1 Pasteurized cream (plain)

This category refers to cream subjected to pasteurization by appropriate heat treatment or made from pasteurized milk. It includes milk cream and "half-and-half".

### 1.4.2 Sterilized and ultra-heat treated (UHT) creams, whipping and whipped creams, and reduced fat creams (plain)

This category includes every cream, regardless of fat content, which has undergone a higher heat-treatment than pasteurization. It includes pasteurized creams with a reduced fat content, as well as every cream intended for whipping or being whipped. Sterilized cream is subjected to appropriate heat-treatment in the container in which it is presented to the consumer. UHT or ultrapasteurized cream is subjected to the appropriate heat treatment (UHT or ultrapasteurization) in a continuous flow process and aseptically packaged. Cream may also be packaged under pressure (whipped cream). It also includes whipping cream, heavy cream, whipped pasteurized cream, and whipped cream-type dairy toppings and fillings. Creams or toppings with partial or total replacement of milkfat by other fats are included in food category 1.4.4 (cream analogues).

#### 1.4.3 Clotted cream (plain)

Clotted cream refers to thickened, viscous cream formed from the action of milk coagulating enzymes. This category includes sour cream (cream subjected to lactic acid fermentation achieved as described for buttermilk (food category 1.1.3)).

### 1.4.4 Cream analogues, excluding beverage whiteners of food category 1.3.2 and its subcategories (if applicable)

This category refers to cream substitute consisting of a vegetable fat-water emulsion in liquid or powdered form for use other than as a beverage whitener (food category 1.3.2). It includes instant whipped cream toppings and sour cream substitutes.

#### 1.5 Milk powder and cream powder and powder analogues (plain)

This category includes plain milk powders, cream powders, or combination of the two, and their analogues. It includes products based on skimmed, partly skimmed and whole milk.

#### 1.5.1 Milk powder and cream powder (plain), including casein and caseinates

This category refers to milk products obtained by partial removal of water from milk or cream and produced in a powdered form. It includes products based on skimmed, partly skimmed and whole milk. It also includes casein and caseinates.

### 1.5.2 Milk powder analogues and cream powder analogues, excluding beverage whiteners of food category 1.3.2 and its sub-categories (if applicable)

This category refers to products based on a fat-water emulsion and dried for use other than as a beverage whitener (food category 1.3.2). Examples include imitation dry cream mix and blends of skimmed milk and vegetable fat in powdered form.

#### 1.6 Cheese and analogues, excluding cheese sauce of food category 12.6.2 and its subcategories (if applicable), cheese-flavoured snacks of food category 15.1 and its subcategories (if applicable), and composite prepared foods

Cheese and cheese analogues are products that have water and fat included within a coagulated milk-protein structure. Products such as cheese sauce (food category 12.6.2) and cheese-flavoured snacks (food category 15.1) are categorized elsewhere.

#### 1.6.1 Unripened cheese (e.g. cottage cheese, cream cheese and mozzarella cheese)

This category refers to unripened cheese, including fresh cheese, is ready for consumption soon after manufacture. Examples include cottage cheese (a soft, unripened, coagulated curd cheese), creamed cottage cheese (cottage cheese covered with a creaming mixture), cream cheese (rahmfrischkase, an uncured, soft spreadable cheese) mozzarella and scamorza cheeses. It includes the whole unripened cheese and unripened cheese rind (for those unripened cheeses with a "skin" such as mozzarella). Most products are plain, however, some, such as cottage cheese and cream cheese, may be flavoured or contain ingredients such as fruit, vegetables or meat.

#### 1.6.2 Ripened cheese (e.g. camembert cheese, cheddar cheese, edam cheese and gouda

#### cheese)

Ripened cheese is not ready for consumption soon after manufacture, but is held under such time and temperature conditions so as to allow the necessary biochemical and physical changes that characterise the specific cheese. For mould-ripened cheese, the ripening is accomplished primarily by the development of characteristic mould growth throughout the interior and/or on the surface of the cheese. Ripened cheese may be soft (e.g. camembert), firm (e.g. edam, gouda), hard (e.g. cheddar), or extra-hard. It also includes cheese in brine, which is a ripened semi-hard to soft cheese, white to yellowish in colour with a compact texture, and without actual rind that has been preserved in brine until presented to the consumer. Examples of ripened cheese include blue cheese, brie, gouda, havarti, hard grating cheese and Swiss cheese.

#### 1.6.2.1 Ripened cheese, includes rind

This category refers to ripened (including mould-ripened) cheese, including rind, or any part thereof, such as cut, shredded, grated or sliced cheese. Examples of ripened cheese include blue cheese, brie, gouda, havarti, hard grating cheese, and Swiss cheese.

#### 1.6.2.2 Rind of ripened cheese

This category refers to the rind only of the cheese. The rind of the cheese is the exterior portion of the cheese mass that initially has the same composition as the interior portion of the cheese, but which may dry after brining and ripening.

#### 1.6.2.3 Cheese powder (for reconstitution (e.g. for cheese sauces))

This category refers to dehydrated product prepared from a variety or processed cheese. It does not include grated or shredded cheese (food category 1.6.2.1 for variety cheese; food category 1.6.4 for processed cheese). Product is intended either to be reconstituted with milk or water to prepare a sauce, or used as-is as an ingredient (e.g. with cooked macaroni, milk and butter to prepare a macaroni and cheese casserole). It also includes spray-dried cheese.

#### 1.6.3 Whey cheese

This category refers to a solid or semi-solid product obtained by concentration of whey with or without the addition of milk, cream or other materials of milk origin, and moulding of the concentrated product. It includes the whole cheese and the rind of the cheese. This category is different from whey protein cheese (food category 1.6.6).

#### 1.6.4 Processed cheese (e.g. American cheese, requeson and pepper jack cheese)

This category refers to products with a very long shelf-life obtained by melting and emulsifying cheese. It includes products manufactured by heating and emulsifying mixtures of cheese, milkfat, milk protein, milk powder, and water in different amounts. Products may contain other added ingredients, such as aromas, seasonings and fruit, vegetables and/or meat. Product may be spreadable or cut into slices and pieces. The term "processed" does not mean cutting, grating, shredding, etc. of cheese. Cheeses treated by these mechanical processes are included under food category 1.6.2 (ripened cheese). This category includes:

- (a) Plain processed cheese product that does not contain added flavours, seasonings, fruit, vegetables and/or meat. Examples include American cheese, requeson; and
- (b) Flavoured processed cheese, including containing fruit, vegetables, meat, etc. product that contains added flavours, seasonings, fruit, vegetables and/or meat. Examples include neufchatel cheese spread with vegetables, pepper jack cheese, cheddar cheese spread with wine, and cheese balls (formed processed cheese coated in nuts, herbs or spices).

### 1.6.5 Cheese analogues, including imitation cheese, imitation cheese mixes and imitation cheese powders

This category refers to products that look like cheese, but in which milkfat has been partly or completely replaced by other fats. It includes imitation cheese, imitation cheese mixes, and imitation cheese powders.

#### 1.6.6 Whey protein cheese (e.g. ricotta cheese)

This category refers to products containing the protein extracted from the whey component of milk. These products are principally made by coagulation of whey proteins. Example: ricotta cheese. They are different from whey cheese (food category 1.6.3).

Dairy-based desserts, including ready-to-eat flavoured dairy dessert products and 1.7 dessert mixes (e.g. ice cream, pudding and fruit or flavoured yoghurt), excluding plain fermented milks (e.g. plain yoghurt) of food category 1.2.1 and its sub-categories (if applicable) This category includes ready-to-eat flavoured dairy dessert products and dessert mixes. includes frozen dairy confections and novelties, and dairy-based fillings. flavoured yoghurt (a milk product obtained by fermentation of milk and milk products to which flavours and ingredients (e.g. fruit, cocoa, coffee) have been added) that may or may not be heat-treated after fermentation. Other examples include ice cream (frozen dessert that may contain whole milk, skim milk products, cream or butter, sugar, vegetable oil, egg products, and fruit, cocoa, or coffee), ice milk (product similar to ice cream with reduced whole or skim milk content, or made with nonfat milk), jellied milk, frozen flavoured yoghurt, junket (sweet custard-like dessert made from flavoured milk set with rennet), dulce de leche (cooked milk with sugar and added ingredients such as coconut or chocolate), butterscotch pudding and chocolate mousse. Besides, this category includes traditional milk-based sweets prepared from milk concentrated partially, from khoa (cow or buffalo milk concentrated by boiling), or chhena (cow or buffalo milk, heat coagulated aided by acids like citric acid, lactic acid, malic acid, etc.), sugar or synthetic sweetener, and other ingredients (e.g. maida (refined wheat flour), flavours and colours (e.g. peda, burfee, milk cake, gulab jamun, rasgulla, rasmalai, basundi)). These products are different from those in food category 3 (edible ices, including water-based frozen desserts, confections and novelties) in that the foods in food category 1.7 are dairy-based, while those in food category 3 are water-based and contain no dairy ingredients.

### 1.8 Whey and whey products, excluding whey cheeses of food category 1.6.3 and its sub-categories (if applicable)

This category includes a variety of whey-based products in liquid and powdered forms.

### 1.8.1 Liquid whey and whey products, excluding whey cheeses of food category 1.6.3 and its sub-categories (if applicable)

Whey is the fluid separated from the curd after coagulation of milk, cream, skimmed milk or buttermilk with milk coagulating enzymes during the manufacture of cheese, casein or similar products. Acid whey is obtained after the coagulation of milk, cream, skimmed milk or buttermilk, mainly with acids of the type used for the manufacture of fresh cheese.

### 1.8.2 Dried whey and whey products, excluding whey cheeses of food category 1.6.3 and its sub-categories (if applicable)

This category refers to whey powders prepared by spray- or roller-drying whey or acid whey from which the major portion of the milkfat has been removed.

#### 2 Fats and oils, and fat emulsions

This main category includes all fat-based products that are derived from vegetable, animal or marine sources, or their mixtures.

#### 2.1 Fats and oils essentially free from water

Edible fats and oils are foods composed mainly of triglycerides from vegetable, animal or marine sources.

#### 2.1.1 Butter oil, anhydrous milk fat and ghee

The milkfat products anhydrous milkfat, anhydrous butter oil and butter oil are products derived exclusively from milk and/or products obtained from milk by a process that almost completely removes water and nonfat solids. Ghee is a product obtained exclusively from milk, cream or butter by a process that almost completely removes water and nonfat solids; it has a specially developed flavour and physical structure.

#### 2.1.2 Vegetable oils and fats

This category refers to edible fats and oils obtained from edible plant sources. Products may be from a single plant source or marketed and used as blended oils that are generally designated as edible, cooking, frying, table or salad oils. Virgin oils are obtained by mechanical means (e.g. pressing or expelling), with application of heat only so as not to alter the natural composition of the oil. Virgin oils are suitable for consumption in the natural state. Cold pressed oils are obtained by mechanical means without application of heat. Examples include virgin olive oil, cottonseed oil, peanut oil and vanaspati.

#### 2.1.3 Lard, tallow, fish oil and other animal fats

All animal fats and oils should be derived from animals in good health at the time of slaughter and intended for human consumption. Lard is fat rendered from the fatty tissue of swine.

Edible beef fat is obtained from fresh bovine fatty tissue covering the abdominal cavity and surrounding the kidney and heart, and from other compact, undamaged fat tissues. Such fresh fat obtained at the time of slaughter is the "killing fat." Prime beef fat (premiere jus or oleo stock) is obtained by low-heat rendering (50-55°C) of killing fat and selected fat trimmings (cutting fat). Secunda beef fat is a product with typical beef fat odour and taste obtained by rendering (60-65°C) and purifying beef fat. Rendered pork fat is fat obtained from the tissue and bones of swine. Edible tallow (dripping) is produced by the rendering of fatty tissue (excluding trimmings and cutting fat), attached muscles and bones of bovine animals or sheep. Fish oils are derived from suitable sources such as herring, sardines, sprat, and anchovies. Other examples include tallow and partially defatted beef or pork fatty tissue.

#### 2.2 Fat emulsions mainly of water-in-oil type

This category includes all emulsified products excluding fat-based counterparts of dairy products and dairy desserts.

#### 2.2.1 Butter

Butter is a fatty product consisting of a primarily water-in-oil emulsion derived exclusively from milk and/or products obtained from milk.

#### <u>2.2.2</u> Fat spreads, dairy fat spreads and blended spreads, including margarine, reducedfat counterparts of butter, margarine and their mixtures

This category includes fat spreads (emulsions principally of the type water and edible fats and oils), dairy fat spreads (emulsions principally of the type water-in-milkfat) and blended spreads (fat spreads blended with higher amounts of milkfat). Examples include margarine (a spreadable or fluid water-in-oil emulsion produced mainly from edible fats and oils); products derived from butter (e.g. "butterine," a spreadable butter blend with vegetable oils) blends of butter and margarine; and minarine (a spreadable water-in-oil emulsion produced principally from water and edible fats and oils that are not solely derived from milk). It also includes reduced fat-based products derived from milkfat or from animal or vegetable fats, including reduced-fat counterparts of butter, margarine, and their mixtures (e.g. three-quarter fat butter, three-quarter fat margarine or three-quarter fat butter-margarine blends).

# 2.3 Fat emulsions mainly of oil-in-water type, including mixed and/or flavoured products based on fat emulsions, excluding products with fat derived from milkfat and dessert products of food category 2.4 and its sub-categories (if applicable)

This category includes fat-based counterparts of dairy-based foods excluding dessert products of food category 2.4. The fat portion of these products is derived from sources other than milkfat (e.g. vegetable fats and oils). Examples include imitation milk (a fat-substituted milk produced from non-fat milk solids by addition of vegetable fats (coconut, safflower or corn oil)); non-dairy whipped cream; non-dairy toppings; and vegetable cream. Mayonnaise is included in food category 12.6.1.

#### 2.4 Fat-based desserts, including ready-to-eat products and their mixes, excluding dairy-

#### based dessert products of food category 1.7 and its sub-categories (if applicable)

This category includes fat-based counterparts of dairy-based desserts. It includes ready-toeat products and their mixes. It also includes non-dairy fillings for desserts. An example is an ice cream-like product made with vegetable fats.

### <u>3 Edible ices, including water-based frozen desserts, confections and novelties (e.g. sherbet and sorbet)</u>

This major category includes water-based frozen desserts, confections and novelties, such as fruit sorbet, "Italian"-style ice, and flavoured ice. Frozen desserts containing primarily dairy ingredients are included in food category 1.7.

### 4 Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This major category is divided into two categories, food category 4.1 (Fruit) and food category 4.2 (Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds). Each of these categories is further divided into sub-categories for fresh and processed products.

#### 4.1 Fruit

This category includes all fresh (food category 4.1.1) and processed (food category 4.1.2) products.

#### 4.1.1 Fresh fruit

Fresh fruit is generally free of additives. However, fresh fruit that is coated or cut or peeled for presentation to the consumer may contain additives.

#### 4.1.1.1 Untreated fresh fruit

This category refers to untreated fresh fruit.

#### 4.1.1.2 Surface-treated fresh fruit

The surfaces of certain fresh fruit are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the fruit. Examples include apples, oranges, dates and longans.

#### 4.1.1.3 Peeled or cut fresh fruit, including shredded or flaked fresh coconut

This category refers to fresh fruit that is cut or peeled and presented to the consumer, e.g. in a fruit salad. It includes fresh shredded or flaked coconut.

#### 4.1.2 Processed fruit

This category includes all forms of processing other than peeling, cutting and surface treating fresh fruit.

#### 4.1.2.1 Frozen fruit

This category refers to fruit that may or may not be blanched prior to freezing. The product may be frozen in a juice or sugar syrup. Examples include frozen fruit salad and frozen strawberries.

#### 4.1.2.2 Dried fruit

This category refers to fruit from which water is removed to prevent microbial growth. It includes dried fruit leathers (fruit rolls) prepared by drying fruit purees. Examples include dried apple slices, dried raisins, dried dates, dried lemon, dried shredded or flaked coconut, and dried prunes.

#### 4.1.2.3 Fruit pickled in vinegar, oil or brine

This category includes pickled products such as pickled plums, mango pickles, lime pickles, pickled gooseberries, and pickled watermelon rind, excluding candied fruit of food category 4.1.2.7.

#### 4.1.2.4 Canned or bottled (pasteurized or heat-sterilized) fruit

This category refers to fully preserved product in which fresh fruit is cleaned and placed in cans or jars with natural juice or sugar syrup (including artificially sweetened syrup) and heat-sterilized or pasteurized. It includes products processed in retort pouches. Examples include canned fruit salad and applesauce in jars.

#### 4.1.2.5 Jams, jellies and marmalades

Jams, preserves and conserves are thick, spreadable products prepared by boiling whole fruit or pieces of fruit, fruit pulp or puree, with or without fruit juice or concentrated fruit juice, and sugar to thicken, and to which pectin and fruit pieces may be added. Jelly is a clear spreadable product prepared similarly to jam, except that it is has a smoother consistency and does not contain fruit pieces. Marmalade is a thick spreadable fruit slurry prepared from whole fruit, fruit pulp or puree (usually citrus), and boiled with sugar to thicken, to which pectin and fruit pieces and fruit peel pieces may be added. This category includes dietetic counterparts made with non-nutritive high-intensity sweeteners. Examples include orange marmalade, grape jelly and strawberry jam.

### 4.1.2.6 Fruit-based spreads (e.g. apple butter, lemon curd and chutney), excluding products of food category 4.1.2.5 and its sub-categories (if applicable)

This category includes all other fruit-based spreads, such as apple butter and lemon curd. It also includes condiment-type fruit products such as mango chutney and raisin chutney.

#### 4.1.2.7 Candied fruit

This category includes glazed fruits (fruit treated with a sugar solution and dried), candied fruit (glazed fruit immersed in a sugar solution and dried so that the fruit is covered by a candy-like sugar shell), and crystallised fruit (glazed fruit rolled in icing or granulated sugar and dried). Examples include cocktail (maraschino) cherries, candied citrus peel, candied citrons (e.g. used in holiday fruitcakes), mostarda di frutta, and traditional Chinese food items (e.g. candied

kumquat).

### 4.1.2.8 Fruit preparations, including pulps, purees, fruit sauces, fruit toppings, coconut milk and coconut cream

Fruit pulp is not usually intended for direct consumption. It is a slurry of lightly steamed and strained fresh fruit, with or without added preservatives. Fruit puree (e.g. mango puree, prune puree) is produced in the same way, but has a smoother, finer texture, and may be used as fillings for pastries, but is not limited to this use. Fruit sauce (e.g. pineapple sauce or strawberry sauce) is made from boiled fruit pulp with or without added sweeteners and may contain fruit pieces. Fruit sauce may be used as toppings for fine bakery wares and ice cream sundaes. Fruit syrup (e.g. blueberry syrup) is a more liquid form of fruit sauce that may be used as a topping e.g. for pancakes. Non-fruit toppings are included in food category 5.4 (sugar- and chocolate- based toppings) and sugar syrups (e.g. maple syrup) are included in food category 11.4. Coconut milk and coconut cream are products prepared using a significant amount of separated, whole, disintegrated, macerated or comminuted fresh endosperm (kernel) of coconut palm and expelled, where most filterable fibers and residues are excluded, with or without coconut water, and/or with additional water. Coconut milk and coconut cream are treated by pasteurization, sterilization or UHT processes. Coconut milk and coconut cream may also be produced in concentrated or skim (or "light") forms. Examples of traditional foods in this category are tamarind concentrate (clean extract of tamarind fruit with not less than 65% total soluble solids), tamarind powder (tamarind paste mixed with tapioca starch), tamarind toffee (mixture of tamarind pulp, sugar, milk solids, antioxidants, flavours, stabilisers and preservatives), and fruit bars (a mixture of fruit (mango, pineapple, or guava) pulp mixed with sugar, flavours and preservatives, dried into a sheet).

# 4.1.2.9 Fruit-based desserts, including ready-to-eat products and mixes and fruit-flavoured water-based desserts, excluding fine bakery wares containing fruit of food categories 7.2.1 and 7.2.2 and their sub-categories (if applicable), fruit-flavoured edible ices of food category 3 and its sub-categories (if applicable) and fruit-containing frozen dairy desserts of food category 1.7 and its sub-categories (if applicable)

This category includes the ready-to-eat products and mixes. It includes fruit-flavoured gelatine, rote gruze, frutgrod, fruit compote, nata de coco, and *mitsumame* (gelatine-like dessert of agar jelly, fruit pieces and syrup). This category does not include fine bakery wares containing fruit (food categories 7.2.1 and 7.2.2), fruit-flavoured edible ices (food category 3), or fruit-containing frozen dairy desserts (food category 1.7).

#### 4.1.2.10 Fermented fruit products

This category refers to type of pickled product produced by preservation in salt and by lactic acid fermentation. Examples include fermented plums.

### 4.1.2.11 Fruit fillings for pastries, including ready-to-eat products and mixes, excluding purees of food category 4.1.2.8 and its sub-categories (if applicable)

This category includes the ready-to-eat products and mixes. It includes all type of fillings

excluding purees (food category 4.1.2.8). These fillings usually include whole fruit or fruit pieces. Examples include cherry pie filling and raisin filling for oatmeal cookies.

#### 4.1.2.12 Cooked fruit

This category refers to fruit that is steamed, boiled, baked, or fried, with or without a coating, for presentation to the consumer. Examples include baked apples, fried apple rings, and peach dumplings (baked peaches with a sweet dough covering).

4.2 Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This category includes all fresh (food category 4.2.1) and processed (food category 4.2.2) products.

4.2.1 Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

Fresh vegetables are generally free of additives. However, fresh vegetables that are coated or cut or peeled for presentation to the consumer may contain additives.

- 4.2.1.1 Untreated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes (including soybeans), and aloe vera), seaweeds, and nuts and seeds
  This category refers to untreated fresh vegetables.
- 4.2.1.2 Surface-treated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

The surfaces of certain fresh vegetables are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the vegetable. Examples include avocados, cucumbers, green peppers and pistachio nuts.

4.2.1.3 Peeled, cut or shredded fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This category refers to fresh vegetables (e.g. peeled raw potatoes) that are presented to the consumer to be cooked at home (e.g. in the preparation of hash brown potatoes).

4.2.2 Processed vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This category includes all forms of processing other than peeling, cutting and surface treating fresh vegetables.

4.2.2.1 Frozen vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This category refers to fresh vegetables that are usually blanched and frozen. Examples include quick-frozen corn, quick-frozen French-fried potatoes, quick-frozen peas, and quick-

frozen whole processed tomatoes.

### 4.2.2.2 Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This category refers to products in which the natural water content has been reduced below that critical for growth for microorganisms without affecting the important nutrients. The product may or may not be intended for rehydration prior to consumption. It includes vegetable powders that are obtained from drying the juice, such as tomato powder and beet powder. Examples include dried potato flakes and dried lentil. Examples of Oriental dried products include dried sea tangle (kelp; *kombu*), dried sea tangle with seasoning (*shiokombu*), dried seaweed (*tororo-kombu*), dried gourd strips (*kampyo*), dried laver (*nori*), dried laminariales (*wakame*), and dried cabbage.

# 4.2.2.3 Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds pickled in vinegar, oil, brine, or soybean sauce, excluding fermented soybean products of food categories 6.8.6, 6.8.7, 12.9.1 and 12.9.2 and their subcategories (if applicable) and fermented vegetables of food category 4.2.2.7 and its subcategories (if applicable)

This category refers to products prepared by treating raw vegetables with salt solution excluding fermented soybean products. Fermented vegetables, which are a type of pickled product, are classified in food category 4.2.2.7. Fermented soybean products are classified in food categories 6.8.6, 6.8.7, 12.9.1 and 12.9.2. Examples include pickled cabbage, pickled cucumber, olives, pickled onions, mushrooms in oil, marinated artichoke hearts, achar, and picalilli. Examples of Oriental-style pickled vegetables include *tsukemono* such as rice bran pickled vegetables (*nuka-zuke*), *koji*-pickled vegetables (*koji-zuke*), sake lees-pickled vegetables (*kasu-zuke*), *miso*-pickled vegetables (*miso-zuke*), soy sauce-pickled vegetables (*shoyu-zuke*), vinegar-pickled vegetables (*su-zuke*) and brine-pickled vegetables (*shio-zuke*). Other examples include pickled ginger, pickled garlic, and chilli pickles.

# 4.2.2.4 Canned or bottled (pasteurized or heat-sterilized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds

This category refers to fully preserved product in which fresh vegetables are cleaned, blanched, and placed in cans or jars in liquid (e.g. brine, water, oil or sauce), and heat-sterilized or pasteurized. Examples include canned chestnuts, canned chestnut puree, asparagus packed in glass jars, canned and cooked pink beans, canned tomato paste (low acid), and canned tomatoes (pieces, wedges or whole).

# 4.2.2.5 Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g. tomato puree, peanut butter and cashew butter)

Vegetable purees are finely dispersed slurries prepared from the concentration of vegetables, which may have been previously heat-treated (e.g. steamed). The slurries may be filtered

prior to packaging. Purees contain lower amounts of solids than pastes (found in food category 4.2.2.6). Examples include tomato puree, peanut butter (a spreadable paste made from roasted and ground peanuts by the addition of peanut oil), other nut butters (e.g. cashew butter), and pumpkin butter.

4.2.2.6 Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps, pastes and preparations (e.g. vegetable desserts and sauces, and candied vegetables), excluding products of food category 4.2.2.5 and its sub-categories (if applicable)

Vegetable pastes and pulps are prepared as described for vegetable purees (food category 4.2.2.5). However, pastes and pulps have a higher amount of solids, and are usually used as components of other foods (e.g. sauces). Examples include potato pulp, horseradish pulp, aloe extract, salsa (e.g. chopped tomato, onion, peppers, spices and herbs), sweet red bean paste (an), sweet coffee bean paste (filling), tomato paste, tomato pulp, tomato sauce, crystallised ginger, bean-based vegetable dessert (namagashi), and traditional Chinese candied vegetables (e.g. candied winter melon).

4.2.2.7 Fermented vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 6.8.6, 6.8.7, 12.9.1 and 12.9.2 and their sub-categories (if applicable)

Fermented vegetables are a type of pickled product, formed by the action of lactic acid bacteria, usually in the presence of salt. Traditional Oriental fermented vegetable products are prepared by air-drying vegetables and exposing them to ambient temperatures so as to allow the microorganisms to flourish; the vegetables are then sealed in an anaerobic environment and salt (to generate lactic acid), spices and seasonings are added. Examples include red pepper paste, fermented vegetable products (some *tsukemono* other than food category 4.2.2.3), *kimchi* (fermented Chinese cabbage and vegetable preparation), and sauerkraut (fermented cabbage). This category excludes fermented soybean products that are found in food categories 6.8.6 (fermented soybeans (e.g. natto and tempe)), 6.8.7 (fermented soybean curd), 12.9.1 (fermented soybean paste e.g. miso) and 12.9.2 (soybean sauce).

### 4.2.2.8 Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds

This category refers to vegetables that are steamed, boiled, baked, or fried, with or without a coating, for presentation to the consumer. Examples include simmered beans, pre-fried potatoes, fried okra, and vegetables boiled down in soy sauce (*tsukudani*).

#### 5 Confectionery

This main category includes all cocoa and chocolate products (food category 5.1), other confectionery products (food category 5.2), chewing gum (food category 5.3) and decorations and icings (food category 5.4).

5.1 Cocoa products and chocolate products including imitations and chocolate

#### substitutes

This category is divided to reflect the variety of cocoa- and chocolate-based products.

#### 5.1.1 Cocoa mixes (powders) and cocoa mass/cake

This category includes a variety of products that are used in the manufacture of other chocolate products or in the preparation of cocoa-based beverages. Most cocoa products have their origin in the cocoa nib, which is obtained from cocoa beans that have been cleaned and freed from the shells. Cocoa mass is obtained from the mechanical disintegration of the nib. Depending on the desired finished chocolate product, the cocoa nib or mass may be treated by an alkalinization process that mellows the flavour. Cocoa dust is the fraction of the cocoa bean produced as a product during winnowing and degerming. Cocoa powder is produced by reducing the fat content of cocoa mass or liquor by pressing (including expeller pressing) and molding into a cocoa cake. The cocoa cake is disintegrated and ground to cocoa powder. Cocoa liquor is a homogeneous flowing paste produced from the cocoa nib, which has been roasted, dried, disintegrated and milled. Cocoa-sugar mixtures contain only cocoa powder and sugar. Chocolate powder for beverages is made from cocoa liquor or cocoa powder and sugar to which flavouring (e.g. vanillin) may be added. Examples include drinking chocolate powder; breakfast cocoa; cocoa dust (fines), nibs, mass, press cake; chocolate liquor; cocoa mixes (powders for preparing the hot beverage); cocoa-sugar mixture; and dry mixes for sugar-cocoa confectionery. Finished cocoa beverages and chocolate milk are included in food category 1.1.4, and most finished chocolate products are included in food category 5.1.4.

#### 5.1.2 Cocoa mixes (syrups)

This category refers to products that may be produced by adding a bacterial amylase to cocoa liquor. The enzyme prevents the syrup from thickening or setting by solubilizing and dextrinizing cocoa starch. This category also includes products such as chocolate syrup used to prepare chocolate milk or hot chocolate. Chocolate syrup differs from fudge sauce (e.g. for ice cream sundaes), which is found in food category 5.4.

### 5.1.3 Cocoa-based spreads, including fillings (e.g. cocoa butter, chocolate pie filling and nut-chocolate based spreads for bread)

This category refers to products in which cocoa is mixed with other ingredients (usually fat-based) to prepare a spreadable paste that is used as a spread for bread or as a filling for fine bakery wares. Examples include cocoa butter, fillings for bonbons and chocolates, chocolate pie filling, and nut-chocolate based spreads for bread.

#### 5.1.4 Cocoa and chocolate products, including chocolate-covered nuts and fruit

Chocolate is produced from cocoa nibs, mass, press cake, powder, or liquor with or without addition of sugar, cocoa butter, aroma or flavouring substances, and optional ingredients (e.g. nuts). This category includes chocolate-covered nuts and fruit (e.g. raisins), but does not include yoghurt-, cereal-, and honey-covered nuts (food category 15.2). Examples include bonbons, cocoa butter confectionery (composed of cocoa butter, milk solids and sugar), white chocolate, chocolate chips (e.g. for baking), milk chocolate, cream chocolate, sweet chocolate,

bitter chocolate, enrobing chocolate, chocolate covered in a sugar-based "shell" or with coloured decorations, filled chocolate (chocolate with a texturally distinct centre and external coating, excluding flour confectionery and pastry products of food categories 7.2.1 and 7.2.2), and chocolate with added edible ingredients excluding flour, starch, and animal fats other than milk fat. This category does not include yoghurt-, cereal-, and honey-covered nuts (food category 15.2).

#### 5.1.5 Imitation chocolate and chocolate substitute products

This category includes chocolate-like products that are not cocoa-based, but have similar organoleptic properties as chocolate, such as carob chips. These chocolate-like products may contain additional optional ingredients and may include filled confectionery. Examples include compound chocolate, flavoured and coloured compound chocolate, compound chocolate coatings, and imitation chocolate covered nuts and fruit (e.g. raisins). This category also includes only the chocolate-like portion of any confectionery within the scope of food category 5.2.

### 5.2 Confectionery, including hard candy, soft candy and nougats, excluding products of food categories 5.1, 5.3 and 5.4 and their sub-categories (if applicable)

This category includes all types of products that primarily contain sugar and their dietetic counterparts and may or may not contain cocoa. It includes:

- (a) Hard candy Products made from water and sugar (simple syrup), colour and flavour that may or may not have a filling, their dietetic counterparts, and products that may or may not contain cocoa. Includes: pastilles and lozenges (rolled, shaped and filled sweetened candy). These types of products may be used as fillings for chocolate products within the scope of food categories 5.1.4 and 5.1.5;
- (b) Soft candy Products include soft, chewy products such as caramels (containing sugar syrup, fats, colour and flavour) and their dietetic counterparts; products that may or may not contain cocoa and milk (e.g. toffees and chocolate-flavoured caramels); jelly-based candies (e.g. jelly beans, jellied fruit paste covered in sugar, made from gelatin, pectin, colour and flavour); and licorice. It also includes halwa teheniaa and oriental specialties, such as sweet bean jelly (yokan) and agar jelly for mitsumame. These types of products may be used as fillings for chocolate products within the scope of food categories 5.1.4 and 5.1.5; and
- (c) Nougats and Marzipans Nougats consist of roasted ground nuts, sugar and cocoa and their dietetic counterparts, that may be consumed as is, or may be used as a filling for chocolate products within the scope of food categories 5.1.4 and 5.1.5. Marzipan is a confection consisting of almond paste and sugar that may be shaped and coloured for direct consumption, or may be used as a filling for chocolate products.

#### 5.3 Chewing gum

This category refers to product made from natural or synthetic gum base containing flavours, sweeteners (nutritive or non-nutritive), aroma compounds, and other food additives. It includes bubble gum and breath-freshener gum products.

#### 5.4 Decorations (e.g. for fine bakery wares), toppings (non-fruit) and sweet sauces

This category includes ready-to-eat icings and frostings for cakes, cookies, pies and bread and flour confectionery, as well as mixes for these products. It includes sugar- and chocolate-based coatings for candy, confections and baked goods, such as chocolate coatings for bonbons and nougat candy. It also includes sweet sauces and toppings include butterscotch sauce for use on ice cream sundaes. These sweet sauces are different from the syrups (e.g. maple, caramel, and flavoured syrups for fine bakery wares and ices) included in food category 11.4. Fruit-based toppings are included in food category 4.1.2.8. Chocolate sauce is included in food category 5.1.2.

# 6 Cereals and cereal products derived from cereal grains, roots and tubers, pulses, legumes and pith or soft core of palm tree, excluding bakery wares of food category 7 and its sub-categories (if applicable)

This category includes unprocessed (food category 6.1) and various processed forms of cereal and cereal-based products.

### 6.1 Whole, broken or flaked grain, including barley, corn, oats, rice, sorghum, soybeans and wheat

This category includes whole, husked, unprocessed cereals and grains. Examples include barley, corn (maize), hops (for beer manufacture), oats, rice (including enriched, instant and parboiled), sorghum, soybeans and wheat.

#### 6.2 Flours and starches (including soybean powder)

Flours and starches are the basic milled products of cereal grains, roots, tubers, pulses, pith or softy core of palm tree or legumes sold as such or used as ingredients (e.g. in baked goods).

#### 6.2.1 Flours

Flour is produced from the milling of cereal grains, cereals and tubers (e.g. cassava) and pith or soft core of palm tree. It includes flour pastes for bread and flour confectionery, flour for bread, pastries, noodles and pasta, and flour mixes (physical mixtures of flours from different cereal or grain sources. Examples include durum wheat flour, self-rising flour, enriched flour, instantized flour, corn flour, corn meal, bran, farina, roasted soybean flour (kinako), konjac flour (devil's tongue jelly powder, konnayaku-ko), and maida (refined wheat flour) and sago flour. This category does not include mixes for ordinary bakery wares (food category 7.1.6) and mixes for fine bakery wares (food category 7.2.3) because these dry mixes, in addition to flour, also contain other ingredients.

#### 6.2.2 Starches

Starch is a glucose polymer occurring in granular form in certain plant species, notably seeds (e.g. cereals, pulses, corn, wheat, rice, beans, peas) and tubers (e.g. tapioca, potato). The polymer consists of linked anhydro-alpha-D-glucose units. Native starch is separated by processes that are specific for each raw material.

#### 6.3 Breakfast cereals, including rolled oats

This category includes all ready-to-eat, instant, and regular hot breakfast cereal products. Examples include granola-type breakfast cereals, instant oatmeal, farina, corn flakes, puffed wheat or rice, multi-grain (e.g. rice, wheat and corn) breakfast cereals, breakfast cereals made from soy or bran, and extruded-type breakfast cereals made from grain flour or powder.

### 6.4 Pastas and noodles and like products (e.g. rice paper, rice vermicelli, and soybean pastas and noodles)

This category includes all pasta, noodle and similar products. There would be few, if any additives needed in dried pastas and noodles.

#### 6.4.1 Fresh pastas and noodles and like products

This category refers to products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are not dehydrated. These products are intended to be consumed soon after preparation. Examples include unboiled noodles, and "skins" or crusts for spring rolls, wontons, and *shuo mai*.

#### 6.4.2 Dried pastas and noodles and like products

This category refers to products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are dehydrated. Examples include dried forms of spaghetti, bean vermicelli, rice vermicelli, macaroni and rice noodles.

#### 6.4.3 Pre-cooked pastas and noodles and like products

This category refers to products that are treated (i.e., heated, boiled, steamed, cooked, pregelatinized or frozen). These products may be sold directly to the consumer (e.g. pre-cooked, chilled gnocchi to be heated prior to consumption), or may be the starch component of prepared meals (e.g. heat-and-serve frozen dinner entrees containing spaghetti, macaroni or noodles). This category also includes instant noodles (*sokuseki-men*; e.g. pre-cooked ramen, udon, rice noodles), that are pre-gelatinized, heated and dried prior to sale to the consumer.

### 6.5 Cereal and starch based desserts (e.g. rice pudding and tapioca pudding), including cereal or starch based fillings for desserts

This category refers to dessert products containing cereal, starch or grain as the main ingredient. It also includes cereal- or starch based fillings for desserts. Examples include rice pudding, semolina pudding, tapioca pudding, rice flour dumplings (*dango*), a steamed yeast-fermented wheat flour dough dessert (*musipan*), and a starchy pudding based dessert (*namagashi*).

6.6 Batters (e.g. for breading or batters for fish or poultry and breading for tempura batter), excluding doughs (e.g. for bread) of food category 7.1.4 and its sub-categories (if applicable), and other mixes (e.g. for bread or cakes) of food categories 7.1.6 and 7.2.3 and their sub-categories (if applicable)

This category refers to products containing flaked or ground cereal or grain that when combined with other ingredients (e.g. egg, water, milk) are used as a coating for fish or poultry. Products are usually sold as dry mix of the cereal or grain component. Examples include breading for tempura batter. Doughs (e.g. for bread) are found in food category 7.1.4, and other mixes (e.g. for bread or cakes) are found in food categories 7.1.6 and 7.2.3, respectively.

# 6.7 Pre-cooked or processed rice products, including rice cakes (Oriental type only), excluding crisp snacks made from rice grains of food category 15.1 and its sub-categories (if applicable), and dessert-type rice cakes of food category 6.5 and its sub-categories (if applicable)

This category refers to products prepared from rice that is soaked, drained, steamed, kneaded and shaped into cake forms (e.g. Japanese *mochi*, Korean *teuck*). Crisp snacks made from rice grains, also called "rice cakes" are categorized in food category 15.1, and dessert-type rice cakes are in food category 6.5. Food category 6.7 would also include processed rice and enriched rice products, such as pre-cooked products that are sold canned, chilled or frozen; and processed rice products sold in retort pouches. This is to distinguish from food category 6.1 (Whole, broken, or flaked grain, including rice) that is intended to include only whole, husked, unprocessed cereals and grains.

### 6.8 Soybean products, excluding soybean-based seasonings and condiments of food category 12.9 and its sub-categories (if applicable)

This category includes dried, cooked, fried or fermented soybean products, and soybean curd products.

#### 6.8.1 Soybean-based beverages

This category refers to products prepared from dried soybeans that are soaked in water, pureed, boiled and strained, or prepared from soybean flour, soybean concentrate, or soybean isolate. It includes products referred to as soybean milk. Soybean-based beverages may be consumed as is, or used to prepare other soybean products, such as those in food categories 6.8.2 (soybean-based beverage film), 6.8.3 (soybean curd (tofu)), 6.8.4 (semi-dehydrated soybean curd), and 6.8.5 (dehydrated soybean curd (kori tofu)). This category also includes soybean products, such as soybean-based beverage powder, which is sold as is, for reconstitution, or as a mix containing a coagulant that can be reconstituted by the consumer for preparation of home-made soft tofu.

#### 6.8.2 Dried soybean-based beverage film

This category refers to film formed on the surface of boiling soybean-based beverage that is dried. It may be deep-fried or softened in water prior to use in soups or poached food. It also known as *fuzhu* or *yuba*.

#### 6.8.3 Soybean curd (tofu)

Soybean curd is prepared from dried soybeans that are soaked in water, pureed, and strained to produce soybean-based beverage, which is then made into a curd with a coagulant, and

placed in a mould. Soybean curds may be of a variety of textures (e.g. soft, semi-firm, firm).

#### 6.8.4 Semi-dehydrated soybean curd

This category refers to soybean curd that has been pressed while being moulded into blocks so that some moisture has been removed, but so that it is not completely dried (see food category 6.8.5). Semi-dehydrated soybean curd typically contains 62% water, and has a chewy texture. It includes:

- (a) Thick gravy-stewed semi-dehydrated soybean curd Partially dehydrated soybean curd that is cooked (stewed) with a thick sauce (e.g. miso sauce). The partially dehydrated soybean curd typically absorbs the sauce, and so regains its original texture;
- (b) Deep fried semi-dehydrated soybean curd Partially dehydrated soybean curd that is deep-fried. It may be consumed as such, or cooked (e.g. stewed in sauce) after frying; and
- (c) Semi-dehydrated soybean curd, other than thick gravy-stewed semi-dehydrated soybean curd and deep fried semi-dehydrated soybean curd - Partially dehydrated soybean curd prepared other than by stewing in thick (e.g. miso) sauce or by deep-frying. It includes grilled products and mashed products that may be combined with other ingredients (e.g. to make a patty or a loaf).

#### 6.8.5 Dehydrated soybean curd (kori tofu)

This category refers to soybean curd from which all moisture has been removed through the process of freezing, aging, and dehydrating. It may be reconstituted with water or sauce for consumption, or is used directly in prepared dishes. It may also be deep-fried or simmered in sauce.

#### 6.8.6 Fermented soybeans (e.g. dou chi, natto and tempe)

This category refers to the product is prepared from soybeans that have been steamed and fermented with certain fungi or bacteria (starter). The soft, whole beans have a distinctive aroma and taste. It includes products such as *dou chi* (China), *natto* (Japan), and *tempe* (Indonesia).

#### 6.8.7 Fermented soybean curd

This category refers to the product is prepared by forming soybean curd into a loaf during the fermentation process. It is a soft, flavoured product, either in red, rice-yellow, or grey-green.

#### 6.8.8 Other soybean protein products

This category refers to other products from soybeans composed mainly of soybean protein such as extruded, textured, concentrated and isolated soybean protein.

#### 7 Bakery wares

This main category includes categories for bread and ordinary bakery wares (food category 7.1) and for sweet, salty and savoury fine bakery wares (food category 7.2).

### 7.1 Bread and ordinary bakery wares and mixes, including all types of non-sweet bakery products and bread-derived products

This category includes all types of non-sweet bakery products and bread-derived products.

### 7.1.1 Breads and rolls (e.g. white breads, rye breads, raisin breads, whole wheat breads, whole wheat rolls and soda breads)

This category includes yeast-leavened and specialty breads and soda bread.

#### 7.1.1.1 Yeast-leavened breads and specialty breads

This category includes all types of non-sweet bakery products and bread-derived products. Examples include white bread, rye bread, pumpernickel bread, raisin bread, whole wheat bread, pain courant français, malt bread, hamburger rolls, whole wheat rolls and milk rolls.

#### 7.1.1.2 Soda breads

This category includes soda breads.

### 7.1.2 Crackers (e.g. soda crackers and rye crisps), excluding flavoured crackers of food category 15.1 and its sub-categories (if applicable)

The term "cracker" refers to a thin, crisp wafer, usually of unsweetened dough. Examples include soda crackers, rye crisps and matzohs. Flavoured crackers (e.g. cheese flavoured) that are consumed as snacks are in food category 15.1.

#### 7.1.3 Other ordinary bakery products (e.g. bagels, pita and English muffins)

This category includes all other ordinary bakery wares, such as cornbread and biscuits. The term "biscuit" in this category refers to a small cake of shortened bread, leavened with baking powder or baking soda. It does not refer to the British "biscuit," which is a "cookie" or "sweet cracker" included in food category 7.2.1.

#### 7.1.4 Bread-type products, including bread stuffing and bread crumbs

This category includes bread-based products such as croutons, bread stuffing and stuffing mixes, and prepared doughs (e.g. for biscuits). Bread mixes are included in food category 7.1.6.

#### 7.1.5 Steamed breads and buns (e.g. mantou and bao)

This category refers to oriental-style leavened wheat (or rice) products that are cooked in a steamer. Products may be made with or without filling. Products without filling are called steamed bread (*mantou*), and those with filling are called steamed buns (*baozi* or *bao*). Twisted rolls of various shapes (*huajuan*) may also be prepared. Examples include steamed bun with meat, jam or other filling (*manjyu*).

#### 7.1.6 Mixes for bread and ordinary bakery wares

This category includes all the mixes containing the dry ingredients to which wet ingredients (e.g. water, milk, oil, butter, eggs) are added to prepare a dough for baked goods from food

categories 7.1.1 to 7.1.5. Examples include French bread mix, tin bread mix, panettone mix, ciabatta mix, among others. Mixes for fine bakery wares (e.g. cakes, cookies, pancakes) are found in food category 7.2.3.

#### 7.2 Fine bakery wares (sweet, salty or savoury) and mixes

This category includes ready-to-eat products (food categories 7.2.1 and 7.2.2) as well as mixes (food category 7.2.3) for preparing fine baked goods.

### 7.2.1 Cakes, cookies and pies (e.g. cheesecakes, western cakes, mooncakes, oatmeal cookies, fruit-filled pies and custard pies)

The term "sweet cracker" or "sweet biscuit" used in this category refers to a cookie-like product that may be eaten as a dessert. Examples include butter cake, cheesecake, fruit-filled cereal bars, pound cake (including *kasutera*), moist cake (type of starchy dessert (*namagashi*)), western cakes, moon cakes, sponge cake, fruit-filled pies (e.g. apple pie), oatmeal cookies, sugar cookies and British "biscuits" (cookies or sweet crackers).

### 7.2.2 Other fine bakery products (e.g. pancakes, waffles, Danish pastry, cones for ice cream, flour confectionery, doughnuts, sweet rolls, scones and muffins)

This category includes products that may be eaten as a dessert or as breakfast. Examples include pancakes, waffles, filled sweet buns (*anpan*), Danish pastry, wafers or cones for ice cream, flour confectionery and trifles.

### 7.2.3 Mixes for fine bakery wares (e.g. cake mix, flour confectionery mix, pancake mix, pie mix and waffle mix)

Mixes containing the dry ingredients to which wet ingredients (e.g. water, milk, oil, butter, eggs) are added to prepare a dough for fine baked goods. Examples include cake mix, flour confectionery mix, pancake mix, pie mix and waffle mix. Prepared dough is found in food category 7.1.4. Mixes for ordinary bakery wares (e.g. bread) is found in food category 7.1.6.

#### 8 Meat and meat products, including poultry and game

This main category includes all types of meat, poultry, and game products, in pieces and cuts or comminuted, fresh (food category 8.1) and processed (food categories 8.2 and 8.3).

#### 8.1 Fresh meat, poultry and game

Fresh products are usually free of additives. However, in certain circumstances, additives are necessary.

#### 8.1.1 Fresh meat, poultry and game in whole pieces or cuts

This category refers to untreated raw meat, poultry and game carcasses and cuts. Examples include beef, hog and pork carcasses; fresh beef blood; fresh whole chickens and chicken parts; fresh beef cuts (e.g. steaks); beef organs (e.g. heart, kidney); fresh tripe; and pork chops.

#### 8.1.2 Fresh meat, poultry and game, comminuted

This category refers to untreated raw comminuted meat, poultry and game. Examples include fresh beef (hamburger) patties; boerewors; fresh breakfast sausages; gehakt (chopped meat); loganiza (fresh, uncured sausage); fresh meatballs; mechanically deboned, ground and formed poultry pieces (with or without breading or coating); and fresh sausages (e.g. beef, Italian, and pork).

#### 8.2 Processed meat, poultry and game products in whole pieces or cuts

This category includes various treatments for non-heat treated meat cuts (food category 8.2.1) and heat-treated meat cuts (food category 8.3.2).

8.2.1 Non-heat treated processed meat, poultry and game products in whole pieces or cuts This category describes several treatment methods (e.g. curing, salting, drying, pickling) that preserve and extend the shelf-life of meats.

### 8.2.1.1 Cured (including salted) non-heat treated processed meat, poultry and game products in whole pieces or cuts

Salted products are treated with sodium chloride. Curing may also be achieved by addition of food additives. Smoked products are also included in this category. Examples include bacon; side bacon; corned beef; marinated beef; and different types of Oriental pickled products such as miso-pickled meat (*miso-zuke*), *koji*-pickled meat (*koji-zuke*), and soy sauce-pickled meat (*shoyu-zuke*).

### 8.2.1.2 Cured (including salted) and dried non-heat treated processed meat, poultry and game products in whole pieces or cuts

The meat cuts may be cured or salted as described for food category 8.2.1.1 and then dried, or they may only be dried. Drying is achieved either in hot air or in vacuum. Examples include dried salt pork, dehydrated meat, stuffed loin, Iberian ham, and prosciutto-type ham.

### 8.2.1.3 Fermented non-heat treated processed meat, poultry and game products in whole pieces or cuts

Fermented products are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt. Examples include potted beef and pickled (fermented) pig's feet.

## 8.2.2 Heat-treated processed meat, poultry and game products in whole pieces or cuts, including cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned meat cuts

This category includes cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned meat cuts. Examples include cured, cooked ham; cured, cooked pork shoulder; canned chicken meat; and meat pieces boiled in soy sauce (tsukudani).

### 8.2.3 Frozen processed meat, poultry and game products in whole pieces or cuts, including raw and cooked meat cuts that have been frozen

This category includes raw and cooked meat cuts that have been frozen. Examples include frozen whole chickens, frozen chicken parts and frozen beef steaks.

### 8.3 Processed comminuted meat, poultry and game products

This category includes various treatments for non-heat treated products (food category 8.3.1) and heat-treated products (food category 8.3.2).

### 8.3.1 Non-heat treated processed comminuted meat, poultry and game products

This category describes several treatment methods (e.g. curing, salting, drying, pickling) that preserve and extend the shelf-life of comminuted and mechanically deboned meat products.

## 8.3.1.1 Cured (including salted) non-heat treated processed comminuted meat, poultry and game products

Salted products are treated with sodium chloride. Curing may also be achieved by addition of food additives. This category also includes smoked products. Examples include chorizos (spicy pork sausages), salami-type products, salchichon, tocino (fresh, cured sausage), pepperoni and smoked sausage.

## 8.3.1.2 Cured (including salted) and dried non-heat treated processed comminuted meat, poultry and game products

The comminuted products may be cured or salted as described for food category 8.3.1.1, and then dried, or they may only be dried. Drying is achieved either in hot air or in vacuum. Examples include pasturmas, dried sausages, cured and dried sausages, beef jerky, Chinese sausages (including traditional cured or smoked pork sausage), and sobrasada.

## 8.3.1.3 Fermented non-heat treated processed comminuted meat, poultry and game products

Fermented products are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt. Certain types of sausages may be fermented.

## 8.3.2 Heat-treated processed comminuted meat, poultry and game products, including cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned comminuted products (e.g. foie gras and pates, and cooked meatballs)

This category includes cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned comminuted products. Examples include pre-grilled beef patties; foie gras and pates; brawn and head cheese; cooked, cured chopped meat; chopped meat boiled in soy sauce (*tsukudani*); canned corned beef; luncheon meats; meat pastes; cooked meat patties; cooked salami-type products; cooked meatballs; saucises de strasbourg; breakfast sausages; brown-and-serve sausages; and terrines (a cooked chopped meat mixture).

## 8.3.3 Frozen processed comminuted meat, poultry and game products, including raw, partially cooked and fully cooked products (e.g. frozen breaded or battered chicken fingers)

This category includes raw, partially cooked and fully cooked comminuted meat products that have been frozen. Examples include frozen hamburger patties; frozen breaded or battered chicken fingers.

### 8.4 Edible casings (e.g. sausage casings)

This category refers to casings or tubing prepared from collagen, cellulose, or food-grade synthetic material or from natural sources (e.g. hog or sheep intestines) that contain the sausage mix.

- 9 Fish and fish products, including aquatic vertebrates (e.g. fish and aquatic mammals (e.g. whales)) and aquatic invertebrates (e.g. molluscs (e.g. clams and snails), crustaceans (e.g. shrimps, crabs and lobsters) and echinoderms (e.g. sea urchins and sea cucumbers))

  This broad category is divided into categories for fresh fish and fish products, including molluscs, crustaceans and echinoderms (food category 9.1) and various processed fish products (food categories 9.2 9.4). This category includes aquatic vertebrates (fish and aquatic mammals (e.g. whales)), aquatic invertebrates (e.g. jellyfish), as well as molluscs (e.g. clams, snails), crustaceans (e.g. shrimps, crabs, lobsters), and echinoderms (e.g. sea urchins, sea cucumbers).
- 9.1 Fresh fish and fish products, including molluscs, crustaceans and echinoderms

  The term "fresh" refers to fish and fish products that are untreated except for refrigeration, storage on ice, or freezing upon catching at sea or in lakes or other bodies of water in order to prevent decomposition and spoilage.

### 9.1.1. Fresh fish

This category includes fresh whale meat, cod, salmon, trout, etc.; and fresh fish roe.

### 9.1.2 Fresh molluscs, crustaceans and echinoderms

This category includes fresh shrimp, clams, crabs, lobster, snails, etc.

- 9.2 Processed fish and fish products, including molluscs, crustaceans and echinoderms
  This category refers to fish products that are frozen and may require further cooking, as well as ready-to-eat cooked, smoked, dried, fermented, and salted products.
- 9.2.1 Frozen (including fresh and partially cooked) fish, fish fillets and fish products, including molluscs, crustaceans and echinoderms (e.g. frozen clams, frozen cod fillets, frozen crabs, frozen finfish, frozen lobsters, frozen prawns, frozen fish roe and frozen surimi)

  This category refers to fresh, including partially cooked, fish subjected to freezing or quick-freezing at sea and on land for further processing. Examples include frozen or deep frozen

freezing at sea and on land for further processing. Examples include frozen or deep frozen clams, cod fillets, crab, finfish, haddock, hake, lobster, minced fish, prawns and shrimp; frozen fish roe; frozen surimi and frozen whale meat.

9.2.2 Frozen uncooked battered fish, fish fillets and fish products, including molluscs,

## <u>crustaceans and echinoderms (e.g. frozen raw breaded shrimps and frozen batter-coated fish fillets)</u>

This category refers to uncooked product prepared from fish or fish portions, with dressing in eggs and bread crumbs or batter. Examples include frozen raw breaded or batter-coated shrimp; and frozen or quick-frozen breaded or batter-coated fish fillets, fish portions and fish sticks (fish fingers).

## <u>9.2.3 Frozen uncooked minced and creamed fish products, including molluscs, crustaceans and echinoderms</u>

This category refers to uncooked product prepared from minced fish pieces in cream-type sauce.

## 9.2.4 Cooked and/or fried fish and fish products, including molluscs, crustaceans and echinoderms

This category includes all ready-to-eat cooked products as described in the sub-categories.

## 9.2.4.1 Cooked fish and fish products (excluding frying), including cooked surimi, cooked fish paste and cooked fish roe

This category refers to cooked products including steamed, boiled or any other cooking method except frying. The fish may be whole, in portions or comminuted. Examples include fish sausage; cooked fish products boiled down in soy sauce (*tsukudani*); cooked surimi product (*kamaboko*); crab-flavoured cooked *kamaboko* product (*kanikama*); cooked fish roe; cooked surimi; cooked, tube-shaped surimi product (*chikuwa*); and cooked fish and lobster paste (surimi-like products). Other fish paste (Oriental type) is found in food category 9.3.4.

### 9.2.4.2 Cooked molluscs, crustaceans and echinoderms (excluding frying)

This category refers to cooked products including steamed, boiled or any other cooking method except frying. Examples include cooked *crangon crangon* and *crangon vulgaris* (brown shrimp); cooked shrimp, clams and crabs.

### 9.2.4.3 Fried fish and fish products, including molluscs, crustaceans and echinoderms

This category refers to ready-to-eat products prepared from fish or fish portions, with or without further dressing in eggs and bread crumbs or batter, that are fried, baked, roasted or barbecued, and then packaged or canned with or without sauce or oil. Examples include ready-to-eat fried surimi, fried calamari, and fried soft-shell crabs.

## 9.2.5 Smoked, dried, fermented and/or salted fish and fish products, including molluscs, crustaceans and echinoderms

Smoked fish are usually prepared from fresh deep frozen or frozen fish that are dried directly or after boiling, with or without salting, by exposing the fish to freshly-generated sawdust smoke. Dried fish are prepared by exposing the fish to sunlight or drying directly or after boiling in a special installation; the fish may be salted prior to drying. Salted fish are either rubbed with salt or placed in a salt solution. This manufacturing process is different from that

described in food category 9.3 for marinated and pickled fish. Cured fish is prepared by salting and then smoking fish. Examples include salted anchovies, shrimp, and shad; smoked chub, cuttlefish and octopus; fish ham; dried and salted species of the *Gadidae* species; smoked or salted fish paste and fish roe; cured and smoked sablefish, shad, and salmon; dried shellfish, dried bonito (*katsuobushi*), and boiled, dried fish (*niboshi*).

### 9.3 Semi-preserved fish and fish products, including molluscs, crustaceans and echinoderms

This category includes products treated by methods such as marinating, pickling and partial cooking that have a limited shelf-life.

## 9.3.1 Fish and fish products, including molluscs, crustaceans and echinoderms, marinated with vinegar or wine and/or in jelly

Marinated products manufactured by soaking the fish in vinegar or wine with or without added salt and spices. They are packaged in jars or cans and have a limited shelf-life. Products in jelly may be manufactured by tenderizing fish products by cooking or steaming, adding vinegar or wine, salt and preservatives, and solidifying in a jelly. Examples include "rollmops" (a type of marinated herring), sea eel (dogfish) in jelly and fish aspic.

## 9.3.2 Fish and fish products, including molluscs, crustaceans and echinoderms, pickled and/or in brine

Pickled products are sometimes considered a type of marinated product. Pickling results from the treatment of the fish with a salt and vinegar or alcohol (e.g. wine) solution. Examples include different types of Oriental pickled products: *koji*-pickled fish (*koji-zuke*), lees-pickled fish (*kasu-zuke*), *miso*-pickled fish (*miso-zuke*), soy sauce-pickled fish (*shoyu-zuke*), and vinegar-pickled fish (*su-zuke*); pickled whale meat; and pickled herring and sprat.

## 9.3.3 Semi-preserved salmon substitutes, caviar and other fish roe products, salted and/or treated with a preservative

Roe is usually produced by washing, salting and allowing to ripen until transparent. The roe is then packaged in glass or other suitable containers. The term "caviar" refers only to the roe of the sturgeon species (e.g. beluga). Caviar substitutes are made of roe of various sea and freshwater fish (e.g. cod and herring) that are salted, spiced, dyed and may be treated with a preservative. Examples include salted salmon roe (*sujiko*), processed, salted salmon roe (*ikura*), cod roe, salted cod roe (*tarako*) and lumpfish caviar. Occasionally, roe may be pasteurized. In this case, it is included in food category 9.4, since it is a fully preserved product. Roe products that are frozen, cooked or smoked are included in food categories 9.2.1, 9.2.4.1 and 9.2.5 respectively; fresh fish roe is found in food category 9.1.1.

9.3.4 Semi-preserved fish and fish products, including molluscs, crustaceans and echinoderms (e.g. traditional Oriental fish paste and shrimp paste), excluding cooked products of food categories 9.2.4.1 and 9.2.4.2 and their sub-categories (if applicable) and products of food categories 9.3.1, 9.3.2 and 9.3.3 and their sub-categories (if applicable)

Examples include fish or crustacean pates and traditional Oriental fish paste. The latter is produced from fresh fish or the residue from fish sauce production, which is combined with other ingredients such as wheat flour, bran, rice or soybeans. The product may be further fermented. Cooked fish or crustacean pastes (surimi-like products) are found in food categories 9.2.4.1 and 9.2.4.2 respectively.

## 9.4 Fully preserved (including canned or fermented) fish and fish products, including molluscs, crustaceans and echinoderms, excluding fully cooked products of food category 9.2.4 and its sub-categories (if applicable)

This category refers to products with extended shelf-life, manufactured by pasteurizing or steam retorting and packaging in vacuum sealed air-tight containers to ensure sterility. Products may be packed in their own juice or in added oil or sauce. This category excludes fully cooked products (see food category 9.2.4). Examples include canned tuna, clams, crab, fish roe and sardines; gefilte fish balls; and surimi (heat-pasteurized).

### 10 Eggs and egg products

This category includes fresh in-shell eggs (food category 10.1), products that may substitute for fresh eggs (food category 10.2) and other egg products (food categories 10.3 and 10.4).

### 10.1 Fresh eggs

Fresh in-shell eggs are not expected to contain preservative or antioxidant.

### 10.2 Egg products

This category refers to products that may be used as replacement for fresh eggs in recipes or as a food (e.g. omelette). They are produced from fresh eggs by either (i) mixing and purifying the whole egg; or (ii) separating the egg white and yolk, and then mixing and purifying each separately. The purified whole egg, white or yolk is then further processed to produce liquid, frozen or dried eggs as described below.

## 10.2.1 Pasteurized and chemically preserved (e.g. by addition of salt) liquid egg products, including whole egg, egg yolk and egg white

The purified whole egg, egg yolk or egg white is pasteurized and chemically preserved (e.g. by addition of salt).

- 10.2.2 Pasteurized and frozen egg products, including whole egg, egg yolk and egg white The purified whole egg, egg yolk or egg white is pasteurized and frozen.
- 10.2.3 Dried and/or heat coagulated (pasteurized) egg products, including whole egg, egg yolk and egg white

Sugars are removed from the purified whole egg, egg yolk or egg white, which is then pasteurized and dried.

### 10.3 Preserved eggs, including alkaline, salted and canned eggs

This category includes traditional Oriental preserved products, such as salt-cured duck eggs (*Hueidan*), and alkaline treated "thousand-year-old-eggs" (*pidan*).

### 10.4 Egg-based desserts (e.g. egg custard and custard fillings for fine bakery wares)

This category includes ready-to-eat products and products to be prepared from a dry mix. Examples include flan and egg custard. It also includes custard fillings for fine bakery wares (e.g. pies).

### 11 Sugars and table-top sweeteners

The category includes all standardized sugars (food categories 11.1), non-standardized products (food categories 11.2, 11.3, 11.4 and 11.6) and natural sweeteners (food category 11.5 - honey).

### 11.1 Refined and raw sugars

Nutritive sweeteners, such as fully or partially purified sucrose (derived from sugar beet and sugar cane), glucose (derived from starch), or fructose, that are included in food subcategories 11.1.1 to 11.1.5.

### 11.1.1 White sugar, dextrose anhydrous, dextrose monohydrate and fructose

White sugar is purified and crystallized sucrose with a polarization of not less than 99.7°Z. Dextrose anhydrous is purified and crystallized D-glucose without water of crystallization. Dextrose monohydrate is purified and crystallized D-glucose with one molecule of water of crystallization. Fructose is purified and crystallized D-fructose.

### 11.1.2 Powdered sugar and powdered dextrose

Powdered sugar (icing sugar) is finely pulverized white sugar with or without added anticaking agents. Powdered dextrose (icing dextrose) is finely pulverized dextrose anhydrous or dextrose monohydrate, or a mixture of the two, with or without added anticaking agents.

## 11.1.3 Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup and raw cane sugar

Soft white sugar is fine grain purified, moist sugar, that is white in colour. Soft brown sugar is fine grain moist sugar that is light to dark brown in colour. Glucose syrup is a purified concentrated aqueous solution of nutritive saccharides derived from starch and/or inulin. Dried glucose syrup is glucose syrup from which water has been partially removed. Raw cane sugar is partially purified sucrose crystallized from partially purified cane juice without further purification. This category includes:

- (a) Dried glucose syrup used to manufacture candy products Dried glucose syrup used to manufacture candy products that are included in food category 5.2 (e.g. hard or soft candies); and
- (b) Glucose syrup used to manufacture candy products Glucose syrup used to manufacture candy products that are included in food category 5.2 (e.g. hard or soft candies).

### 11.1.4 Lactose

This category refers to a natural constituent of milk normally obtained from whey. It may be anhydrous, or contain one molecule of water of crystallization, or be a mixture of both forms.

### 11.1.5 Plantation or mill white sugar

This category refers to purified and crystallized sucrose with a polarization of not less than 99.5°Z.

## 11.2 Brown sugar (e.g. Demerara sugar), excluding products of food category 11.1.3 and its sub-categories (if applicable)

This category includes large-grain, brown or yellow lump sugars, such as Demerara sugar. Examples include slab sugar and crystallized sugar.

## 11.3 Sugar solutions and syrups, also (partially) inverted, including treacle and molasses, excluding products of food category 11.1.3 and its sub-categories (if applicable)

This category includes co-products of the sugar refining process (e.g. treacle and molasses), invert sugar (equimolar mixture of glucose and fructose produced from the hydrolysis of sucrose), and other sweeteners, such as high fructose corn syrup, high fructose inulin syrup and corn sugar.

# 11.4 Other sugars and syrups (e.g. xylose, maple syrup and decorative sugar toppings) This category includes all types of table syrups (e.g. maple syrup), syrups for fine bakery wares and ices (e.g. caramel syrup, flavoured syrups), and decorative sugar toppings (e.g. coloured sugar crystals for cookies).

#### 11.5 Honey

Honey is the natural sweet substance produced by honeybees from the nectar of blossoms or secretions of plants. The honeybees collect the nectar or secretions, transform it by combination with specific substances of the bees' own, and store it in a honeycomb to ripen and mature. Examples of honey include wildflower honey and clover honey.

## 11.6 Table-top sweeteners, including those containing high-intensity sweeteners (e.g. acesulfame potassium)

This category includes products that are preparations of high-intensity sweeteners (e.g. acesulfame potassium) and/or of polyols (e.g. sorbitol) which may contain other food additives and/or nutritive ingredients, such as carbohydrates. These products, which are sold to the final consumer, may be in powder, solid (e.g. cubes), or liquid form.

Spices, condiments, vinegars, soups, sauces, salads, yeast and like products and soybean sauces, excluding cocoa- and nut-based spreads of food categories 4.2.2.5 and 5.1.3 and their sub-categories (if applicable), and products composed primarily of protein that are derived from soybeans or other sources (e.g. milk, cereal or vegetables)

This is a broad category that includes substances added to food to enhance its aroma and

taste (food category 12.1 – salt and salt substitutes; food category 12.2 – herbs, spices, seasonings, and condiments (e.g. seasoning for instant noodles); food category 12.3 – vinegars; and food category 12.4 – mustards), certain prepared foods (food category 12.5 – soups and broths; food category 12.6 – sauces and like products; and food category 12.7 – salads (e.g. macaroni salad and potato salad) and sandwich spreads, excluding cocoa- and nut-based spreads of food categories 4.2.2.5 and 5.1.3), and products composed primarily of protein that are derived from soybeans (food category 12.9 - soybean-based seasonings and condiments).

### 12.1 Salt and salt substitutes

The category includes salt (food category 12.1.1.) and salt substitutes (food category 12.1.2) used as seasoning for food.

### 12.1.1 Salt

The category refers to primarily food-grade sodium chloride. It includes table salt, iodized and fluoride iodized salt, and dendritic salt.

### 12.1.2 Salt substitutes

Salt substitutes are seasonings with reduced sodium content intended to be used on food in place of salt.

12.2 Herbs, spices, seasonings and condiments (e.g. seasoning for instant noodles)
This category describes items whose use is intended to enhance the aroma and taste of food.

### 12.2.1 Herbs and spices (e.g. basil, oregano, cumin and chilli paste)

Herbs and spices are usually derived from botanical sources, and may be dehydrated, and either ground or whole. Examples of herbs include basil, oregano and thyme. Examples of spices include cumin and caraway seeds. Spices may also be found as blends in powder or paste form.

## 12.2.2 Seasonings and condiments (e.g. meat tenderizers, onion salt and garlic salt), excluding condiment sauces (e.g. ketchup, mayonnaise and mustard) and relishes

Seasonings and condiments are mixtures of herbs and spices together with other food ingredients (such as salt, vinegar, lemon juice, molasses, honey or sugar, and sweeteners). Examples include meat tenderizers, onion salt, garlic salt, Oriental seasoning mix (dashi), topping to sprinkle on rice (furikake, containing e.g. dried seaweed flakes, sesame seeds and seasoning), and seasoning for noodles. The term "condiments" as used in the Guidelines does not include salt, salt substitutes and condiment sauces (e.g. ketchup, mayonnaise, mustard) and relishes.

## 12.3 Vinegars, including cider vinegar, wine vinegar, malt vinegar, spirit vinegar, grain vinegar, raisin vinegar and fruit (wine) vinegar

This category refers to liquid produced from fermentation of ethanol from a suitable source

(e.g. wine, cider). Examples include cider vinegar, wine vinegar, malt vinegar, spirit vinegar, grain vinegar, raisin vinegar and fruit (wine) vinegar.

### 12.4 Mustards

This category refers to condiment sauce prepared from ground, often defatted mustard seed that is mixed into a slurry with water, vinegar, salt, oil and other spices and refined. Examples include Dijon mustard and "hot" mustard (prepared from seeds with hulls).

### 12.5 Soups and broths

This category includes ready-to-eat soups and mixes. The finished products may be water-(e.g. consommé) or milk-based (e.g. chowder).

## 12.5.1 Ready-to-eat soups and broths, including canned, bottled, and frozen (e.g. bouillon, consommes, water- and cream-based soups, chowders and bisques)

This category refers to water- or milk-based products consisting of vegetable, meat or fish broth with or without other ingredients (e.g. vegetables, meat, noodles). Examples include bouillon, broths, consommés, water- and cream-based soups, chowders and bisques.

## 12.5.2 Mixes for soups and broths (e.g. bouillon powders and cubes, powdered and condensed soups, and stock cubes and powders)

This category refers to concentrated soup to be reconstituted with water and/or milk, with or without addition of other optional ingredients (e.g. vegetables, meat, noodles). Examples include bouillon powders and cubes; powdered and condensed soups (e.g. *mentsuyu*); and stock cubes and powders.

### 12.6 Sauces and like products

This category includes ready-to-eat sauces, gravies and dressings, and mixes to be reconstituted before consumption. The ready-to-eat products are divided into sub-categories for emulsified (food category 12.6.1) and non-emulsified (food category 12.6.2) products, whereas the sub-category for the mixes (food category 12.6.3) encompasses both emulsified and non-emulsified sauce mixes.

### 12.6.1 Emulsified sauces and dips (e.g. mayonnaise, salad dressing and onion dip)

This category refers to sauces, gravies and dressings based and dips, at least in part, on a fat- or oil-in water emulsion. Examples include salad dressing (e.g. French, Italian, Greek, ranch style), fat-based sandwich spreads (e.g. mayonnaise with mustard), salad cream, fatty sauces and snack dips (e.g. bacon and cheddar dip, onion dip).

## 12.6.2 Non-emulsified sauces, including water-based, coconut milk-based and milk-based sauces (e.g. barbecue sauce, ketchup, cheese sauce, cream sauce, Worcestershire sauce, brown gravy and chilli sauce)

This category includes water-, coconut milk-, and milk-based sauces, gravies and dressings. Examples include barbecue sauce, tomato ketchup, cheese sauce, Worcestershire sauce,

Oriental thick Worcestershire sauce (*tonkatsu sauce*), chilli sauce, sweet and sour dipping sauce, and white (cream-based) sauce (sauce consisting primarily of milk or cream, with little added fat (e.g. butter) and flour, with or without seasoning or spices).

## 12.6.3 Mixes for sauces and gravies (e.g. mixes for cheese sauce, hollandaise sauce and salad dressing)

This category refers to concentrated product, usually in powdered form, to be mixed with water, milk, oil or other liquid to prepare a finished sauce or gravy. Examples include mixes for cheese sauce, hollandaise sauce and salad dressing (e.g. Italian or ranch dressing).

### 12.6.4 Clear sauces (e.g. fish sauce and oyster sauce)

This category includes thin, non-emulsified clear sauces that may be water-based. These sauces may be used as condiments or ingredients rather than as finished gravy (for use e.g. on roast beef). Examples include oyster sauce and Thai fish sauce (*nam pla*).

## 12.7 Salads (e.g. macaroni salad and potato salad) and sandwich spreads, excluding cocoa- and nut-based spreads of food categories 4.2.2.5 and 5.1.3 and their sub-categories (if applicable)

This category includes prepared salads, milk-based sandwich spreads, non-standardized mayonnaise-like sandwich spreads, and dressing for coleslaw (cabbage salad).

### 12.8 Yeast and like products

This category includes baker's yeast and leaven used in the manufacture of baked goods. It also includes the Oriental products *koji* (rice or wheat malted with *A. oryzae*) used in the production of alcoholic beverages.

### 12.9 Soybean-based seasonings and condiments

This category includes products that are derived from soybeans and other ingredients intended for use as seasonings and condiments, such as fermented soybean paste and soybean sauces.

### 12.9.1 Fermented soybean paste (e.g. miso and dou jiang)

The product is made of soybeans, salt, water and other ingredients, using the process of fermentation. The product includes *dou jiang* (China), *doenjang* (Korea), or *miso* (Japan), which may be used in the preparation of soups or dressings, or as a seasoning.

### 12.9.2 Soybean sauce

This category refers to a liquid seasoning obtained by fermentation of soybeans, non-fermentation (e.g. hydrolysis) of soybeans, or by hydrolysis of vegetable protein. It includes:

- (a) Fermented soybean sauce A clear, non-emulsified sauce made of soybeans, cereal, salt and water by the fermentation process;
- (b) Non-fermented soybean sauces Non-fermented soybean sauce, which is also known as non-brewed soybean sauce, may be produced from vegetable proteins, such as defatted

- soybeans that are acid-hydrolyzed (e.g. with hydrochloric acid), neutralized (e.g. with sodium carbonate) and filtered; and
- (c) Other soybean sauce Non-emulsified sauce made from fermented soybean sauce and/or non-fermented soybean sauce, with or without sugar, with or without caramelization process.

### Food intended to be consumed principally by persons under the age of 36 months

This main category refers to food intended to be consumed principally by persons under the age of 36 months. It includes infant formulae (food category 13.1.1) and follow-up formulae (food category 13.1.2), as well as complementary foods for infants and young children (food category 13.2).

### 13.1 Infant formulae and follow-up formulae

This category includes infant formulae (food category 13.1.1) and follow-up formulae (food category 13.1.2).

### 13.1.1 Infant formulae

Infant formula means:

- (a) a product that, according to its descriptions or instructions for use, is intended for consumption as a substitute for human breast milk that is specially manufactured to satisfy, by itself, the nutritional requirements of persons of any age up to and including 12 months until the introduction of appropriate complementary feeding (even if it is also claimed in the descriptions or instructions, if applicable, to be suitable for consumption by persons of any age over 12 months); or
- (b) a product marked or labelled as "infant formula" or "嬰兒配方產品", or with any other words of similar meaning.

### 13.1.2 Follow-up formulae

Follow-up formula means:

- (a) a product that, according to its descriptions or instructions for use, is—
  - (i) represented as a replacement for human breast milk or infant formula; and
  - (ii) intended for consumption as a liquid element in a progressively diversified diet by persons of any age from 6 months to under 36 months (even if it is also claimed in the descriptions or instructions, if applicable, to be suitable for consumption by persons of any other age); or
- (b) a product marked or labelled as "follow-up formula" or "較大嬰兒及幼兒配方產品", or with any other words of similar meaning.

## 13.2 Complementary foods for infants and young children, excluding products of food category 13.1 and its sub-categories (if applicable)

This category refers to products may be ready-to-eat or in powder form to be reconstituted with water, milk, or other suitable liquid. These foods exclude infant formulae (food category 13.1.1) and follow-up formulae (food category 13.1.2). Examples include cereal-, fruit-,

vegetable-, and meat-based "baby foods" for infants, "toddler foods", and "junior foods"; lactea flour, biscuits and rusks for children.

## 14 Beverages, excluding dairy products of food category 1.1.4 and its sub-categories (if applicable)

This major category is divided into the broad categories of non-alcoholic (food category 14.1) and alcoholic (food category 14.2) beverages. This category does not include dairy-based beverages (food category 1.1.4).

### 14.1 Non-alcoholic ("soft") beverages

This category includes waters and carbonated waters (food category 14.1.1), fruit and vegetable juices (food category 14.1.2), fruit and vegetable nectars (food category 14.1.3), water-based flavoured carbonated and non-carbonated drinks (food category 14.1.4), and water-based brewed or steeped beverages such as coffee and tea (food category 14.1.5).

### 14.1.1 Bottled or packaged drinking waters

This category includes bottled or packaged natural mineral waters and other drinking waters, which may be non-carbonated or carbonated.

## 14.1.2 Fruit and vegetable juices, excluding beverages based on fruit and vegetable juices of food category 14.1.4.2 and its sub-categories (if applicable)

This category applies only to fruit and vegetable juices. Beverages based on fruit and vegetable juices are found in food category 14.1.4.2. Fruit-vegetable juice blends have separate classifications for each component (i.e. fruit juice (food category 14.1.2.1) and vegetable juice (food category 14.1.2.2)).

### 14.1.2.1 Fruit juice

Fruit juice is the unfermented but fermentable liquid obtained from the edible part of sound, appropriately mature and fresh fruit or of fruit maintained in sound condition by suitable means. The juice is prepared by suitable processes, which maintain the essential physical, chemical, organoleptical and nutritional characteristics of the juices of the fruit from which it comes. The juice may be cloudy or clear, and may have restored (to the normal level attained in the same kind of fruit) aromatic substances and volatile flavour components, all of which must be obtained by suitable physical means, and all of which must have been recovered from the same kind of fruit. Pulp and cells obtained by suitable physical means from the same kind of fruit may be added. A single juice is obtained from one kind of fruit. A mixed juice is obtained by blending two or more juices or juices and purees, from different kinds of fruit. Fruit juice may be obtained by reconstituting concentrated fruit juice (food category 14.1.2.3) with water. Examples include orange juice, apple juice, black currant juice, lemon juice, orange-mango juice and coconut water.

### 14.1.2.2 Vegetable juice

Vegetable juice is the liquid unfermented but fermentable product intended for direct

consumption obtained by mechanical expression, crushing, grinding, and/or sieving of one or more sound fresh vegetables or vegetables preserved exclusively by physical means. The juice may be clear, turbid, or pulpy. It may have been concentrated and reconstituted with water. Products may be based on a single vegetable (e.g. carrot) or blends of vegetables (e.g. carrot, celery).

### 14.1.2.3 Concentrates for fruit juice

Concentrated fruit juice is the product that complies with the definition given in food category 14.1.2.1. It is prepared by the physical removal of water from fruit juice in an amount to increase the Brix level to a value at least 50% greater than that established for reconstituted juice from the same fruit. In the production of juice that is to be concentrated, suitable processes are used, and may be combined, with simultaneous diffusion of the pulp cells or fruit pulp by water, provided that the water-extracted soluble fruit solids are added in-line to the primary juice, before the concentration procedure. Fruit juice concentrates may have restored (to the normal level attained in the same kind of fruit) aromatic substances and volatile flavour components, all of which must be obtained by suitable physical means, and all of which must be recovered from the same kind of fruit. Pulp and cells obtained by suitable physical means from the same kind of fruit may be added. The products are sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink juice by addition of water. Examples include frozen orange juice concentrate and lemon juice concentrate.

### 14.1.2.4 Concentrates for vegetable juice

This category refers to products prepared by the physical removal of water from vegetable juice. The products are sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink juice by addition of water. It includes carrot juice concentrate.

### 14.1.3 Fruit and vegetable nectars

Fruit and vegetable nectars are beverages produced from purees, juices, or concentrates of either, blended with water and sugar, honey, syrups, and/or sweeteners. Fruit-vegetable nectar blends are reported under their components (i.e. fruit nectar (food category 14.1.3.1) and vegetable nectar (food category 14.1.3.2)).

### 14.1.3.1 Fruit nectar

Fruit nectar is the unfermented but fermentable product obtained by adding water with or without the addition of sugar, honey, syrups, and/or sweeteners to fruit juice, concentrated fruit juice, fruit purees or concentrated fruit purees, or a mixture of those products. Aromatic substances, volatile flavour components, pulp and cells, all of which must have been recovered from the same kind of fruit and obtained by suitable physical means, may be added. Products may be based on a single fruit or on fruit blends. Examples include pear nectar and peach nectar.

### 14.1.3.2 Vegetable nectar

This category refers to products obtained by adding water with or without the addition of sugar,

honey, syrups, and/or sweeteners to vegetable juice or concentrated vegetable juice, or a mixture of those products. Products may be based on a single vegetable or on a blend of vegetables.

### 14.1.3.3 Concentrates for fruit nectar

This category refers to products prepared by the physical removal of water from fruit nectar or its starting materials. The products are sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink nectar by addition of water. Examples include pear nectar concentrate and peach nectar concentrate.

### 14.1.3.4 Concentrates for vegetable nectar

This category refers to products prepared by the physical removal of water from vegetable nectar. The products are sold in liquid, syrup and frozen forms for the preparation of ready-to-drink nectars by addition of water.

14.1.4 Water-based flavoured drinks, including carbonated and non-carbonated varieties and concentrates (liquid or solid), "sports", "energy" or "electrolyte" drinks, particulated drinks, ready-to-drink coffee, tea drinks and herbal-based drinks (e.g. iced tea, fruit-flavoured iced tea and chilled canned cappuccino drinks)

This category includes all carbonated and non-carbonated varieties and concentrates. It includes products based on fruit and vegetable juices. It also includes coffee-, tea- and herbal-based drinks.

## 14.1.4.1 Carbonated water-based flavoured drinks (e.g. colas, carbonated "energy" drinks and dry ginger ale)

This category includes water-based flavoured drinks with added carbon dioxide with nutritive, non-nutritive and/or intense sweeteners and other permitted food additives. It includes *gaseosa* (water-based drinks with added carbon dioxide, sweetener, and flavour), and sodas such as colas, pepper-types, root beer, lemon-lime, and citrus types, both diet/light and regular types. These beverages may be clear, cloudy, or may contain particulated matter (e.g. fruit pieces). It also includes so-called "energy" drinks that are carbonated and contain high levels of nutrients and other ingredients (e.g. caffeine, taurine, carnitine).

## 14.1.4.2 Non-carbonated water-based flavoured drinks, including punches and ades (e.g. fruit juice-based drinks, lactic acid beverages and "sports" drinks containing electrolytes)

This category includes water-based flavoured drinks without added carbon dioxide, fruit and vegetable juice-based drinks (e.g. almond, aniseed, coconut-based drinks, and ginseng drink), fruit flavoured ades (e.g. lemonade, orangeade), squashes (citrus-based soft drinks), capile groselha, lactic acid beverage, ready-to-drink coffee and tea drinks with or without milk or milk solids, and herbal-based drinks (e.g. iced tea, fruit-flavoured iced tea, chilled canned cappuccino drinks) and "sports" drinks containing electrolytes. These beverages may be clear or contain particulated matter (e.g. fruit pieces), and may be unsweetened or sweetened with sugar or a non-nutritive high-intensity sweetener. This category also includes so-called

"energy" drinks that are non-carbonated and contain high levels of nutrients and other ingredients (e.g. caffeine, taurine, carnitine).

### 14.1.4.3 Concentrates (liquid or solid) for water-based flavoured drinks

This category includes powder, syrup, liquid and frozen concentrates for the preparation of carbonated or non-carbonated water-based non-alcoholic beverages by addition of water or carbonated water. Examples include fountain syrups (e.g. cola syrup), fruit syrups for soft drinks, frozen or powdered concentrate for lemonade and iced tea mixes.

14.1.5 Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, including ready-to-drink products, their mixes and concentrates, and treated coffee beans for the manufacture of coffee products, excluding ready-to-drink cocoa of food category 1.1.4 and its sub-categories (if applicable) and cocoa mixes of food category 5.1.1 and its sub-categories (if applicable)

This category includes the ready-to-drink products (e.g. canned), and their mixes and concentrates. Examples include chicory-based hot beverages (postum), rice tea, mate tea, and mixes for hot coffee and tea beverages (e.g. instant coffee, powder for hot cappuccino beverages). Treated coffee beans for the manufacture of coffee products are also included. This category does not include ready-to-drink cocoa (food category 1.1.4) and cocoa mixes (food category 5.1.1).

### 14.2 Alcoholic beverages, including alcohol-free and low-alcoholic counterparts

The alcohol-free and low-alcoholic counterparts are included in the same category as the alcoholic beverages.

### 14.2.1 Beer and malt beverages

This category refers to alcoholic beverages brewed from germinated barley (malt), hops, yeast and water. Examples include ale, brown beer, weiss beer, pilsner, lager beer, oud bruin beer, Obergariges Einfachbier, light beer, table beer, malt liquor, porter, stout and barleywine.

### 14.2.2 Cider and perry

This category refers to fruit wines made from apples and pears (e.g. cider and perry). It also includes cider bouche.

### 14.2.3 Grape wines

This category refers to alcoholic beverage obtained exclusively from the partial or complete alcoholic fermentation of fresh grapes, whether crushed or not, or of grape must (juice), and includes:

- (a) Still grape wine Grape wine (white, red, rosé, or blush, dry or sweet) that may contain up to a maximum 0.4g/100 ml (4000 mg/kg) carbon dioxide at 20 °C;
- (b) Sparkling and semi-sparkling grape wines Grape wines in which carbonation is produced during the fermentation process, either by bottle fermentation or closed tank fermentation. It also includes carbonated wine whose carbon dioxide is partially or totally of exogenous

- origin. Examples include spumante and "cold duck" wine; and
- (c) Fortified grape wine, grape liquor wine, and sweet grape wine Grape wines produced either by: (i) the fermentation of grape must (juice) of high sugar concentration; or (ii) by the blending of concentrated grape juice with wine; or (iii) the mixture of fermented must with alcohol. Examples include grape dessert wine.

## 14.2.4 Wines (other than grape, apple and pear) (e.g. rice wine (sake), and sparkling and still fruit wines)

This category includes wines made from fruit other than grapes, apples and pears, and from other agricultural products, including grain (e.g. rice). These wines may be still or sparkling. Examples include rice wine (*sake*), and sparkling and still fruit wines.

### 14.2.5 Mead

This category refers to alcoholic liquor made from fermented honey, malt and spices, or just of honey. It includes honey wine.

### 14.2.6 Distilled spirituous beverages containing more than 15% alcohol

This category includes all distilled spirituous beverages derived from grain (e.g. corn, barley, rye, wheat), tubers (e.g. potato), fruit (e.g. grapes, berries) or sugar cane that contain greater than 15% alcohol. Examples include aperitifs, brandy (distilled wine), cordials, liqueurs (including emulsified liqueurs), bagaceira belha (grappa from Portugal; bagaceira is a drink distilled from bagaço (pressed skins, seeds and stalks of the grapes)), eau de vie (a brandy), gin, grappa (Italian brandy distilled from the residues of pressed wine), marc (brandy distilled from grape or apple residue), korn (grain spirit (schnapps) of Germany, usually derived from rye (Roggen), sometimes from wheat (Weizen) or both (Getreide); also labelled as Kornbrantt or Kornbranttwein), mistela (also mistelle (France) and jeropico (South Africa); unfermented grape juice fortified with grape alcohol), ouzo (Greek spirit drink flavoured with aniseed), rum, tsikoudia (grape marc spirit from Crete), tsipouro (grape marc spirit from certain regions in Greece), wienbrand (style of grape brandy devised by Hugo Asbach, Rudesheim, Germany; literally, "burnt wine"), cachaça (Brazilian liquor made from fermented distilled sugar cane juice), tequila, whiskey and vodka.

## 14.2.7 Aromatized alcoholic beverages (e.g. wine and spirituous cooler-type beverages and low-alcoholic refreshers)

This category includes all non-standardized alcoholic beverage products. Although most of these products contain less than 15% alcohol, some traditional non-standardized aromatized products may contain up to 24% alcohol. Examples include aromatized wine, cider and perry; aperitif wines; americano; batidas (drinks made from *cachaça*, fruit juice or coconut milk and, optionally, sweetened condensed milk); bitter soda and bitter vino; clarea (also claré or clary; a mixture of honey, white wine and spices; it is closely related to *hippocras*, which is made with red wine); jurubeba alcoholic drinks (beverage alcohol product made from the *Solanum paniculatum* plant indigenous to the north of Brazil and other parts of South America); negus (sangria; a hot drink made with port wine, sugar, lemon and spice); sod, saft, and sodet;

vermouth; zurra (in Southern Spain, a sangria made with peaches or nectarines; also the Spanish term for a spiced wine made of cold or warm wine, sugar, lemon, oranges or spices); amazake (a sweet low-alcoholic beverages (<1% alcohol) made from rice by koji; mirin (a sweet alcoholic beverage (<10% alcohol) made from a mixture of shoochuu (a spirituous beverage), rice and koji); "malternatives," and prepared cocktails (mixtures of liquors, liqueurs, wines, essences, fruit and plant extracts, etc. marketed as ready-to-drink products or mixes). Cooler-type beverages are composed of beer, malt beverage, wine or spirituous beverage, fruit juice(s) and soda water (if carbonated).

### 15 Ready-to-eat savouries

This main category includes all types of savoury snack foods.

15.1 Snacks—potato, cereal, flour or starch based (from roots and tubers, pulses and legumes), including all plain and flavoured savoury snacks (e.g. potato chips, popcorn and flavoured crackers), excluding plain crackers of food category 7.1.2 and its sub-categories (if applicable)

This category includes all savoury snacks, with or without flavourings, but excludes unsweetened crackers (food category 7.1.2). Examples include potato chips, popcorn, pretzels, rice crackers (*senbei*), flavoured crackers (e.g. cheese-flavoured crackers), *bhujia* (*namkeen*; snack made of a mixture of flours, maize, potatoes, salt, dried fruit, peanuts, spices, colours, flavours, and antioxidants), and *papads* (prepared from soaked rice flour or from black gram or cow pea flour, mixed with salt and spices, and formed into balls or flat cakes).

15.2 Processed nuts, including coated nuts and nut mixtures (with e.g. dried fruit), excluding chocolate-covered nuts of food category 5.1.4 and its sub-categories (if applicable) and nuts covered in imitation chocolate of food category 5.1.5 and its sub-categories (if applicable)

This category includes all types of whole nuts processed by, e.g. dry-roasting, roasting, marinating or boiling, either in-shell or shelled, salted or unsalted. Yoghurt-, cereal-, and honey-covered nuts, and dried fruit-nut-and-cereal snacks (e.g. "trail mixes") are classified here. Chocolate-covered nuts are classified in food category 5.1.4, and nuts covered in imitation chocolate are included in food category 5.1.5.

15.3 Snacks—fish based, excluding dried fish snacks of food category 9.2.5 and its subcategories (if applicable) and dried meat snacks of food category 8.3.1.2 and its subcategories (if applicable)

This category describes savoury crackers with fish, fish products or fish flavouring. Dried fish *per se* that may be consumed as a snack is assigned to food category 9.2.5, and dried meat snacks (e.g. beef jerky, pemmican) are assigned to food category 8.3.1.2.

### 16 Miscellaneous

This board category comprises of food additives, flavourings and flavouring syrups, enzymes, essential oils and isolates from the concentrates of essential oils, gelatin, silicone antifoam emulsion, liquid pectin and partial glycerol esters.

### 4 Frequently Asked Questions

### 4.1 How is the use of preservatives and antioxidants regulated in Hong Kong?

In Hong Kong, most food safety related rules and regulations are contained in Part V of the Public Health and Municipal Services Ordinance (Cap. 132). The Ordinance stipulates that all food on sale must be wholesome, unadulterated and fit for human consumption. There is also a set of subsidiary legislation which spells out the standards for specific food products or substances allowed in food. The control on the use of preservatives and antioxidants in food is governed by the Preservatives in Food Regulation (Cap. 132BD) which stipulates that any food being imported, manufactured for sale, or sold should only contain permitted preservatives or antioxidants and in the proportion that does not exceed the maximum permitted levels. In 2024, the Preservatives in Food (Amendment) Regulation 2024 amended Cap. 132BD. Details of the legislation are available at the website <a href="https://www.elegislation.gov.hk">https://www.elegislation.gov.hk</a>.

## 4.2 What are preservatives and antioxidants as defined in the Amendment Regulation?

According to the Amendment Regulation, "Preservative" —

- (a) means a substance, not normally consumed as food by itself nor normally used as a typical ingredient of food, that, when added to, or used in or on, food at any stage of food processing, is capable of prolonging the shelf-life of the food by protecting against deterioration caused by microorganisms; but
- (b) does not include—
  - (i) common salt (sodium chloride);
  - (ii) sugars;
  - (iii) alcohol or potable spirits, isopropyl alcohol or monoacetin;
  - (iv) herbs or hop extract;
  - (v) spices or essential oils when used for flavouring purposes;
  - (vi) any substance added to food by the process of curing known as smoking; or
  - (vii) any vitamins or minerals added to food as nutrients.

According to the Amendment Regulation, "Antioxidant" —

- (a) means a substance, not normally consumed as food by itself nor normally used as a typical ingredient of food, that, when added to, or used in or on, food at any stage of food processing, is capable of prolonging the shelf-life of the food by protecting against deterioration caused by oxidation; but
- (b) does not include any vitamins or minerals added to food as nutrients.

## 4.3 How can I know whether a particular preservative or antioxidant can be used in a food product in Hong Kong?

Cap. 132BD stipulates which preservatives and antioxidants are permitted in food, as well as conditions of use including the maximum permitted levels in food. Under the amended Cap. 132BD, permitted food additives refer to food additives specified in column 2 of Schedule 1 or in column 2 of Schedule 1B.

The preservatives and antioxidants listed in Schedule 1 to the amended Cap. 132BD may be used in the food categories specified, and their use must observe the relevant maximum permitted levels and the notes (if available) specified in Schedule 1. Schedule 1 to the amended Cap. 132BD is organized into 4 columns. Column 1 lists the food categories or sub-categories, Column 2 lists specific names of the permitted preservatives / antioxidants and their International Numbering System for Food Additives (INS) numbers, Column 3 states the maximum permitted levels at which certain preservatives and antioxidants may be present in food and Column 4 lists the notes which set out additional specifications on the usage of permitted preservatives and antioxidants in certain food categories.

On the other hand, food additives listed in Schedule 1B are permitted under section 3(2A) to be added to food (except any relevant food of a scheduled food category that is also specified in Schedule 1C) in accordance with GMP principles. Column 2 of Schedule 1B lists such permitted preservatives / antioxidants and their INS numbers.

### 4.4 What are the major amendments made by the Amendment Regulation?

The major amendments include: -

- (a) Updating the definitions of "preservatives" and "antioxidants";
- (b) Updating the list of permitted preservatives and antioxidants in the "positive list":
- (c) Updating / Specifying the maximum permitted levels for the permitted preservatives and antioxidants, including specifying the list of GMP additives (i.e. additives that are acceptable for use in food in general when used in accordance with the GMP principles); and
- (d) Updating of the food category system.

## 4.5 Is there any transitional period allowed upon the commencement of the Amendment Regulation?

There is a 24-month transitional period. During this 24-month transitional period, any single food item may be legally imported or sold if it complies wholly with the requirements of either Cap. 132BD before the amendments or the amended Cap. 132BD. It is not acceptable for a

single food item to comply partly with Cap. 132BD before the amendments and partly with the Amendment Regulation. After the end of the transitional period, the trade should fully comply with the requirements of the amended Cap. 132BD. Transitional period means the period beginning on 30 December 2024 and ending on 29 December 2026 (both dates inclusive).

## 4.6 What are the preservatives and antioxidants newly permitted for food use in the Amendment Regulation?

There are 29 preservatives and antioxidants newly permitted for food use in the Amendment Regulation. These are:-

- acetic acid, glacial
- ascorbic acid, L-
- ascorbyl esters
- benzoyl peroxide
- calcium acetate
- calcium ascorbate
- calcium lactate
- carbon dioxide
- citric acid
- citric and fatty acid esters of glycerol
- erythorbic acid (isoascorbic acid)
- glucose oxidase
- lauric arginate ethyl ester
- lecithins
- nitrous oxide
- phosphates
- potassium acetate
- potassium lactate
- rosemary extract
- sodium acetate
- sodium ascorbate
- sodium diacetate
- sodium erythorbate (sodium isoascorbate)
- sodium lactate
- stearyl citrate
- tartrates
- tocopherols
- tricalcium citrate
- tripotassium citrate

All of these newly permitted preservatives and antioxidants have been evaluated by JECFA.

4.7 In accordance with section 3(2) of Cap. 132 BD (both before and after the amendments), the level of a preservative or antioxidant contained in a food must be in a proportion that does not exceed the "maximum permitted level". What does it mean?

Section 3(2) of Cap. 132BD restricts the level at which certain preservatives and antioxidants may be present in food. The "maximum permitted level" means the greatest proportion of a permitted preservative or antioxidant, specified in column 3 of Schedule 1, allowed to be present in the relevant food. Please refer to section 2.3 of this Guidelines for details.

Food manufacturers should notice that the "maximum permitted level" may not correspond to the optimum, recommended, or typical level of use. Under Good Manufacturing Practice, the optimum, recommended, or typical use level will differ for each application of a food additive and is dependent on the intended technical effect and the specific food in which the food additive would be used, taking into account the type of raw material, food processing and post-manufacture storage, transport and handling by distributors, retailers, and consumers. Hence, food manufacturers should ensure that the quantity of a food additive added to food does not exceed the maximum permitted use level and is the lowest possible level necessary to accomplish the desired effect of adding it.