

# Overview of Codex Classification of Foods and Animal Feeds

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# Codex Classification of Foods and Animal Feeds

## *Food classification*

- ✿ Food items classified in a hierarchy and structural system
  - ⊕ Five classes → 19 types
  - ⊕ Each type → commodity groups → subgroups → individual commodities
- ✿ Each commodity / subgroup / group assigned with a code number

# Codex Classification of Foods and Animal Feeds

## *Food classification*

### ✿ Five classes:

- ✿ Class A Primary Food Commodities of Plant Origin
- ✿ Class B Primary Food Commodities of Animal Origin
- ✿ Class C Primary Animal Feed Commodities
- ✿ Class D Processed Foods of Plant Origin
- ✿ Class E Processed Foods of Animal Origin

# Class A

## Primary Food Commodities of Plant Origin

## Class A Primary Food Commodities of Plant Origin

Type	No.	Group	Group Letter Code
01 Fruits	001	Citrus fruits	FC
	002	Pome fruits	FP
	003	Stone fruits	FS
	004	Berries and other small fruits	FB
	005	Assorted tropical and sub-tropical fruits – edible peel	FT
	006	Assorted tropical and sub-tropical fruits – inedible peel	FI
02 Vegetables	009	Bulb vegetables	VA
	010	Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead cabbages	VB
	011	Fruiting vegetables, Cucurbits	VC
	012	Fruiting vegetables, other than Cucurbits	VO
	013	Leafy vegetables (including Brassica leafy vegetables)	VL
	014	Legume vegetables	VP
	015	Pulses	VD
	016	Root and tuber vegetables	VR
	017	Stalk and stem vegetables	VS
03 Grasses	020	Cereal grains	GC
	021	Grasses, for sugar or syrup production	GS
04 Nuts and Seeds	022	Tree nuts	TN
	023	Oilseed	SO
	024	Seed for beverages and sweets	SB
05 Herbs and Spices	027	Herbs	HH
	028	Spices	HS

# Type 3 Grasses

# Cereal grains (GC)

- ✿ Group 020. Cereal grains are derived from the ears (heads) of starchy seeds produced by a variety of plants, primarily of the grass family (Gramineae).
- ✿ Buckwheat, a dicotyledonous crop belonging to the botanical family Polygonaceae and two Chenopodium species, belonging to the botanical family Chenopodiaceae are included in this group, because of similarities in size and type of the seed, residue pattern and the use of the commodity.
- ✿ The edible seeds are protected to varying degrees from pesticides applied during the growing season by husks. Husks are removed before processing and/or consumption.
- ✿ Cereal grains are often exposed to post-harvest treatment with pesticides.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity. Fresh corn and sweet corn: kernels plus cob without husk. (For the latter see Group 012 Fruiting vegetables, other than Cucurbits).**

# Cereal grains (2)

Group/subgroup with available preliminary proposed limits

## ✿ Cereal grains

### ✦ Millet 穀子

- Little millet, Finger millet, Foxtail millet

### ✦ Oats 燕麥

- Oat, red

### ✦ Sorghum 高粱

- Chicken corn, Durra, Feterita, Guinea corn, Kaffir corn, Milo, Shallu



# Cereal grains (3)

- ❖ Other common cereal grains of local interest
  - ❖ Barley 大麥
  - ❖ Buckwheat 蕎麥
  - ❖ Maize
  - ❖ Popcorn 爆花用玉米
  - ❖ Rice
  - ❖ Rye 裸麥
  - ❖ Triticale 黑小麥
  - ❖ Wheat
  - ❖ Wild rice 野米

# Grasses for sugar or syrup production (GS)

- ✿ Group 021, Grasses for sugar or syrup production, includes species of grasses with a high sugar content especially in the stem. The stems are mainly used for sugar or syrup production, and to a small extent as vegetables or sweets.
- ✿ Common “grasses for sugar or syrup production” of local interest
  - ✿ Sorgo or sorghum, sweet
  - ✿ Sugar cane

# Type 4 Nuts and Seeds

# Tree nuts (TN)

- ✿ Group 022, Tree nuts are the seeds of a variety of trees and shrubs which are characterized by a hard inedible shell enclosing an oily seed.
- ✿ The seed is protected from pesticides applied during the growing season by the shell and other parts of the fruit.
- ✿ The edible portion of the nut is consumed in succulent, dried or processed forms.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of shell. Chestnuts: whole in skin.**

# Tree nuts (2)

Group/subgroup with available preliminary proposed limits

✿ Tree nuts

✿ **Walnuts** 胡桃

- Black walnut, English walnut

# Tree nuts (3)

## ✿ Other common tree nuts of local interest

- ✿ Almonds
- ✿ Brazil nuts
- ✿ Cashew nut 腰果
- ✿ Chestnuts 栗子
- ✿ Coconut
- ✿ Hazelnuts
- ✿ Macadamia nuts 澳洲堅果
- ✿ Pecan 美洲山核桃
- ✿ Pine nuts
- ✿ Pistachio nut 開心果

# Oilseed (SO)

- ✿ Group 023, Oilseed consists of seeds from a variety of plants used in the production of edible vegetable oils, seed meals and cakes for animal feed. Some important vegetable oil seeds are by-products of fibre or fruit crops (e.g. cotton seed, olives).
- ✿ Some of the oilseeds are, directly or after slight processing (e.g. roasting), used as food (e.g. peanuts) or for food flavouring (e.g. poppy seed, sesame seed).
- ✿ Oilseeds are protected from pesticides applied during the growing season by the shell or husk.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Unless specified, seed or kernels, after removal of shell or husk.**

# Oilseed (2)

Group/subgroup with available preliminary proposed limits

## ✿ Oilseed

### ✿ Mustard seeds 芥菜籽

- Mustard seed
- Mustard seed, Field
  - Colza, Indian; Rape seed, Indian
- Mustard seed, Indian



# Oilseed (3)

## ✿ Other common oilseed of local interest

- ✿ Cotton seed
- ✿ Lin-seed (flaxseed) 亞麻籽
- ✿ Palm nut 棕櫚核
- ✿ Peanut
- ✿ Poppy seed
- ✿ Rape seed 油菜籽
- ✿ Safflower seed 紅花籽
- ✿ Sesame seed
- ✿ Sunflower seed 葵花籽

# Seed for beverages and sweets (SB)

- ✿ The seeds for beverages and sweets are derived from tropical and sub-tropical trees and shrubs. After processing the seeds are used in the production of beverages and sweets.
- ✿ These seeds are protected from pesticides applied during the growing season by the shell or other parts of the fruit.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Unless specified, whole commodity (seed only, other parts of the fruit not included).**

# Seed for beverages and sweets (2)

- ✿ Common “seed for beverages and sweets” of local interest
  - ✿ Cacao beans 可可豆
  - ✿ Coffee beans 咖啡豆

# Type 5 Herbs and Spices

# Herbs (HH)

- ✿ Herbs consist of leaves, flowers, stems and roots from a variety of herbaceous plants, used in relatively small amounts as condiments to flavour foods or beverages. They are used either in fresh or naturally dried form.
- ✿ Herbs are fully exposed to pesticides applied during the growing season. Post-harvest treatments are often carried out on dried herbs.
- ✿ Herbs are consumed as components of other foods in succulent and dried forms or as extracts of the succulent products.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

# Herbs (2)

Group/subgroup with available preliminary proposed limits

## ✿ Herbs

### ✿ Chives 細香蔥

- Chinese chives

### ✿ Mints

- Peppermint, spearmint

# Herbs (3)

- ✿ Other common herbs of local interest
  - ✿ Basil 羅勒葉
  - ✿ Bay leaves 月桂葉
  - ✿ Dill 蒔蘿
  - ✿ Parsley 歐芹
  - ✿ Sage 鼠尾草

# Spices (HS)

- ✿ Group 028. Spices consist of the aromatic seeds, roots, berries or other fruits from a variety of plants, which are used in relatively small quantities to flavour foods.
- ✿ Spices are exposed in varying degrees to pesticides applied during the growing season. Also post harvest treatment may be applied to spices in the dried form.
- ✿ They are consumed primarily in the dried form as condiment.
- ✿ Portion of the commodity to which MRL applies (and which is analysed): **Unless specified, whole commodity as marketed, mainly in the dried form.**



# Spices (2)

## Group/subgroup with available preliminary proposed limits

### ✿ Spices

#### ⊕ Spices, seeds

- Anise seeds 大茴香籽, cardamom seed 豆蔻籽, nutmeg 肉豆蔻 豆寇, coriander seed 胡荽子, cumin seeds 小茴香籽, fennel seeds 茴香籽

#### ⊕ Spices, fruits and berries

- Pimento fruit, “Pepper, Black; White” 黑、白胡椒, vanilla bean 香子蘭豆

#### ⊕ Spices, roots and rhizomes

- Ginger root 生薑, liquorice roots 甘草根, tumeric roots 姜黃根

# Spices (2)

- ✿ Other common spices of local interest
  - ✿ Cinnamon bark 肉桂皮 (including Cinnamon, Chinese bark)
  - ✿ Cloves, buds 丁香苞

# CLASS B

## Primary Food Commodities of Animal Origin

06 Mammalian products	030	Meat (from mammals other than marine mammals)	MM
	031	Mammalian fats	MF
	032	Edible offal (mammalian)	MO
	033	Milks	ML
07 Poultry products	036	Poultry meat (including Pigeon meat)	PM
	037	Poultry fats	PF
	038	Poultry, Edible offal of	PO
	039	Eggs	PE

08 Aquatic animal products

09 Amphibians and reptiles

10 Invertebrate animals

# Highlights

- ✿ Poultry skins
  - ✿ Grouped under “Poultry, Edible offal of”

# Class D

## Processed Foods of Plant Origin

12 Secondary food commodities of plant origin	055	Dried fruits	DF
	056	Dried vegetables	DV
	057	Dried herbs	DH
	058	Milled cereal products (early milling stages)	CM
	059	Miscellaneous secondary food commodities of plant origin	SM
13 Derived products of plant origin	065	Cereal grain milling fractions	CF
	066	Teas	DT
	067	Vegetable oils, crude	OC
	068	Vegetable oils, edible (or refined)	OR
	069	Miscellaneous derived edible products of plant origin	DM
	070	Fruit juices	JF
	071	By-products, used for animal feeding purposes, derived from fruits and vegetable processing	AB
14 Manufactured foods (single ingredient) of plant origin	075	Reserved	
15 Manufactured foods (multi-ingredient) of plant origin	078	Manufactured multi-ingredient cereal products	CP

# Type 12 Secondary Food Commodities of Plant Origin



# Dried fruits (DF)

- ✿ The commodities of this group are in general artificially dried. They may or may not be preserved or candied with addition of sugars.
- ✿ Exposure to pesticides may arise from pre-harvest applications, post-harvest treatment of the fruits before processing, or treatment of the dried fruit to avoid losses during transport and wholesale or retail distribution.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of stones, but the residue is calculated on the whole commodity.**

# Dried fruits (3)

Group/subgroup with available preliminary proposed limits

✿ Dried fruits

⊕ Dried grapes

- Raisins, sultanas, muscatel, dried vine fruits

# Dried fruits (2)

- ✿ Other common dried fruits of local interest
  - ⊕ Prunes
  - ⊕ Apples, dried
  - ⊕ Apricots, dried
  - ⊕ Dried grapes
  - ⊕ Dates, dried or dried and candied

# Dried vegetables (DV)

- ✿ Group 056, Dried vegetables. The commodities of this group are in general artificially dried and often comminuted.
- ✿ Exposure to pesticides is from pre-harvest applications and/or treatment of the dry commodities.
- ✿ The entire commodity may be consumed after soaking or boiling.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

# Dried herbs (DH)

- ✿ Group 057, Dried herbs. The commodities of this group are in general artificially dried and often comminuted.
- ✿ Exposure to pesticides is from pre-harvest applications and/or treatment of the dry commodities.
- ✿ They are consumed in the dried form or soaked as a condiment in food commodities of plant or animal origin or in drinks, generally in small amounts.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

# Dried herbs (2)

Group/subgroup with available preliminary proposed limits

- ✿ Dried herbs

# Milled cereal products (early milling stages) (CM)

- ✿ Group 058. Milled cereal products (early milling stages). The group includes the early milling of fractions of cereal grains, except buckwheat, cañihua and quinoa, such as husked rice, polished rice and the unprocessed cereal grain brans.
- ✿ Exposure to pesticides is through pre-harvest treatments of the growing cereal grain crop and especially through post-harvest treatment of cereal grains.
- ✿ The entire commodity may be consumed after further processing or household preparation.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

# Milled cereal products (early milling stages) (2)

- ✿ Common milled cereal products (early milling stages) of local interest
  - ✿ Rice bran, unprocessed
  - ✿ Rice, husked
  - ✿ Rice, polished



# Type 13 Derived Edible Products of Plant Origin

# Cereal grain milling fractions (CF)

- ✿ Group 065. Cereal grain milling fractions includes milling fractions of cereal grains at the final stage of milling and preparation in the fractions. The group also include the processed brans, as prepared for direct consumption.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity.**

# Cereal grain milling fractions (2)

- ✿ Common cereal grain milling fractions of local interest
  - ⊕ Maize flour
  - ⊕ Maize meal
  - ⊕ Rye flour 黑麥麵粉
  - ⊕ Rye wholemeal
  - ⊕ Wheat bran, processed 已加工小麥麩
  - ⊕ Wheat germ 小麥胚芽
  - ⊕ Wheat flour
  - ⊕ Wheat wholemeal

# Tea (DT)

- ✿ Teas, Group 066, are derived from the leaves of several plants, principally *Camellia sinensis*.
- ✿ They are used mainly in a fermented and dried form or only as dried leaves for the preparation of infusions, which are used as beverages.
- ✿ Newly grown vegetative shoots (terminal bud and 2-3 leaves) of tea are plucked, withered, twisted and comminuted and thereafter, in general, fermented and dried.
- ✿ Teas made from other plants are often prepared in a similar way.
- ✿ Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

# Tea (2)

- ✿ Tea of local interest
  - ✿ Tea, Green, Black (black, fermented and dried)

# Vegetable oils, crude (OC)

- ✿ Group 067. Vegetable oils, crude, includes the crude vegetable oils derived from oil seed Group 023, tropical and sub-tropical oil-containing fruits such as olives, and some pulses (e.g. soya bean, dry).
- ✿ Exposure to pesticides is through pre-harvest treatment of the relevant crops or post-harvest treatment of the oilseeds or oil-containing pulses.
- ✿ Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale distribution.**

# Vegetable oils, edible (or refined) (OR)

- ✿ Group 068. Vegetable oils, edible (or refined) include the vegetable oils derived from oil seed, Group 023, tropical and sub-tropical oil-containing fruits such as olives, and some pulses with a high oil content. The edible oils are derived from the crude oils through a refining and/or clarifying process.
- ✿ Exposure to pesticides is through pre-harvest treatment of the relevant crops, or post-harvest treatment of the oilseeds and oil containing pulses.
- ✿ Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**

# Vegetable oils, edible (or refined) (2)

Group/subgroup with available preliminary proposed limits

- ✿ Vegetable oils, edible
  - ✿ Cotton seed oil, edible
  - ✿ Coconut oil, refined
  - ✿ Maize oil, edible
  - ✿ Olive oil, refined
  - ✿ Peanut oil, edible
  - ✿ Rape seed oil, edible
  - ✿ Safflower seed oil, edible
  - ✿ Sesame seed oil, edible
  - ✿ Soya bean oil, refined
  - ✿ Sunflower seed oil, edible



# Miscellaneous derived edible products of plant origin (DM)

- ✿ Group 069. Miscellaneous derived edible products include various intermediate products in the manufacture of edible food products. Some of these are used for further processing and not consumed as food or feed as such.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity.**
- ✿ Products of interest
  - ✦ Sugar beet molasses
  - ✦ Sugar cane molasses 甘蔗糖蜜

# Fruit juices (JF)

- ✿ Fruit juices, Group 070, are pressed from various mature fruits, either from the whole fruits or from the pulp. A small amount of preserving agent(s) may be added to the juices during processing. The juices are often prepared for international trade in a concentrated form which is reconstituted for wholesale or retail distribution to about the original juice concentration as obtained by the pressing process.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity (not concentrated) or commodity reconstituted to the original juice concentration.**

# Fruit juices (2)

Group/subgroup with available preliminary proposed limits

- ✿ Citrus juice

- ✦ Orange juice, grapefruit juice

- ✿ Other common fruit juices of local interest

- ✦ Apple juice
- ✦ Grape juice
- ✦ Pineapple juice
- ✦ Tomato juice

# Type 15 Manufactured Foods (Multi-ingredient) of Plant Origin

# Manufactured multi-ingredient cereal products (CP)

- ✿ The commodities of this group are manufactured with several ingredients; products derived from cereal grains however form the major ingredient.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**
- ✿ Common manufactured multi-ingredient cereal products of local interest
  - ✿ White bread
  - ✿ Wholemeal bread

# Class E

## Processed Foods of Animal Origin

16 Secondary food commodities of animal origin	080	Dried meat and fish products	MD
	081	Reserved	
	082	Secondary milk products	LS
17 Derived edible products of animal origin	084	Crustaceans, processed	SC
	085	Animal fats, processed	FA
	086	Milk fats	FM
	087	Derived milk products	LD
18 Manufactured food (single-ingredient) of animal origin	090	Manufactured milk products (single-ingredient)	LI
19 Manufactured food (multi-ingredient) of animal origin	092	Manufactured milk products (multi-ingredient)	LM

# Type 16 Secondary Food Commodities of Animal Origin



# Dried meat and fish products (MD)

- ✿ Group 080. Dried meat and fish products, includes natural or artificial dried meat products and dried fishes, mainly marine fishes. Most of the dried fishes are naturally dried (wind and sun). For convenience other marine animals, whether or not fishes or Crustaceans, are classified in this group.
- ✿ The entire commodity may be consumed, either as such or after processing (e.g. dried fish).
- ✿ Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity as prepared for wholesale or retail distribution.**
- ✿ Products of interest
  - ✦ Cattle meat, dried

# Type 17 Derived Edible Products of Animal Origin

# Milk fats (FM)

- ✿ Group 086. Milk fats are the fatty ingredients derived from the milk of various mammals.
- ✿ Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity.**

Group/subgroup with available preliminary proposed limits

- ✿ **Milk fats**
  - ✦ Buffalo milk fat
  - ✦ Camel milk fat
  - ✦ Cattle milk fat
  - ✦ Goat milk fat
  - ✦ Sheep milk fat

# Questions for Discussion

# Dried, Dehydrated, Concentrated, Processed or Compounded Food

- ✿ The MRLs/EMRLs shall apply to any food in a dried, dehydrated or concentrated form with adjustment determined with respect to the mass of the food after dilution or reconstitution, where appropriate;
- ✿ Apart from food in a dried, dehydrated or concentrated form, the MRLs/EMRLs shall apply equally to primary food commodities and processed food;
- ✿ Any compounded food may contain any pesticide residue if the proportion of the pesticide residue present in the compounded food does not exceed, in relation to the quantity of the relevant food used, the level permitted by the MRLs/EMRLs.

# Food Items of Local Interest

- ✿ Aloe
- ✿ American ginseng (花旗參)
- ✿ Dried dates (紅棗乾)
- ✿ Dried longan (龍眼乾)
- ✿ Edible flowers
  - ✦ Chrysanthemum (菊花)
  - ✦ Honeysuckle (金銀花)
  - ✦ Plumeria rubra Flower (雞蛋花)
  - ✦ Rose
- ✿ Flos Sophorae (槐米)
- ✿ Gingko nuts (白果)
- ✿ Hawthorne (山楂)
- ✿ Honey
- ✿ Luo han guo (羅漢果)
- ✿ Lotus leaf (荷葉)
- ✿ Mulberry leaf (桑葉)
- ✿ Rhizoma Imperatae (白茅根)
- ✿ Seaweed
- ✿ Sprouts (芽菜)
- ✿ Other traditional Chinese herbs

# Regulated under the Chinese Medicine Ordinance (Cap. 549)

✿ Dried or processed form. For example,

- ✿ 夏枯草
- ✿ 雞骨草
- ✿ 燈心草
- ✿ 川貝母
- ✿ 平貝母

# Thank you