Overview of Codex Classification of Foods and Animal Feeds

20 April 2011
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 an 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
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Citrus fruits (FC)

Citrus fruits are produced on trees or shrubs of the family Rutaceae. These fruits are characterized by aromatic oily peel, globular form and interior segments of juice-filled vesicles. The fruit is fully exposed to pesticides during the growing season. Post-harvest treatments with pesticides and liquid waxes are often carried out to avoid deterioration during transport and distribution due to fungal diseases, insect pests or loss of moisture. The fruit pulp may be consumed in succulent form and as a juice.

- The entire fruit may be used for preserves.

- Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity**.

- Except Kumquats
Citrus Fruits (2)

Group/subgroup with available preliminary proposed limits

- Citrus fruits
  - Mandarins
    - Tangerine, King mandarin, Tangors, etc.
  - Oranges, Sweet, Sour
    - Orange, Sweet (including blood orange)
  - Shaddocks or Pomelos
    - Pomelo, shaddock, tangelo
Citrus fruits (3)

- Other common citrus fruits of local interest
  - Grapefruit
  - Lemon
  - Lime 青檸
Pome fruits (FP)

Pome fruits are produced on trees and shrubs belonging to certain genera of the rose family (Rosaceae), especially the genera Malus and Pyrus. They are characterized by fleshy tissue surrounding a core consisting of parchment-like carpels enclosing the seeds.

Pome fruits are fully exposed to pesticides applied during the growing season. Post-harvest treatments directly after harvest may also occur. The entire fruit, except the core, may be consumed in the succulent form or after processing.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of stems.**
Pome fruits (2)

Group/subgroup with available preliminary proposed limits

- Pome fruits
  - Pear
    - “Pear, Oriental”
Pome fruits (3)

- Other common pome fruits of local interest
  - Apple
  - Loquat 枇杷
Stone fruits (FS)

Stone fruits are produced on trees belonging to the genus Prunus of the rose family (Rosaceae). They are characterized by fleshy tissue surrounding a single hard shelled seed. The fruit is fully exposed to pesticides applied during the growing season (from fruit setting until harvest). Dipping of fruit immediately after harvest, especially with fungicides, may also occur.

The entire fruit, except the seed, may be consumed in a succulent or processed form.

Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of stems and stones, but the residue calculated and expressed on the whole commodity without stem.**
Stone fruits (2)

Group/subgroup with available preliminary proposed limits

- Stone fruits
  - Cherries
    - Sour cherry, Sweet cherry
Stone fruits (3)

- Other common stone fruits of local interest
  - Plums (including Prunes) 李子
  - Apricot 杏桃
  - Nectarine 油桃
  - Peach 桃
Berries and other small fruits (FB)

- Berries and other small fruits are derived from a variety of perennial plants and shrubs having fruit characterized by a high surface : weight ratio. The fruits are fully exposed to pesticides applied during the growing season (blossoming until harvest).

- The entire fruit, often including seed, may be consumed in a succulent or processed form.

- Portion of commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of caps and stems. Currants, Black, Red, White: fruit with stem.**
Berries and other small fruits (2)

Group/subgroup with available preliminary proposed limits

Berries and other small fruits

- Blueberries
  - “Blueberry, Highbush”, “Blueberry, Lowbush”, “Blueberry, Rabbiteye”
- Currents, Black, Red, White
  - “Current, Black”, “Currant, Red, White”
- Dewberries
  - Boysenberry, Loganberry
- Grapes
  - Table-grapes, wine-grapes
Berries and other small fruits (3)

Other common berries and small fruits of local interest
- Blackberries
- Cranberry
- Mulberry
- Raspberries, Red, Black
- Strawberry
Assorted tropical and subtropical fruits – edible peel (FT)

- The assorted Tropical and sub-tropical fruits - edible peel are derived from the immature or mature fruits of a large variety of perennial plants, usually shrubs or trees. The fruits are fully exposed to pesticides during the growing season (period of fruit development).

- The whole fruit may be consumed in a succulent or processed form.

- Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity. Dates and Olives: Whole commodity after removal of stems and stones but residue calculated and expressed on the whole fruit.
Assorted tropical and subtropical fruits – edible peel (2)

Group/subgroup with available preliminary proposed limits

 반드시 Assorted tropical and subtropical fruits – edible peel

🔹 Kumquats
  - Kumquat, Marumi; Kumquat, Nagami
Assorted tropical and subtropical fruits – edible peel (3)

Other common “assorted tropical and subtropical fruits – edible peel” of local interest

- Carambola 楊桃
- Chinese olive, Black, White
- Date 棗
- Fig
- Jujube, Chinese 大棗
- Olives
- Persimmon
The assorted tropical and sub-tropical fruits - inedible peel are derived from the immature or mature fruits of a large variety of perennial plants, usually shrubs or trees. Fruits are fully exposed to pesticides applied during the growing seas (period of fruit development) but the edible portion is protected by skin, peel or husk. The edible part of the fruits may be consumed in a fresh or processed form.

Portion of the commodity to which the MRL applies (and which is analysed): Whole fruit unless qualified: e.g., banana pulp. Pineapple after removal of crown. Avocado, mangos and similar fruit with hard seeds: Whole commodity after removal of stone but calculated on whole fruit.
Assorted tropical and subtropical fruits – inedible peel (2)

Group/subgroup with available preliminary proposed limits

Assorted tropical and subtropical fruits – inedible peel
Assorted tropical and subtropical fruits – inedible peel (3)

Other common “assorted tropical and subtropical fruits – inedible peel” of local interest
- Avocado
- Banana
- Durian
- Guava
- Jackfruit
- Java apple
- Kiwifruit
- Longan
- Litchi
- Mangosteen 山竹
- Passion fruit
- Persimmon
- Pineapple
- Pomegranate 石榴
- Rambutan 紅毛丹
- Sapodilla 人參果
- Sugar apple 番荔枝
- Tamarind 酸豆
Fruits - Highlights

- Kumquat belongs to “Assorted tropical and sub-tropical fruits – edible peel”
- Melon-type fruits such as melon, watermelon, cantaloupe, etc., belong to Vegetables
  - “Fruiting vegetables – Cucurbits”
- Grouping of persimmons depend on its cultivars – edible/inedible peel
  - “Assorted tropical and sub-tropical fruits – edible peel”
  - “Assorted tropical and sub-tropical fruits – inedible peel”
- Coconut
  - Grouped under “Tree nuts”
- Ground cherries 燈籠果
  - Grouped under “Fruiting vegetables other than Cucurbits”
Common fruits in Hong Kong; but not listed under Codex’s classification

- Myrobalan 油甘子；Wampee 黃皮
- Assorted tropical and sub-tropical fruits – edible peel?
Type 02 Vegetables
Bulb vegetables (VA)

- Bulb vegetables are pungent highly flavoured foods derived from fleshy scale bulbs (in some commodities including stem and leaves), of the genus Allium of the lily family (Liliaceae). Bulb fennel is included in this group; the bulb-like growth of this commodity gives rise to similar residues.

- The subterranean parts of the bulbs and shoots are protected from direct exposure to pesticides during the growing season.

- The entire bulb may be consumed after removal of the parchment-like skin. The leaves and stems of some species or cultivars may also be consumed.

- Portion of the commodity to which the MRL applies (and which is analysed): Bulb/dry onions and garlic: Whole commodity after removal of roots and adhering soil and whatever parchment skin is easily detached. Leeks and spring onions: Whole vegetable after removal of roots and adhering soil.
Bulb vegetables (2)

Group/subgroup with available preliminary proposed limits

- Bulb vegetables
  - Chives
    - “Chives, Chinese”
Bulb vegetables (3)

- Other common bulb vegetables of local interest
  - Garlic
  - Garlic, Great-headed
  - Leek
  - Onion, Bulb
  - Onion, Chinese (Rakkyho)
  - Shallot
  - Spring onion
  - Tree onion
**Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas (VB)**

- Brassica (cole or cabbage) vegetables and flowerhead brassicas are foods derived from the leafy heads, stems and immature inflorescences of plants belonging to the genus Brassica of the family Cruciferae. Although Kohlrabi does not comply fully with the description above, for convenience and because of the similarity in residue behaviour the commodity is classified in this group. Kohlrabi is a tuber-like enlargement of the stem.

- The edible part of the crop is partly protected from pesticides applied during the growing season by outer leaves, or skin (Kohlrabi).

- The entire vegetable after discarding obviously decomposed or withered leaves may be consumed.

- Portion of the commodity to which the MRL applies (and which is analysed): Head cabbages and Kohlrabi: Whole commodity as marketed, after removal of obviously decomposed or withered leaves. Cauliflower and broccoli: flower heads (immature inflorescence only). Brussels sprouts: “buttons” only.
Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas (2)

Group/subgroup with available preliminary proposed limits

- Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas
  - Cabbages, Head
    - Cabbage, red cabbage, white cabbage, “cabbage, savoy”
  - Flowerhead brassicas
    - Broccoli, cauliflower, “Broccoli, Chinese”
Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas (3)

- Other common “Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas” of local interest
  - Brussels sprouts
  - Kohlrabi 芥蘭頭
Fruiting vegetables, Cucurbitas (VC)

- Group 011 Fruiting vegetables, Cucurbitas are derived from the immature or mature fruits of various plants, belonging to the botanical family Cucurbitaceae: usually these are annual vines or bushes.
- These vegetables are fully exposed to pesticides during the period of fruit development.
- The edible portion of those fruits of which the inedible peel is discarded before consumption is protected from most pesticides, by the skin or peel, except from pesticides with a systemic action.
- The entire fruiting vegetable or the edible portion after discarding the inedible peel may be consumed in the fresh form or after processing. The entire immature fruit of some of the fruiting vegetables species may be consumed, whereas only the edible portion of the mature fruit of the same species, after discarding the then inedible peel, is consumed.
- Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity after removal of stems.
Fruiting vegetables, Cucurbits (2)

Group/subgroup with available preliminary proposed limits

- Fruiting vegetables, Cucurbits
  - Melons, except Watermelon
    - Cantaloupe, Honeydew melon, Winter melon, etc.
  - Squash
    - Summer squash and winter squash
Fruiting vegetables, Cucurbits (3)

Other common “Fruiting vegetables, Cucurbits” of local interest
- Balsam pear (bitter gourd) 苦瓜
- Bottle gourd 葫蘆瓜/蒲瓜
- Chayote 合掌瓜
- Cucumber 黃瓜
- Gherkin 小黃瓜
- Loofah, Angled 絲瓜
- Loofah, Smooth 水瓜
- Melon
- Vegetable Spaghetti 魚翅瓜/金絲瓜
- Water melon
- Winter melon 冬瓜
- Zucchini
Fruiting vegetables other than Cucurbits (VO)

- Group 012 Fruiting vegetables, other than Cucurbits are derived from the immature and mature fruits of various plants, usually annual vines or bushes. The group includes edible fungi and mushrooms, being comparable organs of lower plants. Many plants of this group belong to the botanical family Solanaceae.

- This group does not include fruits of vegetables of the botanical family Cucurbitaceae or the pods of vegetables of the Leguminosae family.

- The vegetables of this group are fully exposed to pesticides applied during the period of fruit development, except those of which the edible portion is covered by husks, such as sweet corn, ground cherries (Physalis spp.). The latter fruiting vegetables are protected from most pesticides by the husk except from pesticides with a systemic action.

- The entire fruiting vegetable or the edible portion after discarding husks or peels may be consumed in a fresh form or after processing.

- Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity after removal of stems. Mushrooms: Whole commodity. Sweet corn and fresh corn: kernels plus cob without husk.**
Fruiting vegetables other than Cucurbits (2)

Group/subgroup with available preliminary proposed limits

- Fruiting vegetables other than Cucurbits
  - Peppers
    - Sweet peppers (including bell peppers, long peppers)
    - Chili peppers (including cluster pepper)
Fruiting vegetables other than Cucurbits (3)

Other “Fruiting vegetables other than Cucurbits” of local interest

- Corn-on-the-cob
- Edible fungi
- Egg plant
- Ground cherries 燈籠果
- Mushrooms
- Okra 潮茄
- Sweet corn (kernels)
- Tomato
Leafy vegetables (including Brassica leafy vegetables) (VL)

- Group 013 Leafy vegetables are foods derived from the leaves of a wide variety of edible plants, usually annuals or biennials. They are characterized by high surface : weight ratio. The leaves are fully exposed to pesticides applied during the growing season.

- The entire leaf may be consumed, either fresh or after processing or household cooking.

- Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity as usually marketed, after removal of obviously decomposed or withered leaves.
Leafy vegetables (including Brassica leafy vegetables) (2)

Group/subgroup with available preliminary proposed limits

- Leafy vegetables (including Brassica leafy vegetables)
  - Brassica leafy vegetables
    - Chinese cabbage (type Pe-tsai), Choi sum, Indian mustard, Kale, Pak-choi, turnip greens, etc.
Leafy vegetables (including Brassica leafy vegetables) (3)

Other common leafy vegetables of local interest
- Amaranth
- Box thorn/Gow Kee 枸杞
- Chard/Beet leaves 君達菜
- Endive 菊苣
- Kangkung/ Water spinach
- Lettuce, Head
- Lettuce, Leaf

- Pepper leaves
- Purslane 馬齒苋
- Radish leaves (including radish tops)
- Spinach 菠菜
- Spinach, Indian 滬菜
- Sweet potato, leaves
- Watercress 西洋菜
Legume vegetables (VP)

- Group 014. Legume vegetables are derived from the succulent seed and immature pods of leguminous plants commonly known as beans and peas.

- Pods are fully exposed to pesticides during the growing season, whereas the succulent seed is protected within the pod from most pesticides, except pesticides with systemic action.

- The succulent forms may be consumed as whole pods or as the shelled product.

- Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity, unless otherwise specified.
Legume vegetables (2)

Group/subgroup with available preliminary proposed limits

- **Legume vegetables**
  - Beans, except broad bean and soya bean (green pods and immature seeds)
    - Common bean (pods and/or immature seeds), mung bean (green pods)
      - French bean 玉豆, Kidney bean (pods and/or immature seeds), green bean 四季豆
  - Beans, shelled
  - Peas (pods and succulent = immature seeds)
    - Garden pea, yard-long bean 豆角
  - Peas, shelled
Legume vegetables (3)

- Other common legume vegetables of local interest
  - Broad bean 蠶豆
  - Soybean 大豆
Pulses (VD)

- Group 015. Pulses are derived from the mature seeds, naturally or artificially dried, of leguminous plants known as beans (dry) and peas (dry).

- The seeds in the pods are protected from most pesticides applied during the growing season except pesticides which show a systemic action. The dried beans and peas however are often exposed to post harvest treatments.

- The dry pulses are consumed after processing or household cooking.

- Portion of the commodity to which the MRL applies (and which is analysed): **Whole commodity.**
Pulses (2)

Group/subgroup with available preliminary proposed limits

- **Pulses**
  - **Beans (dry)**
    - Adzuki bean, kidney bean, Mung bean, Lima bean,
  - **Peas (dry)**
    - Cowpea, field pea
Pulses (3)

- Other common pulses of local interest
  - Chick-pea
  - Lentil
  - Soya bean
Group 016. Root and tuber vegetables are the starchy enlarged solid roots, tubers, corms or rhizomes, mostly subterranean, of various species of plants, mostly annuals.

The underground location protects the edible portion from pesticides applied to the aerial parts of the crop during the growing season; however the commodities in this group are exposed to pesticide residues from soil treatments.

The entire vegetable may be consumed in the form of fresh or processed foods.

Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity after removing tops. Remove adhering soil (e.g. by rinsing in running water or by gentle brushing of the dry commodity).
Root and tuber vegetables (2)

Group/subgroup with available preliminary proposed limits

Root and tuber vegetables

- Cassava
  - Bitter cassava, sweet cassava

- Yams
  - White yam, Greater yam 大薯, Yellow yam, etc.
Root and tuber vegetables (3)

- Other common roots and tuber vegetables of local interest
  - Arrowhead 茨茹
  - Beetroot 紅菜頭
  - Carrot
  - Horseradish 山葵
  - Potato
  - Radish
  - Sweet potato 番薯
  - Taro
  - Turnip, Garden 蕃菁
  - Yam bean 沙葛
Group 017. Stalk and stem vegetables are the edible stalks, leaf stems or immature shoots, from a variety of annual or perennial plants. Although not actually belonging to this group, globe artichoke (the immature flowerhead) of the family Compositae is included in this group.

Depending upon the part of the crop used for consumption and the growing practices, stalk and stem vegetables are exposed, in varying degrees to pesticides applied during the growing season.

Stalk and stem vegetables may be consumed in whole or in part and in the form of fresh, dried or processed foods.

Portion of the commodity to which the MRL applies (and which is analysed): Whole commodity as marketed after removal of obviously decomposed or withered leaves. Rhubarb, leafstems only: globe artichoke, flowerhead only, celery and asparagus, remove adhering soil.
Stalk and stem vegetables (2)

Group/subgroup with available preliminary proposed limits

※ Stalk and stem vegetables
Stalk and stem vegetables (3)

- Common stalk and stem vegetables of local interest
  - Artichoke, globe 球狀朝鮮薊
  - Asparagus 蘆筍
  - Bamboo shoots 竹筍
  - Celtuce 蒟蒻
  - Celery 芹菜
  - Rhubarb 大黃
Vegetables – Highlights (1)

- **Melon-type fruits** such as melon, watermelon, cantaloupe, etc., belong to Vegetables
  - “Fruiting vegetables – Cucurbits”

- **Ground cherries**
  - Grouped under “Fruiting vegetables other than Cucurbits”
Vegetables – Highlights (2)

- “Fresh” beans/peas
  - Legumes

- “Dried” beans/peas
  - Pulses

- Yard-long bean
  - Belongs to subgroup “peas”

- Chives
  - Normally consumed as vegetables in Hong Kong
  - Considered as “Bulb vegetables (VA)”, rather than “Herbs (HH)”
Vegetables – Highlights (3)

Chinese cabbage (type Pe-tsai)

- Tientsin cabbage 津菜；Wong choi cabbage 王菜；黃芽白；紹菜；Baby Tientsin cabbage 娃娃菜

Pak-choi

- 江門白；鶴藪白；馬尾白；白菜仔；江門仔；馬尾仔；黃葉白菜；黑葉白菜
Vegetables – Highlights (4)

Chinese Kale 芥蘭/芥藍 (Brassica oleracea L., var. alboglabra (L.H. Bailey) Musil)
- Equivalent to “Broccoli, Chinese” (VB 0401)
- Grouped under group “Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas (VB 0040); and
  - subgroup “Flowerhead brassicas (VB 0042)”
Questions for Discussion
A. Foods that are unique to the local diet, not listed under Codex classification, but grouping may be considered accordingly

- **Bulb vegetables**
  - Lily bulbs 百合；Water chestnut 馬蹄；Garlic shoot 蒜芯

- **Fruiting vegetables, Cucurbits**
  - Hairy melon 筠瓜；翠玉瓜 (=Summer squash?)

- **Fruiting vegetables, other than Cucurbits**
  - 珍珠筍；粟米鬚

- **Leafy vegetables**
  - Garden chrysanthemum 藥薑；白菜心；小棠菜；塌菜

- **Root and tuber vegetables**
  - Kudzu 粉葛；lotus root 蓮藕

- **Stalk and stem vegetables**
  - Wild rice 茭筍
B. Other foods that are unique to the local diet, not listed under Codex classification

- Mung bean sprouts 綠豆芽菜；soya bean sprouts 大豆芽；alfalfa sprouts 苜蓿芽
  - Grouped under pulses?
- Pea shoots 豆苗
  - Grouped under leafy vegetables or legumes?
- Ginkgo 白果
  - Tree nuts?
- Lotus seeds 蓮子；melon seeds 瓜子；alfalfa seeds
  - Vegetables or oilseeds?
Thank you