

Proposed Amendments to the Food Adulteration (Metallic Contamination) Regulations (Cap.132V)

Consultation Forum

Outline

- **Background**
- **Proposed amendments**
- **Public consultation and way forward**



Background



Chief Executive's 2024 Policy Address-Supplement

- **One of the Policy Measures**
 - In 2024-25, review food safety standards regarding metal content in food under the Food Adulteration (Metallic Contamination) Regulations with reference to international standards and practices, with a view to formulating legislative amendment proposals and launching public consultation.



Metallic contaminants in Food

- Metals are naturally present in the environment. They can enter the food supply through environmental contamination or during the food production processes.
- Metallic contaminants may be present in foods in trace amounts.
- Diet is one of the main sources of exposure to some metallic contaminants.



Metallic Contaminants in Food

- **Adverse health effects of certain metallic contaminants:**
 - **Cadmium:** Long-term exposure can affect the kidneys function. High intake of cadmium can affect calcium metabolism, leading to the formation of kidney stones.
 - **Mercury:** Mercury exists in various forms. Organic mercury (methylmercury) is more toxic than inorganic mercury. Excessive intake of methylmercury can cause adverse effect to the nervous system, especially the foetus's developing brain and neurological development.
 - **Lead:** Long-term exposure to excessive lead can cause retarded cognitive and intellectual development in children. Exposure to lead is also known to cause chronic diseases such as increasing hypertension, coronary heart disease and renal impairment risk in adults.



Regulation of Metallic Contamination in Food in Hong Kong

- **The Food Adulteration (Metallic Contamination) Regulations (Cap. 132V) (the Regulations):**
 - stipulates 144 Maximum Levels (MLs) for 14 metallic contaminants in food.
- **The Public Health and Municipal Services Ordinance (Cap. 132) :**
 - Section 54: all food for sale must be fit for human consumption.



Codex Alimentarius Commission

- **Established by FAO and WHO in 1960s**
 - 188 member countries and 1 member organization (the European Union (EU));
 - Codex standards are developed through thorough discussion among its members and adopted by consensus.
- **International food standards, code of practice**
 - ✓ Protecting consumer health;
 - ✓ Ensure fair international food trade (removing barriers to trade);
 - ✓ Recognised by the World Trade Organization as the standard-setting body for food safety.
- **The most important international reference**



Proposed Amendments



Proposed Amendments

- 1) To add or update the MLs in the Regulations with reference to the Codex latest standards for lead, cadmium and methylmercury in food;
- 2) To add or update the MLs for lead and cadmium in edible fungi in the Regulations;
- 3) To add MLs for lead in sugars;
- 4) To update the MLs for lead in “Fat spreads and blended spreads” and “Lime preserved eggs” in the Regulations.



Factors considered

- **The latest Codex standards of metallic contaminants;**
- **The standards of major food importing places including the EU, Korea and the Mainland China (the Mainland), etc;**
- **Local food consumption pattern and dietary practices;**
- **Results of risk assessment conducted by CFS; and**
- **Stakeholder concerns.**



(1) With reference to the Codex standards

- **Propose to set 22 MLs for metallic contaminants in specified foods with reference to Codex (add 16 and update 6)**

➤ **Add**

- Lead: 5 (grape juice, 3 edible fungi, foods for infant and young children, honey and candies)
- Cadmium: 5 (chocolate products)
- Methylmercury: 6 (specified fish species)

➤ **Update**

- Lead: 6 (edible offal, edible fats and oils, salt and mango chutney)



Lead : Add or update 11 MLs with reference to Codex

Lead : Add 5 MLs		
	Food items	Proposed ML (mg/kg)
1	Grape juice	0.04
2	Fresh farmed mushrooms (<i>Agaricus bisporus</i> , <i>Lentinula edodes</i> and <i>Pleurotus ostreatus</i>)	0.3
3	Cereal-based foods intended to be consumed principally by persons under the age of 36 months.	0.02
4	Ready-to-eat complementary foods intended to be consumed principally by persons under the age of 36 months. (Other than cereal-based foods intended to be consumed principally by persons under the age of 36 months.)	0.02
5	Honey and sugar-based candies	0.1



Lead : Add or update 11 MLs with reference to Codex

Lead : Update 6 MLs			
	Food items	Existing ML (mg/kg)	Proposed ML (mg/kg)
6	Mango chutney	1	0.4
7	Edible offal of cattle	0.5	0.2
8	Edible offal of pig	0.5	0.15
9	Edible offal of poultry	0.5	0.1
10	Edible fats and oils	0.1	0.08
11	Salt, food grade (Other than salt from marshes, food grade)	2 (Salt, food grade)	1



Methylmercury : Add 6 MLs for specified fish with reference to Codex

Methylmercury: Add 6 MLs			
	Food items	Existing ML (mg/kg)	Proposed ML (mg/kg)
1	Tuna	0.5 (Fish)	1.2
2	Alfonsino	0.5 (Fish)	1.5
3	Marlin	0.5 (Fish)	1.7
4	Shark	0.5 (Fish)	1.6
5	Orange roughy	0.5 (Fish)	0.8
6	Pink cusk-eel	0.5 (Fish)	1.0



MLs for methylmercury in 6 specified fish species

- **Codex has adopted new MLs for methylmercury in 6 specified predatory fish species* (ranging from 0.8 to 1.7 mg/kg) based on the principle of ALARA.**
- **Propose to add new MLs for methylmercury in 6 specified fish species with reference to Codex**
 - The local dietary exposure to methylmercury arising from the consumption of the 6 fish species accounts for a relatively low proportion of the population's total dietary exposure to methylmercury (with a total of 3%); a significant impact on the exposure of the local population to methylmercury is unlikely.
 - CFS will continue to provide dietary advices to local population.

**Tuna, Alfonsino, Marlin, Shark, Orange roughy, Pink cusk-eel
ALARA: as low as reasonably achievable*



MLs for methylmercury in other fish and “Fish balls/fish cakes”

- **Maintain the existing ML for methylmercury in “Fish” at 0.5 mg/kg in the Regulations for fish other than these 6 specified fish species.**
- **Propose to add ML for methylmercury in “fish balls/fish cakes” at 0.5 mg/kg**
 - In the Second Hong Kong Population-based Food Consumption Survey, the consumption of “fish balls/fish cakes” by the local population is the highest amount fish products.



Cadmium: Add 5 MLs for chocolate products with reference to Codex

Cadmium: Add 5 MLs		
	Food items	Proposed ML (mg/kg)
1	Cocoa powder (100% total cocoa solids on a dry matter basis) ready for consumption	2.0
2	Chocolates containing or declaring $\geq 70\%$ total cocoa solids on a dry matter basis	0.9
3	Chocolates containing or declaring $\geq 50\%$ to $< 70\%$ total cocoa solids on a dry matter basis	0.8
4	Chocolates containing or declaring $\geq 30\%$ to $< 50\%$ total cocoa solids on a dry matter basis	0.7
5	Chocolates containing or declaring $< 30\%$ total cocoa solids on a dry matter basis	0.3



MLs for cadmium in chocolate

- **Propose to add 5 MLs for cadmium in chocolate products with reference to Codex standards, ranging from 0.3 to 2 mg/kg**
 - To better protect the local population, especially children, from any potential health risks posed by exposure to cadmium from consumption of chocolate products.



(2) (i) MLs for cadmium in edible fungi

- **Propose to set 6 MLs for cadmium in various kinds of edible fungi with reference to the latest Mainland standards, ranging from 0.2 to 2 mg/kg**
 - Codex has no relevant MLs for cadmium.
 - Mainland is our primary source of edible fungi.
 - According to the results of the 1st HKTDS, the dietary exposures to cadmium of the local population are below the corresponding HBGV, normal dietary exposure to cadmium is unlikely to pose health risk to the local population.

1st HKTDS: The First Hong Kong Total Diet Study
HBGV: Health-based guidance value



Cadmium: Add 6 MLs for edible fungi

	Food items	Proposed ML (mg/kg)
1	Edible fungi unless otherwise specified	0.2
2	<i>Lentinula edodes</i>	0.5
3	<i>Morchella importuna</i> , <i>Sarcodon imbricatus</i> , <i>Russula virescens</i> , <i>Cantharellus</i> spp. and <i>Armillaria mellea</i>	0.6
4	<i>Tricholoma matsutake</i> , “ <i>Boletus bainiugan</i> , <i>Lanmaoa asiatica</i> , <i>Sutorius brunneissimus</i> , <i>Rugiboletus extremiorientalis</i> ” , <i>Termitomyces</i> spp. and <i>Lactarius volemus</i>	1
5	<i>Tuber</i> spp. and <i>Agaricus blazei</i>	2
6	“ <i>Auricularia cornea</i> , <i>Auricularia heimuer</i> ” and <i>Tremella fuciformis</i>	0.5 (In dried form)



(2) (ii) MLs for lead in edible fungi

- **Propose to update the ML for lead in “Edible fungi” in the Regulations with reference to the latest Mainland standards**
 - The existing ML for lead in “Edible fungi” at 1 mg/kg in the Regulations was made with reference to previous version of Mainland standard.
 - Under the latest Mainland standards, the corresponding ML for lead has been replaced by separate MLs for four groups of edible fungi (ranging from 0.3 to 1 mg/kg).



Lead : Add 3 and update 1 MLs for edible fungi

Lead: Add 3 MLs			
	Food items	Proposed ML (mg/kg)	
1	<i>Armillaria mellea</i>	0.3	
2	“ <i>Boletus bainiugan</i> , <i>Lanmaoa asiatica</i> , <i>Sutorius brunneissimus</i> , <i>Rugiboletus extremiorientalis</i> ” , <i>Tricholoma matsutake</i> , <i>Tuber</i> spp., <i>Russula virescens</i> , <i>Termitomyces</i> spp., <i>Cantharellus</i> spp. and <i>Lactarius volemus</i>	1.0	
3	“ <i>Auricularia cornea</i> , <i>Auricularia heimuer</i> ” and <i>Tremella fuciformis</i>	1.0 (In dried from)	
Lead: Update 1 ML			
	Food items	Existing ML (mg/kg)	Proposed ML (mg/kg)
4	Edible fungi unless otherwise specified	1 (Edible fungi)	0.5



(3) MLs for lead in “White and refined sugar, corn and maple syrups”, and “Soft brown, raw, and non–centrifugal sugars”

- **Propose to add MLs for lead in “White and refined sugar, corn and maple syrups”, and “Soft brown, raw, and non–centrifugal sugars”**
 - To protect public health, we propose to add MLs for lead with reference to relevant standards of the Mainland and Korea.
 - Mainland and Korea are the major sources of sugar imports for Hong Kong.
 - Both places set the ML for lead in sugar at 0.5 mg/kg.
 - Addition of the new ML should not affect the supply of sugars in Hong Kong.



(4) (i) ML for lead in “Fat spreads and blended spreads”

- **Propose to update the ML for lead in “Fat spreads and blended spreads” in the Regulations**
 - The MLs for lead in both “Fat spreads and blended spreads” and “Edible fats and oils” are set at the same level at 0.1 mg/kg in the Regulations.
 - “Fat spreads and blended spreads” is made from the ingredient “Edible fats and oils” up to 90% fat.
 - Propose to update the MLs for lead in both commodities in the Regulations to the same level at 0.08 mg/kg, in line with the latest standards of the Mainland.

** The proposed ML for lead in “Edible fats and oils” at 0.08 mg/kg is made with reference to Codex latest standard.*



(4) (ii) ML for lead in lime preserved eggs

- **Propose to update the ML for lead in lime preserved eggs in the Regulations**
 - The existing ML for lead in “Lime preserved eggs” at 0.5 mg/kg in the Regulations was made with reference to the previous version of Mainland standard.
 - Under the latest Mainland standard, the corresponding ML for lead has been changed to 0.2 mg/kg.
 - Lime preserved eggs are mainly imported from the Mainland.
 - Propose to update the ML for lead in lime preserved eggs in the Regulations from 0.5 mg/kg to 0.2 mg/kg, in line with the latest relevant standard of the Mainland.



To update the MLs for lead, cadmium and methylmercury in food

- With reference to Codex standards as the backbone
- Supplemented with the standards of major food importing places (including Mainland China)

	Number of MLs under existing Cap.132V :	144
+	Number of new MLs :	27
	Number of updated MLs :	9
Number of MLs after amendments :		171



Reality check

- CFS has reviewed food surveillance statistics and collected additional food samples, in particular those newly proposed food pairs, for reality check. The results showed that more than 99% of the food samples can meet the proposed MLs.
- In general, the implications of the proposed amendments to the MLs on food supply is insignificant.



Expert Committee on Food Safety

- **To advise the Director of Food and Environmental Hygiene**
 - formulation of food safety measures, review of food safety standards, risk communication strategies, etc.
- **The Expert Committee consists of academics, food experts, members of the trade and other experts.**
- **Consulted the Expert Committee in September 2024**
 - Supported the proposed amendments to the Regulations.



Transitional period

- **Propose a transitional period of 18 months after enactment of the amended legislation.**
- **Will update the Guidelines on the Food Adulteration (Metallic Contamination) Regulations**
 - To assist the trade to better understand the amendments and facilitate their compliance.



Public consultation and way forward



Public consultation and way forward

- **Have launched the 2-month public consultation (till 16 February 2025).**
- **Plan to introduce the legislative amendments to the Legislative Council in 2025.**



Consultation forum

Date:	27 December 2024 (Friday)	17 January 2025 (Friday)
Time:	3:00pm – 4:30pm	3:00pm – 4:30pm
Format:	Physical Meeting	Zoom Cloud Meeting
Location:	Conference Room, 1/F, New Wan Chai Market, 258 Queen's Road East, Wan Chai, Hong Kong	-
Registration deadline :	19 December 2024	9 January 2025

View sought

- Please send your comments by post, facsimile or e-mail to CFS within consultation period (16 Dec 2024 - 16 Feb 2025) :

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Thank you

