

# **立法會**

## ***Legislative Council***

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### **Panel on Food Safety and Environmental Hygiene**

#### **Background brief prepared by the Legislative Council Secretariat for the special meeting on 3 July 2017**

#### **Proposed amendments to the Food Adulteration (Metallic Contamination) Regulations**

### **Purpose**

This paper provides background information on the Administration's proposal to amend the Food Adulteration (Metallic Contamination) Regulations (Cap. 132V) ("the Regulations"), and summarizes the views and concerns of members expressed at the meeting of the Panel on Food Safety and Environmental Hygiene ("the Panel") held on 13 June 2017.

### **Background**

2. According to the information provided by the Administration for the said Panel meeting, metals are naturally present and ubiquitous in the environment. Metallic contaminants may enter the food supply chain through environmental contamination or during food production process. They may be present in food in trace amount. For ordinary adults, diet is one of the important sources of exposure to metallic contaminants. Adverse health effects posed by metallic contaminants in food depend on the chemical nature as well as the amount and duration of individual exposure, etc.

#### Existing regulatory control on levels of metallic contamination in food

3. At present, metallic contamination in food in Hong Kong is regulated by the Public Health and Municipal Services Ordinance (Cap. 132) ("PHMSO") and the Regulations:

- (a) section 54 of PHMSO stipulates that all food for sale must be fit for human consumption;
- (b) Regulation 3 of the Regulations prohibits the import, consignment, delivery, manufacture or sale of any food for human consumption containing any metal in such amount as to be dangerous or prejudicial to health; and
- (c) the First and Second Schedules to the Regulations prescribe 19 maximum permitted concentrations of seven metallic contaminants in food, namely, antimony, arsenic, cadmium, chromium, lead, mercury and tin, among which the corresponding food categories of four metallic contaminants (i.e. arsenic, lead, mercury and tin) cover "all food in solid/liquid form".

4. The Regulations were enacted in 1960, with the latest major amendments to the First and Second Schedules to the Regulations made in 1983. Having regard to international developments over the years, including revision of the international food safety standards by the Codex Alimentarius Commission ("Codex") and other jurisdictions as well as their experience in implementing the revised standards, the Administration considers it necessary to enhance and update the Regulations with a view to better protecting public health, facilitating effective regulation and promoting harmonization between local and international standards.

#### Proposed amendments to the Regulations

5. Following a comprehensive review of the Regulations, in consultation with the Working Group on Amendments to Food Adulteration (Metallic Contamination) Regulations, the Expert Committee on Food Safety and the Advisory Council on Food and Environmental Hygiene, the Administration proposes to amend the Regulations as follows:

- (a) to replace the existing food categories of "all food in solid/liquid form" with specific maximum levels ("MLs")<sup>1</sup> targeting individual food/food groups, with a view to aligning with the Codex principle and modern international regulatory trends of specifying metallic contamination standards for individual food/food groups of significant dietary exposure;

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<sup>1</sup> "Maximum permitted concentrations" under the Regulations are known as "maximum levels" (MLs) under Codex. The term ML has been used in the proposed amendments so as to align with the Codex terminology.

- (b) to adopt all Codex MLs on metallic contaminants, except for seven Codex MLs including ML for cadmium in "rice, polished" and the guideline level for methylmercury in predatory fish;
- (c) to establish MLs for food/food groups which are of significance to the population in Hong Kong and for which there is no relevant Codex ML. Factors including the local dietary practice, the local risk assessment results, relevant standards of other jurisdictions, recent food incidents in Hong Kong and other jurisdictions as well as the Codex principle that contaminant levels in food shall be "as low as reasonably achievable" have been taken into account when setting the proposed MLs; and
- (d) to update the food descriptions and nomenclatures in the Regulations and to incorporate interpretation of MLs into the Regulations<sup>2</sup>, so as to bring the Regulations into alignment with international practice.

6. Under the proposed amendments to the Regulations, the total number of metallic contaminants covered will increase from seven to 14; and the total number of MLs of metallic contaminants will increase from 19 to 145, of which 90 are more stringent than the existing maximum permitted concentrations.

### **Members' views and concerns**

7. Major views and concerns expressed by members on the Administration's proposed amendments to the Regulations are summarized below.

#### **Regulatory standards for certain metallic contaminants**

8. Members in general supported the Administration's proposals to enhance and update the Regulations with a view to aligning with the Codex principle and modern international regulatory trends of specifying metallic contamination standards for individual food/food groups of significant dietary exposure. Many members, however, expressed concern about the proposed revision to ML for cadmium in cereals (including polished rice, husked rice and wheat) from 0.1mg/kg to 0.2 mg/kg, which in their view suggested a relaxation of standards

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<sup>2</sup> There is currently no interpretation in the Regulations on how the maximum permitted concentrations can be applied to food in a dried, dehydrated or concentrated form as well as multi-ingredient products.

that might be dangerous or prejudicial to public health. Questioning the rationale behind this specific proposal, some members objected to the proposed revision in relation to ML for cadmium in cereals and opined that the existing limit for cadmium in cereals under the Regulations should remain unchanged.

9. Some members noted with concern that the Administration proposed to adopt an ML of 0.5 mg/kg for methylmercury (the major form of mercury in fish) in fish, including predatory fish. Pointing out that methylmercury was only one of the many forms of mercury, these members queried whether the proposal might pose potential health risks to the public if no ML was applied/expressed in total mercury. As six of the 145 proposed MLs were less stringent than the existing maximum permitted concentrations, some members expressed reservations about the proposed relaxation, worrying that food items which failed to comply with the existing standards under the Regulations would be able to enter the local market, thereby compromising food safety and protection for public health.

10. According to the Administration, one of the objectives of implementing the proposed amendments was to promote harmonization between local and international standards. The Administration thus proposed to adopt the Codex MLs unless there were strong scientific justifications to adopt a different standard. When setting the proposed MLs for individual food/food groups with no relevant Codex MLs, the Administration had taken into account factors including the local dietary practice, the risk assessment results of the Centre for Food Safety ("CFS"), recent food incidents in Hong Kong and other jurisdictions as well as the Codex principle that contaminant levels in food should be "as low as reasonably achievable".

11. The Administration further advised that regarding ML for cadmium in "rice, polished", Codex had established an ML of 0.4 mg/kg. Having regard to the dietary habit of the Hong Kong population and the relevant standards adopted by various jurisdictions (i.e. the European Union, Korea, the Mainland and Singapore had adopted MLs of 0.2 mg/kg for cadmium in polished rice), a proposed ML for cadmium in "rice, polished" at 0.2 mg/kg, which was more stringent than Codex, was considered justified to protect public health in Hong Kong. As regards the proposed ML for methylmercury in fish, there was no relevant Codex ML for total mercury in fish but Codex had established guideline levels ("GLs")<sup>3</sup> for methylmercury in fish (other than predatory fish)

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<sup>3</sup> According to the General Standard for Contaminants and Toxins in Food and Feed published by Codex, GL is the maximum level of a substance in a food commodity which is recommended by Codex to be acceptable for commodities moving in international trade. When GL is exceeded, governments are advised to decide whether and under what circumstances the food should be distributed within their territory or jurisdiction.

and predatory fish respectively at the limits of 0.5 mg/kg and 1 mg/kg. Factors including consumption pattern/amount of the food concerned, toxicity of the relevant metallic contaminants and effects on vulnerable groups in the Hong Kong population had been considered, in proposing an ML of 0.5 mg/kg for methylmercury in fish.

12. The Administration stressed that although some of the proposed MLs were less stringent than the existing maximum permitted concentrations, the proposed revision would not compromise local food safety. CFS would continue to conduct surveys on targeted food, popular food and seasonal food. If test results indicated that a food sample posed immediate risks to public health or was related to issues of public concern, CFS would issue press releases immediately to explain the risks involved and advise the public against consuming the food concerned.

#### Implications on food supply

13. Some members noted with concern that a significant number of MLs proposed were more stringent than the existing maximum permitted concentrations under the Regulations. An enquiry was raised as to whether the enhancement would have an adverse impact on the supply and prices of food in Hong Kong. The Administration advised that according to the results of CFS' routine food surveillance programme and additional studies conducted by CFS, the levels of metallic contamination in food in the local market could generally comply with the proposed MLs. Even though most of the proposed MLs were more stringent than before, the Administration expected that they would have minimal impact on the supply of food.

#### Capability of the local testing and laboratory sector

14. Given the substantive updates proposed to be made to the Regulations in respect of the types and standards of metallic contaminants in food, concerns were raised as to whether there were adequate laboratory testing facilities in Hong Kong and whether additional resources should be allocated to enhance CFS' food safety control work, in particular in the area of food surveillance.

15. According to the Administration, CFS had discussed with the local private testing and laboratory sector its capacity on testing metallic contaminants in food as proposed in the amendments to the Regulations. The local private testing and laboratory sector's initial feedback was that it would be capable of providing testing services for the metallic contaminants as proposed, provided that the sector was given sufficient time in advance to gear up for making available such testing services. The Administration would consider

giving a reasonable grace period for the relevant Amendment Regulations to come into effect, so that the trade and the private testing and laboratory sector would have reasonable time to get prepared for the updated standards. Since the number of food groups of the proposed MLs would be increased, the types of samples to be collected under CFS' food surveillance programme might be adjusted accordingly. CFS would ensure that sufficient manpower resources would be deployed for conducting routine food surveillance through the established mechanism.

### **Latest developments**

16. On 6 June 2017, the Government released a consultation document and kicked start a three-month public consultation exercise on the proposed amendments to the Regulations. The Panel will receive deputations' views on the legislative proposals at the special meeting on 3 July 2017.

### **Relevant papers**

17. A list of relevant papers on the Legislative Council website is in the **Appendix**.

Council Business Division 2  
Legislative Council Secretariat  
29 June 2017

## Appendix

### Relevant papers on the proposed amendments to the Food Adulteration (Metallic Contamination) Regulations

Committee	Date of meeting	Paper
Panel on Food Safety and Environmental Hygiene	13.6.2017 (Item IV)	<u>Agenda</u>

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Legislative Council Secretariat  
29 June 2017