Proposed Amendments to the Food Adulteration (Metallic Contamination) Regulations

June 2017







Introduction

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 these metallic contaminants. The 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.

Regulation of metallic contamination in foods in Hong Kong

The following statutory control on metallic contamination in foods are currently in place:-

- (a) Section 54 of the Public Health and Municipal Services Ordinance (Cap. 132) stipulates that all food for sale must be fit for human consumption;
- (b) Regulation 3 of the Food Adulteration (Metallic Contamination) Regulations (Cap. 132V) (the Regulations) prohibits the import, consignment, delivery, manufacture or sale, for human consumption, of any food containing any metal in such amount as to be dangerous or prejudicial to health;
- (c) the First and Second Schedules to the Regulations stipulate 19 maximum permitted concentrations ¹ of 7 metallic contaminants, namely arsenic, antimony, cadmium, chromium, lead, mercury and tin, in foods. Amongst the 19 existing maximum permitted concentrations, the corresponding food categories of 4 metallic contaminants (namely arsenic, lead, mercury and tin) cover "all food in solid / liquid form".
- 1 "Maximum permitted concentrations" under the Regulations are known as "maximum levels" (ML) under Codex Alimentarius Commission (Codex). We will use the term ML when we amend the Regulations as proposed in order to align with the Codex terminology.

The need to update the Regulations

It is necessary to enhance and update the Regulations, with a view to better protecting public health, facilitating effective regulation and promoting harmonisation between local and international standards.

Proposed amendments to the Regulations

(a) To replace the existing food categories of "all food in solid / liquid form" with specific MLs 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

Most jurisdictions nowadays do not set MLs for all types of foods (including foods in solid and liquid forms). Setting specific MLs targeting individual food / food groups will be conducive to a more focused, tailor-made and proportionate regulation over metallic

contamination in food, calibrated in accordance with the known risks associated with the food item concerned.

(b) To adopt Codex MLs unless otherwise justified

To harmonise the food standards of Hong Kong with international food standards, we propose to adopt all Codex MLs on metallic contaminants, save 7 Codex MLs into the proposed amendments to the Regulations. The 7 Codex MLs which we do not propose to adopt are, namely Codex ML for cadmium in "rice, polished", Codex guideline level for methylmercury in predatory fish, and 5 Codex MLs for tin in certain meat products in containers other than tinplate containers.

(c) To establish MLs for foods/food groups which are of significance to the population in Hong Kong and which there is no relevant Codex MLs

We have taken into account factors such as the local food consumption pattern / dietary practice, results of risk assessment studies and total diet study conducted locally in the past, recent food incidents in Hong Kong and other jurisdictions, and relevant standards of other jurisdictions. Also, we have taken into account Codex's principle that contaminant levels in food shall be as low as reasonably achievable (i.e. ALARA).

(d) To update the food descriptions and nomenclatures in the Regulations, with reference to the available Codex's food descriptions and nomenclatures or those of other jurisdictions as appropriate

This would help bring the Regulations in alignment with the internationally accepted food descriptions and nomenclatures, as well as facilitate interpretation of the proposed metallic contamination levels under the Regulations by local and overseas stakeholders alike.

(e) To incorporate interpretation of MLs into the Regulations, given that 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

We propose to incorporate interpretation of MLs in the Regulations, along the Codex guidance that when products are concentrated, dried or diluted, we will use the concentration or dilution factor to obtain a primary judgement of the contaminant levels in these processed products. The maximum contaminant concentration in a multi-ingredient food can, likewise, be calculated from the composition of the food.

Overview of the proposed MLs

• The total number of metallic contaminants covered will increase from 7 to 14. For the additional 7 metals, i.e. (i) barium, (ii) boron, (iii) copper, (iv) manganese, (v) nickel, (vi) selenium and (vii) uranium, MLs are set exclusively with regard to "natural mineral waters" and / or "bottled / packaged drinking waters (other than natural mineral waters)".

- The total number of MLs under the Regulations will increase from 19 to 145, which
 is mainly the result of the proposed new approach of replacing the existing food
 categories of "all food in solid / liquid form" with specific MLs targeting individual food/
 food groups.
- Of the 145 proposed MLs, 90 of them are more stringent than the existing maximum permitted concentrations and 6 of them are less stringent than the existing maximum permitted concentrations.
- We have set MLs for those types of foods on an absolutely necessary basis only and will continue to make use of risk assessment as the safety net, striking a balance between safeguarding public health and avoiding undue regulation.

Views sought

We welcome your views on the proposed amendments to the Regulations. The consultation document on the proposed amendments can be downloaded from the websites of the Food and Health Bureau (http://www.fhb.gov.hk) and the Centre for Food Safety (CFS) (http://www.cfs.gov.hk).

The consultation document can also be obtained from the following locations -

 Communication Resource Unit, CFS, Food and Environmental Hygiene Department (FEHD)

(8/F, Fa Yuen Street Municipal Services Building, 123A Fa Yuen Street, Mong Kok, Kowloon);

- District Environmental Hygiene Offices, FEHD; and
- District Offices, Home Affairs Department.

Please send your comments by letter, facsimile or e-mail to CFS on or before 5 September 2017. Details are as follows –

Centre for Food Safety Food and Environmental Hygiene Department 43/F, Queensway Government Offices, 66 Queensway, Hong Kong Facsimile: (852) 2893 3547 E-mail address: metal_consultation@fehd.gov.hk

Persons submitting their views should note that unless they have expressed their wish in advance in writing to remain anonymous or keep any part of their views confidential, the Government may publish all or part of the views received and disclose the identity of the source in such a manner as it considers appropriate.