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中華人民共和國香港特別行政區政府總部食物及衞生局
Food and Health Bureau, Government Secretariat
The Government of the Hong Kong Special Administrative Region
The People's Republic of China

11 December 2020

Clerk to Panel on Food Safety and Environmental Hygiene
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong
(Attn : Miss Josephine SO)

Dear Miss SO,

Public Consultation on the Proposed Amendments to the Harmful Substances in Food Regulations (Cap. 132AF)

The Food and Health Bureau (FHB) and the Centre for Food Safety of the Food and Environmental Hygiene Department (CFS) have launched today a public consultation on the proposed amendments to the Harmful Substances in Food Regulations (Cap. 132AF). The proposed amendments aim to update and strengthen the regulatory control of harmful substances in food, namely three types of mycotoxins; five types of other substances in specified food groups (including edible fats and oils, condiments and formula products intended for infants); and partially hydrogenated oils, the main source of industrially-produced trans-fatty acids, with a view to safeguarding food safety in Hong Kong. The consultation exercise will last for three months until 15 March 2021.

Please find attached for Members' perusal a bilingual copy of the consultation document, which is also available at the FHB's website (www.fhb.gov.hk/en/press_and_publications/consultation/index.html) and the CFS's website (www.cfs.gov.hk/harmfulsubstance). We also target to consult Members at the Panel meeting on 12 January 2021.

Yours sincerely,

(Ms Chelsea WONG)
for Secretary for Food and Health

c.c. Controller, Centre for Food Safety

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Consultation Document

Proposed Amendments to the Harmful Substances in Food Regulations (Cap. 132AF)

December 2020

食物及衞生局
Food and Health Bureau

食物環境衞生署
Food and Environmental Hygiene Department

食物安全中心
Centre for Food Safety

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Proposed Amendments to the Harmful Substances in Food Regulations (Cap. 132AF)

Food and Health Bureau

Food and Environmental Hygiene Department

Centre for Food Safety

December 2020

List of Abbreviations

3-MCPD	3-monochloropropane-1,2-diol
Acid-HVPs	Acid-hydrolysed vegetable proteins
B[a]P	Benzo[a]pyrene
CFS	Centre for Food Safety of the Food and Environmental Hygiene Department
Codex	Codex Alimentarius Commission
DON	Deoxynivalenol
FAO	Food and Agriculture Organization of the United Nations
GE	Glycidyl fatty acid esters
General Standard	General Standard for Contaminants and Toxins in Food and Feed
IARC	International Agency for Research on Cancer
IP-TFAs	Industrially-produced trans-fatty acids
ML(s)	Maximum level(s)
PAHs	Polycyclic aromatic hydrocarbons
PHOs	Partially hydrogenated oils
REPLACE action package	Action package to eliminate industrially-produced trans-fatty acids
The Ordinance	Public Health and Municipal Services Ordinance (Cap. 132)
The Regulations	Harmful Substances in Food Regulations (Cap. 132AF)
WHO	World Health Organization

CONTENTS

Chapter 1 Introduction

1.1 Under the Public Health and Municipal Services Ordinance (Cap. 132) ("the Ordinance"), food for sale and intended for human consumption in Hong Kong must be fit for human consumption. Standards relating to food safety are provided in various subsidiary legislations of the Ordinance. In particular, the Harmful Substances in Food Regulations (Cap. 132AF) ("the Regulations") stipulate that any specified food containing prohibited substances or specified harmful substances in excessive concentrations is not allowed to be imported to or sold in Hong Kong.

1.2 The Food and Health Bureau and the Centre for Food Safety of the Food and Environmental Hygiene Department ("CFS") have been closely monitoring international developments on the safeguarding of food safety, and reviewing local food safety standards and regulatory arrangements from time to time. Recent initiatives in this regard include –

- enacting the Pesticide Residues in Food Regulation (Cap. 132CM) in 2012 to stipulate residue limits for some 360 pesticides in various foods / food groups and other relevant requirements;

- conducting public consultation on strengthening regulation of edible fats and oils in 2015, covering regulatory proposals on metallic contaminants, mycotoxins and other harmful substances in edible fats and oils; and

- amending the Food Adulteration (Metallic Contamination) Regulations (Cap. 132V) in 2018 to increase the number of metallic contaminants covered from seven to 14 and update the statutory standards for arsenic and lead in edible fats and oils.

1.3 In view of the public health and food safety risks posed by harmful substances (e.g. mycotoxins) in food, the CFS has conducted risk assessments having regard to local dietary practices and reviewed relevant standards under the existing Regulations based on the General Standard for Contaminants and Toxins in Food and Feed ("General Standard") of the Codex Alimentarius Commission

("Codex")[1]. For certain harmful substances and foods / food groups that are of greater food safety risks to the local population but without corresponding Codex standards, the CFS has formulated relevant proposals by making reference to the practices of other places and taking into account the local situation.

1.4 We propose to update and strengthen the regulatory control of three types of mycotoxins in food (detailed in Chapter 2) and set maximum levels ("MLs") for five types of other harmful substances in edible fats and oils, condiments and formula products intended for infants (detailed in Chapter 3) by amending the Regulations. At present, food sold in Hong Kong can generally comply with the requirements under the relevant proposals. According to the testing results of the samples collected by the CFS under its Food Surveillance Programme and relevant risk assessments in recent years, more than 95% of the relevant samples could meet the proposed MLs for harmful substances in foods / food groups.

1.5 Besides, the World Health Organization ("WHO") put forward an action package to eliminate industrially-produced trans-fatty acids ("IP-TFAs") from the global food supply ("REPLACE action package")[2] in 2018, calling on governments to take actions to eliminate IP-TFAs from the food supply. Various places have successively implemented policies to ban the use of partially hydrogenated oils, the main source of IP-TFAs, in the food supply. In view of these developments, we propose to amend the Regulations to regard partially hydrogenated oils as a prohibited substance in food (detailed in Chapter 4).

1.6 Overview of the proposed amendments to the Regulations is set out in Chapter 5. Members of the public are welcome to offer views on the proposals during the three-month public consultation period.

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[1] Established by the Food and Agriculture Organization of the United Nations ("FAO") and the World Health Organization in 1960s, Codex is the most important international source of reference in developing food associated standards. Information on the Codex standards can be found on the Codex webpage (www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/en).

[2] The REPLACE action package can be found on the WHO webpage (www.who.int/teams/nutrition-and-food-safety/replace-trans-fat).

Chapter 2 Mycotoxins in Food

2.1 There are a wide variety of moulds. Moulds are fungi commonly present in the surrounding environment. Most moulds are generally harmless, except for a few which can produce toxins that may cause acute and / or chronic health effects in humans if ingested via food. Currently, the Codex General Standard has provided definitions and set MLs for certain mycotoxins in different foods / food groups.

2.2 The MLs of aflatoxin (i.e. the most toxic kind of mycotoxins) in food have been stipulated under the Regulations since the 1980s. However, they are generally less stringent than the prevailing international standards. We therefore propose to update the relevant standards in this amendment exercise. Taking into account data such as the dietary practices of the local population, we also propose to incorporate two other types of mycotoxins (i.e. deoxynivalenol and patulin) covered by the Codex General Standard into the regulatory framework of the Regulations. Proposed amendments relating to these three types of mycotoxins are set out in the ensuing paragraphs.

Aflatoxin

2.3 Aflatoxin is a group of natural toxins which include four major types, namely aflatoxins B_1, B_2, G_1 and G_2. Among them, aflatoxin B_1 is the most common and the most toxic. Besides, if cows or other ruminant animals consume feeds contaminated with aflatoxin B_1, aflatoxin M_1 will be formed as a result of the metabolic process in the livers of ruminants and be excreted in milk. It may thus exist in milk and milk products produced for human consumption.

2.4 Aflatoxins B_1, B_2, G_1, G_2 and M_1 are classified as "carcinogenic to humans" (Group 1) by the International Agency for Research on Cancer ("IARC") of the WHO. They are also genotoxic. Ingesting a large amount of food contaminated with aflatoxins could result in acute poisoning and cause liver damage. Long-term ingestion of aflatoxins could result in liver cancer. The carcinogenic potency of aflatoxins in hepatitis B virus infected individuals is substantially higher than non-infected ones.

2.5 According to the WHO, hepatitis B prevalence is the highest in the Western Pacific Region (including Hong Kong), where over 6% of the adult

population is infected. In addition, local epidemiological studies gauged a prevalence of 7.2% for hepatitis B virus infection in the Hong Kong population, higher than the average rates of the Western Pacific Region and many neighbouring places (e.g. 4.4% in Korea, 3.6% in Singapore, etc.). In fact, liver cancer is among the three leading causes of cancer deaths in Hong Kong.

2.6 The MLs of aflatoxin prescribed by the existing Regulations are 20 µg/kg in "peanuts or peanut products" and 15 µg/kg in any other food. The current definition of aflatoxin under the Regulations is different from that in the Codex General Standard[3]. We propose to **update the definition of "aflatoxins, total" under the existing Regulations to ensure consistency with that adopted by Codex**.

2.7 Considering the grave potential food safety risks of aflatoxin to the local population (especially hepatitis B virus carriers), as well as the recommendation of the Joint FAO / WHO Expert Committee on Food Additives that the intake of aflatoxin should be reduced to a level as low as reasonably achievable, we propose to make reference to the practices of some places in the Western Pacific region (e.g. Malaysia and Singapore)[4] to **tighten up the ML for "aflatoxins, total" in any food other than specified food from 15 µg/kg under the existing Regulations to 5 µg/kg**.

2.8 We note that the Codex General Standard has set standards which are as low as reasonably achievable for **"aflatoxins, total" in certain tree nuts, peanuts and dried fruit** that are more susceptible to aflatoxin contamination, **ranging from 10 µg/kg to 15 µg/kg**. We **propose to make reference to the aforesaid standards** to update the ML for "peanuts and peanut products" under the existing Regulations and incorporate other MLs for specified foods set by Codex, with a view to keeping the relevant local standards consistent with the international ones.

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[3] The existing Regulations stipulate that "aflatoxin" includes aflatoxin B_1, B_2, G_1, G_2, M_1, M_2, P_1 and aflatoxicol. In the Codex General Standard, "aflatoxins, total" refers to aflatoxins B_1, B_2, G_1 and G_2, and there is a separate standard for "aflatoxin M_1".

[4] The relevant standard of some neighbouring places such as Malaysia and Singapore for aflatoxin in any food other than specified food is 5 µg/kg. Relevant limit of the United States is 20 µg/kg, and relevant standard of Korea is 15 µg/kg. Japan has set the relevant limit at 10 µg/kg for all food. Australia / New Zealand, Canada, the European Union and the Mainland have not set any relevant standard.

2.9 Besides, the health of infants and young children is affected more easily by harmful substances in food, and manufacturers of food for infants and young children can also achieve a more stringent aflatoxin standard through prudent selection of raw materials. We propose to make reference to the practices of other places (e.g. the European Union, Korea, Malaysia, Singapore and Vietnam)[5] to **set an ML of "aflatoxin B_1"** (i.e. the most potent aflatoxin) in **any food intended to be consumed principally by infants and young children under the age of 36 months at 0.1 µg/kg**.

2.10 We also propose to make reference to the Codex General Standard to set an ML of **"aflatoxin M_1" in milk at 0.5 µg/kg**. Considering milk is the major source of nutrients for infants in the first 6 months, and for those who cannot be breastfed or whose parents opt not to do so, formula products will be the substitute, we propose to make reference to the practices of other places (e.g. the European Union, Korea, Malaysia, Singapore and Vietnam)[6] to set a more stringent **ML of 0.025 µg/kg for "aflatoxin M_1" in formula products intended to be consumed principally by infants under the age of 12 months**.

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[5] The relevant standard of some neighbouring places (such as Korea, Malaysia, Singapore and Vietnam) and the European Union is 0.1 µg/kg. The Mainland has set the relevant standard at 0.5 µg/kg. Australia / New Zealand and Canada have not set any relevant standard, while Japan and the United States adopt their respective uniform limits for all food (see footnote 4).

[6] The relevant standard of some neighbouring places (such as Korea, Malaysia, Singapore and Vietnam) and the European Union is 0.025 µg/kg (applicable to products that are, or are reconstituted to be, ready-to-drink). The Mainland has set the relevant standard at 0.5 µg/kg (applicable to products in powdered form). Australia / New Zealand, Canada, Japan and the United States have not set any relevant specified standard.

2.11 Details of the proposed amendments relating to aflatoxin are as follows –

Substance	Food / Food group	Proposed ML	ML under the existing Regulations
Aflatoxins, total (Aflatoxins $B_1+B_2+G_1+G_2$)	Non-ready-to-eat peanuts, almonds, Brazil nuts, hazelnuts and pistachios	15 μg/kg	Peanuts or peanut products: 20 μg/kg Any other food: 15 μg/kg (Includes aflatoxin B_1, B_2, G_1, G_2, M_1, M_2, P_1 and aflatoxicol)
	Non-ready-to-eat products of the above food		
	Spices		
	Ready-to-eat peanuts, almonds, Brazil nuts, hazelnuts and pistachios	10 μg/kg	
	Ready-to-eat products of the above food		
	Dried figs		
	Any other food	5 μg/kg	
Aflatoxin B_1	Any food intended to be consumed principally by persons under the age of 36 months	0.1 μg/kg	
Aflatoxin M_1	Infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	0.025 μg/kg	
	Any other milk and dried milk	0.5 μg/kg	

Note: For the proposed MLs in foods / food groups shaded in grey, reference has been made to the standards of other places such as the European Union, Korea, Malaysia, Singapore and Vietnam. Other proposed MLs are set with reference to the Codex General Standard and the existing Regulations.

Deoxynivalenol

2.12 Deoxynivalenol ("DON") (also known as vomitoxin) is mainly produced by moulds in soil. DON-producing moulds are pathogens of cereals, particularly wheat and maize. Infants and young children are more vulnerable to the toxic effects of DON, which may cause decreased appetite and weight loss, possibly leading to reduced growth in the long run. In view of this, we propose to make reference to the standard of DON in cereal food for infants and young children under the Codex General Standard to incorporate in the Regulations **an ML of 200 μg/kg for "DON" in any food containing cereal intended to be consumed principally by infants and young children under the age of 36 months**.

2.13 Based on the local dietary practices and risk assessment results, the dietary intake of DON from cereal products such as pasta / noodles and bread is very low among the Hong Kong population. It is therefore unlikely to pose adverse health effects to the local population groups other than infants and young children (e.g. adults). The CFS will continue to monitor the level of DON in the cereal food concerned and review the results of relevant risk assessments to safeguard food safety.

Patulin

2.14 Patulin is produced by a variety of moulds and mostly occurs in rotten apples. For apple juice made with rotten apples, the patulin contained therein cannot be removed despite heat treatments such as pasteurisation. Excessive intake of patulin through consumption of apple juice could result in symptoms such as nausea, gastrointestinal disturbances and vomiting.

2.15 The CFS has been continuously monitoring the level of patulin in apple juice and other beverages under its Food Surveillance Programme, and noted a number of recent cases involving substantial amounts of patulin found in relevant products. In view of this, we propose to make reference to the standard of patulin in apple juice under the Codex General Standard to incorporate in the Regulations **an ML of 50 μg/kg for "patulin" in apple juice and other beverages to which apple juice has been added.**

Chapter 3 Edible Fats and Oils, Condiments and Formula Products Intended for Infants

3.1 Apart from the mycotoxins mentioned in Chapter 2, we propose to set MLs for five other harmful substances in edible fats and oils, condiments or formula products intended for infants to better protect the health of the local population (including infants). Among these harmful substances, the carcinogenicity[7] of four of them, namely benzo[a]pyrene ("B[a]P"), glycidol (a substance released from hydrolysis of glycidyl fatty acid esters ("GE") in the gastrointestinal tract), melamine and 3-monochloropropane-1,2-diol ("3-MCPD"), have been classified by the IARC of the WHO; whilst the other substance, i.e. erucic acid, has been regulated under the existing Regulations since the 1980s. In relation to these harmful substances, the food groups concerned are closely related to the dietary practices of the local population, and relevant standards have also been set by Codex or other places.

Edible fats and oils and condiments

3.2 Edible fats and oils and condiments are common elements of the local diet, frequently used by the general public for cooking. We propose to set an ML for B[a]P in edible fats and oils and update the existing Regulations to incorporate an ML for erucic acid in a specific type of oil, i.e. "low-erucic acid rapeseed oil". As regards condiments, we propose to set MLs for 3-MCPD in their various forms. Relevant proposals are detailed in paragraphs 3.3 – 3.9 below.

B[a]P

3.3 B[a]P is a kind of polycyclic aromatic hydrocarbons ("PAHs") which are ubiquitous in the environment. B[a]P is classified as "carcinogenic to humans" (Group 1) by the IARC and is toxic to genes. The Joint FAO / WHO Expert Committee on Food Additives has pointed out that vegetable fats and oils

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[7] Under the carcinogenicity classification of the IARC, agents can be categorised into "carcinogenic to humans" (Group 1), "probably carcinogenic to humans" (Group 2A), "possibly carcinogenic to humans" (Group 2B) or "not classifiable as to its carcinogenicity to human" (Group 3).

constitute a major source of the dietary exposure to PAHs (including B[a]P) due to their higher PAH concentrations. Nevertheless, the B[a]P levels of the end products depend on the quality control adopted along the production process.

3.4 Following the incidents of suspected substandard cooking oil in 2011, the CFS set an action level of 10 μg/kg for B[a]P in edible fats and oils in 2013. In the public consultation on strengthening regulation of edible fats and oils in 2015, we proposed to incorporate the level of B[a]P in edible fats and oils at 5 μg/kg into the regulatory framework of the Regulations. During the said consultation, some traders and members of the public considered the proposed ML too stringent, which might have an impact on the production cost and supply of certain edible fats and oils. Meanwhile, there were views that the ML of B[a]P in edible fats and oils should be tightened up substantially to 2 μg/kg with reference to the standard of the European Union.

3.5 After considering a host of factors, including the standards and regulatory arrangements of various places[8], the latest risk assessments and the local situation, as well as the comments received during the earlier public consultation on strengthening regulation of edible fats and oils, we propose to **set an ML of 5 μg/kg for "B[a]P" in edible fats and oils** by amending the Regulations. While the proposed ML is more stringent than the existing action level of the CFS (i.e. 10 μg/kg), it also reflects the outcome of the trade's efforts in reducing the level of B[a]P in edible fats and oils in recent years[9], striking a balance between safeguarding food safety and trade facilitation.

Erucic acid

3.6 Erucic acid is a monounsaturated fatty acid which naturally occurs in oil-rich seeds of species of the mustard family. Unlike some other monounsaturated fatty acids which may reduce the risk of heart disease, studies in experimental animals internationally since the 1970s have revealed that

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[8] The relevant standard in the Mainland is 10 μg/kg, while that in the European Union and Korea is 2 μg/kg. Codex, Australia / New Zealand, Canada, Japan, Singapore and the United States have not set any relevant standard.

[9] According to the CFS's continuous food surveillance, more than 300 samples of edible fats and oils were collected from January 2017 to September 2020, among which some 99% could comply with the proposed ML of B[a]P at 5 μg/kg. This is higher than the rate of about 95% recorded before the 2015 public consultation (i.e. 2012-2014), reflecting an overall reduction of B[a]P in edible fats and oils marketed in Hong Kong in recent years and their ability to comply with the proposed standard (which is more stringent than the current action level of the CFS).

excessive intake of erucic acid may damage heart tissues. Over the years, many places have set standards for erucic acid in edible fats and oils. The existing Regulations have also stipulated the ML of erucic acid in oil or fat (or any mixture thereof) at 5% of their fatty acid content.

3.7 We note that Codex has specified in its Standard for Named Vegetable Oils the level of **"erucic acid"** in **"low erucic acid rapeseed oil"** (i.e. vegetable oil produced from low erucic acid oil-bearing seeds of varieties derived from the *Brassica napus* L., *Brassica rapa* L. and *Brassica juncea* L., species) **must be less than 2% of the total fatty acids**. We propose to make reference to the said standard and **incorporate the same ML** by amending the Regulations.

3-MCPD

3.8 One of the ways to produce and process condiments (such as soy sauce, chilli sauce and chicken powder) is to add acid-hydrolysed vegetable proteins ("acid-HVPs") to enhance flavours. However, the production process of acid-HVPs could produce 3-MCPD, which may in turn be present in the final products. According to the IARC, 3-MCPD is classified as "possibly carcinogenic to humans" (Group 2B).

3.9 Currently, the Codex General Standard has a standard for 3-MCPD only in liquid condiments containing acid-HVPs. For solid condiments which are also commonly added to the local diet, only the Mainland has set a relevant standard. Codex and other places[10] have not set any standard for 3-MCPD in solid condiments. Thus, in updating the Regulations, we propose to make reference to the Codex standard for liquid condiments and the Mainland standard for solid condiments to **set MLs for "3-MPCD" in solid condiments and condiments in any other forms (whether liquid, semi-liquid or semi-solid, etc.) at 1 mg/kg and 0.4 mg/kg respectively**[11].

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[10] Including Australia / New Zealand, Canada, the European Union, Japan, Korea, Singapore and the United States.

[11] To ensure that the scope of the proposed standards is easily comprehensible, the proposed amendments will be applicable to all condiments imported to or sold in Hong Kong (regardless of whether they contain acid-HVPs).

Formula products intended for infants

3.10 For infants[12] who cannot be breastfed or whose parents opt not to do so, we propose to enhance the relevant food safety standards with reference to the practices of Codex and the European Union for better protecting their health. Specifically, we propose to set MLs for B[a]P and GE in formula products intended for infants, and update the existing Regulations to incorporate an ML for melamine in liquid formula products. Relevant proposals are detailed in paragraphs 3.11 – 3.15 below.

B[a]P

3.11 B[a]P may be formed in the manufacturing process of the ingredients of formula products. Considering the potential health effects of B[a]P intake on infants (detailed in paragraph 3.3 above), we propose to **set an ML of 1 µg/kg for "B[a]P" in formula products intended to be consumed principally by infants under the age of 12 months** with reference to the relevant standards of the European Union and Korea[13].

GE

3.12 GE are contaminants formed mainly during the deodourisation process in refining vegetable oils. Refined oils and food containing refined oils (e.g. infant formula products) may therefore contain GE. Upon ingestion, GE are hydrolysed into glycidol in the gastrointestinal tract. Glycidol is genotoxic and classified as "probably carcinogenic to humans" (Group 2A) by the IARC. It may also cause toxic effects on the nervous, renal and reproductive systems based on studies in experimental animals.

3.13 While Codex does not have any standard for GE in food at present, the European Union has recently set standards for GE in certain food groups, including infant formula. We propose to update the Regulations by making

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[12] According to the definition of Codex, "infant" means a person under 12 months of age.

[13] The relevant standard of the European Union and Korea is 1 µg/kg. Codex, Australia / New Zealand, Canada, Japan, the Mainland, Singapore and the United States have not set any relevant standard.

reference to the said standards[14] to **set MLs of "GE" in powdered and liquid formula products intended for infants under the age of 12 months at 50 μg/kg and 6 μg/kg respectively**.

Melamine

3.14 Melamine is an industrial chemical and should not be added to any food[15]. Adverse health effects such as urinary problems have occurred among infants and young children who consumed melamine-contaminated infant formula products. Melamine is classified as "possibly carcinogenic to humans" (Group 2B) by the IARC. Subsequent to the incidents of milk products detected with melamine in 2008, we amended the Regulations in the same year to set MLs for melamine in milk, any food intended to be consumed principally by infants and young children under the age of 36 months, and any food intended to be consumed by pregnant or lactating women at 1 mg/kg. These are more stringent than the standard for any food (other than infant formulae) at 2.5 mg/kg set by Codex in its General Standard in 2010.

3.15 In the Codex General Standard, the standard for melamine in "powdered infant formula" is set at 1 mg/kg (i.e. same as the ML under the existing Regulations in Hong Kong), while a separate standard is provided specifically for melamine in "liquid infant formula" at 0.15 mg/kg. Despite the fact that liquid infant formula products are uncommon in the local market, for the purposes of making the local standards in line with the international ones and enhancing food safety for infants, we propose to update the Regulations by making reference to the relevant Codex standard to **set an ML for "melamine" in <u>liquid formula products</u> intended to be consumed by infants under the age of 12 months at 0.15 mg/kg**. All other MLs for melamine under the existing Regulations would remain unchanged.

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[14] The relevant standards of the European Union are 50 μg/kg (applicable to powdered formula products) and 6 μg/kg (applicable to liquid formula products). Codex, Australia / New Zealand, Canada, Japan, Korea, the Mainland, Singapore and the United States have not set any relevant standard.

[15] Melamine is generally used for the production of melamine resins, which are used to produce industrial products such as laminates, glues, paper, textiles etc. Traces of melamine may be present in food due to migration of melamine from utensils / packaging made of melamine-formaldehyde resin and from the environment. However, since melamine is high in nitrogen, adding it illegally to food such as milk can increase the apparent protein content of the food.

Chapter 4 Partially Hydrogenated Oils

4.1 Partially hydrogenated oils ("PHOs") are edible fats and oils (vegetable oils in general) which have undergone the industrial process of hydrogenation. By controlling various elements such as hydrogen pressure, temperature, catalysts, etc. in the hydrogenation process, liquid oils are modified into partially hydrogenated fat products of different hardness (ranging from liquid to solid). Compared with the use of natural animal and vegetable fats (e.g. butter, lard, cocoa butter, etc.), PHOs stand out in terms of lower manufacturing cost, longer product shelf life, higher flavour stability, and making the food produced more resistant to repeated heating. PHOs have thus been widely adopted by the food industry since the early 20th century for manufacturing or adding to food products of different forms and textures such as margarines and vegetable shortenings, pastries, pies, biscuits, cakes and various kinds of baked and fried food.

4.2 PHOs were once believed to be a healthier alternative to animal and some vegetable fats due to the higher content of saturated fatty acids of the latter, which would potentially increase cholesterol levels. Nonetheless, the process of producing PHOs can actually result in a large amount of industrially-produced trans-fatty acids (i.e. IP-TFAs) at a level ranging from 25% to 45% of the total fatty acids generally. There is growing evidence from scientific research that the consumption of IP-TFAs from PHOs is harmful to health caused by the resultant increase in the low-density lipoprotein cholesterol (i.e. the "bad" cholesterol) and decrease in the high-density lipoprotein cholesterol (i.e. the "good" cholesterol), contributing significantly to an increased risk of coronary heart disease.

4.3 The WHO launched the REPLACE action package in 2018, with a goal of eliminating IP-TFAs from the global food supply by 2023. Banning PHOs is one of the policies that the WHO recommended for implementation around the world. The WHO also pointed out that healthier alternatives[16] could be used in lieu of PHOs without affecting the taste or cost of food.

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[16] For healthier alternatives, their total fat should contain as little saturated fat as possible and as much unsaturated fat as possible. Their content of saturated fat should also be less than the sum of saturated fat and trans fat in the PHO-containing products being in use. Edible fats and oils rich in unsaturated fat include corn, sunflower, soybean, canola, olive and peanut oils.

4.4 According to the WHO report released in September 2020, the 12 largest multinational food companies around the world have committed to eliminating IP-TFAs from all their products by 2023. Major oil and fat suppliers worldwide have also been using mature technologies widely to produce PHO-free fats and oils to satisfy market needs. In Hong Kong, PHO-free margarines, vegetable shortenings and other edible fats and oils are currently available in the local market, and many catering and baking industries have already chosen these PHO-free products for food production.

4.5 In recent years, various places have successively formulated policies with reference to the REPLACE action package to prohibit the use of PHOs in food and/or the sale of food containing PHOs, for instance –

- The United States released its final determination in 2015 that PHOs are not Generally Recognized as Safe, prohibiting the addition of PHOs to food by food manufacturers by the end of 2020;

- Canada added PHOs to the List of Contaminants and Other Adulterating Substances in Foods in 2017, prohibiting the sale of any food containing PHOs from 2018 onwards;

- Thailand amended its legislation in 2018 to prohibit the production, import or sale of PHOs and food containing PHOs from 2019 onwards; and

- Singapore amended its legislation in June 2020 to prohibit the import of edible fats and oils containing PHOs for manufacturing other edible fats or oils or prepackaged food, or the use of edible fats and oils containing PHOs for manufacturing other edible fats or oils or prepackaged food. This amendment will take effect in June 2021 to supersede its existing legislation enacted in 2013 which set an ML of trans-fatty acids in oils and fats.

4.6 In the "Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong" announced by the Government in 2018, one of the key tasks is to explore the adoption of policies to eliminate PHOs

in the food supply[17], thereby eliminating the food safety risks associated with the consumption of IP-TFAs and protecting the public at source. With reference to the WHO's REPLACE action package and the relevant measures adopted in other places, we propose to **regard "PHOs" as a prohibited substance by prohibiting under the Regulations the import of any edible fats and oils containing "PHOs" and the sale of any food (including edible fats and oils) containing "PHOs"**[18].

4.7 In line with the above proposal, we also propose to stipulate the labelling requirements for hydrogenated oils under the Food and Drugs (Composition and Labelling) Regulations (Cap. 132W). Specifically, **if prepackaged foods (including edible fats and oils) contain hydrogenated oils, the latter must be indicated accordingly (e.g. "hydrogenated oil" or the name of the oil qualified by the word "hydrogenated") in the list of ingredients**. Prepackaged foods containing "hydrogenated oils" as the only single ingredient are also required to provide an ingredient list and comply with the labelling requirement for hydrogenated oils. The relevant labelling requirements, upon implementation, can facilitate the trade to ascertain whether the food products or ingredients that they source contain any hydrogenated oils.

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[17] Details of the "Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong" are accessible on the website of the Department of Health (www.change4health.gov.hk/en/saptowards2025/publications.html).

[18] For the purpose of this proposed amendment to the Regulations, "PHOs" means any edible oils or fats that have undergone the process of hydrogenation but are not fully saturated as a result of that process. In other words, fully hydrogenated oils should in theory contain no IP-TFAs since all the fatty acids are fully saturated.

Chapter 5 Overview of the Proposed Amendments

5.1 Regarding the proposed amendments to the Regulations set out in Chapters 2 to 4, we consider it appropriate to implement them as soon as practicable, whilst allowing a grace period to provide sufficient time for the food trade and the private testing and laboratory sector to get prepared for the updated food safety standards. To strike a balance between the two and with reference to the experience of previous amendments of food standards, we propose that the Amendment Regulations come into force 18 months after its publication in the Gazette.

5.2 The proposed amendments in relation to the MLs of **mycotoxins and other harmful substances in food** detailed in Chapters 2 and 3 are summarised in the table below:

<table>
<tr><th></th><th>Substance</th><th>Food / Food group</th><th>Proposed ML</th><th>ML under the existing Regulations</th></tr>
<tr><td rowspan="9">1.</td><td rowspan="8">Aflatoxins, total (Note 1)</td><td>Non-ready-to-eat peanuts, almonds, Brazil nuts, hazelnuts and pistachios</td><td rowspan="3">15 μg/kg (Note 3)</td><td rowspan="9">Peanuts or peanut products: 20 μg/kg

Any other food: 15 μg/kg</td></tr>
<tr><td>Non-ready-to-eat products of the above food</td></tr>
<tr><td>Spices (Note 2)</td></tr>
<tr><td>Ready-to-eat peanuts, almonds, Brazil nuts, hazelnuts and pistachios</td><td rowspan="3">10 μg/kg (Note 4)</td></tr>
<tr><td>Ready-to-eat products of the above food</td></tr>
<tr><td>Dried figs</td></tr>
<tr><td>Any other food</td><td>5 μg/kg</td></tr>
<tr><td>Aflatoxin B_1</td><td>Any food intended to be consumed principally by persons under the age of 36 months</td><td>0.1 μg/kg</td></tr>
</table>

	Substance	Food / Food group	Proposed ML	ML under the existing Regulations
	Aflatoxin M_1	Infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	0.025 μg/kg (Note 5)	
		Any other milk and dried milk	0.5 μg/kg (Note 5)	
2.	Deoxynivalenol	Any food containing cereal intended to be consumed principally by persons under the age of 36 months	200 μg/kg (Note 6)	Nil
3.	Patulin	Apple juice and other beverages to which apple juice has been added	50 μg/kg (Note 7)	
4.	Benzo[a]pyrene	Any oil or fat or any mixture of oil and fat	5 μg/kg	
		Infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	1 μg/kg (Note 8)	
5.	Glycidyl fatty acid esters (expressed as glycidol)	Powdered infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	50 μg/kg (Note 8)	
		Liquid infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	6 μg/kg (Note 8)	

	Substance	Food / Food group	Proposed ML	ML under the existing Regulations
6.	Melamine (Note 9)	Liquid infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	0.15 mg/kg (Note 8)	Milk and any food intended to be consumed principally by persons of an age group into which children under the age of 36 months fall: 1mg/kg
		Milk other than liquid infant formula and follow-up formula intended to be consumed principally by persons under the age of 12 months	1 mg/kg (Note 10)	
		Any other food intended to be consumed principally by persons under the age of 36 months		
7.	3-monochloropropane-1,2-diol	Solid condiments	1 mg/kg	Nil
		Any other condiments	0.4 mg/kg (Note 11)	
8.	Erucic acid (Note 12)	Low-erucic acid rapeseed oil	2 per centum by weight of their fatty acid content	Any oil or fat or any mixture thereof: 5 per centum by weight of their fatty acid content
		Any other oil or fat or any mixture of oil and fat	5 per centum by weight of their fatty acid content (Note 10)	

Note 1: "Aflatoxins, total" refers to "aflatoxins B_1+B_2+G_1+G_2" as defined in the Codex General Standard. It is proposed to replace "aflatoxin" and its description (i.e. "group of bis-furanocoumarin compounds and includes aflatoxin B_1, B_2, G_1, G_2, M_1, M_2, P_1 and aflatoxicol") as stipulated in Schedule 1 to the existing Regulations.

Note 2: Codex is drafting an ML for certain spices (i.e. 20 or 30 μg/kg), which is more lenient than that for any food including spices under the existing Regulations (i.e. 15 μg/kg). It is therefore proposed to retain the more stringent standard stipulated under the existing Regulations as the proposed ML.

Note 3: The ML for "non-ready-to-eat" peanuts, almonds, Brazil nuts, hazelnuts and pistachios is proposed with reference to the Codex General Standard in respect of those "intended for further processing". For the non-ready-to-eat products of the above food, the proposed ML is based on the principle that "peanuts or peanut products" is regarded as the same group under the existing Regulations.

Note 4: The ML for "ready-to-eat" almonds, Brazil nuts, hazelnuts and pistachios is proposed with reference to the Codex General Standard, while that for "ready-to-eat" peanuts is based on the existing draft Codex standard. For the ready-to-eat products of the above food, the proposed ML is based on the principle that "peanuts or peanut products" is regarded as the same group under the existing Regulations.

Note 5: The proposed ML applies to products that are, or are reconstituted to be, ready-to-drink.

Note 6: The proposed ML applies to the whole commodity on a dry weight basis.

Note 7: For other beverages to which apple juice has been added, the ML is proposed with reference to the standard for "apple juice" in the Codex General Standard. The proposed ML applies to the whole commodity that is not concentrated, or is reconstituted to be ready-to-drink.

Note 8: The ML applies to products as sold.

Note 9: The MLs of melamine in "any food intended to be consumed principally by pregnant or lactating women" at 1 mg/kg and "any other food" at 2.5 mg/kg stipulated under the existing Regulations would remain unchanged.

Note 10: The ML is the same as that of the existing Regulations; the proposed amendment only involves refinements to the description to the relevant "food / food group".

Note 11: The ML is proposed with reference to the standard for "liquid condiments" containing acid-HVPs in the Codex General Standard.

Note 12: The ML of erucic acid in "any food to which oil or fat or a mixture thereof has been added" at "5 per centum by weight of their fatty acid content of all the oils and fats in the food" under the existing Regulations would remain unchanged.

5.3 The proposed amendments in relation to PHOs in Chapter 4 are summarised as follows –

- To regard "PHOs" as a prohibited substance in food by prohibiting under the Regulations the import of any edible fats and oils containing "PHOs" and the sale of any food (including edible fats and oils) containing "PHOs"; and

- To require that prepackaged foods (including edible fats and oils), if containing hydrogenated oils, be indicated accordingly (e.g. “hydrogenated oils” or the name of the oil qualified by the word “hydrogenated”) in the list of ingredients. Prepackaged foods containing hydrogenated oils as the only single ingredient are also required to provide an ingredient list and comply with the labelling requirement for hydrogenated oils.

Chapter 6 Views Sought

6.1 We welcome views from members of the public on the proposed amendments to the Regulations detailed in Chapter 5. Please send your comments to the CFS by letter, facsimile or e-mail on or before 15 March 2021 –

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: harmful-sub-consultation@fehd.gov.hk

6.2 Members of the public are free to supply their personal data when giving views on the consultation document. Any personal data provided with a submission will only be used for purpose of this consultation exercise.

6.3 The submissions and personal data collected may be sent to the relevant Government bureaux, departments or agencies for purposes directly related to this consultation exercise. The parties receiving the data are bound by such purposes in their subsequent use of the data.

6.4 The names and views of individuals and organisations submitting their views in response to the consultation document ("senders") may be published for public viewing after conclusion of the consultation exercise. The CFS may, either in discussion with others or in any subsequent report, whether privately or publicly, quote the senders and the views they submitted in response to the consultation document. We will respect the wish of senders to remain anonymous and/or keep the views confidential in part or in whole, but if no such wish is indicated, it will be assumed that the sender can be named and his / her views be published for public information.

6.5 Any sender providing personal data to the CFS in his submission will have the right of access and correction with respect to such personal data. Any request for data access or correction of personal data should be made in writing to the focal point of contact specified in paragraph 6.1 above.

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諮詢文件

《食物內有害物質規例》（第132AF章）的建議修訂

2020年12月

食物及衞生局
Food and Health Bureau

食物環境衞生署
Food and Environmental Hygiene Department

食物安全中心
Centre for Food Safety

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《食物內有害物質規例》（第 **132AF** 章）的建議修訂

食物及衞生局

食物環境衞生署

食物安全中心

2020 年 **12** 月

簡稱一覽表

世衛	世界衛生組織
行動方案	消除工業生產的反式脂肪酸一攬子行動方案
多環芳烴	多環芳香族碳氫化合物
食安中心	食物環境衛生署食物安全中心
《通用標準》	《食品和飼料中污染物和毒素通用標準》
《規例》	《食物內有害物質規例》(第 132AF 章)
氯丙二醇	3-氯-1,2-丙二醇

目錄

第 1 章　　引言

1.1　根據《公眾衞生及市政條例》(第 132 章)，在香港出售擬供人食用的食物必須適宜供人食用。該條例下有多項附屬法例訂明與食物安全有關的標準，其中的《食物內有害物質規例》(第 132AF 章)(下稱《規例》)規定，個別食物如含有違禁物質或濃度超標的指明有害物質，均不得輸入或在本港出售。

1.2　食物及衞生局和食物環境衞生署食物安全中心(下稱「食安中心」)一直密切留意國際間就保障食物安全方面的發展，不時檢視本港的食物安全標準和規管安排。近年有關這方面的措施包括：

- 於 2012 年制定了《食物內除害劑殘餘規例》(第 132CM 章)，訂明約 360 種除害劑在不同食物／食物組別中的殘餘限量及其他相關規定；

- 於 2015 年就加強規管食用油脂諮詢公眾，當中包括食用油脂中的金屬污染物、霉菌毒素及其他有害物質的規管建議；及

- 於 2018 年修訂了《食物攙雜(金屬雜質含量)規例》(第 132V 章)，將涵蓋的金屬污染物由七種增至 14 種，同時更新了食用油脂中砷及鉛的法定標準。

1.3　食安中心考慮到霉菌毒素等食物內有害物質對公共衛生和食物安全的風險，按本港市民的膳食習慣評估風險後，並以國際食品法典委員會的《食品和飼料中污染物和毒素通用標準》[1]（下稱《通用標準》）為基礎，檢視了現行《規例》的相關標準。就對香港市民有較大食物安全風險，而食品法典委員會未有訂定標準的個別有害物質及食物／食物組別，食安中心參考了其他地區的做法，並考慮本地情況，訂定相關的修訂建議。

1.4　我們現建議修訂《規例》，更新和加強規管食物中三類霉菌毒素（詳見下文第 2 章），並訂定五類其他有害物質在食用油脂、調味品及擬供嬰兒食用的配方產品的最高含量（詳見下文第 3 章）。現時，在本港出售的食物一般都能符合相關建議的要求，根據食安中心近年在其食物監測計劃及相關風險評估工作中測試抽取的樣本的結果，就擬議規管的有害物質及食物／食物組別，全部相關樣本中超過 95% 都能符合建議的最高含量。

1.5　此外，世界衛生組織（下稱「世衛」）於 2018 年就全球食品供應提出了代號為 REPLACE 的《消除工業生產的反式脂肪酸一攬子行動方案》[2]，呼籲各地採取措施，消除食品供應中的工業生產的反式脂肪酸。不少地區已相繼實施政策，禁止在食品供應中使用部分氫化油（即工業生產的反式

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[1]　食品法典委員會於六十年代由聯合國糧食及農業組織和世界衛生組織成立，其制定的食物標準是現行最重要的國際參考準則。食品法典委員會各項標準可於其網頁瀏覽（網址為 www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/zh）。

[2]　《消除工業生產的反式脂肪酸一攬子行動方案》可於世衛網頁瀏覽（網址為 www.who.int/teams/nutrition-and-food-safety/replace-trans-fat）。

脂肪酸的主要來源）。有見及此，我們建議透過修訂《規例》，將部分氫化油列為食物中的違禁物質（詳見下文第 4 章）。

1.6　各項修訂建議載於下文第 5 章，歡迎市民在為期三個月的公眾諮詢期內，就這些建議提供意見。

第 2 章　　食物中的霉菌毒素

2.1　霉菌屬於真菌類，種類繁多，廣泛存在於周圍環境中。大部分霉菌均屬無害，不過有少數會產生毒素，這些毒素經食物進入人體後，可造成急性及／或長期的健康影響。目前食品法典委員會已在《通用標準》中訂明一些霉菌毒素的定義，以及其在不同食物／食物組別的最高含量。

2.2　本港的《規例》自八十年代已有就毒性最強的霉菌毒素——黃曲霉毒素訂明在食物中的最高含量，不過有關標準一般較國際現行標準寬鬆，因此我們建議透過這次修訂更新標準。與此同時，根據本港市民的膳食習慣等數據，我們亦建議把食品法典委員會《通用標準》中另外兩類霉菌毒素（即脫氧雪腐鐮刀菌烯醇及棒曲霉素），納入《規例》的規管範圍。有關這三類霉菌毒素的修訂建議說明如下：

<u>黃曲霉毒素</u>

2.3　黃曲霉毒素是天然存在的毒素，主要包括黃曲霉毒素 B_1、B_2、G_1 及 G_2 四種，當中以黃曲霉毒素 B_1 最常見，毒性也最強。此外，乳牛等反芻動物如果進食了受黃曲霉毒素 B_1 污染的飼料，毒素可經其肝臟轉化為代謝物黃曲霉毒素 M_1，並隨乳汁分泌而出，從而留存在供人食用的奶類和奶類產品中。

2.4　黃曲霉毒素 B_1、B_2、G_1、G_2 及 M_1 已被世衛轄下的國際癌症研究機構列為「令人類患癌」（即第 1 類）物質，同時

亦具基因毒性。進食大量受其污染的食物可引致急性中毒，令肝臟受損。長期攝入黃曲霉毒素則可引致肝癌，對乙型肝炎病毒感染人士的致癌性更遠高於沒受感染人士。

2.5 根據世衛資料，乙型肝炎在西太平洋區域（包括香港）最為普遍，成年人口的乙型肝炎病毒感染人士比率超過 6%。另外，本地流行病學研究顯示，全港人口約有 7.2% 患有乙型肝炎，較西太平洋區域的平均比率及不少鄰近地區的比率（例如韓國的 4.4%、新加坡的 3.6% 等）為高。事實上，肝癌是本港三大致命癌症之一。

2.6 目前《規例》就黃曲霉毒素訂明「花生或花生產品」的最高含量為每公斤 20 微克，其他任何食物則為每公斤 15 微克。另外，《規例》中對於黃曲霉毒素的定義與食品法典委員會現行的《通用標準》不盡相同[3]。我們建議**更新現行《規例》中「總黃曲霉毒素」的定義，以便與食品法典委員會採用的定義一致**。

2.7 考慮到黃曲霉毒素對本港市民（尤其乙型肝炎病毒感染人士）的潛在食物安全風險甚大，而聯合國糧食及農業組織／世衛聯合食物添加劑專家委員會亦建議應把黃曲霉毒素的攝入量降至盡可能低的水平，我們建議參考西太平洋一些地區（例如馬來西亞和新加坡）的做法[4]，**把「總黃曲霉毒**

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[3] 現行《規例》訂明「黃曲霉毒素」包括黃曲霉毒素 B_1、B_2、G_1、G_2、M_1、M_2、P_1 及黃曲霉毒素醇；而食品法典委員會的《通用標準》則訂明「總黃曲霉毒素」為黃曲霉毒素 B_1、B_2、G_1 及 G_2，並另有訂明「黃曲霉毒素 M_1」的標準。

[4] 一些鄰近地區（如馬來西亞和新加坡）就黃曲霉毒素在特定食物外的其他任何食物訂定的相關標準為每公斤 5 微克。美國的相關上限為每公斤 20 微克，韓國的相關標準為每公斤 15 微克，日本在所有食物的相關上限為每公斤 10 微克，而澳洲 / 新西蘭、加拿大、歐盟和內地則未有訂定相關標準。

素」在特定食物外的其他任何食物的最高含量由現行《規例》的每公斤 15 微克收緊至每公斤 5 微克。

2.8　我們留意到食品法典委員會的《通用標準》對於一些較容易受黃曲霉毒素污染的**個別堅果、花生和乾果**訂定了可合理做到而盡可能低的**「總黃曲霉毒素」**標準，即**每公斤 10 微克至每公斤 15 微克不等**。我們**建議參考有關標準**，更新現行《規例》中「花生或花生產品」的最高含量及加入其他食品法典委員會就特定食物訂定的標準，以使本地標準與國際標準接軌。

2.9　此外，嬰幼兒健康較容易受食物中有害物質影響，嬰幼兒食品生產商其實亦可通過審慎挑選生產原料以符合更嚴格的黃曲霉毒素水平，我們建議參考其他地區（例如歐盟、韓國、馬來西亞、新加坡和越南）的做法[5]，規定在**擬主要供 36 個月以下嬰幼兒食用的任何食物**中**「黃曲霉毒素 B_1」**（即黃曲霉毒素中毒性最強的種類）的最高含量，**為每公斤 0.1 微克**。

2.10　我們亦建議參考食品法典委員會的《通用標準》，就**奶類訂定每公斤 0.5 微克「黃曲霉毒素 M_1」**的最高含量。同時，奶是嬰兒首六個月的主要食糧，如果嬰兒未能或父母選擇不以母乳餵哺，會以配方產品作替代品。我們建議參考其他地區（例如歐盟、韓國、馬來西亞、新加坡和越南）的做

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[5]　一些鄰近地區（如韓國、馬來西亞、新加坡和越南），以及歐盟訂定的相關標準為每公斤 0.1 微克。內地的相關標準為每公斤 0.5 微克，澳洲 / 新西蘭和加拿大未有訂定相關標準，日本和美國則對所有食物採用劃一上限（見註腳 4）。

法[6]，為**擬主要供12個月以下嬰兒食用的配方產品**訂定更嚴格的「**黃曲霉毒素 M_1**」最高含量，**為每公斤0.025微克**。

2.11　有關黃曲霉毒素的建議修訂詳情如下－

物質	食物 ／ 食物組別	建議最高含量	現行《規例》最高含量
總黃曲霉毒素（黃曲霉毒素 $B_1+B_2+G_1+G_2$）	非即食的花生、杏仁、巴西堅果、榛子及開心果	15 微克/公斤	花生或花生產品：20 微克/公斤 任何其他食物：15 微克/公斤 （包括黃曲霉毒素 B_1、B_2、G_1、G_2、M_1、M_2、P_1 及黃曲霉毒素醇）
	上述食物的非即食產品		
	香料		
	即食的花生、杏仁、巴西堅果、榛子及開心果	10 微克/公斤	
	上述食物的即食產品		
	無花果乾		
	任何其他食物	5 微克/公斤	
黃曲霉毒素 B_1	擬主要供 36 個月以下的人食用的任何食物	0.1 微克/公斤	
黃曲霉毒素 M_1	擬主要供 12 個月以下的人食用的嬰兒配方產品及較大嬰兒及幼兒配方產品	0.025 微克/公斤	
	任何其他奶類及奶粉	0.5 微克/公斤	

註：上表灰色標示的食物／食物組別的建議最高含量是參考歐盟、韓國、馬來西亞、新加坡和越南等地區的標準訂定，其他建議最高含量則參考食品法典委員會《通用標準》及現行《規例》訂定。

[6] 一些鄰近地區（如韓國、馬來西亞、新加坡和越南），以及歐盟訂定的相關標準為每公斤 0.025 微克（適用於即時飲用或已調配至飲用狀態時的產品）。內地的相關標準為每公斤 0.5 微克（適用於粉狀產品），而澳洲 / 新西蘭、加拿大日本和美國則未有訂定相關特定標準。

脫氧雪腐鐮刀菌烯醇

2.12　脫氧雪腐鐮刀菌烯醇（又稱嘔吐毒素）主要來自土壤中的霉菌，而這些霉菌是穀物（尤其是小麥及玉米）的致病菌。脫氧雪腐鐮刀菌烯醇的毒性對嬰幼兒的影響較大，可引致食慾下降和體重減輕，長遠或導致生長減慢。有見及此，我們建議參考食品法典委員會《通用標準》中就脫氧雪腐鐮刀菌烯醇在嬰幼兒穀類食物中的標準，在《規例》中新增**擬主要供 36 個月以下嬰幼兒食用含有穀類的任何食物的「脫氧雪腐鐮刀菌烯醇」最高含量，為每公斤 200 微克**。

2.13　根據本地膳食習慣及風險評估數據，本港市民從膳食（包括粉麵和麵包等穀類食物）攝入這霉菌毒素的分量很低，故其對嬰幼兒以外人口組別（如成年人）的健康造成不良影響的機會輕微。食安中心會持續監測有關穀類食物中脫氧雪腐鐮刀菌烯醇的含量及檢視相關風險評估數據，以保障食物安全。

棒曲霉素

2.14　棒曲霉素由多種霉菌產生而成，大多存在於腐爛的蘋果中。蘋果汁如使用腐爛的蘋果製成，即使經過加熱處理進行消毒，仍不能去除已存在的棒曲霉素。如經飲用蘋果汁過量攝入這霉菌毒素，可出現噁心、胃腸道不適及嘔吐等徵狀。

2.15　由於食安中心在其食物監測計劃中持續監測蘋果汁及其他飲品中棒曲霉素的含量，發現近期多宗相關產品含大量

棒曲霉素的事故，因此，我們建議參考食品法典委員會《通用標準》中就棒曲霉素在蘋果汁中的標準，在《規例》中新增**蘋果汁及加有蘋果汁的其他飲品的「棒曲霉素」最高含量，為每公斤 50 微克**。

第 3 章 食用油脂、調味品及擬供嬰兒食用的配方產品

3.1 除上文第 2 章提及的霉菌毒素，我們建議訂定五種其他有害物質在食用油脂、調味品或擬供嬰兒食用的配方產品中的最高含量，當中包括四種已被世衛轄下的國際癌症研究機構按其致癌性分類的物質[7]：苯並[a]芘、環氧丙醇（即縮水甘油脂肪酸酯經攝入後在人體內分解並釋出的物質）、三聚氰胺及 3-氯-1,2-丙二醇（下稱「氯丙二醇」），以及一種現行《規例》自八十年代起已規管的有害物質（即芥酸），以加強保障本港市民（包括嬰兒）的健康。這些食物組別均與本港市民膳食習慣有密切關連，而食品法典委員會或其他地區亦已就該等有害物質訂定了相關標準。

<u>食用油脂及調味品</u>

3.2 食用油脂和調味品均屬香港本地膳食常用的物質，市民在烹調時經常使用。我們建議訂定苯並[a]芘在食用油脂的最高含量，並更新現行《規例》，加入芥酸在特定油品（即「低芥酸菜籽油」）的最高含量。調味品方面，我們建議訂定氯丙二醇在不同型態調味品的最高含量。有關建議詳見下文第 3.3 至 3.9 段。

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[7] 國際癌症研究機構就物質的致癌性分類分為「令人類患癌」（即第 1 類）、「可能令人類患癌」（即第 2A 類）、「或可能令人類患癌」（即第 2B 類）或「在會否令人類患癌方面未能分類」（即第 3 類）。

苯並[a]芘

3.3　苯並[a]芘是一種多環芳香族碳氫化合物（下稱「多環芳烴」），在環境中無處不在。苯並[a]芘被國際癌症研究機構列為「令人類患癌」（即第 1 類）物質，同時亦對基因有害。聯合國糧食及農業組織／世衛聯合食物添加劑專家委員會曾指出，植物油脂的多環芳烴含量較高，是膳食中攝入多環芳烴（包括苯並[a]芘）的主要來源，不過其最終的苯並[a]芘含量，則取決於食物製作過程的質量控制。

3.4　2011 年發生懷疑劣質食油事件後，食安中心已於 2013 年就苯並[a]芘在食用油脂中的含量制定每公斤 10 微克的行動水平。在 2015 年有關加強規管食用油脂的公眾諮詢中，我們建議將食用油脂中苯並[a]芘的含量納入《規例》的規管範圍，最高含量為每公斤 5 微克。在諮詢過程中，有業界和公眾人士認為擬議最高含量過嚴，或會影響某些食用油脂的生產成本和產品供應，同時亦有意見認為苯並[a]芘在食用油脂中的最高含量應參考歐盟的標準，大幅收緊至每公斤 2 微克。

3.5　經考慮一系列因素，包括國際間不同地區的標準和規管安排[8]、最新的風險評估及本地情況，以及早前就加強規管食用油脂進行公眾諮詢期間所收到的意見，我們現建議透過修訂《規例》，**為食用油脂訂定「苯並[a]芘」的最高含量，為每公斤 5 微克**。建議的最高含量較目前食安中心的行動水

[8]　內地的相關標準為每公斤 10 微克，歐盟和韓國的相關標準為每公斤 2 微克，而食品法典委員會、澳洲 / 新西蘭、加拿大、日本、新加坡和美國則未有訂定相關標準。

平每公斤 10 微克更嚴格，但也反映了業界近年致力減低食用油脂中苯並[a]芘含量的成效[9]，在確保食物安全與便利營商之間取得適當平衡。

芥酸

3.6　芥酸是一種單元不飽和脂肪酸，天然存在於芥科植物的油籽中。國際間自七十年代已有動物實驗研究發現，大量攝入芥酸可損害動物心臟組織，與其他一些可減低心臟病風險的單元不飽和脂肪酸的情況有別。不少地區已有就食用油脂中的芥酸含量訂定標準，而現行《規例》亦已訂明芥酸在油或脂肪（或兩者的混合物）的最高含量為其所含脂肪酸的 5%。

3.7　我們注意到食品法典委員會在其《特定植物油標準》中，特別就**「低芥酸菜籽油」**（即由含低芥酸油脂的油菜、白菜、芥菜的種子製備而成的植物油）訂定**「芥酸」不得超過其所含脂肪酸 2% 的標準**。我們建議參考有關標準更新《規例》，**加入同樣的最高含量**。

氯丙二醇

3.8　調味品（例如豉油、辣椒醬、雞粉等）的製造和加工方法之一是使用加酸水解植物蛋白，以增加其鮮味，但加酸

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[9] 根據食安中心的持續食物監測，自 2017 年 1 月至 2020 年 9 月抽取共 300 多個食用油脂樣本，約 99% 樣本能符合苯並[a]芘的建議最高含量每公斤 5 微克，比率較 2015 年公眾諮詢前（即 2012 至 2014 年間）錄得約 95% 為高，顯示近年在本港出售的食用油脂的苯並[a]芘含量整體上有所下降，並有能力符合較食安中心現行行動水平更嚴格的建議標準。

水解植物蛋白的製造過程有可能產生氯丙二醇，從而存在於製成品中。氯丙二醇已被國際癌症研究機構列為「或可能令人類患癌」（即第 2B 類）物質。

3.9　現時，食品法典委員會的《通用標準》只就氯丙二醇在含有加酸水解植物蛋白的液態調味品訂定標準。至於本港市民膳食中亦常加入的固態調味品，只有內地訂定了相關標準，食品法典委員會及其他地區[10]均未有訂定氯丙二醇在固態調味品的標準。因此，我們建議更新《規例》時，分別參考食品法典委員會就液態調味品及內地就固態調味品的相關標準，**為固態調味品及其他任何形態（不論液態、半液態或半固態等）的調味品訂定「氯丙二醇」的最高含量，分別為每公斤 1 毫克及每公斤 0.4 毫克**[11]。

<u>擬供嬰兒食用的配方產品</u>

3.10　至於如果嬰兒[12]未能或父母選擇不以母乳餵哺而以配方產品餵哺者，我們建議參考食品法典委員會及歐盟的做法，加強相關的食物安全標準，進一步保障嬰兒的健康。具體而言，我們建議訂定擬供嬰兒食用的配方產品中苯並[a]芘和縮水甘油脂肪酸酯的最高含量，並更新現行《規例》，加入液態配方產品中三聚氰胺的最高含量。有關建議詳見下文第 3.11 至 3.15 段。

10　包括澳洲 / 新西蘭、加拿大、歐盟、日本、韓國、新加坡和美國。

11　為使建議標準的適用範圍易於理解，上述的修訂建議會涵蓋所有輸入或在本港出售的調味品（不論是否含有加酸水解植物蛋白）。

12　根據食品法典委員會的定義，「嬰兒」是指 12 個月以下的人。

苯並[a]芘

3.11　配方產品的配料在製造過程中可能產生苯並[a]芘。考慮到攝入此物質對嬰兒的潛在健康影響（詳見上文第 3.3 段），我們建議參考歐盟和韓國的相關標準[13]，**為擬主要供 12 個月以下嬰兒食用的配方產品訂定「苯並[a]芘」的最高含量，為每公斤 1 微克**。

縮水甘油脂肪酸酯

3.12　縮水甘油脂肪酸酯主要是在精煉植物油過程中的脫臭步驟所產生的污染物，因而存在於精煉油和含精煉油的食物中，例如嬰兒配方產品。縮水甘油脂肪酸酯經攝入後會在人體內分解，釋出環氧丙醇。環氧丙醇對基因有害，並已被國際癌症研究機構列為第 2A 類物質，即「可能令人類患癌」。動物研究亦顯示攝入環氧丙醇也可能會對神經、泌尿和生殖系統產生毒性影響。

3.13　食品法典委員會目前並未有訂定縮水甘油脂肪酸酯在食物中的標準，但歐盟近年已就縮水甘油脂肪酸酯在特定食物組別（包括嬰兒配方產品）訂定了標準。我們建議參考有關標準[14]更新《規例》，**為擬主要供 12 個月以下嬰兒食用的配方產品訂定「縮水甘油脂肪酸酯」的最高含量，粉狀配方產**

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[13]　歐盟和韓國的相關標準為每公斤 1 微克，而食品法典委員會、澳洲 / 新西蘭、加拿大、日本、內地、新加坡和美國則未有訂定相關標準。

[14]　歐盟的相關標準為每公斤 50 微克（適用於粉狀配方產品）和每公斤 6 微克（適用於液態配方產品），而食品法典委員會、澳洲 / 新西蘭、加拿大、日本、韓國、內地、新加坡和美國則未有訂定相關標準。

品及液態配方產品分別為每公斤 50 微克及每公斤 6 微克。

三聚氰胺

3.14　三聚氰胺是工業用化學品，不應添加於任何食品[15]。曾有嬰幼兒因進食受三聚氰胺污染的嬰兒配方產品後，出現泌尿問題等不良健康影響。目前三聚氰胺亦已被國際癌症研究機構列為「或可能令人類患癌」(即第 2B 類）物質。2008 年有奶類產品驗出含有三聚氰胺的事故後，我們已於同年修訂《規例》，就所有奶類、擬主要供 36 個月以下嬰幼兒食用的任何食物，以及擬主要供懷孕或授乳女性食用的任何食物，訂定三聚氰胺最高含量為每公斤 1 毫克，較食品法典委員會在 2010 年修訂的《通用標準》中訂定任何食物（嬰兒配方產品除外）的每公斤 2.5 毫克更為嚴格。

3.15　然而，《通用標準》除了訂明三聚氰胺在「粉狀嬰兒配方產品」的標準為每公斤 1 毫克（即與本港《規例》的最高含量一致），同時亦另就「液態嬰兒配方產品」的三聚氰胺訂定了特定標準，為每公斤 0.15 毫克。雖然液態嬰兒配方產品在本港市場並不普遍，為確保本地標準與國際標準銜接及嬰兒食物更加安全，我們建議參考有關標準更新《規例》，**為擬主要供 12 個月以下嬰兒食用的液態配方產品訂定「三聚氰胺」的最高含量，為每公斤 0.15 毫克**。所有其他在現行《規例》中有關三聚氰胺的最高含量則維持不變。

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[15]　三聚氰胺一般用於生產三聚氰胺樹脂，以製造膠板、膠水、紙品、紡織品等工業產品。由於以三聚氰胺甲醛樹脂製成的器皿／包裝會出現三聚氰胺遷移的情況，而三聚氰胺亦可能存在於環境中，因此食物有可能含有微量三聚氰胺。但由於三聚氰胺含氮量高，如非法加入奶類等食物中，可使其蛋白質含量看似增加。

第 4 章　　部分氫化油

4.1　　部分氫化油是透過氫化的工業過程，利用並控制氫氣壓力、溫度、催化劑等相關元素，把食用油脂（一般為植物油）轉變成為不同硬度（由液體至固體不等）的部分氫化油脂產品。由於其製造成本相較使用天然動物及植物脂肪（例如牛油、豬油、可可脂等）低，產品保質期更長、味道更穩定，以及令食品更為耐受反覆加熱，部分氫化油在 20 世紀初開始被食品工業廣泛採用，例如製造或用於各式軟硬度或質感的人造牛油和植物起酥油、酥皮、批、餅乾、蛋糕及各類烘焙和油炸食品等。

4.2　　過去部分氫化油曾經被認為是比天然動物及個別植物脂肪較健康的選擇，原因是後者的飽和脂肪酸含量較高，有可能增加膽固醇水平。事實上，在生產部分氫化油過程中會產生大量反式脂肪（即工業生產的反式脂肪酸），含量一般可達總脂肪酸的 25% 至 45%。越來越多科學研究證明，這些主要經部分氫化油攝取的工業生產的反式脂肪酸會損害人體健康，不單令血液內低密度「壞」膽固醇增加，同時亦減少高密度「好」膽固醇的水平，大大提高患冠心病的機會。

4.3　　世衛於 2018 年推出了《消除工業生產的反式脂肪酸一攬子行動方案》（下稱《行動方案》），目標是到 2023 年在全球食品供應中消除工業生產的反式脂肪酸這種有害化合物。世衛建議全球各地實施的政策之一就是禁止部分氫化油，並指出部分氫化油可以在不影響食品味道和成本的情況下，用

較健康的油脂取代[16]。

4.4 世衛於 2020 年 9 月發表的報告指出，已有全球 12 間最大的跨國食品企業承諾於 2023 年或以前在其產品中消除工業生產的反式脂肪酸。現時全球主要的油脂供應商都已廣泛應用並整合多種成熟的技術，生產不含部分氫化油的油脂製品，供應市場所需。本港市場目前亦有供應不含部分氫化油的人造牛油、植物起酥油及其他食用油脂，不少餐飲及烘焙業界亦已選用該等不含部分氫化油的油脂製作食物。

4.5 近年不少地區亦已相繼參照《行動方案》制訂政策，禁止在食物中使用部分氫化油及／或售賣含有部分氫化油的食品，例如：

- 美國於 2015 年將部分氫化油界定為並非「普遍認為安全」物質，並於 2020 年底前全面禁止食物製造商於食品中加入部分氫化油；

- 加拿大於 2017 年將部分氫化油列入「食品中污染物和其他攙雜物質名單」之中，訂明於 2018 年起禁止在加拿大售賣任何含有部分氫化油的食品；

- 泰國於 2018 年修訂法例，訂明於 2019 年起禁止製造、進口或售賣部分氫化油及任何含有部分氫化油的食品；及

[16] 較健康的油脂應含盡量少飽和脂肪和盡量多不飽和脂肪，其中飽和脂肪的含量應比現時使用部分氫化油的產品中的飽和脂肪和反式脂肪總含量為少。含豐富不飽和脂肪的食用油脂包括粟米油、葵花籽油、大豆油、芥花籽油、橄欖油及花生油等。

- 新加坡於 2020 年 6 月修訂法例，禁止進口任何含有部分氫化油的食用油脂以製造其他食用油脂和預先包裝食物，或在製造其他食用油脂和預先包裝食物時使用任何含有部分氫化油的食用油脂。上述修訂將於 2021 年 6 月生效，取代當地於 2013 年就反式脂肪酸在食用油脂中最高含量所訂立的規定。

4.6 本港方面，政府於 2018 年公布《邁向 2025：香港非傳染病防控策略及行動計劃》[17]，當中一項主要工作是探討實施政策措施，禁止在食品供應中使用部分氫化油，從源頭保障市民，免除攝入工業生產的反式脂肪酸的食物安全風險。我們參考世衛的《行動方案》及其他地區的相關規管措施，建議**將「部分氫化油」列為食物中的違禁物質，在《規例》中訂明禁止輸入含有「部分氫化油」[18]的任何食用油脂，以及售賣含有「部分氫化油」的任何食物（包括食用油脂）**。

4.7 配合上述建議，我們亦建議在《食物及藥物（成分組合及標籤）規例》（第 132W 章）中訂明有關氫化油的標示要求。**如預先包裝食物（包括食用油脂）含有氫化油，必須在其配料表中作出相應標示（如指明含「氫化油」或在所含油脂的名稱前加上「氫化」字樣）**。如預先包裝食物只含有「氫化油」一種配料，亦須提供配料表及遵從有關氫化油的標示要求。相關標示可方便業界於採購食品或食物原材料時辨識當中是否含有氫化油。

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[17] 《邁向 2025：香港非傳染病防控策略及行動計劃》詳情可於衛生署網頁瀏覽（網址為 www.change4health.gov.hk/tc/saptowards2025/publications.html）。

[18] 在此《規例》修訂建議中，「部分氫化油」指任何經氫化過程但最終並未完全飽和的油脂。簡單而言，如油脂經完全氫化，理論上其所含的脂肪酸會變成完全飽和，因而不會含有工業生產的反式脂肪酸。

第 5 章　　建議修訂綜覽

5.1　　就本文件第 2 至 4 章提出的修訂《規例》建議，我們認為應在切實可行的情況下盡快實施，但同時須為業界提供寬限期，讓食物業及私營檢測及化驗機構有足夠時間為已更新的食物安全標準作好準備。為了在兩者之間盡量取得平衡，並經參考過往修訂食物標準的經驗，我們建議修訂規例於刊憲後 18 個月生效。

5.2　　有關就第 2 至 3 章食物中**霉菌毒素及其他有害物質**最高含量的建議修訂已綜合載於下表：

<table>
<tr><th></th><th>物質</th><th>食物 ／ 食物組別</th><th>建議
最高含量</th><th>現行《規例》
最高含量</th></tr>
<tr><td rowspan="12">1.</td><td rowspan="7">總黃曲霉毒素
（註 1）</td><td>非即食的花生、杏仁、巴西堅果、榛子及開心果</td><td rowspan="3">15 微克/公斤
（註 3）</td><td rowspan="12">花生或
花生產品：
20 微克/公斤

任何其他
食物：
15 微克/公斤</td></tr>
<tr><td>上述食物的非即食產品</td></tr>
<tr><td>香料（註 2）</td></tr>
<tr><td>即食的花生、杏仁、巴西堅果、榛子及開心果</td><td rowspan="3">10 微克/公斤
（註 4）</td></tr>
<tr><td>上述食物的即食產品</td></tr>
<tr><td>無花果乾</td></tr>
<tr><td>任何其他食物</td><td>5 微克/公斤</td></tr>
<tr><td>黃曲霉毒素 B_1</td><td>任何擬主要供 36 個月以下的人食用的食物</td><td>0.1 微克/公斤</td></tr>
<tr><td rowspan="2">黃曲霉毒素 M_1</td><td>擬主要供 12 個月以下的人食用的嬰兒配方產品及較大嬰兒及幼兒配方產品</td><td>0.025 微克/公斤
（註 5）</td></tr>
<tr><td>任何其他奶類及奶粉</td><td>0.5 微克/公斤
（註 5）</td></tr>
</table>

	物質	食物 ／ 食物組別	建議 最高含量	現行《規例》 最高含量
2.	脱氧雪腐鐮刀菌烯醇	任何擬主要供 36 個月以下的人食用含有穀類的食物	200 微克/公斤 （註 6）	無
3.	棒曲霉素	蘋果汁及加有蘋果汁的其他飲品	50 微克/公斤 （註 7）	
4.	苯並[a]芘	任何油或脂肪或兩者的混合物	5 微克/公斤	
		擬主要供 12 個月以下的人食用的嬰兒配方產品及較大嬰兒及幼兒配方產品	1 微克/公斤 （註 8）	
5.	縮水甘油脂肪酸酯 （以環氧丙醇顯示）	擬主要供 12 個月以下的人食用的粉狀嬰兒配方產品及較大嬰兒及幼兒配方產品	50 微克/公斤 （註 8）	
		擬主要供 12 個月以下的人食用的液態嬰兒配方產品及較大嬰兒及幼兒配方產品	6 微克/公斤 （註 8）	
6.	三聚氰胺 （註 9）	擬主要供 12 個月以下的人食用的液態嬰兒配方產品及較大嬰兒及幼兒配方產品	0.15 毫克/公斤 （註 8）	奶類及所有擬主要供涵蓋 36 個月以下幼兒的某年齡組別的人食用的任何食物： 1 毫克/公斤
		奶類（擬主要供 12 個月以下的人食用的液態嬰兒配方產品及較大嬰兒及幼兒配方產品除外）	1 毫克/公斤 （註 10）	
		任何擬主要供 36 個月以下的人食用的其他食物		
7.	3-氯-1,2-丙二醇	固態調味品	1 毫克/公斤	無
		任何其他調味品	0.4 毫克/公斤 （註 11）	

	物質	食物 ／ 食物組別	建議 最高含量	現行《規例》 最高含量
8.	芥酸 （註 12）	低芥酸菜籽油	以重量計其所含脂肪酸的 2%	任何油或脂肪或兩者的混合物：以重量計其所含脂肪酸的 5%
		任何其他油或脂肪或油及脂肪的任何混合物	以重量計其所含脂肪酸的 5% （註 10）	

註 1： 「總黃曲霉毒素」是指食品法典委員會《通用標準》中所定義的「黃曲霉毒素 $B_1+B_2+G_1+G_2$」，以取代現行《規例》附表 1 訂明的「黃曲霉毒素」及其描述（即「雙呋喃氧雜萘鄰酮屬的化合物，並包括黃曲霉毒素 B_1、B_2、G_1、G_2、M_1、M_2、P_1 及黃曲霉毒素醇」）。

註 2： 食品法典委員會現正就個別香料草擬的標準（即每公斤 20 或 30 微克）較現行《規例》就香料等其他食物訂明的最高含量（即每公斤 15 微克）寬鬆，故此建議繼續沿用現行《規例》中較嚴格的最高含量。

註 3： 「非即食」的花生、杏仁、巴西堅果、榛子及開心果的建議最高含量是參考食品法典委員會《通用標準》中就「用作進一步加工」所指的有關標準訂定；而上述食物的非即食產品的建議最高含量則按現行《規例》就「花生或花生產品」視為同一類別的原則訂定。

註 4： 「即食」的杏仁、巴西堅果、榛子及開心果的建議最高含量是參考食品法典委員會的《通用標準》訂定，「即食」花生的建議最高含量則參考食品法典委員會現正擬議的標準訂定；而上述食物的即食產品的建議最高含量則按現行《規例》就「花生或花生產品」視為同一類別的原則訂定。

註 5： 建議最高含量適用於即時飲用或已調配至飲用狀態時的產品。

註 6： 建議最高含量適用於按乾重計算的整體。

註 7： 加有蘋果汁的其他飲品的建議最高含量，是參考食品法典委員會《通用標準》中就「蘋果汁」的標準訂定。建議最高含量適用於非濃縮或已調配至飲用狀態的整體。

註 8： 建議最高含量適用於供出售狀態時的產品。

註 9： 現行《規例》中訂明三聚氰胺在「擬主要供懷孕或授乳的女性食用的任何食物」的最高含量（即每公斤 1 毫克）及「任何其他食物」的最高含量（即每公斤 2.5 毫克）將維持不變。

註 10：最高含量與現行《規例》相同，而有關建議修訂僅涉及對相關「食物／食物組別」的描述。

註 11：建議最高含量是參考食品法典委員會《通用標準》中就含有加酸水解植物蛋白的「液態調味品」的標準訂定。

註 12：現行《規例》中訂明芥酸在「加有油或脂肪或加有兩者的混合物的任何食物」的最高含量（即「以重量計食物內全部油及脂肪所含脂肪酸的百分之五」）將維持不變。

5.3 至於第 4 章提出有關**部分氫化油**的建議修訂，則綜合如下：

- 將「部分氫化油」列為食物中的違禁物質，訂明禁止輸入含有「部分氫化油」的任何食用油脂，以及售賣含有「部分氫化油」的任何食物（包括食用油脂）；及

- 規定如預先包裝食物（包括食用油脂）含有氫化油，必須在其配料表中作出相應標示（如指明含「氫化油」或在所含油脂的名稱前加上「氫化」字樣），而以氫化油作為單一種配料的預先包裝食物，亦須提供配料表及遵從上述標示要求。

第 6 章　　徵詢意見

6.1　　歡迎市民就第 5 章詳列的《規例》建議修訂提出意見，請於 2021 年 3 月 15 日或以前，以郵寄、傳真或電郵方式把意見送交食安中心：

香港金鐘道 66 號
金鐘道政府合署 43 樓
食物環境衞生署
食物安全中心
傳真：(852) 2893 3547
電郵：harmful-sub-consultation@fehd.gov.hk

6.2　　市民就本諮詢文件提交意見書時，可隨個人意願，選擇是否提供個人資料。任何在意見書上提供的個人資料，只作這次諮詢工作之用。

6.3　　收集所得的意見書及個人資料，或會轉交相關的政府決策局、部門或機構作與這次諮詢工作直接有關的用途。獲取資料的各方其後亦只可把資料用於該等用途。

6.4　　曾就本諮詢文件提交意見書的個人及機構（提交意見者）的姓名／名稱及意見，或會在諮詢工作結束後公布，以供公眾參閱。食安中心在與其他人士討論時，或在任何其後發表的報告內，不論私下或公開，或會指名引述提交意見者就本諮詢文件提出的意見。提交意見者如欲把姓名／名稱及／或其全部或部分意見保密，我們會尊重其意願；不過，如

無事先說明，我們將假定可以公開其姓名／名稱，以及把其意見發表，供公眾參閱。

6.5　曾向食安中心遞交意見書而提供個人資料的提交意見者，有權查閱和更正其所提供的個人資料。如擬查閱或更正個人資料，請以書面方式向上文第 6.1 段指定的聯絡單位提出有關要求。

食物環境衞生署食物安全中心出版
政府物流服務署印（12/2020）