食物安全焦點



Food Safety Focus

__零__四年七月•第二百一十六期
July 2024 • 216th Issue



本期內容 IN THIS ISSUE

- ❖ 跨境食品雜貨 ─ 安全合法最重要
- ❖ 確保食物安全:認識食物中的 金屬污染物
- ❖ 剩餘食物 ─ 減少浪費之餘也 要保障安全
- ❖ 冰凍甜點的微生物風險
- ❖ 風險傳達工作一覽
- Cross Boundary Food Groceries –
 Be Legal and Safe
- Keeping Our Food Safe: Understanding Metallic Contaminants in Food
- Surplus Food Keeping it Safe while Reducing Waste
- Microbiological Risks in Frozen Confections
- Summary of Risk Communication Work

編 輯 委 員 會 EDITORIAL BOARD

總編輯

張勇仁醫生

顧問醫生(社會醫學)(風險評估及傳達)

行政編輯

周楚耀醫生

首席醫生(風險評估及傳達)

委員

吳志翔醫生 首席醫生(風險管理) 曾然宙獸醫 高級獸醫師(獸醫公共衞生) 張偉文先生 高級總監(食物安全中心) 林明偉先生 高級總監(食物安全中心)

譚秀琼醫生 主管(風險評估組)

陳以信博士 高級化驗師(食物研究化驗所)

Editor-in-chief

Dr. Terence CHEUNG

Consultant (Community Medicine) (Risk Assessment and Communication)

Executive Editor

Dr. Tony CHOW

Principal Medical Officer (Risk Assessment and Communication)

Members

Dr. Henry NG

Principal Medical Officer (Risk Management)

Dr. Benedict TSANG

Senior Veterinary Officer (Veterinary Public Health)
Mr. W M CHEUNG

Senior Superintendent (Centre for Food Safety)
Mr. M W LAM
Senior Superintendent (Centre for Food Safety)

Dr. Carole TAM

Head (Risk Assessment Section)

Dr. Gabriel CHAN Senior Chemist (Food Research Laboratory)

跨境食品雜貨 一 安全台法最重要

Cross Boundary Food Groceries - Be Legal and Safe

食物安全中心風險傳達組 科學主任葉景新先生報告

自香港與內地通關後,跨境食品雜貨日益受歡迎。有些人或會從內地購買新鮮及即食食物,再經各個出入境管制站帶回本港。消費者應保持小心謹慎,確保食物安全,並遵從相關法例。本文將重點講述本港對入口食物的相關規例要求、探討跨境食品雜貨的食物安全疑慮並講述從購買到貯存的一般食物安全原則。

進口食物時要注意規例要求

野味、肉類、家禽及蛋類等食品是消費者的常見選擇・但這些食品都是本港受規管食物。根據《進口野味、肉類、家禽及蛋類規例》(第132AK章)・每批次的受規管食物・無論是自用與否・必須附有由來源地有關當局簽發的衞生證明書或食物環境衞生署(食環署)的書面准許(圖1)。根據第132AK章・違例者一經定罪・最高可被罰款五萬元及監禁六個月。

《冰凍甜點規例》(第132AC章)及《奶業規例》(第132AQ章)規定·從製造來源地進口冰凍甜點、奶類或奶類飲品必須獲得食環署批准·否則不得在香港售賣。此外·海產入口商應先向來源地發證實體申領衞生證明書·然後將證明書隨貨附上·以證明所入口的海產適宜供人食用。

值得注意的是,僅轉換食物包裝設計和物料,例如用錫紙包裹生肉或以真空包裝肉類,對有關規例的執行沒有任何影響。消費者在攜帶食物進入境時,應遵守相關香港法例。食安中心已加強堵截和採取執法行動,安排檢疫偵緝犬於各陸路邊境管制站協助執法。

Reported by Mr. Kenneth YIP, Scientific Officer, Risk Communication Section, Centre for Food Safety

Cross-boundary food groceries have grown in popularity since the full restoration of regular travel between Hong Kong and the Mainland. Some people may purchase fresh and ready-to-eat (RTE) food from the Mainland and bring them back through various Immigration Control Points. Consumers should exercise caution to secure food safety and follow relevant legislations. This article will highlight relevant local regulatory requirements of imported food, discuss the food safety concerns of cross boundary food grocery and explain some general food safety principles from purchase to storage.

Be Vigilant of the Regulatory Requirements when Importing Food

Food items like game, meat, poultry and eggs are common choices among consumers, yet they are regarded as regulated food in Hong Kong. According to the Imported Game, Meat, Poultry and Eggs Regulations (Cap. 132AK), each consignment of regulated food, whether for personal use or not, has to be accompanied by a health certificate issued by the issuing entity of the place of origin or written permission from the Food and Environmental Hygiene Department (FEHD) (Figure 1). Offenders are liable on conviction to a maximum fine of \$50,000 and six months' imprisonment under Cap. 132AK.

As stipulated in the Frozen Confections Regulation (Cap. 132AC) and the Milk Regulation (Cap. 132AQ), approval from the FEHD is required when importing frozen confections, milk or milk beverage into Hong Kong from a source of manufacture for sale. Besides, marine product importers should obtain health certificates issued by issuing entities of countries of origin to accompany their imports certifying that the food products concerned are fit for human consumption.

Of note, merely changing food packaging designs and materials like packing raw meat in foil or using

須附有衞生證明書 Health Certificate Required









野味 Game

肉類 Meat

家禽 Poultry

蛋類 Eggs

圖1: 進口受規管食物須附有有效衞生證明書

Figure 1: Valid health certificates are required when importing regulated food

跨境食品雜貨有什麼食物安全問題?

有些消費者·喜歡一次購買多種食品·包括燒味等即食食物及新鮮蔬果等生的食物。混合這兩類食物有可能導致即食食物與生的食物發生交叉污染。混合生與即食食物或會引致病原體交叉污染到即食食物。

此外,預先包裝食物的食物標籤和營養標籤格式或會與本地 出售的食物不同。有些食品標示的可能是生產日期而非本港標 籤規例規定的「此日期或之前食用」或「此日期前最佳」的日 期。此外,營養標籤上顯示的營養資料與本港規定也有差異。 這些差異可能會引致錯誤解讀。

由於市場與家宅之間的遠距離,食物在購買後或要一段長時間才能運送到家。購買的食物在配製或冷存前或已放在膠袋内多個小時。將食物(特別是即食食物)貯存在不適當的温度下,不僅有可能導致食物變質,還會導致購買的食物出現細菌繁殖。

保障食物安全的秘訣

最好為生的食物和即食食物準備不同的購物袋。生的食物應分開放在購物袋內,防止汁液污染其他食物。購物袋的物料應是不透水的,最好可封口,以減少食物受周圍環境污染。

購買預先包裝食物時‧應細閱食物標籤內容。印在包裝上的日期或有到期日以外的其他信息。不要購買已過到期日的食物。此外‧可取的做法是參閱配料表和營養標籤以了解食物的配料和所含的致敏物‧以便作出明智的選擇。

冷食和熱食應分別存放在隔熱袋及冰袋內。對於購買後存放在攝氏4度至60度的即食食物·應遵循2小時/4小時原則。到步後應盡快把即食、冷藏及冷凍食物存放在雪櫃內·以保持食物的品質。

注意事項

- 1. 進口包括野味、肉類、家禽及蛋類的受規管食物必須附有有效衞生證明書及/或食環署的書面准許。
- 即食食物受生的食物交叉污染、錯誤解讀食物標籤和營養標 籤及食物長時間存放在不適當的貯存温度是跨境食品雜貨的 食物安全疑慮。
- 3. 分開存放生的食物和即食食物、正確解讀標籤及把即食食物 存放在保温容器内,可減低食物安全風險。

給消費者的建議

- 不要攜帶沒有衞生證明書的野味、肉類、家禽及蛋類進入本港。
- 分開存放生的食物和即食食物;存放在危險温度範圍內的即食食物,應遵循2小時/4小時原則。
- 購買後仔細閱讀預先包裝食物的食物標籤和營養標籤。

給業界的建議

從可靠的供應商採購入口食物,受規管食物應附有有效衞生 證明書。 vacuum packing for meat makes no difference on the enforcement of the regulations. Consumers are reminded to abide by the relevant Hong Kong laws when bringing food across the boundary. The CFS has stepped up interception and mounted enforcement actions, and deployed quarantine detector dogs to assist law enforcement at various land boundary control points.

What are the Food Safety Concerns of Cross Boundary Groceries?

Some customers would prefer to buy a variety of products at one go, including RTE food like siu-mei and raw food like fresh produce. Cross-contamination of RTE food with raw food may result from mixing the two types of food. Mixing raw and RTE food may cause cross-contamination of pathogens onto the RTE food.

In addition, the formats of food labels and nutrition labels of prepackaged food may be different from locally sold products. Some products may show manufacture dates rather than best before or use by dates required by the local labelling regulation. Besides, the nutrients shown on the nutrition labels might be different from the local requirements. Such deviations may result in misinterpretations.

Owing to the long distance between markets and home, it may take time to deliver the food back home after purchase. The food purchased may be kept in shopping bags for hours before sending for preparation or cold storage. Keeping food especially the RTE ones at improper holding temperature not only results in possible deterioration but also bacterial proliferation in the food purchased.

Tips to Secure Food Safety

It is best to prepare different shopping bags for raw and RTE food. Raw food should be separated in shopping bags to prevent the juices from contaminating other food items. The materials of the shopping bags should be water impermeable and preferably sealable to minimise contamination of the food by the surroundings.

When purchasing prepackaged food, the details of food labels should be studied. The dates printed on the packages may have different meanings in addition to expiry dates. Do not buy food beyond its expiry date. It is also wise to refer to the ingredient list and nutrition label to know the ingredients and allergens in the food for making informed choices.

Insulated bags and ice packs should be used for keeping hot and cold food respectively. For RTE food exposed within Temperature Danger Zone between 4°C and 60°C after purchase, follow the <u>2-hour / 4-hour rule</u>. Upon arrival, store RTE, frozen and chilled foods in refrigerators promptly to maintain their quality.

Key Points to Note

- The import of regulated food including game, meat, poultry and eggs should be accompanied by a valid health certificate and/or written permission from the FEHD.
- 2. Cross-contamination of RTE food by raw food, misinterpretations of food labels and nutrition labels as well as prolonged food storage at improper holding temperature are food safety concerns of cross boundary food grocery.
- Food safety risks can be minimised by keeping raw and RTE food separately, reading labels correctly and storing RTE food in insulated containers.

Advice to Consumers

- Do not bring any game, meat, poultry and eggs into Hong Kong without health certificates.
- Store raw and RTE food in separately; follow the 2-hour / 4-hour rule for those RTE food items kept within Temperature Danger Zone.
- Read food labels and nutrition labels of prepackaged food carefully upon purchase.

Advice to Trade

 Source imported food from reliable suppliers; regulated food should be supported by valid health certificates.



確保食物安全:認識食物中的金屬污染物



Keeping Our Food Safe: Understanding Metallic Contaminants in Food

食物安全中心風險評估組 科學主任張鳳文女士報告

天然存在 Naturally present

火山活動 Volcanic activities 風化和侵蝕 Weathering and erosion

穀物、肉類和蔬菜等食物是人類飲食不可或缺的部分,提供了人體成長、修補組織,甚至製造抗體以抵抗疾病所需的重要營養素。然而,有毒重金屬的可能存在,是需關注的食物安全課題。重金屬可通過環境污染或食物製作過程進入食物鏈。過去的研究曾發現,英國牛和羊的内臟中有高含量的重金屬。了解食物中重金屬的來源及普遍程度,對保障公共健康尤爲重要。讓我們在此深入探討這個問題。

食物中的重金屬來源

重金屬是在天然存在於環境中的物質,是地殼表面的基礎成分,天然存在於岩石、土壤和水中。當這些重金屬進入泥土和水時,便會輕易被我們食用的植物、動物和水中生物吸收,因此食物中含有金屬污染物是無可避免的。

然而,人類活動可大幅增加環境中重金屬的含量,這些活動包括採礦、使用含金屬的肥料、除害劑及除蟲劑,以及各種工業生產活動。若食物在受污染的環境中種植,或在食品生產過程中使用受污染的原材料,這些有害物質便可能在食物鏈中積累,從而對人類健康構成直接的威脅。

重金屬對健康的不良影響

部分重金屬·例如銅、鉻、錳及硒等·我們身體正常運作所需的微量重金屬·但一些其他重金屬則對人體毫無功能·即使微量濃度也會對生物造成有害影響。長期從飲食中攝入這些重金屬可能導致多種嚴重的健康問題。

在食物中可能存在的金屬污染物中,砷、鎘、鉛及汞,因其毒性,特別是長期攝入所帶來的影響,被世界衞生組織(世衞)識別為引起重大公共衞生關注的四種金屬污染物。長期攝入鉛可引致兒童智力受損和成人血壓升高。汞以多種形態存在,即金屬汞、無機汞和有機汞。有機形態的汞稱爲甲基汞,毒性較無機汞強。攝入甲基汞,尤其是胎兒、嬰兒及

童統緩障癌人組可風腎能攝鈣結,受、礙症類)能險臟,入代石會損行。研患,增。,情大謝。其導問和機的汞某主會不鎘調神致題鎘構物這些要破能亦,經發及被列質些癌積壞逆會形經發及被列質些癌積壞逆會形態發展,與實際令1質的在功。致腎遲習際令1質的在功。致腎

食物中的重金屬如 何受到規管?

在本港、《食物攙雜(金屬雜質含

Reported by Ms. Iris CHEUNG, Scientific Officer, Risk Assessment Section, Centre for Food Safety

Food such as grains, meat and vegetables are an essential part of the human diet. They provide crucial nutrients that our bodies need for growth, repair of tissues and even the production of antibodies to fight off illness. However, the potential presence of toxic heavy metals is a food safety concern. They can enter the food chain as a result of environmental contamination or during the food production process. Past studies have found high levels of heavy metals in the internal organs of cattle and sheep in the United Kingdom. Understanding the sources and prevalence of heavy metals in our food supply are crucial for safeguarding public health. Let's take a closer look at this concerning issue.

Sources of Heavy Metal in Food

Heavy metals are natural substances that are ubiquitous in the environment. They are fundamental elemental components of the Earth's crust and naturally exist in rocks, soil and water. As these heavy metals get into the soil and water, they are easily taken up by the plants, animals, and aquatic life that we consume. This makes the presence of metallic contaminants in our food, in most cases, unavoidable.

Human activities, however, can significantly increase the levels of heavy metals in the environment. These activities include metal mining, the use of metal containing fertilizers, pesticides and insecticides, and various industrial processes. When food is grown in polluted environments or when contaminated ingredients are used in food production, these harmful substances can accumulate in the food chain, potentially posing a direct threat to human health.

Adverse Health Effects of Heavy Metals

While some heavy metals like copper, chromium, manganese and selenium are essential for the proper functioning of our bodies in trace amounts, some other heavy metals serve no functional purpose and are harmful to living organisms in even minute concentrations. Long term exposure to these heavy metals through the diet can lead to a range of serious health problems.

Among the metallic contaminants which may be found in food, the World Health Organization (WHO) has identified four as major public health concerns due to their toxicity, especially with long-term exposure. These are arsenic, cadmium, lead and mercury. Chronic exposure to lead may lead to reduction of intelligence quotient (IQ) in children and increased blood pressure in adults. Mercury exists in several forms,

i.e. metallic, inorganic and organic. The organic form known as methylmercury is more toxic than inorganic mercury. Exposure to methylmercury, particularly for fetuses, infants and children, can impair neurological development and result in developmental delays, behavioral issues and learning problems. Arsenic and cadmium are classified as human carcinogens (Group 1) by the International Agency for Research on Cancer, meaning they can increase the risk of certain types of cancer. Cadmium accumulates mainly in the kidneys and may lead to irreversible kidney dysfunction. High intake of cadmium can also disrupt calcium metabolism and lead to the formation of kidney stones.

「工業活動」 使用含金屬的除書剛 Containing pesticides the important of the important of

人類活動 Human activities

進入食物鏈中並生物累積 Enter and bioaccumulate in the food chain



人類進食 Human consumption

圖2::重金屬如何進入我們的飲食 Figure 2: How heavy metals get into our diets

: 重金屬

How are Heavy Metals in Food Being Regulated?

Governments and international organisations have established mechanisms to monitor and regulate the amounts of heavy metals in food because they are aware of the possible health concerns associated with the consumption of food contaminated with heavy metals. The Codex Alimentarius Commission (CAC), an international organisation established jointly by the Food and Agriculture Organization of the United Nations (FAO) and the WHO, has developed detailed guidelines on setting the maximum levels of heavy metals across a wide range of food commodities.

Food Safety Focus

量)規例》(第132V章)訂定了各類食品中金屬污染物的最高含量·對市民健康具有重要意義。為保障公眾健康和促進國際食品貿易·我們一直遵守《實施動植物衞生檢疫措施的協議》的規定·並建議在制訂本港的食物中的金屬污染物標準時·盡可能與食品法典委員會的標準保持一致。此外,食物安全中心(中心)通過食物監察計劃·從進口、批發和零售層面抽取食物樣本進行不同檢測·包括金屬污染物水平。對於不合格的樣本·中心會立即採取跟進行動,以保障市民健康。

食物業和消費者應做的事

儘管我們無法完全消除這些金屬污染物,但也應將其含量控制在合理可達到的最低水平。食品生產商應遵行《優良務農規範》及《優良製造規範》等良好作業規範。作爲消費者,我們可以盡自己的一份力量,從可靠的零售商購買食物,並保持均衡飲食,避免因偏吃某幾類食物而過量攝入金屬污染物。

In Hong Kong, the Food Adulteration (Metallic Contamination) Regulations (Cap. 132V) sets out maximum levels (MLs) for metallic contaminants in various types of foods, which are of significance to the public. To protect public health and facilitate the international trade of food, we have observed the Agreement on the Application of Sanitary and Phytosanitary Measures and proposed to align our standards for metallic contaminants in food with the Codex standards as far as possible. Besides, the Centre for Food Safety (CFS) collects food samples under the food surveillance programme at import, wholesale and retail levels for testing various parameters including metallic contaminants. Immediate follow up actions will be undertaken for any unsatisfactory sample to safeguard public health.

What the Food Trade and Consumers Should Do

Although we cannot completely eliminate these metallic contaminants, their levels should be kept as low as reasonably achievable. Food producers should adopt best practices such as Good Agricultural Practice (GAP) and Good Manufacturing Practice (GMP). As consumers, we can do our part by buying food from reliable retailers and maintain a balanced diet to avoid excessive exposure to metallic contaminants from a small range of food items.

剩餘食物 — 減少浪費之餘也要保障安全 Surplus Food - Keeping it Safe while Reducing Waste

隨着社會日益關注在幫助有需要人士的同時能減少浪費食物,更多人願意捐贈狀況良好的待棄置食物。現時,本港有數以十計接受食物捐贈的團體。

確保捐贈食物的食物安全是為重要。一般來說,市民可以 捐贈沒有損壞、未開封、未過期及耐於保存的預先包裝食物。 部分食物銀行也會接受已過「<u>此日期前最佳</u>」日期的食物,因爲 仍可供安全食用,儘管品質可能並非最佳。部分食物銀行也會 接受商業機構批量捐贈新鮮蔬果、冷凍及冷藏食品。

食物銀行應檢查捐贈得來的食物庫存。已損壞或有曾貯存及 處理不當迹象的食物均應棄置。按照到期日使用預先包裝食物。 收集得來的食物在再分發前,應妥善存放。 With increasing social awareness of supporting people in need of food while reducing food waste, more people are willing to donate food in good condition that would otherwise be disposed of. Locally, there are tens of organisations that accept food donations.

It is important to ensure food safety of donated food. Undamaged, unopened, unexpired and shelf-stable prepackaged food is generally accepted from the general public. Some food banks may also accept foods that are past the "best before" dates, as they are safe for consumption, although they may not be of the highest quality. Some food banks also accept bulk donations of fresh produce, chilled and frozen food products from commercial entities.

Food banks should conduct stock inspections of donated food. Food that is damaged or has signs of previous improper storage and handling should be disposed of. Use the prepackaged food according to the date of expiration. Collected food should be stored properly before re-distribution.

冰凍甜點的微生物風險 Microbiological Risks in Frozen Confections

夏日炎炎,雪糕、冰條、軟雪糕及其他冰凍甜點是受歡迎的 消暑食物。然而,由於製造或貯存不當的冰凍甜點,因爲營養豐 富和天氣炎熱的關係有利微生物滋長(例如<u>沙門氏菌類、大腸桿</u> 菌、李斯特菌等致病菌),因此應採取適當的預防措施。

消費者購買冰凍甜點時,應光顧信譽良好的供應商。為防止細菌滋長,冰凍甜點應盡可能遠離危險温度(即攝氏4度或以上),因爲重新冷藏並不能完全消滅細菌。在運送時保持雪糕冰凍也有助保持品質,因為令雪糕質感軟滑的氣泡會在融化時消散。因此,回家後經重新冷藏的雪糕會變硬。使用保冷袋及冰墊把冰凍甜點帶回家,並盡快存放在雪櫃冷藏格(冰格)內。

至於<u>軟雪糕</u>方面,軟雪糕售賣機的衞生及清潔情況欠佳可 導致李斯特菌及大腸菌群等細菌滋生。<u>孕婦</u>應避免進食軟雪 糕,以免染上李斯特菌病,而引致流產。 With summer in full swing, ice-creams, ice lollies, soft ice-creams and other frozen confections are popular food for combating the intense heat. However, one must take proper precautions as improperly produced or stored frozen confections are conductive to microbiological growth (e.g. <u>pathogens</u> like <u>Salmonella</u> species, <u>E. coli, Listeria monocytogenes</u>) due to the abundance of nutrients and high temperatures.

When purchasing frozen confections, purchase only from reputable sources. Keep them out of dangerous temperatures (i.e. above 4°C) as much as possible to prevent bacterial growth, as re-freezing cannot eliminate the bacteria present. Keeping ice-cream frozen during transit can also maintain their quality, as air bubbles in the ice-cream which contribute to the soft texture will dissipate while melting. Therefore, ice-cream will become firm after re-freezing at home. Use chiller bags and ice packs to carry frozen confections home and store them in the freezer as soon as possible.

For <u>soft ice-creams</u>, poor hygiene and cleaning of the dispensing machines can lead to bacterial contaminations like Listeria and coliforms. <u>Pregnant women</u> should avoid them to prevent miscarriages caused by listeriosis.



風險傳達工作一覽(二零二四年六月)

Summary of Risk Communication Work (June 2024)

事故/ 食物安全個案 Incidents/ Food Safety Cases: 359

公眾查詢 Public Enquiries: 155 業界查詢 Trade Enquiries: 297

食物投訴 Food Complaints: 522 給業界的快速警報 Rapid Alerts to Trade:

給消費者的食物警報 Food Alerts to Consumers: 5 懷疑食物中毒個案通報
Suspected Food Poisoning Alerts:

教育研討會/ 演講/ 講座/ 輔導 Educational Seminars/ Lectures/ Talks/ Counselling: 上載到食物安全中心網頁的新訊息 New Messages Put on the CFS Website: 62