

食物安全焦點

Food Safety Focus



食物安全中心
Centre for Food Safety

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總編輯的話



本期是“食物安全焦點”的創刊號，我在此歡迎各位讀者！“食物安全焦點”是食物安全中心(中心)與市民大眾之間的新設溝通渠道，其主要目的是喚起市民關注近日在本港和海外發生的食物安全事件和中心就有關事件採取的行動；就各類食物危害及其對公眾健康的影響提供專業而又淺白易明的資訊；以及加強與食物業和市民的溝通，從而提升食物安全。這份電子通訊會於每月第三個星期三上載於中心網頁，希望大家會喜歡它！

Message from the Editor-in-chief

Welcome to the first issue of “Food Safety Focus”! “Food Safety Focus” provides a new channel of communication between the Centre for Food Safety (CFS) and the general public. Its main objectives are to arouse the awareness of the community on current food safety issues, both local and overseas, as well as the actions undertaken by the CFS in relation to these issues; to provide professional and easy-to-understand information on various food hazards and their public health risks and to promote food safety through enhancing communication with the food trade and public. This is an electronic monthly newsletter available on the CFS homepage on the third Wednesday of each month. Enjoy reading!

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Incident in Focus

英國回收受沙門氏菌污染的巧克力產品

Recall of Salmonella Contaminated Chocolate Products in the United Kingdom

食物安全中心風險傳達組研究主任游天頌報告

Reported by Arthur YAU, Research Officer,
Risk Communication Section, Centre for Food Safety

事故摘要

英國食物標準局在二零零六年六月二十三日宣布，吉百利公司由於有七款巧克力產品可能受一種名為“蒙得維的亞沙門氏菌”(Salmonella Montevideo)的罕見沙門氏菌污染，因此回收在英國出售的有關產品。由於該公司產品在本港市面甚為常見，食物安全中心(中心)立即與本港的吉百利產品總代理、本港大型食品零售商和英國駐港總領事館聯絡，發現有小部分其中一款受影響產品已流入本港，但有關超級市場集團已即時停售產品。其後，英國食物標準局作出結論，認為吃某些吉百利巧克力產品極可能是近期導致多宗這種罕見沙門氏菌感染個案的原因。二零零六年八月一日，吉百利公司通知英國食物標準局，表示打算將可能受沙門氏菌污染而在六月二十三日回收的五款產品重新推出市面。截至八月初，有關調查仍在英國進行。

對健康的影響

沙門氏菌是一組可在人類、野生及飼養動物(包括家禽、豬和寵物(如狗、貓和爬蟲類動物))的腸道中存在的細菌。多種沙門氏菌可令人類食物中毒。在食物中，沙門氏菌較常見於牛肉、豬肉、家禽、奶類、蛋類及其製品。吃下含菌的生或未完全煮熟的食物，或

Summary of Incident

On 23 June 2006, the Food Standards Agency (FSA) of the United Kingdom (UK) announced that Cadbury recalled seven types of chocolate products in the UK due to possible contamination with an unusual strain of salmonella named “Salmonella Montevideo”. As the products of the Company are readily available locally, the Centre for Food Safety (CFS) promptly contacted the sole agent of Cadbury products, major food retailers and the British Consulate-General in Hong Kong. A small number of one of the affected products were found locally but were immediately withdrawn from sale by the concerned supermarket chain. It was subsequently concluded that eating particular Cadbury chocolate products was the most likely cause for the recent outbreak of this unusual strain of salmonella in the UK. On 1 August 2006, the FSA was notified by Cadbury that it intended to restock five types of products that had been recalled on 23 June 2006 due to possible contamination with salmonella. The investigation in the UK was still in progress as of early August 2006.

Health Effect

Salmonella is a group of bacteria that can be found in the intestinal tract of humans as well as

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Incident in Focus

進食受到沙門氏菌污染的其他食物或受感染人類交叉污染的已烹煮即食食物，均可引致食物中毒。潛伏期由6至72小時不等，通常約為12至36小時。病徵包括噁心、發燒、腹痛和肚瀉，有時更會出現嘔吐。這些病徵在嬰兒和長者身上會更為嚴重。生的食物中所含的沙門氏菌可經徹底烹煮殺死，而已煮熟食物則必須小心處理，以免再受沙門氏菌污染。

微生物含量準則

在中心的食物監察計劃下，我們會分析從市面抽取的即食食物樣本，並根據即食食物微生物含量指引所訂的微生物含量準則評估其安全。有關指引訂明在25克即食食物樣本中不得檢出含有沙門氏菌。

跟進工作

中心一直密切留意事態發展，並已即時採取跟進工作，與吉百利產品的本港總代理、本港大型食品零售商和英國駐港總領事館聯絡。該代理商表示，他們並沒有進口受影響的產品，並已設立熱線回答有關顧客的查詢。在大型食品零售商中，有一間大型超級市場集團的管理層告知中心，他們進口了其中一款受影響產品。有關產品已即時停售。此外，中心又就此事通知有關食物業人士，提醒他們須確保出售的所有食物可供人安全食用。由於英國當局仍在進行更深入的調查，中心會繼續留意事態發展。在本港，中心已與衛生防護中心聯絡，請其留意沙門氏菌感染個案的模式。從衛生防護中心透過沙門氏菌監察系統所得的初步數據顯示，在二零零六年上半年有一宗“蒙得維的亞沙門氏菌”感染個案。衛生防護中心會繼續留意事態的發展。

更多資料

讀者如有興趣更深入了解此事，請瀏覽英國食物標準局網頁。事實上，沙門氏菌是食物中毒個案的常因。附圖列出獲證實由沙門氏菌引致食物中毒的個案數字。如欲取得更多有關沙門氏菌食物中毒的資料，請登入中心網頁。

both wild and domestic animals including poultry, pigs and pets like dogs, cats and reptiles. A variety of salmonella species can cause food poisoning in humans. In food, salmonella is more commonly found in beef, pork, poultry, milk, eggs and their products. By eating raw or undercooked food that contains the bacteria or by consuming cooked ready-to-eat (RTE) food that had been cross-contaminated with salmonella from other foods or infected humans, food poisoning can occur. The incubation period is from 6 to 72 hours, usually about 12 to 36 hours. The symptoms include nausea, fever, abdominal pain, diarrhoea and sometimes vomiting. The symptoms are more severe in infants and the elderly. Salmonella present in raw food can be destroyed by cooking thoroughly. However, cooked food must be handled carefully in order to prevent re-contamination by salmonella.

Microbiological Criteria

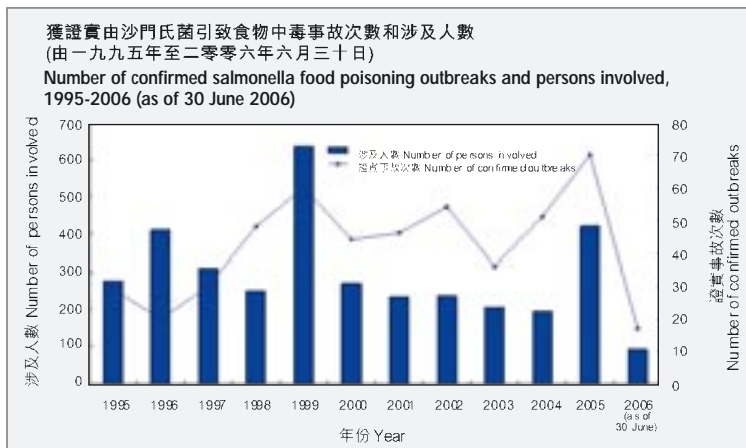
Under the CFS food surveillance programme, RTE food samples collected from the market are analyzed and their safety are assessed using the microbiological criteria set out in the Microbiological Guidelines for RTE Food. The guidelines specifies that no salmonella bacteria should be detected in 25 grams of the RTE food sample tested.

Follow-up Actions

The CFS has been closely monitoring the development of the issue and follow up actions were undertaken immediately. The CFS contacted the sole agent of Cadbury products, major food retailers and the British Consulate-General in Hong Kong. The agent informed that no affected products had been imported through them and a hotline had been set up by them to answer questions from concerned customers. Of the major food retailers, the management of a major supermarket chain informed the CFS that one of the affected products had been imported into Hong Kong through their own channels. The concerned products were immediately withdrawn from sale. The CFS also informed concerned members of the food trade of the issue and reminded them that they should ensure that all foods sold are fit for human consumption. Since the UK authority was still conducting further investigations, the CFS would continue to monitor the development of the incident. In Hong Kong, the CFS has liaised with the Centre for Health Protection (CHP) to monitor the pattern of salmonella infection. Preliminary data from the CHP showed one laboratory isolate of Salmonella Montevideo in the first two quarters of 2006 through the Salmonella Surveillance System. CHP would continue to monitor the situation.

Further Information

For readers who are interested to know more about the incident, they can visit the FSA website. In fact, the salmonella group of organisms in general are a common cause of food poisoning outbreaks. The number of food poisoning cases confirmed to be caused by salmonella is presented in the attached graph. For further information on salmonella food poisoning, please visit the CFS website.



風險傳達
工作一覽
Summary of
Risk Communication Work

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食物安全中的危害與風險(上篇)

Hazard and Risk in Food Safety (Part I)

食物安全中心風險評估組研究主任鄧紹平及
風險傳達組研究主任黃穎敏報告

Reported by Anna TANG, Research Officer, Risk Assessment
Section and Mary WONG, Research Officer, Risk Communication
Section, Centre for Food Safety

人生中總有風險。舉例來說，當我們走在街上，就要面對遇上交通意外而受傷的風險；當我們存錢在銀行，就要面對一旦銀行破產而無法取回積蓄的風險。

危害 ≠ 風險

本文從食物安全管制的角度，淺談危害和風險。辨識危害和評估相關的風險，是確保食物安全和保障公眾健康的重要工作。

“危害”、“風險”這兩個詞語常用於預期可能產生不良後果的情況。兩詞的意義相關，但並不相同，各具獨特概念。

危害指可能引致不良後果的因素或媒介，而風險則指出現不良後果的機會率。下表比較了人們可能會面對的各類事故的估計風險。

定質風險	每年風險
因交通意外受傷	四百六十分之一
因心臟病死亡	一千一百七十分之一
因各種原因患上肝癌	四千一百三十分之一
因交通意外死亡	四萬三千三十分之一
因閃電擊中死亡	二百萬分之一
因飛機失事死亡(民航機)	五千二百六十萬分之一

Risk in qualitative source	Annual risk
Injury due to traffic accident	1 in 460
Death due to heart disease	1 in 1,170
Liver cancer from all causes	1 in 4,130
Death due to traffic accident	1 in 43,300
Death due to lightning strike	1 in 2,000,000
Death due to plane crash (airliner)	1 in 52,600,000

從食物安全的角度來說，凡食物所含的物質或媒介，具有對消費者健康構成不利影響的能力或潛力，均歸類為“危害”。該物質可以是生物、化學或物理媒介。舉個例說，生蛋可能含有生物媒介沙門氏菌，人吃下含沙門氏菌的食物，可能會招致食物中毒，因此，專家把食物所含的沙門氏菌視為生物危害，沙門氏菌可能對消費者健康帶來潛在風險。至於某些食物所含的天然污染物水銀，專家則視為化學危害，水銀也可能對消費者健康帶來潛在風險。

在決定人類從食物攝入某種危害會否對健康帶來“風險”時，我們須考慮把該危害吃進體內的可能性，以及若吃進體內，該危害對健康構成哪些或有多嚴重的不利影響。“風險”一詞儘管意味着危害已經存在，但還附帶另一層意思，即從攝入該危害對健康可能構成的影響和影響的嚴重程度，考慮該危害在個別人士身上發生或在社區爆發的“機會”或“機會率”。舉個例說，雖然生蛋可能含有沙門氏菌，但若把蛋徹底煮熟才吃，通過烹煮過程把危害消除，從而把攝入危害的機會減至最低，因感染沙門氏菌而導致食物中毒的風險便會微乎其微。相反，若生吃蛋類，蛋類含有沙門氏菌以及把沙門氏菌吃進體內的可能性便會增加，因此蛋類含沙門氏菌對健康帶來的風險會較高。同樣地，食物可能含水銀，而水銀能對消費者的健康帶來潛在風險。不過，正如大多數的化學危害一樣，若食物的水銀含量低，偶爾攝入少量的水銀，通常不會對人體健康構成不利影響，所以水銀對消費者健康帶來的風險也會較小。此外，從有關長期中毒的食物安全評估角度來看，攝入一種化學物和其對健康的影響通常指人在一生中攝入該化學物的分量。只要並非長期超出平均攝入量，偶然高於安全參考值也不會影響健康。

以黃曲霉毒素為例

黃曲霉毒素是一種食物危害，大家都關注長時間攝入大量黃曲霉毒素會引致肝癌。因此，黃曲霉毒素在食物中的

Risk is part of everyone's life. For example, there is a risk of injury due to traffic accidents when we go out onto the street. Also, when we put money in a bank, there is a risk of not being able to retrieve it if the bank goes bankrupt.

Hazard ≠ Risk

This article introduces the concepts of hazard and risk, within the framework of food safety control. Identification of hazards and estimation of the risk concerned are central components in ensuring food safety and safeguarding public health.

“Hazard” and “risk” are terms commonly used in scenarios where possible adverse outcomes are expected. Though these two terms are related to each other, they are distinct entities with different meanings.

Hazard is a factor or agent which may lead to undesirable effects, whereas, risk refers to the probability that the effect will occur. The table on the left compares the estimated risk of certain events that we may encounter within the population.

In the context of food safety, a “hazard” can be classified as a substance or agent present in food that has the ability or the potential to cause an adverse health effect to the consumer. The substance can be a biological, chemical or physical agent. For example, salmonella, a biological agent, may be present in raw eggs. Ingestion of salmonella may result in food poisoning. Therefore, salmonella in food is considered a biological hazard and may also pose a potential risk to the consumer. Mercury, a natural contaminant that may be present in some foods, is regarded as a chemical hazard and could also pose a potential risk to the consumer.

In determining whether there is a “risk” posed to humans from exposure to a specific hazard through food, there must be a consideration of the likelihood of consumption and the nature or severity of the adverse health effect posed by a certain hazard if consumed. While “risk” already implies the existence of a hazard, it has the additional component of the “chance” or “probability” of that happening to the individual or the population as a whole, as well as taking into account the severity and impact of the health effect that may occur as a result of being exposed to the hazard. For example, although salmonella may be present in raw eggs, the risk of getting salmonella food poisoning is minimal when the egg is thoroughly cooked before consumption to eliminate the hazard and thus minimizing the chance of exposure. However, if the eggs are eaten raw, the health risk from salmonella in eggs will be higher as a result of the higher likelihood that the hazard will be present and consumed. Similarly, mercury may be present in food and could pose a potential risk to the consumer. However, as in the cases of most chemical hazards, if the amount of mercury in the food is low, the risk to the consumer will also be low as occasional exposure to low levels of mercury will usually not cause adverse health effects in humans. Also in food safety assessment with respect to chronic toxicity, exposure and health effects of a chemical usually refer to the intake of that chemical over a lifetime. Transient excursion above the safety reference value would have no health consequences provided that the average intake over long period is not exceeded.

食物安全平台

Food Safety Platform

含量受法例規管，以防止過量攝入。下列假設情況顯示從食物中攝入黃曲霉毒素引致肝癌的估計風險。

根據現時港人吃花生的日常分量，假設花生中的黃曲霉毒素含量較法定上限高出一倍，一名身體健康而又每天都吃花生的人因攝入黃曲霉毒素而患上肝癌的風險將會是每年二百三十萬分之一；這是非常低的風險水平，與因閃電擊中死亡的風險相若。

一般來說，食物中的危害即使超出法例標準，並不表示健康一定會受損，個別情況需視乎風險評估的結果而定。

Aflatoxin as an Example

Aflatoxin is a food hazard and the concern is on its ability to cause liver cancer when people are exposed to high levels over an extended time. Its level in food is therefore regulated by law to prevent excess exposure. The following hypothetical scenario shows the estimated risk of occurrence of liver cancer due to aflatoxin intake.

According to the average pattern of peanut consumption in Hong Kong and assuming that peanuts contain aflatoxin at a level two times the legal limit, a healthy person who eats peanuts every day of their life would have a risk of cancer due to aflatoxin intake of 1 in 2,300,000 per year. This level of risk is very low and is comparable to the risk of death due to lightning strike.

In general, an exceedance of the level of a food hazard over the regulatory standard does not necessarily cause harm to health. The individual impact should depend on the risk assessment result.

食物事故點滴

Food Incident Highlight

來自同一供應商的生海膽引致的食物中毒個案

二零零六年七月，有市民在不同食肆進食生海膽後出現多宗副溶血性弧菌食物中毒的個案。食物安全中心(中心)立即展開調查，發現有關生海膽全部來自同一供應商，於是即時要求該供應商停止分銷受影響的食物，並回收和銷毀餘下的海膽。此外，中心職員又巡查了40多間食肆，確定市面上再無受影響的食物。與此同時，由於供應商聲稱有關的海膽是由深圳供應，因此中心知會了內地有關當局，以便採取進一步行動。中心採取各項管制措施後，本港再沒有出現新個案。

副溶血性弧菌是一種常見引致食物中毒的細菌。在攝氏75度或以上，經數分鐘的烹煮可將副溶血性弧菌殺死。副溶血性弧菌所引致的食物中毒潛伏期大約4至30小時，通常是12至24小時。病徵包括腹痛、肚瀉及嘔吐，有時會出現輕微發燒徵狀。

食物業人士和消費者應向可靠和信譽良好的供應商購買食物，尤其是貝類海產；檢查食物的質量以及將食物貯放在適當溫度。如欲更深入了解此事，請登入中心網頁。

Food Poisoning Cases Traced to Raw Sea Urchins from the Same Supplier

In July 2006, there were a number of *Vibrio parahaemolyticus* food poisoning outbreaks related to consumption of raw sea urchins at several food premises. The Centre for Food Safety (CFS) conducted prompt investigations and found that the raw sea urchins concerned all sourced from the same supplier. The supplier was immediately requested to stop distribution of the affected products, and to recall and destroy any remaining sea urchins. In addition, over 40 food outlets were inspected to confirm that the affected products had been removed from the market. At the same time, since the supplier claimed that the sea urchins were supplied from Shenzhen, the CFS informed the relevant authority on the Mainland to take further action. No further cases occurred after control measures taken by the CFS.

Vibrio parahaemolyticus is one of the most frequently isolated food poisoning organisms and can be destroyed by heating at 75°C or above for several minutes. Incubation period is from 4 to 30 hours and usually 12 to 24 hours. The symptoms include abdominal pain, diarrhoea, vomiting, occasionally with mild fever.

The food trade and consumers are advised to purchase all food, especially shellfish, from reliable and reputable suppliers, check the quality of the food and store food at appropriate temperatures. Please visit the [CFS website](#) for further details on the incident.

新西蘭食物安全局呼籲國民切勿進食由韓國進口未經烹煮的蠔

新西蘭近日出現數起與進食未經烹煮的韓國蠔有關的疾病爆發。為此，新西蘭食物安全局在二零零六年七月六日提醒國民切勿進食由韓國進口而未經烹煮的蠔。雖然所有韓國急凍蠔的包裝袋標籤均清楚註明須經烹煮方可食用，但新西蘭食肆並非經常依從。生蠔有時含有可引致腸胃疾病的諾沃克病毒。

諾沃克病毒常見於受污染的水中。吃生或未完全煮熟的食物(包括貝類海產、沙律和生的蔬菜)十分容易感染諾沃克病毒。此病毒引致的病徵可能包括噁心、嘔吐、非出血性肚瀉和腹絞痛。

預防諾沃克病毒感染的方法是確保食物衛生、個人衛生和環境衛生。長者、小童、孕婦及免疫力低等高危人士，應小心選擇食物，尤其是高風險的食物。此外，易受諾沃克病毒污染的食品(如貝類海產)應徹底煮熟才進食。如欲取得更多有關諾沃克病毒和安全進食貝類海產的教育資料，請登入中心網頁。

New Zealand Food Safety Authority (NZFSA) advised the public not to consume uncooked oysters imported from Korea

The NZFSA issued a reminder to the public on 6 July 2006 of not to consume uncooked oysters imported from Korea. The statement was made in response to several reported outbreaks in New Zealand that had been linked to the consumption of uncooked Korean oysters. Although all bags of frozen Korean oysters were clearly labelled as requiring cooking before consumption, this practice has not been consistently observed by the catering industry in New Zealand. Raw oysters are known to sometimes carry norovirus, which can cause gastrointestinal illness.

Norovirus is commonly found in sewage-contaminated water. Ingestion of raw or inadequately cooked foods, including shellfish, salad and raw vegetables can pose a high risk of norovirus infection. Symptoms caused by norovirus may include nausea, vomiting, non-bloody diarrhoea and abdominal cramps.

The key to the prevention of norovirus infection is strict observance of food, personal and environmental hygiene. Vulnerable population, which include the elderly, children, pregnant women and persons with lower immunity, should be careful when choosing foods especially high risk food. Products that pose a high risk of being contaminated with norovirus, such as shellfish, should also be cooked thoroughly before consumption. Please visit the [CFS website](#) for further educational materials on [norovirus](#) and [safe consumption of shellfish](#).