食物安全焦點
Food Safety Focus

食物環境衞生署 Food and Environmental Hygiene Department

食物安全中心 Centre for Food Safety

二零零九年五月・第三十四期 May 2009・34th Issue

食物環境衞生署食物安全中心出版 Published by the Centre for Food Safety, Food and Environmental Hygiene Department

本期內容 IN THIS ISSUE

編輯委員會 EDITORIAL BOARD

焦點個案 Incident in Focus

二零零八年食物事故回顧
Review of Food Incidents in 2008

食物安全中心
風險管理組
馮永輝醫生報告

Reported by Dr. Benjamin FUNG, Medical Officer, Risk Management Section, Centre for Food Safety

由於食物迅速分銷往世界各地和現代食物鏈具有跨國特性，我們必須設立有效的溝通及管理系統，才可有效監控幾乎每天在世界各地發生的食物事故。食物安全中心（中心）自二零零六年五月成立以來，已推行食物事故監察系統監察世界各地的食物事故。這個系統十分有效，讓中心可就會對本港有影響的食物事故作出果斷的管理決定。

食物事故監察

中心每天監察傳媒及互聯網，以取得有關食物安全的資訊。一旦發現食物事故，中心會就所發現的危害擬備風險簡介，評估其對健康造成的風險，並根據風險評估的結果，採取適當行動跟進事故。這些行動可能包括向有關當局索取更多有關問題食品的資料；向業界發出警報；了解食物有否在本港出售；加強監察；以及發出新聞公報和食物警報。

二零零八年食物事故回顧

一般趨勢

由二零零八年一月至十二月，中心一共發現約700宗食物事故，每月平均為59宗（見圖一）。

The rapid global distribution of food and the multi-national nature of the modern food chain require effective communications and management systems for the effective control of food incidents which almost happen daily around the world. The Centre for Food Safety (CFS) since its establishment in May 2006 has developed a Food Incident Surveillance system (FIS) to monitor food incidents around the world. The system is effective for the CFS to make prompt management decision in response to those incidents that would have local impact.

Food Incident Surveillance

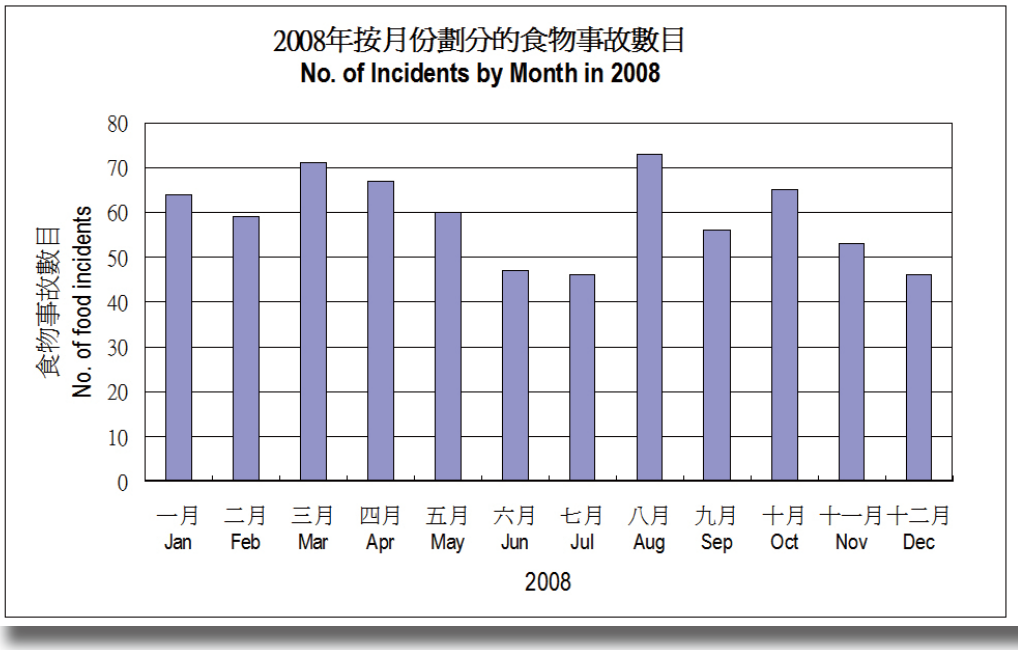
The CFS conducts daily surveillance of the media and internet for information related to food safety. Once a food incident is identified, the CFS will prepare a risk profile of the identified hazard and assess its health risk. Based on the result of the risk assessment, the CFS will take appropriate actions to follow up the incident, which may include enquiring relevant authorities for further information of the affected products, alerting traders, conducting sales check, stepping up surveillance, and issuing press release as well as Food Alert.

Review of Food Incidents in 2008

General Trend

From January to December 2008, around 700 food incidents were identified by the CFS. The average monthly figure was 59. (Figure 1).

圖一 Figure 1



焦點個案
Incident in Focus

食物事故的源頭地

在發現的食物事故中，由非本港（如內地及台灣、美國和歐洲國家）報告的食物事故佔絕大部分（98%），本港食物事故則約為2%。

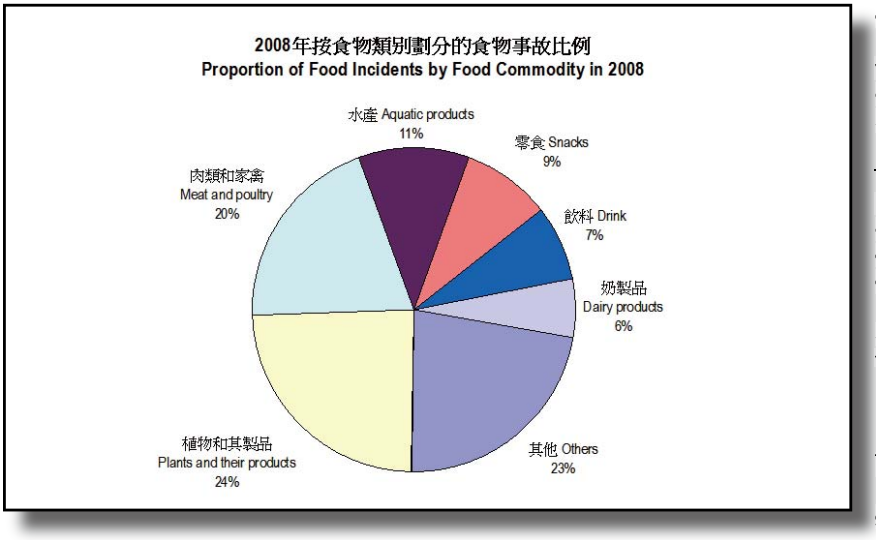
涉及的食物種類

以食物種類而言，食物事故最常涉及蔬菜、豆類、穀類、水果和其製品（24%），其他主要食物類別則有肉類和家禽（20%）、水產（11%）及零食（9%）（見圖二）。

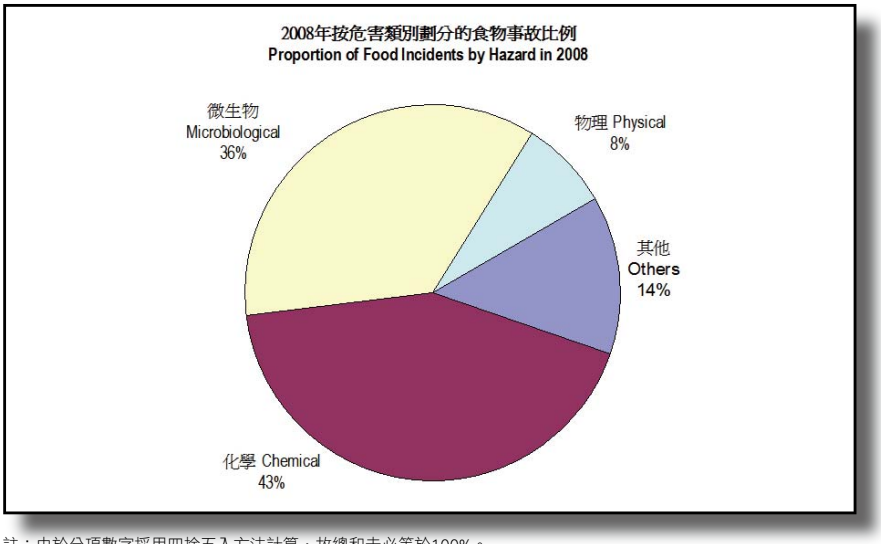
發現的危害

我們從圖三中明顯看出，在三種食物危害中，最常見的是化學物（43%）（例如防腐劑、除害劑、染色料、甜味劑和重金屬），其次則為微生物危害（36%）（例如細菌和病毒）。至於物理危害（例如金屬和玻璃碎片），則佔8%。

圖二 **Figure 2**



圖三 **Figure 3**



註：由於分項數字採用四捨五入方法計算，故總和未必等於100%。
N.B. Add-ups may not be equal to 100% due to rounding.

中心採取的行動

視乎食物事故對市民健康構成的風險，中心會採取不同的跟進行動。二零零八年，中心一共向業界發出約190則警報（較二零零七年上升約46%），又向公眾發出100多則新聞公報（較二零零七年上升約230%）。增發的警報和新聞公報主要是由於內地發生三聚氰胺污染奶製品的事故所致。

二零零八年，內地嬰兒配方奶粉及奶製品驗出含三聚氰胺，引起市民極大關注。政府旋即成立專家小組，以便小組成員就各項管理措施提供意見和支援。中心亦因應事故立即加強監察市面上的嬰兒配方奶粉及奶製品，又透過不同途徑向市民適時公布分析結果，更設立熱線專門解答市民對此事的查詢。此外，政府於九月在憲報刊登《2008年食物內有害物質（修訂）規例》，制定食物中三聚氰胺的法定上限。透過上述各項措施，中心已有效減低這次事故對市民健康造成的影響。

結語

經中心監察系統發現的食物事故，大部分都不是源於本港的。由於本港約95%食物是進口的，業界應確保其食物來自可靠的供應商。此外，業界應保留有關的交易記錄，以便追查並從市面上撤回問題食物。一旦發現食物事故可能對本港有重大影響，中心將繼續向市民和業界作出適時公布。除了政府的努力外，食物業的積極參與在處理本港食物安全事故的工作上亦至為重要。

Origin of Food Incidents

Non-local food incidents reported in areas such as the Mainland and Taiwan, USA and European countries contributed to most (98%) of the food incidents identified. Local food incidents constituted about 2%.

Food Groups Involved

With regard to the food groups involved, food incidents related to vegetable, bean, cereal, fruit and their products were the commonest (24%). The other major food groups involved were meat and poultry (20%), aquatic products (11%) and snacks (9%) (Figure 2).

Hazards Identified

From Figure 3, it is obvious that among the three categories of food hazards, chemicals (e.g. preservatives, pesticides, colouring matters, sweeteners, heavy metals) were the commonest hazards identified (43%) followed by microbiological hazards (36%) (e.g. bacteria, virus). The proportion of physical hazards (e.g. metal pieces, glass fragments) was 8%.

Actions Taken

Depending on the public health risk of the food incidents, the CFS had taken various follow-up actions. In 2008, about 190 alerts to traders (about 46% increase from 2007) and some 100 press releases (about 230% increase from 2007) were issued. The increase of alerts and press releases was mainly attributed to the incident related to melamine contamination of dairy products in the Mainland.

In 2008, the detection of melamine in infant formula and dairy products in the Mainland had caused major public concern. An expert group was swiftly set up by the Government to give advice on and provide support to various management actions. The CFS had taken prompt responses to step up surveillance of infant formula and dairy products available in the market and to inform the public of the results of analysis in a timely manner through various channels. A designated hotline was established to answer public enquiries related to the incident. In addition, the Harmful Substances in Food (Amendment) Regulation 2008 was also gazetted in September to set the legal limits of melamine in foods. Through these measures, the CFS was able to minimise the public health impact of this incident.

Conclusions

Most of the food incidents identified by our monitoring system involved places outside Hong Kong. As some 95% of our food are imported, traders should ensure their foods are sourced from reliable suppliers. Besides, traders should keep relevant transaction records to facilitate tracing and removal of the affected products from the market. The CFS will continue to make timely announcement to the public and the trade in case the food incidents identified have significant potential local impact. In addition to Government efforts, active participation of the food trade is also essential in managing food safety incidents in Hong Kong.

食物安全平台
Food Safety Platform

營養素與健康：鈉
Nutrient and Health - Sodium

食物安全中心
風險傳達組
科學主任馮慧中女士報告

Reported by Ms. Jacqueline FUNG, Scientific Officer,
Risk Communication Section,
Centre for Food Safety

在過往的《營養素與健康》系列文章中，我們首先介紹了最佳的營養素攝入量這個概念，繼而探討能量及多種營養素（包括蛋白質、碳水化合物、膳食纖維、糖、脂肪及膽固醇）。本文是此系列的末篇，將會闡述鈉這種營養素。

鈉的膳食來源

每當談到“鈉”時，我們總會想起“鹽”，又或更確切一點，“食鹽”一詞。“食鹽即是鈉嗎？”簡單來說，可以說“是”，尤其在有關營養的公眾教育方面。不過，從科學角度來看，卻應說“不是”。一般而言，食鹽指一種稱為“氯化鈉”的化合物，當中鈉佔40%，氯則佔60%。換言之，每克食鹽含0.4克（即400毫克）鈉。許多人以為食鹽是我們從膳食中攝取鈉的唯一來源。其實，食鹽只是我們從膳食中攝取鈉的其中一個來源。在烹調和進食期間使用食鹽而攝入鈉的分量，可能遠低於來自加工及預製食物中的含鈉防腐劑及調味料。

加工及預製食物通常含有名為“亞硝酸鈉”及／或“硝酸鈉”的食物添加劑。這兩種食物添加劑會用於新鮮及加工肉類、加工魚類及魚製品、芝士及芝士製品等食物中，作為防腐劑、抗菌劑及／或護色劑。除了亞硝酸鈉和硝酸鈉外，由於加工及預製食物現時在市面上非常普及，並廣為人們食用，故此這些食物中所用的谷氨酸鈉（俗稱“味精”）、豉油、蠔油、湯精和許多其他調味鹽及調味醬料亦是我們從膳食中攝入鈉的主要來源。

鈉與健康

鈉對多項人體功能十分重要，有助維持體內細胞外液和酸鹼的平衡，亦是神經傳送和肌肉收縮方面的必需元素。

腎臟負責調節人體內鈉的分量。當體內鈉水平偏低時，腎臟便會貯存鈉；當鈉水平偏高時，則會在尿液中排出多餘的鈉。腎臟有時候不能排出足夠的鈉，往往會令鈉和體液積存在體內，因而可能引致高血壓。有些人對鈉較為敏感，即他們會較易貯存鈉，因而可能增加患上高血壓的風險。

除了引致高血壓外，世界衞生組織（世衞）及世界癌症研究基金會近年的專家報告均指，鹽和鹽醃的食物可能增加罹患胃癌的風險。

鈉攝入量

根據世衞建議，一名成年人每天需要 2 000 毫克鈉，即約相等於一平茶匙食鹽（~5克食鹽）所含的鈉分量。以健康飲食金字塔來說，鈉與脂肪和糖一樣，位

In the past issues of this “Nutrition and Health” series, we first introduced the concept of optimal nutrient intake, then examined energy and different types of nutrients, including protein, carbohydrates, dietary fibre, sugars, fats and cholesterol. In this last article of this series, we will talk about sodium.

Dietary Sources of Sodium

Talking of sodium, another word comes to mind must be salt, to be more specific, table salt. “Does table salt equal to sodium?” Simply speaking, the answer is “yes”, in particular, when public education on nutrition is concerned. However, in scientific term, the answer is “no”. Generally, table salt is a chemical compound known as sodium chloride, which consists of 40% sodium and 60% chloride. In other words, for each gram of table salt, there is 0.4g (i.e. 400mg) of sodium. Many people think that table salt is the sole source of sodium in our diet. In fact, table salt is only one of the sources of sodium in our diet and its contribution to sodium intake, through the use of table salt while cooking and eating, may be much less than sodium-containing preservatives and condiments in processed and prepared foods.

Processed and prepared foods often contain food additives known as sodium nitrites and/or sodium nitrates, which are used as preservatives, anti-microbial agent and/or colour fixatives in foods, including raw and processed meats, processed fish and fish products, cheese and cheese products. Besides sodium nitrites and sodium nitrates, monosodium glutamate (MSG), soya sauce, oyster sauce, bouillon cubes and many other seasoning salts and sauces are key contributors of sodium in our diet as used in these foods are widely available and consumed nowadays.

Sodium and Health

Sodium is essential for body functions. It helps maintain the extra-cellular fluid balance and acid-base balance in the body. It is required for nerve transmission and muscle contraction.

Kidneys are responsible for regulating the amount of sodium in the body. They conserve sodium when the levels are low. On the other hand, they excrete the excess amount in urine when the levels of sodium are high in the body. There are times that the kidneys cannot excrete enough sodium and often result in sodium and fluid retention in the body, which may lead to high blood pressure (i.e. hypertension). Some individuals are more sensitive to sodium, meaning that they tend to retain sodium more easily and in turn may have higher risk of developing hypertension.

Besides hypertension, in recent years, expert reports from the World Health Organization (WHO) and the World Cancer Research Fund concluded that salt and salt-preserved foods probably increase the risk of stomach cancer.

Intake of Sodium

According to the WHO’s recommendation, an adult requires 2 000mg of sodium per day. This amount of sodium is approximately equal to what is found in a level teaspoon of table salt (~5g of table salt). When referring to the food pyramid, alongside fat and sugars, sodium

食物中的鈉含量 Sodium Contents in Foods

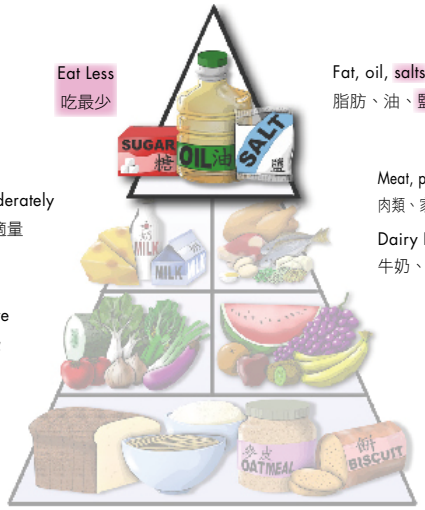
食物（每100克）Food (per 100g)	鈉（毫克）Sodium (mg)
豉油皇炒麪 Fried noodles with soya sauce	510
火腿 Ham	940
含鹽薯片 Potato chips, salted	370 - 920
不含鹽薯片 Potato chips, unsalted	8
涼果 Preserved fruits	1 100 - 13 000
棉花雞 Steamed chicken with fish maw	640

如需更多資料，請瀏覽食物安全中心網頁內的食物資料查詢系統和有關鹹味小食含鈉的研究報告。

Please visit the Nutrient Information Inquiry System and the survey report on sodium contents in savoury snacks at the CFS website for more information

於金字塔頂層，即應該“吃最少”。

要減少鈉攝入量，第一步就是少吃加工及預製食物，改吃新鮮農作物及肉類。此外，亦可選擇未經醃製和沒有預先調味的冷凍農作物及肉類。至於下一步，就是在配製食物時減少使用食鹽及含鈉的調味料，改用香草及香料來調味。最後，我們建議拿走餐桌上的鹽瓶，因為大部分食物已經美味可口，無需額外下鹽。



健康飲食金字塔 The Food Pyramid

is placed at the top of the pyramid which represents the “Eat Less” level.

To cut down on sodium intake, the first step is to eat fewer processed and prepared foods by substituting them with fresh produce and meat. Frozen produce and meat are other options as long as they are unpreserved and are not pre-seasoned. The next step is to reduce the amount of table salt and sodium-containing condiments used by replacing them with herbs and spices for seasoning purpose when preparing foods. Last but not least, it is suggested to remove the salt shaker from the dining table as most foods are tasty enough and do not need an extra dash of salt.

食物事故點滴
Food Incident Highlight

人類豬型流感（甲型流感/H1N1）與進食豬肉

最近在墨西哥和美國首先出現的人類豬型流感（甲型流感/H1N1）爆發個案由於具有潛力演變成大流行，並已出現死亡個案，故引起全球高度關注。由於人類豬型流感這名稱令人聯想起這疾病與豬隻有關，因而有些人擔心進食豬肉可能會患上此症。

在食用安全方面，聯合國糧食及農業組織、世界衞生組織（世衞）和世界動物衞生組織已於二零零九年五月七日發出聯合聲明，重申沒有證據顯示，人類可經進食加工豬肉或其他豬肉製品而感染流感病毒。烹調肉類至中心溫度達到攝氏70度或以上，可令生肉產品中可能存在的病毒不再活躍。此外，按照由世衞、食品法典委員會及世界動物衞生組織建議的良好衞生方法處理的豬肉和豬肉製品不會傳播流感病毒。

為預防經食物傳播的疾病，市民應遵守“食物安全五要點”。切勿購買來源可疑的豬肉。觸摸生豬肉後，應立即以溫水和梘液徹底洗淨雙手。至於曾與生豬肉接觸的工作面、用具和設備，則應以熱水和清潔劑徹底洗淨。避免熟食與生豬肉交叉感染，並把食物存放在安全溫度。豬肉應徹底煮熟才可進食，中心溫度至少達到攝氏75度。在外出用膳時，如懷疑豬肉沒有徹底煮熟，應要求店鋪員工把豬肉重新徹底煮熟。

Human Swine Influenza (Influenza A/H1N1) and Consumption of Pork

The recent outbreak of human swine influenza (influenza A/H1N1) in humans first reported in Mexico and the United States has caused much concern worldwide because of its pandemic potential and the occurrence of death cases. As the name suggests linkage with pigs, some people are worried about the possibility of catching the human swine influenza through the consumption of pork.

In relation to food safety, the Food and Agriculture Organization (FAO), World Health Organization (WHO) and World Organization for Animal Health (OIE) issued a joint statement on 7 May 2009 which reaffirmed that influenza viruses are not known to be transmissible to people through eating processed pork or other food products derived from pigs. By cooking meat to a core temperature of 70°C or above will readily inactivate any viruses potentially present in raw meat products. Moreover, pork and pork products, handled in accordance with good hygienic practices recommended by the WHO, Codex Alimentarius Commission and the OIE, will not be a source of infection.

Public is advised to apply the 5-keys to Food Safety to prevent food-borne illnesses. Do not buy pork from questionable source. Wash hands thoroughly with warm soapy water immediately after touching raw pork. Clean work surfaces, utensils and equipment that have been in contact with raw pork thoroughly using hot water and detergent. Prevent cross contamination of cooked food with raw pork and keep food at safe temperature. Pork should be cooked thoroughly before consumption with central part of the pork reaching at least 75°C. When eating out, ask the staff to re-cook the pork thoroughly if one suspects that it is not thoroughly cooked.

風險傳達工作一覽
Summary of Risk Communication Work

風險傳達工作一覽（二零零九年四月） Summary of Risk Communication Work (April 2009)	數目 Number
事故/食物安全個案 Incidents / Food Safety Cases	76
公眾查詢 Public Enquiries	175
業界查詢 Trade Enquiries	406
食物投訴 Food Complaints	419
給業界的快速警報 Rapid Alerts to Trade	60
教育研討會/演講/講座/輔導 Educational Seminars / Lectures / Talks / Counselling	60
上載到食物安全中心網頁的新訊息 New Messages Put on the CFS Website	37