食物安全焦點
Food Safety Focus

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食物環境衞生署 Food and Environmental Hygiene Department

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食物安全中心
食物事故應變及管理小組
張家慧醫生報告

Reported by Dr. Karen CHEUNG, Medical & Health Officer, Food Incidents Response & Management Unit, Centre for Food Safety

本文就食物安全中心(中心)在二零一五年接獲有關本港食肆及食物業的食源性疾病食源性疾病個案作出回顧。

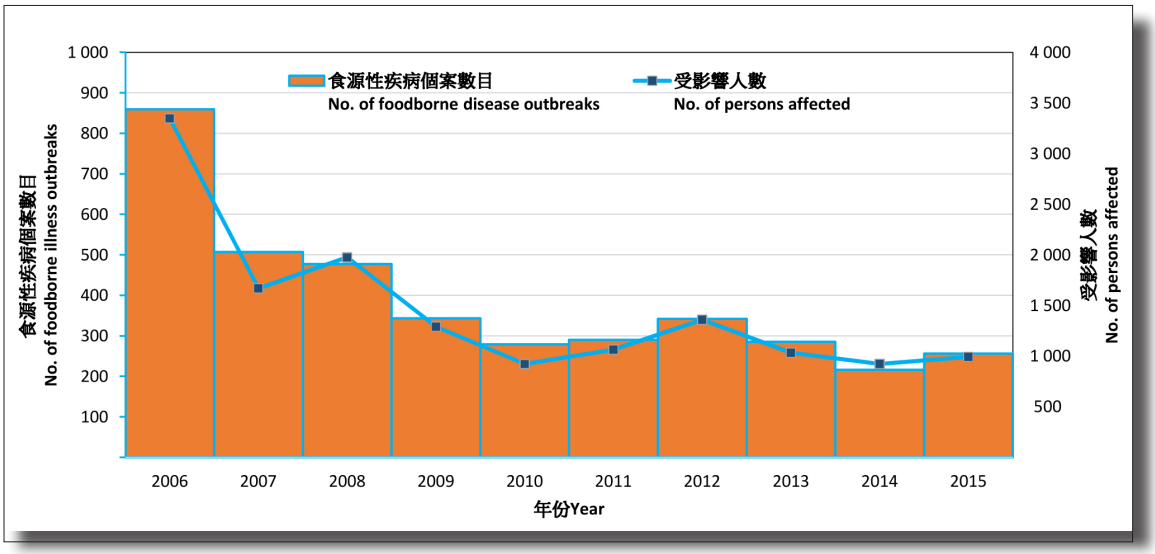
與本港食肆及食物業相關的食源性疾病個案

中心的職責之一是與衞生署合作調查及監控有關食肆及食物業的食源性疾病個案。在二零一五年，中心接獲256宗由衞生署轉介的懷疑食源性疾病個案，共有993人受影響。在過去十年，該類轉介個案由二零零六年的859宗逐年下降至二零一零年的279宗。近年數字轉趨平穩，保持在每年216至350宗之間（見圖）。

In this article, we review the foodborne disease outbreaks related to local food premises and food businesses reported to the Centre for Food Safety (CFS) in 2015.

Foodborne Disease Outbreaks Related to Local Food Premises and Food Businesses

In collaboration with the Department of Health (DH), the CFS is responsible for the investigation and control of foodborne disease outbreaks related to local food premises and food businesses. In 2015, the CFS received 256 referrals from the DH on foodborne disease outbreaks affecting 993 persons. Over the past decade, the number of referrals decreased from 859 in 2006 to 279 in 2010, and has since remained stable between 216 and 350 per year (see Figure).



2006至2015年有關食肆／食物業的食源性疾病個案數目及受影響人數

Number of foodborne disease outbreaks related to food premises and food businesses and the corresponding number of persons affected, 2006 to 2015

病原體及成因

在二零一五年所有個案中，由細菌引起的仍然佔大多數(78%)，排在頭三位的是沙門氏菌、副溶血性弧菌和產氣莢膜梭狀芽孢桿菌。至於病毒所引起的食源性疾病個案，最常見的是因進食生的或未徹底煮熟的雙殼貝類而感染諾如病毒，佔中心接獲個案總數的9%。

Causative Agents and Contributing Factors

Bacterial foodborne agents remained the leading cause (78%) of all foodborne disease outbreaks in 2015. *Salmonella*, *Vibrio parahaemolyticus* and *Clostridium perfringens* were the top three agents. For the viral causes, norovirus, associated with the consumption of raw or undercooked bivalves, was the commonest viral agent causing 9% of all the outbreak referrals.

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焦點個案
Incident in Focus

在去年調查的256宗食源性疾病個案中，最常見的三個成因分別是食物被生的食物污染、食物未經徹底煮熟和生吃的食物受污染。

兩宗大型食物中毒事件

“洪瑞珍”三文治引發的集體食物中毒個案

二零一五年七月至八月間，衞生署接獲34個群組的食物中毒事件報告，涉及96人，患者均曾進食從不同渠道購買的“洪瑞珍”三文治。所有患者均已康復，沒有嚴重的併發症。

調查發現，涉事三文治是在台灣製造和預先包裝的，有些經不同入口商進口，有些是由市民自攜入境的。其中10個群組部分患者的糞便樣本和一個群組的患者未吃的三文治被驗出同一種腸炎沙門氏菌。值得注意的是，一名糞便樣本被驗出該菌的患者所吃的三文治購自台灣桃園國際機場的店鋪。根據掌握的資料顯示，污染來自同一個源頭，且很可能發生在三文治包裝前，故三文治應不是在香港受到污染。三文治受到細菌污染後，長期和不當的儲存或為細菌滋長提供了有利環境，令食物中毒個案激增。

中心接報後即時展開跟進行動，包括追查問題食物的來源和分銷情況，呼籲市民不要食用自攜入境或從市面或網上購買的有關產品，並提醒業界停止出售或使用受影響產品。為保障公眾健康，中心於二零一五年八月三日禁止“洪瑞珍”三文治進口及在香港出售。

中心又加強檢查和監察各零售店、取貨點和網上商店，並沒有發現有店鋪出售問題三文治的存貨。此外，中心還加強教育公眾有關三文治等易壞食物的微生物風險。

學校午餐飯盒引發的集體食物中毒個案

二零一五年九月，一所學校發生集體中毒事件，共有120名師生受影響。患者均曾進食由食物製造廠供應的同一款午餐飯盒。調查人員懷疑飯盒受產氣莢膜梭狀芽孢桿菌污染。

中心接報後立即到涉事的食物製造廠和學校視察，發現煮好的食物配料在事發當天較平時提早送到學校，而有關溫度控制的紀錄未如理想。中心已指示有關供應商遵循良好的食物安全守則，尤其是要注意在食用前存放飯盒食物的正確溫度。中心已跟進檢查涉事的食物製造廠房，其後再沒有收到新的個案。

事實上，本港不時發生大型學校午餐飯盒食物中毒個案，而普遍存在於生的肉類和家禽中的產氣莢膜梭狀芽孢桿菌是此類個案的重要成因。由於供應商需要預先製作大量食物供應給大量人群食用，食物安全措施稍有不足，便有可能造成集體食物中毒事故。因此，供應商必須採取有效預防措施，包括把食物徹底煮熟，並存放於安全溫度(即攝氏60度以上或攝氏4度或以下)。

結語

雖然有關食肆及食物業的食源性疾病個案數目與早年相比，在過去數年一直維持在相對低的水平，中心仍會一如既往地努力保障食物安全，而業界和市民亦應時刻謹守“食物安全五要點”，以預防食源性疾病個案的發生。

Of the 256 cases investigated last year, contamination by raw food, inadequate cooking and contaminated raw food (food to be consumed raw) were the most frequently identified contributing factors.

Two Major Food Poisoning Outbreaks

A large-scale food poisoning outbreak related to “Hung Rui Chen” sandwiches

Between July and August 2015, there were a total of 34 clusters of *Salmonella* food poisoning outbreaks notified to the DH which involved 96 patients consuming different varieties of “Hung Rui Chen” sandwiches purchased through various channels. All patients have since recovered without serious complications.

Investigation showed that the incriminated sandwiches were manufactured and prepackaged in Taiwan, and imported or brought by different importers or individuals into Hong Kong. Identical Salmonella Enteritidis strain was isolated from patients of 10 clusters as well as unconsumed sandwiches collected from the patients of one cluster. Of note, the same outbreak strain was isolated from the stool specimen of one patient who purchased the sandwiches directly from a shop at the Taiwan Taoyuan International Airport. The available findings pointed to a common source of contamination and the site of contamination was likely to have occurred outside Hong Kong before the sandwiches were packaged. Subsequent prolonged and improper storage of the sandwiches might have provided favourable conditions for the bacteria to grow and thus aggravated the size of the outbreak.

Upon knowing the incident at the initial stage, the CFS immediately followed up with the trade, traced the sources and distribution of the affected products, and urged the public not to consume the affected products that were brought into Hong Kong by themselves or purchased from shops or online. The trade was reminded to stop selling or using the affected products. To safeguard public health, the CFS banned all “Hung Rui Chen” sandwiches from being imported into and sold in Hong Kong on 3 August 2015.

Enhanced inspection and surveillance of selling of the sandwich in question at retail outlets, collection points and online were mounted. No sale of the remaining stock of affected products was detected in any of these channels. Furthermore, the CFS also enhanced food safety publicity regarding the microbiological risks of perishable foods such as sandwiches.

A large-scale school lunchbox food poisoning outbreak

In September 2015, there was a major food poisoning outbreak affecting 120 children and staff of a school. All affected persons had consumed the same type of lunchboxes, suspected to be contaminated with *C. perfringens* , that were provided by a food factory.

The CFS visited the food factory and the school immediately upon receipt of notification. It was found that the cooked food ingredients were delivered to the school earlier than usual on the day of consumption of the meal in question and the documentation of temperature control was less than satisfactory. The CFS instructed the catering service to follow good food safety practices, particularly in keeping the cooked food for lunchboxes at a proper holding temperature before consumption. Enhanced follow-up inspections to the concerned food factory were conducted and no further related cases were reported afterwards.

Large-scale school lunchbox food poisoning outbreaks do occur from time to time locally. *C. perfringens* , commonly present in raw meat and poultry, is a well-recognised cause for foodborne disease in this setting. As the foods are prepared in large quantities in advance and supplying a relatively large number of persons, any lapse in food safety measures may lead to large-scale food poisoning outbreaks. The providers must cook the food thoroughly and keep them at safe temperatures, i.e. above 60°C or at or below 4°C, as effective preventive measures.

Conclusion

The number of foodborne disease outbreaks has remained at a relatively low level over the past few years as compared with previous years. While the CFS will continue to be vigilant in safeguarding food safety, the trade and the public need to recognise the risks involved and adopt and adhere to the “Five Keys to Food Safety”.

食物安全平台
Food Safety Platform

第1組食物致癌物 – 酒精飲品
Group 1 Carcinogens in Food – Alcoholic Beverages

食物安全中心
風險評估組
科學主任游天頌先生報告

Reported by Mr. Arthur YAU, Scientific Officer,
Risk Assessment Section,
Centre for Food Safety

上期我們探討了本港食物中較常見的一些第1組致癌物。這期我們會談談飲用酒精飲品與癌症之間的關係。

港人飲酒有多普遍？

很多地方的人都有飲酒的習慣，每逢節日更少不了觥籌交錯，舉杯暢飲。香港人飲酒的情況也很普遍。根據衞生署在二零一四年進行的調查，在調查前一年內曾飲最少一杯酒精飲品的成年人約有62.7%，而曾每月至少一次暴飲(一次過飲至少5杯或5罐酒精飲品)的約有6.8%。在二零零四年至二零一四年期間，本港的每年人均飲酒量介乎2.53至2.87升。隨著葡萄酒和酒精濃度不多於30%的飲品酒稅於二零零八年獲豁免，本港的人均飲酒量在該年出現明顯升幅。而二零零九至二零一四年間，本港的人均飲酒量呈上升趨勢。

飲酒、癌症與其他健康危害

飲酒，尤其是過量飲酒對健康有害(包括患癌)。世界衞生組織轄下的國際癌症研究中心(IARC)於二零零七年把飲酒列為“令人類致癌”(第1組)。世界各地的研究一致證明經常飲酒會增加患口腔癌、咽喉癌、喉癌和食道癌的風險。每天喝大約50克酒精(約5.3個酒精單位)的人患上述癌症的風險比不飲酒的人高兩至三倍。另一項研究發現每天喝50克酒精，患乳癌的風險比不喝酒的人高一倍半。

同時有抽菸及喝酒習慣的人，患癌的風險更會倍增。此外，多項研究發現飲酒會導致肝癌。除了患癌外，飲酒還會對心臟、大腦、肝臟、口腔、消化道、性器官和神智造成不良影響。

飲酒會攝入乙醛。乙醛是一種化學物，既會在酒的發酵過程中產生，亦會在酒精進入人體後轉化而成。而“與飲酒有關的乙醛”已被IARC列為“令人類致癌”(第1組)的致癌物質。因為基因遺傳的關係，將近有三成東亞人體內分解乙醛的酵素活性約只有一般人的10%。乙醛對這些人的傷害

了解何謂“酒精單位”(一個單位相等於12毫升容量或8克重量的純酒精)，有助監察飲酒的數量。
從左至右，每杯均相等於一個酒精單位：一個酒吧杯（約30毫升）酒精含量為40%的烈酒；一小杯（約100毫升）酒精含量為12%的葡萄酒；以及四分三罐（約250毫升）酒精含量為5%的啤酒。資料來源：衞生署
Understanding what a "unit of alcohol" is (i.e. contains about 12ml by volume or 9.5g by weight of alcohol) can facilitate monitoring the amount of drinks consumed.
From left to right, each is equivalent to one unit of alcohol: 1 pub measure (~30ml) of hard liquor with 40% alcohol; 1 small glass (~100ml) of wine with 12% alcohol; and ¾ can (~250ml) of beer with 5% alcohol. Reference: Department of Health

In the previous issue, we discussed some of the Group 1 carcinogens that are more commonly found in locally consumed foods. In this issue, we will discuss the relationship between consumption of alcoholic beverages and cancer.

Prevalence of Alcohol Consumption

Consumption of alcoholic beverages is entrenched in many cultures, especially during festivities. Drinking is quite common among the population of Hong Kong. Locally, according to a Department of Health (DH) survey in 2014, about 62.7% of the adult population had at least one drink in the past year, and about 6.8% of the adults engaged in binge drinking (i.e. at least five glasses or cans of alcoholic drinks on one occasion) at least once a month. The per capita consumption of alcohol in Hong Kong per year from 2004 to 2014 stood between 2.53 and 2.87 litres. A surge was observed in 2008 due to the exemption of duty for wine and liquor of an alcoholic strength not more than 30% in that year. From 2009 to 2014, the alcohol consumption per capita of Hong Kong showed an increasing trend.

Alcohol Consumption, Cancer, and Other Health Risks

However, alcoholic beverages consumption, especially excessive consumption, can impact health, including likelihood of cancers. The International Agency for Research on Cancer (IARC) of the World Health Organization classified the consumption of alcoholic beverages as carcinogenic to humans (Group 1 agent) in 2007. Studies from around the world have consistently shown that regular alcohol consumption is associated with an increased risk for oral, pharyngeal, laryngeal and oesophageal cancers. When compared with people who do not drink, consumption of about 50g of alcohol (about 5.3 units) daily will increase the risk of the above cancers two to three times. Another research has found that daily consumption of 50g of alcohol will increase the risk of breast cancer 1.5 times when compared with non-drinkers.

The effect of smoking and drinking on cancer seems to multiply the risk. Additionally, many studies suggest that alcohol consumption is a risk factor for liver cancer. Drinking can also cause many non-cancer health problems, affecting the heart, brain, liver, mouth, gut, sex organs and the mind.

Moreover, drinking will expose drinkers to acetaldehyde. It is a chemical formed during alcohol fermentation and converted inside the body after alcohol consumption. The IARC has also classified acetaldehyde associated with consumption of alcoholic beverages as carcinogenic to humans (Group 1 agent). Acetaldehyde is especially harmful for up to 30% of the East Asian populations, as they have only about 10% of the enzyme activities that breakdown acetaldehyde, due to a genetic condition. This will lead to a higher risk of alcohol-related oesophageal, head and neck cancers

尤大，這些酵素功能不好的人飲酒，患食道癌和頭頸癌的機率比其他人高。

飲酒有益 — 是真的嗎？

衞生署指出，雖然有研究指飲用少量酒精或對某些人具有適度保護心臟健康的作用，但相關研究結果仍具爭議性。要保護心臟健康，健康飲食和多做運動才是有效的方法。

減少與酒精相關的危害

要改善健康，如果從沒飲酒的便不要飲酒。就算要飲酒，也應有所節制，以盡量減少與酒精相關的危害。飲用酒精飲品能引致多種癌症，飲酒越多，患上這些病的機會就越高。

when compared with the rest of the population.

Benefits of Alcohol Consumption – Is It True?

The DH considers that although some researchers found that drinking moderate amounts of alcohol may be associated with better heart health in certain populations, the evidence remains controversial. If one is looking to protect the heart, healthy eating and maintaining an active lifestyle are effective means to achieve protection.

Minimising Harm Caused by Alcohol

If you want to improve health, do not start drinking if you do not drink at all. If you decide to drink, limit the amount of drinks to minimise the harm. For alcohol-related cancers, the larger the amount consumed, the higher the risk for the cancers.

食物事故點滴
Food Incident Highlight

食物中的高氯酸鹽

近月有傳媒關注食物(例如茶葉)含高氯酸鹽對健康的影響。高氯酸鹽有可能影響甲狀腺攝取碘的功能，抑制碘進入濾泡細胞，或會造成甲狀腺功能減退。

高氯酸鹽是一種在環境中廣泛存在的污染物。食物中的高氯酸鹽，有可能源自肥料和某些人造工業產品(例如用於製造火箭助推器和煙花的高氯酸銨)，亦有可能源自大自然(例如雨水、硝酸鹽和鉀鹽礦牀)。然而，高氯酸鹽進入食物鏈的途徑目前尚未明確。

聯合國糧農組織和世界衞生組織轄下的食物添加劑專家委員會在審查了食物含高氯酸鹽的相關數據後，認為按人們從食物和飲用水攝取的高氯酸鹽分量推算，不會構成健康問題。消費者應保持健康飲食，每天吃的食物要多樣化，各種食物類別都不可少。

Perchlorate in Food

In recent months, the media has expressed concern on the health effects of perchlorate in food such as tea leaves. Perchlorate may have an effect directly on the thyroid, blocking uptake of iodine into the follicular cell, thus potentially may cause hypothyroidism.

Perchlorate is a ubiquitous environmental contaminant. Fertilisers, certain manmade industrial products (e.g. ammonium perchlorate used in rocket propellants and fireworks) and natural sources (e.g. rainwater and deposits of nitrate and potash) are potential sources of perchlorate contamination in food. Nevertheless, its entry pathway into the food chain has not been clearly identified.

The Joint FAO/WHO Expert Committee on Food Additives has reviewed the available data concerning the level of perchlorate in food and considers that the estimated amount of perchlorate consumed from food and drinking-water are not of health concern. Consumers are advised to maintain a healthy diet and eat a variety of foods across all food groups daily.

購買野生菇類要小心

最近兩個月據報有數名市民進食購自不同零售店的乾牛肝菌後感到不適。調查人員懷疑這些牛肝菌意外摻雜了一些帶毒性的菇類品種。食物安全中心已向市民公布事件，並指示有關進口商及店鋪停售及回收涉事產品。

一些可食用的野生菇類在外表上與有毒菇類非常相似，而且兩者可能生長在同一環境。因此，野生菇類在售賣前通常經專家鑑定。但即使如此，本港和海外仍不時發生因野菇摻雜了毒菇而食物中毒的個案。市民應注意，進食野生菇類是有危險性的。此外，市民切勿採摘及進食野生菇類。業界則應確保所售菇類適合供人食用。

Be Cautious When Buying Wild Mushrooms

In the last two months, several persons were reported ill after eating dried wild porcini (also called boletoid) mushrooms that they had bought from different retail outlets. It was suspected that edible mushrooms had been unintentionally mixed with poisonous mushrooms. The Centre for Food Safety has alerted the public about the incidents and requested relevant importers and vendors to stop sale and recall the affected products.

Some edible wild mushrooms are very similar in appearance to poisonous varieties and may grow in the same habitat. Thus, wild mushrooms are usually inspected by mushroom identification experts before they are sold. Still, food poisoning cases, both local and overseas, related to adulterated wild mushrooms happen from time to time. The public should be aware of the risk in consuming wild mushrooms. Furthermore, the public should not pick wild mushrooms for consumption. The trade should make sure that the mushrooms they sell are fit for human consumption.

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

風險傳達工作一覽（二零一六年二月） Summary of Risk Communication Work (February 2016)	數目 Number
事故/食物安全個案 Incidents / Food Safety Cases	75
公眾查詢 Public Enquiries	53
業界查詢 Trade Enquiries	194
食物投訴 Food Complaints	364
給業界的快速警報 Rapid Alerts to Trade	10
給消費者的食物警報 Food Alerts to Consumers	4
教育研討會/演講/講座/輔導 Educational Seminars / Lectures / Talks / Counselling	36
上載到食物安全中心網頁的新訊息 New Messages Put on the CFS Website	41