



由食物環境衛生署食物安全中心於每月第三個星期三出版  
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## 焦點個案 Incident in Focus

## 二零一八年有關食肆及食物業的食物中毒個案回顧

## Review of Food Poisoning Outbreaks Related to Food Premises and Food Business in 2018

食物安全中心風險管理組  
高級醫生陳國雄報告  
Reported by Dr. Addi CHAN, Senior Medical Officer,  
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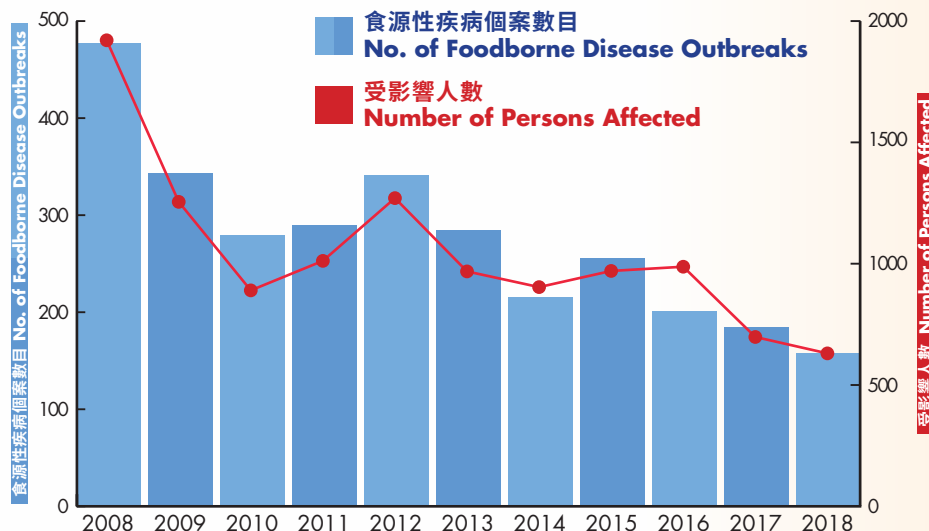


圖1：二零零八年至二零一八年有關食肆及食物業的食物中毒個案數目及受影響人數。  
Figure 1. Number of FPOs related to food premises and food business and the corresponding number of persons affected from 2008 to 2018.

本文就食物環境衛生署食物安全中心(中心)在二零一八年接獲有關本地食肆及食物業的食物中毒個案作出回顧。

### 與本地食肆及食物業有關的食物中毒個案

食物中毒是本港法定須呈報的疾病。中心的職責之一，是與衛生署合作調查和監控有關本地食肆及食物業的食物中毒個案。二零一八年，中心接獲158宗由衛生署轉介的食物中毒個案，共有641人受影響。該類轉介個案的數目在過去數年呈現逐漸下跌的趨勢(見圖1)。

### 病原體及成因

在所有食物中毒個案中，由細菌引起的仍然佔大多數(82%)，排在前三位的是沙門氏菌、副溶血性弧菌及蠟樣芽孢桿菌。至於病毒所引起的食物中毒個案，佔總數大約12.7%，全部都與諾如病毒有關。食物中毒個案最常見的成因分別是食物未經徹底煮熟、被生的食物污染及貯存溫度不當。下列在二零一八年發生的

This article reviews the food poisoning outbreaks (FPOs) concerning local food premises and food business reported to the Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department in 2018.

### FPOs Related to Local Food Premises and Food Business

Food poisoning is a statutory notifiable disease in Hong Kong. In collaboration with the Department of Health (DH), the CFS is responsible for the investigation and control of FPOs related to local food premises and food business. In 2018, the CFS received 158 FPOs referred from the DH, affecting 641 persons. The annual number of referred cases showed a gently decreasing trend over the past few years (see Figure 1).

### Causative Agents and Contributing Factors

Bacterial foodborne agents remained the leading causes (82%) of all FPOs, with *Salmonella* (SM), *Vibrio parahaemolyticus* (VP) and *Bacillus cereus* (BC) being the top three. Viral causes accounted for around 12.7% of all the FPOs and all were related to norovirus. Inadequate cooking, contamination by raw food and improper holding temperature were the most frequently identified contributing factors. The following two major FPOs in 2018 could illustrate the importance of good hygiene and food safety practices in safeguarding food safety.

兩宗大型食物中毒事故，正好說明採取良好衛生及食物安全措施對保障食物安全的重要性。

### 因食物未經徹底煮熟而引起的集體食物中毒個案

二零一八年二月底至三月中，中心接獲涉及一間食肆的六宗集體食物中毒報告，共有16人受影響。檢測發現，兩宗個案中兩名患者的糞便樣本對腸炎沙門氏菌呈陽性反應。衛生署的流行病學調查顯示，這些個案均與同日進食以滑蛋為配料的同菜式有關。

據現場調查發現，食肆採用未經巴士德消毒的雞蛋，而且只經短時間烹煮便上菜。雞蛋未經徹底煮熟，可能就是造成食物中毒事故的原因。中心隨後向食物處理人員作出衛生建議，並勸諭食肆即時暫停出售有關食品及進行徹底清潔及消毒。在食肆作出糾正後，例如把食物徹底煮熟，中心再無接獲相關食物中毒報告。

沙門氏菌通常透過進食受污染的動物源食物（主要是雞蛋、家禽、牛肉及豬肉）而感染。這宗個案說明了未經巴士德消毒的雞蛋必須徹底煮熟。業界應選用經巴士德消毒的雞蛋、蛋類製品或雞蛋粉來製作無需進一步加熱處理的食品。



### 因食物交叉污染及貯存溫度不當而引起的食物中毒個案

二零一八年五月底至六月初，中心接獲涉及在一個熟食檔進食而引起的三宗集體食物中毒個案，共有6人受影響。檢測發現，兩名患者提交的糞便樣本均對副溶血性弧菌呈陽性反應。

流行病學評估顯示，已包裝好供即時食用已煮熟的墨魚及豆腐可能就是中毒個案源頭。現場調查也發現，煮熟的墨魚及豆腐置於用以處理生海產的工作枱旁邊，在室溫下醃製數小時後，才被包裝和存放在展銷櫃中出售，存放時間約五至六小時。現場所測得的展銷櫃溫度為29°C。發生食物中毒個案，可能就是因為生熟食物交叉污染及貯存溫度不當引起。中心已向涉事熟食檔提供衛生建議，即時暫停出售有關食品及進行徹底清潔及消毒。中心亦已進行跟進巡查，在熟食檔改善食物安全措施後，中心再無接獲新增個案。

副溶血性弧菌通常存在於海洋環境及海產中。為防感染副溶血性弧菌，必須徹底煮熟食物才食用，並防止生熟食物交叉污染，更需特別留意海產。

### 結語

雖然食物中毒個案數目在過去數年一直維持在相對較低的水平，但中心不會掉以輕心，仍會一如既往努力保障食物安全。業界及市民亦應了解涉及的風險，並遵守「食物安全五要點」。

### Clusters of FPOs Related to Inadequate Cooking

From late February to mid March 2018, 6 clusters of FPOs related to a restaurant affecting a total of 16 persons were reported to the CFS. Stool specimens of 2 victims in 2 clusters were tested positive for *Salmonella enteritidis*. Epidemiological investigation of these clusters by the DH suggested that they were related to the consumption of various dishes with stir-fried eggs on the same day.

Field investigation found that unpasteurised eggs were used and then cooked for a very short time before serving. Inadequate cooking might have contributed to the outbreak. Health advice was then conveyed to the food handlers and the food premises was advised to suspend sale of the food items immediately and carry out thorough cleansing and disinfection. After irregularities such as inadequate cooking of food were rectified, no further outbreaks were reported afterwards.

Salmonellosis is usually acquired through consumption of contaminated food of animal origin (mainly egg, poultry, beef and pork). This case revealed the importance of thorough cooking of unpasteurised eggs. The trade is advised to choose pasteurised eggs, egg products or dried egg powder to prepare dishes not requiring further heat treatment.

### FPOs Related to Cross Contamination and Improper Holding Temperature

From late May to early June 2018, three clusters of FPOs related to consumption of food from a cooked food stall were reported to the CFS, with a total of 6 persons affected. Two victims had submitted stool specimens for testing and both were tested positive for *Vibrio parahaemolyticus* (VP).

Epidemiological assessment indicated that the ready-to-eat food package with cooked cuttlefish and tofu was the possible source. Field investigation revealed that cooked cuttlefish and tofu were marinated in room temperature for hours next to a working table for preparing raw seafood. Then they were packaged and kept in a display showcase for sale until 5 to 6 hours later. The temperature of the display showcase was measured 29°C during inspection. Cross contamination by raw food and improper holding temperature of cooked food might have contributed to the outbreak. Health advice was provided to the concerned food premises and sale of the food items was suspended immediately. The premises was thoroughly cleaned and disinfected. Follow up visits were conducted, with no additional cases reported afterwards upon the change of practices of food safety.

VP is usually found in the marine environment and seafood. To prevent VP infection, it is important to cook food thoroughly before consumption and to prevent cross contamination of cooked food by raw food, especially marine food.



### Conclusion

While the number of FPOs has remained at relatively low level over the past few years, the CFS will continue to be vigilant in safeguarding food safety. The trade and the public should also recognise the risks involved and adhere to the "Five Keys to Food Safety".

# 改良食品配方以降低食物的鹽含量(第II部分)

## Product Reformulation to Reduce Salt Content in Food (Part II)

食物安全中心風險傳達組  
科學主任何國偉先生報告

Reported by Mr. Nicky HO, Scientific Officer  
Risk Communication Section, Centre for Food Safety

上一期我們討論了如何訂立食物的減鹽/鈉目標，今次我們會談談怎樣透過改良食品配方來降低食物的鹽含量。

In the last issue, we discussed target setting in salt/sodium reduction in food. This time, we talk about salt reduction in food through product reformulation.

### 食物的鹽含量各有差異

食物安全中心(中心)定期就本港不同食品的營養素含量進行研究，所得結果往往顯示，同一類別食物在鹽含量上可以大有差異，例如麵包、湯水、港式小菜及碟頭粉麵飯，這反映業界降低食品的鹽含量是可行的。

### 改良食品配方以降低食物的鹽含量

世界衛生組織認為，改良食品配方以降低食物的鹽含量，是其中一項減少鹽攝取量的「最合算」措施。中心編製了《降低食物中鈉含量的業界指引》，鼓勵業界生產和推廣既健康又可供安全食用的鹽含量較低食品。

### 如何降低食物的鹽含量

業界可遵照中心在上述指引內所提供的建議，來降低食品的鹽含量，包括：

- 選用鹽含量較低的配料。有關資料可請供應商提供，也可查閱產品的營養標籤或一些食物成分資料庫。
- 在採購或進口用以製造食品的配料時，參考其他有關當局訂定的減鹽目標，作為指引。
- 減少使用鹽及調味料，例如改以新鮮、冷藏或減鹽罐頭蔬菜取代醃菜，或以鮮肉取代醃肉。
- 使用天然的配料(例如檸檬、番茄)或香草及香料(例如蒜頭、辣椒、八角、香茅、羅勒等)來調味和醃製食物。
- 建立公司產品資料庫，以監察食品的鹽含量。

有人擔心，降低食品的鹽含量，味道可能不為消費者所接受。不過，澳洲及荷蘭的研究指出，逐步減少麵包中的鹽含量，不會影響消費者的選擇。因此，業界如果以循序漸進的方式降低食物的鹽含量，在不知不覺間改變消費者的口味，將更易接受。

### 降低麵包的鹽含量

中心最近就麵包的鹽含量進行的研究發現，芝麻包、白方包、麥方包及腸仔包的鹽含量較高。要降低麵包的鹽含量，業界可採購鹽含



圖2: 使用天然的配料或香草及香料來調味和醃製食物，以及改以鮮肉取代醃肉，有助降低食物的鹽含量。

Figure 2. Using natural ingredients or herbs and spices for flavouring and marinating and using fresh meat to replace marinated or preserved meat help reduce salt content in food.

### Variation of Salt Content in Food

The Centre for Food Safety (CFS) regularly conducts studies on nutrient content in different food products in Hong Kong. The study results often show that within the same type of food, the salt content can vary widely. This is observed in food types, such as bread, soups, Hong Kong style savoury dishes and "Meal-on-One-Plate", reflecting the feasibility of the trade to reduce the salt content in their food products.

### Product Reformulation to Reduce Salt Content in Food

The World Health Organization opines that reformulation of food products to contain less salt is among others one of the "Best Buy" intervention to reduce salt intake of the population. The CFS had published "Trade Guidelines for Reducing Sodium in Foods" to encourage the trade to produce and promote wholesome and safe food which have lower salt content.

### Ways to Reduce Salt Content in Food

The trade may follow the advice in the CFS' guidelines to reduce salt contents in food products, including:

- Choose ingredients with lower salt content. The information could be obtained from the suppliers, the nutrition labels of products or some food composition databases.
- Make reference to the salt reduction targets set by other authorities as a guide to purchase or import ingredients for manufacturing food.
- Reduce the use of salt and seasonings such as using fresh, frozen or reduced-salt canned vegetables to replace pickles or using fresh meat to replace marinated or preserved meat.
- Use natural ingredients (e.g. lemon, tomato) or herbs and spices (e.g. garlic, chilli, star anise, lemongrass, basil, etc.) for flavouring and marinating.
- Establish a database of their products so as to monitor the salt content in food.

These are concerns that reducing the salt content of food products may make the food not palatable to consumers. However, studies in Australia and the Netherlands had showed that a gradual salt reduction in bread would not affect the consumers' choice. So if, the trade lower the salt content in food gradually without a noticeable difference in taste, better consumer acceptance is expected.

### Salt Reduction in Bread

From a recent study conducted by the CFS on salt content in bread, sesame bun, white bread, wholemeal bread and sausage bun were found having relatively high salt content. The trade may reduce their salt content by purchasing butter and sausage with lower salt content and gradually reduce

量較低的牛油及香腸，並逐漸減少添加於麵團中的鹽，令消費者易於接受麵包在質感上的改變。此外，研究顯示同一種類麵包的鹽含量各有差異，這反映降低麵包中的鹽含量是可行的。

### 降低湯水的鹽含量

中心在二零一六年就湯水的鹽含量進行的研究發現，冬蔭功湯、酸辣湯及羅宋湯的鹽含量較高。要降低湯水的鹽含量，業界可使用天然的配料或香草及香料來調味，以取代佐料、醬料及鹽，以及改以鮮肉取代醃肉。

### 本港的減鹽目標

我們一直與業界就改良食品配方以減少食物的鹽含量進行商討。中心已開始與業界交流意見，研究如何降低湯水及麵包中的鹽含量，並就這些食品訂立相應的自願減鹽目標。中心會繼續就其他食品(例如湯粉麵、港式小菜及碟頭粉麵飯)進行相關工作。政府會繼續與食物業協力降低食物中的鹽含量，並利便他們進行改良食品配方的工作。

the salt added in the dough with acceptable change in the texture of the bread. Moreover, the study showed that there is variation in the salt content in the same bread type, reflecting that salt reduction in bread is feasible.

### Salt Reduction in Soup

From the study conducted by the CFS in 2016, Tom Yum Goong soup, Hot and Sour soup and Borsch were found having relatively high salt content. The trade may reduce their salt content by using natural ingredients or herbs and spices to replace seasonings and sauce for flavouring, and using fresh meat to replace marinated or preserved meat.

### Salt Reduction Target in Hong Kong

We have been discussing with the trade on product reformulation on reducing salt content in food. The CFS has started to exchange views with the trade to reduce the salt content in soup and bread to set relevant voluntary salt reduction target for the food products. The CFS will continue the work for other food products (e.g. noodles-in-soup, Hong Kong style savoury dishes and "Meal-on-One-Plate"). The government will continue to work with the food trade on reducing salt content in food and to facilitate their work on product reformulation.

## 食物事故點滴 Food Incident Highlight

# 進食向天果種子後出現肝功能異常 Deranged Liver Function after Consumption of Sky Fruit Seeds

香港過去幾年發現約30宗懷疑食用桃花心木(俗稱向天果)種子或相關產品後出現肝功能異常的個案。新加坡在數月前亦作出類似公布。

在一些東南亞國家，向天果種子傳統上用於治療各種疾病，例如控制血糖及高血壓。

雖然目前未有科學數據顯示食用向天果種子或相關產品與肝功能受損有直接關係，但市民必須注意食用有關食品／產品可能引致肝功能受損的風險。如在食用向天果種子後感到不適或出現肝功能異常的症狀，例如噁心、食慾不振、昏睡、茶色尿、眼白或皮膚變黃，應立即求醫。

About 30 suspected cases of liver damage following the consumption of mahogany (commonly known as sky fruit) seeds or related products in the past few years have been identified in Hong Kong. Similar report was announced in Singapore a few months ago.

Seeds of sky fruit are traditionally used in Southeast Asian countries for treating various illnesses such as control of blood sugar and high blood pressure.

Although there is currently no scientific data on the direct risk of liver injury related to the intake of sky fruit seeds or related products, members of the public are urged to be aware of the potential risk of adverse effects on the liver from the consumption. Those who feel unwell or have symptoms of deranged liver function such as nausea, loss of appetite, lethargy, tea colour urine, or yellow colour in the whites of the eyes or the skin after consumption of sky fruit seeds should consult their doctors immediately.

## 如何清洗水果才食用？

## How to Wash Fruits before Eating?

近來有討論，應如何清洗水果才食用。在進食水果前應該將之加以清洗，有助去除水果表面的塵埃、污垢及細菌。不過，有人懷疑是否有需要使用洗手液或清潔劑來清洗水果。美國、加拿大及新加坡等海外國家的有關當局指出，在清洗水果時無需使用清潔劑或洗手液。

要有效清洗水果，市民宜用流動的清水徹底沖洗，這亦是世界衛生組織建議的措施。此外，在去皮前沖洗水果，可避免刀具把污垢及細菌帶到果肉上。表皮堅硬而粗糙不平滑的水果，例如哈密瓜，可用清潔的刷子刷洗。

Recently, there were discussions on how to wash fruits before eating. Fruit should be washed before consumption as it can help to remove the dusts, dirt and germs from the surface of the fruit. However, some people wonder whether it is worthwhile to wash fruits with cleaning agents or handwash. National authorities of some overseas countries like the United States, Canada and Singapore have stated that there is no need to use cleaning agent or handwash in the fruit cleaning process.

To effectively clean the fruits, the public is advised to wash them thoroughly with clean running water, a measure also recommended by the World Health Organization. In addition, rinsing the fruit before peeling can avoid dirt and germ from transferring from the knife onto the fruit. Fruits with hard and rough surfaces (e.g. rockmelons) can be scrubbed with a clean brush.



## 風險傳達工作一覽 (二零一九年二月) Summary of Risk Communication Work (February 2019)

事故／食物安全個案 Incidents/ Food Safety Cases: 172	公眾查詢 Public Enquiries: 68	業界查詢 Trade Enquiries: 130	食物投訴 Food Complaints: 355
給業界的快速警報 Rapid Alerts to Trade: 9	給消費者的食物警報 Food Alerts to Consumers: 7	教育研討會／演講／講座／輔導 Educational Seminars/ Lectures/ Talks/ Counselling: 42	上傳到食物安全中心網頁的新訊息 New Messages Put on the CFS Website: 46