

# 食物安全焦點

## Food Safety Focus

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### 焦點個案 Incident in Focus

## 台灣進口的劣質豬油及其製品 Substandard Lard and Its Products from Taiwan

食物安全中心

風險評估組

科學主任朱源強先生報告

Reported by Mr. Johnny CHU, Scientific Officer,  
Risk Assessment Section,  
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二零一四年九月四日，本地電子傳媒報道台灣有商人以劣質豬油製作食物出售。涉事的劣質豬油是用回收的廢棄油和動物飼料用豬油製作的“強冠全統香豬油”。問題產品其後被發現曾進口本港。本文將扼要介紹食物安全中心(中心)為消除市民的疑慮而採取的行動。

### 用劣質豬油／豬油製品製作食物

九月五日，中心聯絡台灣當局了解情況，並為審慎起見，呼籲業界主動停售和停用“強冠企業股份有限公司”(“強冠公司”)生產的所有品牌的相關豬油/豬油製品。“強冠公司”是出產問題豬油的台灣公司。中心同時開始調查問題豬油的分銷情況，並封存“強冠公司”生產的豬油/豬油製品。

九月九日，中心收到台灣有關當局的通知，指未有發現有劣質豬油流入本港市場。然而，當九月十日有一家香港公司被揭發把劣質豬油(飼料用豬油)出口到台灣後，事件再次迅速升溫。

九月十一日，除早前被點名的豬油外，台灣當局宣布回收“強冠公司”生產的24種豬油/豬油製品。九月十二日，中心尋求法律意見，準備發出《食物安全命令》(《命令》)，禁止輸入和在香港境內供應所有由“強冠公司”在二零一四年三月一日或以後生產的豬油/豬油製品，以及用這些豬油/豬油製品製成的所有食物。《命令》於九月十四日在憲報刊登，業界必須在14天內收回已供應的上述產品及食物。

為保障消費者的知情權，並確保回收工作能夠盡快和有系統地完成，中心在網頁上公布可能曾進口、分銷或使用“強冠公司”於二零一四年三月一日或之後生產

On 4 September 2014, the local electronic media reported that the substandard lard “CG Fragrant Lard Oil” produced from recycled waste oils and lards for animal feeds was used in producing food in Taiwan. The incriminated products were later revealed being exported to Hong Kong. This article summarises the actions taken by the Centre for Food Safety (CFS) to address public concerns.

### Use of Substandard Lard/Lard Products in Food

On 5 September, the CFS made contact with the Taiwan authorities and, for prudence's sake, asked the trade to stop selling and using all brands of related lard/lard products manufactured by Chang Guann Co., Ltd (CG). CG was the company in Taiwan that manufactured the incriminated lard. The CFS also started to trace the distribution, marked and sealed the concerned lard/lard products manufactured by CG for the sake of precaution.

On 9 September, the Taiwan authorities informed the CFS that no substandard lard was found to have entered the Hong Kong market. However, the situation again heated up quickly following the finding on 10 September that lard products intended for use in animal feed was exported by a Hong Kong company to Taiwan.

On 11 September, in addition to the initially affected lard, Taiwan authorities recalled another 24 lard/lard products manufactured by CG. On 12 September, the CFS sought legal advice with an intention to issue a Food Safety Order (the Order) to prohibit the import into and supply within Hong Kong of all lard/lard products produced by CG in Taiwan on or after 1 March 2014 and all food products made with these lard/lard products. The Order was made on 13 September and published in Gazette on 14 September. The

Order also required traders to recall all concerned lard and their products within 14 days.

To protect the consumers' right to know and to ensure that recall of concerned products was conducted in a timely and systematic manner, the CFS released on its website names of the companies that might have imported, distributed or



問題豬油  
The incriminated lard product

焦點個案  
Incident in Focus

的豬油／豬油製品的商戶名單。回收行動已於九月二十八日結束，結束前名單上共列有700多個商戶，進口商據稱回收了逾130公噸問題產品。此外，還有八款由台灣進口的食品因用劣質豬油製造而須回收。這些數字反映事件牽涉範圍甚廣，問題並不簡單。

由於事件中的劣質豬油／豬油製品可能受苯並〔a〕芘和黃曲霉毒素等致癌物質及金屬雜質污染，中心於九月期間在市面上抽查了180多個高風險油脂和食品樣本，其中一個樣本的過氧化值（質素指標之一）超過食品法典委員會的標準。中心根據台灣當局到現時為止的調查結果和中心的化驗結果所作的風險評估顯示，食用有關食物的風險並不高，市民無需過分擔心。

未來路向

因應公眾對食用油安全的關注，中心將於未來一年加強監察由外地進口的食用油。此外，中心正考慮為食用油制定新的安全標準和進口規格。政府同時亦計劃加強規管及監察本地回收“經使用煮食油”的運作。

注意要點

- 事件中商人在食物中使用劣質豬油是不折不扣的詐騙行為。
- 根據《命令》，業界不得進口、供應及使用有問題的豬油／豬油製品。
- 風險評估結果顯示，食物出現安全問題的風險並不高，市民無需過分擔心。

給業界的建議

1. 業界要有系統地整理交易紀錄，確保業界能夠在短時間內(例如24小時內)提交紀錄資料。
2. 業界須向中心提供一個24小時緊急聯絡電話號碼，以便中心在有需要時即時聯絡商戶。
3. 進口商須核實其供應商有良好的監控措施確保所生產的食物符合優良製造規範和食物法例。

給市民的建議

1. 這次事件引起的食物安全問題風險並不高，市民無需過分擔心。
2. 有問題的豬油在本港應已不再有售。

used lard/lard products manufactured by CG on or after 1 March 2014. The recall on lard/lard products ended on 28 September. Upon conclusion of the recall, the lists of traders contained more than 700 food businesses and over 130 tonnes of the concerned products were reportedly recalled by the importers. Besides, eight kinds of food products imported from Taiwan were also recalled because they were made with substandard lard. These figures showed the scale and complexity of the problem to be addressed.

In this incident, the substandard lard/lard products may be subject to contamination by some carcinogens (such as benzo[a]pyrene and aflatoxins) and metal contaminants. The CFS took some 180 samples of high risk fats and oils and food products from the market during September for testing. The peroxide value, a quality indicator, of one sample exceeded the relevant Codex standard. According to available information from the Taiwan authorities and the test results from the CFS, the risk assessment conducted by the CFS showed that the food safety risk is considered to be not high and there is no cause for undue concern.

Actions to be Taken

Considering public concern over the safety of edible oil, the CFS will step up the surveillance of imported edible oil in the coming year, and is considering establishing and adopting relevant new safety standards for edible oils and import requirements. The Government also plans to establish regulations and monitor the use of recycled waste cooking oil in Hong Kong.

Key Points to Note

- The use of “substandard lard” in food is primarily a fraudulent practice in this incident.
- Under the Order, the trade is prohibited to import, supply and use the affected lard/lard products.
- Risk assessment shows that the food safety risk is considered to be not high and there is no cause for undue concern.

Advice to the Trade

1. The trade must maintain a good record keeping system which should be capable of retrieving source tracing information within a short period of time, such as 24 hours.
2. The trade should provide a 24-hour emergency contact telephone number to the CFS such that the CFS can make immediate contact with relevant traders when necessary.
3. Importers must verify that their suppliers have controls in place to ensure that the food they produced complies with good manufacturing practices and food legislation.

Advice to the Public

1. Food safety risk of the incident is considered to be not high and there is no cause for undue concern.
2. The concerned substandard lard should no longer be available in the local market.

風險傳達  
工作一覽  
Summary of  
Risk Communication Work

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## 食用色素：是敵是友？(中篇)

### Food Colours: Devil or Friend? (Part II)

食物安全中心  
風險評估組  
科學主任郭麗儀女士報告

Reported by Ms. Joey KWOK, Scientific Officer,  
Risk Assessment Section,  
Centre for Food Safety

我們在上篇中簡述了使用食用色素的源起和歷史，這篇將介紹在食物中添加食用色素的目的，以及何謂正確或不當使用食用色素。

#### 添加食用色素的目的

色、香、味素來是中國人以至各地人們評定食物的標準。消費者可能會純粹因某種食物色相欠佳而對其失去興趣。英國一項研究顯示，消費者對沒有恢復在加工過程中減退的色澤而呈灰綠色的罐頭青豆和灰褐色的草莓醬反應不佳，銷售額也隨之下降。另一方面，色澤也會影響消費者的味覺。一項研究指出，當青檸味沙冰是紫色時，能吃得青檸味的人遠較綠色青檸味沙冰的少。

在食物中添加色素不但令食物變得賞心悅目，而且滿足了人們心目中對食物的一些期望。試想想如果沒有了食用色素，那麼可樂類飲品便不再是棕色的；薄荷味雪糕不再是綠色的；人造牛油不再是黃色的；而彩虹糖也不會是我們預期的五彩繽紛了。

為了令產品的賣相更吸引消費者，食物生產商在食物中添加食用色素來給食物著色或恢復食物的色澤。在大量配製食品的過程中添加色素的原因主要包括：(一)恢復食物在加工或保存過程中減退的色澤；(二)給本來色澤淺淡或沒有色澤的加工食品著色；(三)糾正食材自然出現及因季節而出現的色差；以及(四)令本身天然色調未達要求的食物增強色澤。

#### 正確使用食用色素

為確保食物安全，食物生產商應使用已通過安全評估的食用色素。此外，生產商須奉行優良製造規範，包括使用達到預期效果所需的最低食用色素分量。

#### 不當使用食用色素

利用食用色素來掩飾攙假行為或欺騙消費者無論在何時何地都是不可接受的。例如早在十八世紀的英國曾出現一些既不誠實又有害的欺騙行為。當時，茶葉從中國千里迢迢運抵英國，並須繳付沉重的稅款，故茶葉的價錢十分高昂。為逃稅並牟取暴利，一些無良的商人把泡過的茶葉烘乾後與真茶葉混在一起出售。為了令這些攙假茶泡出碧綠的茶水來以假亂真，英國不法商人甚至會加入有毒的染色料，例如黃綠色的亞砷酸銅和黃色的鉻酸鉛等。

另外也有一些騙人的伎倆雖然有失誠信，但對人體是無害的。葉綠素銅絡合物是一種深綠色的染色料，獲國際機構評定為可安全用於食物中。海外曾有

In the last issue, we have introduced the long history of use of food colours and their origins. Now, let us explore the purposes as to why food colours are used in foods, their proper and inappropriate uses.

#### Purposes for Using Food Colours

Colour, odour and flavour are intertwined criteria for determining the acceptability of food products in many cultures including Chinese. Consumers may reject a certain food simply based on the colour presentation of the food. A study conducted in the United Kingdom (UK) has shown that without restoring the colour lost during processing, canned peas with the greenish grey colour and strawberry jam with a dull brown colour were negatively received by consumers and the sales suffered accordingly. On the other hand, colour also influences consumers' taste perception. As indicated by another study, significantly less consumers could identify lime-flavoured sherbet correctly when it was coloured purple than when it was coloured green.

The use of colours in food not only enhances the visual appeal of the food, but also serves to match consumers' expectations. Without food colours, cola drink would not be brown, mint ice-cream would not be green, margarine would not be yellow, and rainbow candies would not be as colourful as consumers may expect them to be.

To make their food more appealing to consumers, food manufacturers use food colours to add or restore colours in foods. The main reasons for adding colours in mass food production include: (1) offsetting colour loss during processing or subsequent storage; (2) giving colour to those processed foods that would otherwise have little or no colour; (3) correcting natural and seasonal variations in food raw materials; and (4) supplementing the intensity of natural colour existing at levels weaker than those usually associated with a given food.

#### Proper Use of Food Colours

To ensure food safety, food manufacturers should use food colours that have been ascertained as safe for food use through safety evaluation. In addition, food colours should be used under conditions of good manufacturing practice which include, amongst others, limiting the quantity used in food to the lowest level necessary to accomplish the desired colouring effect.

#### Inappropriate Use of Food Colours

The use of food colours to disguise adulteration or to defraud consumers is unacceptable, anytime anywhere. A distant example of both dishonest and harmful ill-practice has been cited in the UK. In the eighteenth century, tea was kept at high prices in the UK when tea leaves were shipped all the way from China, and heavy taxation was imposed to this commodity. With a view to avoiding taxation and maximising profit, some unscrupulous traders in the UK sought to adulterated tea by mixing genuine tea leaves with those that had already been brewed and then dried. Poisonous colourants, such as copper arsenite and lead chromate with yellow-green and yellow colour respectively, were reported to be used to give a more convincing green tea colour.

Some other ill-practices which defraud consumers may not be inherently harmful. Chlorophylls copper complexes are colour additive with a dark green colour. It has been evaluated by international authority as safe for food use. There have been overseas reports of dishonest traders who



五彩斑斕的食用色素  
A variety of food colours

報告指不法商人在廉價的種籽油及／或橄欖油中加入葉綠素銅絡合物調成綠色，冒充高價的特級初榨橄欖油出售牟利。

在香港，食物安全中心曾發現有食物添加了未經准許的染色料。例如曾在辣椒粉和蛋中檢出工業用染色料蘇丹紅。為了投消費者所好，不法商人在辣椒製品中加入蘇丹紅，令其顏色更鮮紅；或把蘇丹紅摻在家禽飼料中，以求令蛋黃更為橙紅。有研究指這些染色料可令實驗動物患癌。香港等地均禁止在食物中添加這些染色料。

下一篇我們會探討食用色素的安全問題。

made profit by mixing cheaper seed oils and/or olive oil with chlorophylls copper complexes, and deceptively selling them as high-value extra virgin olive oil which often appears green.

Locally in Hong Kong, the Centre for Food Safety has previously noted ill-practices which involved the use of colourants not approved for food use. For example, industrial Sudan red dyes had been detected in chilli powder and eggs. In these cases, Sudan red dyes were added to the chilli product to enhance its red colour, or they were added to poultry feeds which in turn enhanced the orange-red colour of the egg yolks, a characteristic sought-after by many consumers. Some studies indicate that these dyes may cause cancer in experimental animals. These dyes are not approved for use as food colour in many places, including Hong Kong.

In the next article, we will look into the safety concerns of food colours.

### 食物事故點滴 Food Incident Highlight

#### 劍魚產品含過量汞

食物安全中心(中心)上月接獲歐洲聯盟委員會食品和飼料快速預警系統通報，指一款越南出口的連皮冷藏劍魚的汞(俗稱水銀)含量超標。中心接報後立即加強檢測市面的劍魚產品，檢出三款從越南進口的劍魚柳及劍魚扒的汞含量超出法例標準。中心已把上述檢測結果知會涉事的進口商，並把事件知會業界和市民。

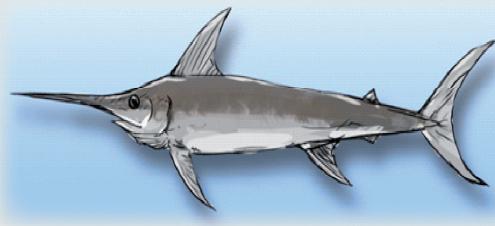
汞是一種天然存在於環境中的重金屬。火山爆發和採礦等均會令汞進入空氣或水中。積聚在河流、湖泊和海洋裏的汞會轉化為甲基汞，然後被水中生物攝入體內，沿着食物鏈向上累積，因此體型較大的捕獵魚類通常會累積較多這種化學物。

攝入大量的汞可損害發育中的神經系統，因此孕婦、計劃懷孕的婦女和幼童等應避免進食體型較大的捕獵魚類。市民應保持均衡及多元化的飲食，適量地進食各種魚類。

#### Excessive Mercury in Swordfish Products

Subsequent to the notification received from the Rapid Alert System for Food and Feed (RASFF) of the European Commission last month that a kind of skin-on frozen swordfish exported from Vietnam was found to contain excessive mercury, the Centre for Food Safety (CFS) enhanced its surveillance on swordfish and found three kinds of swordfish loin and steak imported from Vietnam contained mercury at levels exceeding the legal limit. The CFS has informed the importer concerned and alerted the trade and the public of the incident.

Mercury is a heavy metal that occurs naturally in the environment. It can be released into the air and water as a result of volcanic eruptions and mining activities. Mercury collected in streams, lakes, and oceans can be turned into methylmercury which is readily taken up by living organisms in the water and accumulated up the food chain. Thus large predatory fish may contain higher level of the chemical.



劍魚——一種捕獵魚類  
Swordfish – a kind of predatory fish

avoid consumption of large predatory fish. Members of the public are advised to maintain a balanced and varied diet with moderate consumption of a variety of fish.

#### 澳洲杏仁含氫氰酸

澳洲及新西蘭食物標準局上月發現Aprisnax澳洲杏仁的氫氰酸含量較高，因而發起回收行動。食物安全中心(中心)得悉事件後已立即聯絡澳洲當局，索取進一步資料，暫時沒有資料顯示有關產品曾進口本港。鑑於上述產品在網上有售，為審慎起見，中心把有關事件知會業界和市民。

杏仁天然含有氰苷。氰苷本身可說是沒有毒性的，但經過化學作用會轉化為對人類有毒的氫氰酸。人類急性氰化物中毒的臨牀症狀包括呼吸急速、血壓下降、頭痛、胃痛和嘔吐等。

中心建議市民如外遊時或在網上曾購買有關產品，應停止食用。如食用上述產品後不適，應盡快求醫。



受影響的杏仁(照片來自澳洲及新西蘭食物標準局)  
The affected raw apricot kernels (Photo by courtesy of the Food Standards Australia New Zealand)

#### Hydrocyanic Acid in Australian Raw Apricot Kernels

Last month, the Food Standards Australia New Zealand (FSANZ) recalled Aprisnax Australian Raw Apricot Kernels because of high hydrocyanic acid levels. The Centre for Food Safety (CFS) immediately contacted FSANZ and found no indication of any affected product being imported into Hong Kong. As the concerned product could be purchased online, for the sake of prudence, the CFS has alerted the trade and the public of the incident.

Cyanogenic glycosides, which naturally present in apricot kernels, are relatively non-toxic. However, they can release hydrocyanic acid, which is toxic to humans, as a result of chemical reaction. The clinical signs of acute cyanide intoxication include rapid respiration, drop in blood pressure, headache, stomach pain and vomiting.

The CFS advises consumers to stop eating the product concerned bought abroad or online recently. People should also seek medical treatment if they feel unwell after consuming the particular product.