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!

Incident in Focus

Recall of Salmonella Contaminated Chocolate Products in the United Kingdom

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

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 salmonella. 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 A small number of one of the affected products were found locally but were immediately withdrawn from sale by the concerned supermarket chain.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...
進食受到沙門氏菌污染的其他食物或受污染人類交叉污染的已煮熟即食食物，均可引致食物中毒。潛伏期由已至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。這些症狀在嬰兒和長者身會更為嚴重。食物中含有的沙門氏菌可經徹底烹煮後死亡，而約烹熟食物則必須小心處理，以免再次受沙門氏菌污染。

微生物含量準則

在食物的監察計劃下，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，與香港生產的本地有機食品生產商和英國駐港總領事館聯繫。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部門認真處理中心，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，中心正就此事件通知有關食物業界人士，提醒他們應確保出售的所有食物適合人食用。在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繫，製訂當沙門氏菌感染個案。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“難得的亞門氏菌”感染個案。衛生防護會持續關注事態的發展。

更多資料

讀者如有興趣深入了解此事，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見原因。附圖列出由沙門氏菌引致食物中毒的個案數據，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。

風险傳達工作一覽

Summary of Risk Communication Work

- 事故/食物安全個案
  Incidents / Food Safety Cases: 24
- 公眾查詢
  Public Enquiries: 44
- 食物投訴
  Food Complaints: 390
- 警示及研究會
  Educational Seminars / Lectures / Talks / Counselling: 139
- 上載到食物安全中心網頁的新資訊
  New messages put on the CFS website: 18
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.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Risk in qualitative source</th>
<th>Annual risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury due to traffic accident</td>
<td>1 in 460</td>
<td></td>
</tr>
<tr>
<td>Death due to heart disease</td>
<td>1 in 1,170</td>
<td></td>
</tr>
<tr>
<td>Liver cancer from all causes</td>
<td>1 in 4,130</td>
<td></td>
</tr>
<tr>
<td>Death due to traffic accident</td>
<td>1 in 43,300</td>
<td></td>
</tr>
<tr>
<td>Death due to lightning strike</td>
<td>1 in 2,000,000</td>
<td></td>
</tr>
<tr>
<td>Death due to plane crash (airliner)</td>
<td>1 in 52,600,000</td>
<td></td>
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</tbody>
</table>

In the context of food safety, a “hazard” can be classified as a substance or agent present in food that has the ability 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. Inhalation 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.

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 also pose a potential risk to the consumer. 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.
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 lightening 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.

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 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 educational materials on norovirus and safe consumption of shellfish.

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 Korean oysters. 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. Uncooked oysters are known to sometimes carry norovirus, which can cause gastrointestinal illness. 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.