食物安全焦點







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文魚會傳播2019冠狀病毒病



Would Salmon Spread COVID-19?

食物安全中心風險評估組 科學主任莊梓傑博士報告 Reported by Dr. Ken CHONG, Scientific Officer, Risk Assessment Section, Centre for Food Safety

背景

六月初北京出現新一輪的2019冠狀病 毒病疫情,有報道指在一個市場用於處理三 文魚的砧板上檢測到2019冠狀病毒病病毒, 令很多人感到驚詫。食物安全中心已即時採 取跟進行動,了解有關事件。本文會闡釋水生 食用動物是否有令人感染2019冠狀病毒病 病毒的風險及水產的安全性。

水生動物不大可能受到感染

2019冠狀病毒病病毒屬於一個據報告 指只會感染哺乳動物的冠狀病毒亞羣,沒有 科學證據顯示水生食用動物可受此病毒感 染。2019冠狀病毒病是一種呼吸系統病,病 毒主要攻擊呼吸道和感染肺部。人類與鰭魚 的主要生理差異之一在於魚類並無肺部,因 此後者不大可能感染此病毒。

病毒的入侵取決於病毒與宿主細胞結合 以便進入並複製。2019冠狀病毒病病毒專門 透過與ACE2(動物中普遍存在的一種細胞受 體)結合來進入宿主細胞。結合的過程就像使 用鑰匙開鎖,視乎病毒的「鑰匙」與宿主細胞的 「鎖」是否吻合,如在結構及結合位置上越是 吻合,病毒便越大機會進入。不同哺乳動物的 ACE2在形態上頗為相似,但鰭魚的在蛋白質 序列上有很多分別。從這一點來看,2019冠 狀病毒病病毒不大可能透過ACE2來感染水 生動物的細胞,更不用說進入後能否利用細 胞的系統複製。

生吃水產的安全性

水生食用動物雖然不大可能受2019冠 狀病毒病病毒感染,但與任何其他物件或表 面一樣,也可能會受到此病毒污染,尤其是經 病毒感染者處理後。目前,並無證據顯示人類 會透過食物(包括活生水產,未煮熟水產)感 染2019冠狀病毒病病毒。市民應時刻保持個 人、食物及環境衞生。如果有適當的食物處理 及衞生措施,水生動物或水產製品受2019冠

Background

When a new COVID-19 outbreak emerged in Beijing in early June, many were jolted by reports that COVID-19 virus had been detected on a cutting board used for salmon at a market. The Centre for Food Safety took immediate follow-up actions to understand the incident. This article sheds light on the risk of acquiring COVID-19 virus from aquatic food animals and the safety of relevant products.

Aquatic Animals Unlikely to be Infected

COVID-19 virus belongs to a subset of coronaviruses that are only reported to infect mammals; there is no scientific evidence indicating that aquatic food animals can be infected by COVID-19 virus. COVID-19 is a respiratory disease and the virus primarily targets our respiratory tracts and infects our lungs. One of the major physiological differences between humans and finfish is that fish do not have lungs and are therefore not likely to be susceptible to the virus.

The invasion of a virus into cells depends on its ability of binding to a host cell to gain access and replicate. COVID-19 virus enters the host cell specifically through binding to ACE2, a cell receptor widely present in animals. The binding is analogous to using a key opening a lock, in which it depends on whether the 'keys' on the virus fit into a host cell's 'lock'. The better the fit in terms of structure and binding sites, the more chance the virus has to gain access. While rather similar morphologically across mammals, ACE2 in finfish bears a lot more differences in the protein sequence. In this sense, it is not quite possible for COVID-19 virus to infect cells of aquatic animals through ACE2, not to mention being able to use the cell's machinery or not after entering for replication.

Safety of Raw Aquatic Products

Although aquatic food animals are unlikely to be infected by COVID-19 virus, they, like any other object or surface, may potentially become contaminated with COVID-19 virus, especially when handled by people infected with the virus. Currently, there is no evidence indicating that humans can be infected by COVID-19 virus via food, including raw aquatic products. Members of the public are recommended to maintain personal, food and environmental hygiene at all times. With proper food handling and sanitation, the likelihood of contamination of aquatic animals or their products with COVID-19 virus should be very low. Some practical reminders are given below for consumers on enhancing hygiene.

Food Safety Focus



ncident in Focus



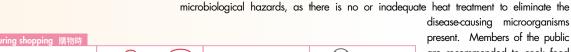
狀病毒病病毒污染的可能性應甚低。消費者可參閱下圖的實用 提示以加強衞生:

一般來說,進食生或未 經煮熟的水產所帶來的微 生物危害風險較高,原因是 沒有經過熱處理或熱處理 不足,未能消滅當中可致病 的微生物。市民應把食物徹 底煮熟,以減低患上食源性 疾病的風險。高危人士,例 如孕婦、嬰幼兒、長者及免

疫力弱人士,應避免進食生 及未經煮熟的食物。

食物業加強衞生

防止環境污染對遏止 2019冠狀病毒病的傳播也 是十分重要的。除了確保食 物安全外,食物業員工還須 加強食物業環境的衞生。舉 例來說,如出現2019冠狀病 毒病的病徵,便不應上班; 更頻繁地消毒頻密接觸點, 例如門柄、購物車把手及水 龍頭。這些措施亦適用於濕 貨街市。



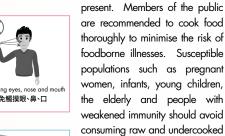






In general, eating raw or undercooked aquatic products are at higher risk of





Enhance Hygiene in Food Businesses

contamination is also important

to limit the spread of COVID-19.

On top of upholding food safety,

food workers are also reminded to enhance hygiene in food business

environment. For example, they

should refrain from working when

having COVID-19 symptoms;

disinfect high-touch points, such

as door handlers, handles of

shopping trolleys and water taps,

more frequently. These measures

environmental

Preventina









回家後立即洗手











圖1:消費者的加強衞生貼士

Figure 1: Some Tips for Consumers to Enhance Hygiene

are also applicable to wet markets.

注意事項

- 水生食用動物不大可能受2019冠狀病毒病病毒感染, 而且沒有證據顯示人類會透過食物感染此病毒。
- 與物件或表面一樣,水生食用動物及水產製品也可能會 受到此病毒污染。
- 如果只要有適當的食物處理及衞生措施,水生動物或水 產製品受2019冠狀病毒病病毒污染的可能性應甚微。

給消費者的建議

- 時刻保持個人、食物及環境衞生,並把食物徹底煮熟,以保 障食物安全。
- 高危人士應避免進食生及未經煮熟的食物,以減低患上食 源性疾病的風險。

給業界的建議

- 採取減少社交接觸的措施,並加強食物業環境的衞生。
- 食物業員工應時刻保持雙手清潔,並經常清潔和消毒物件 表面,特別是食物業處所內的食物接觸面及頻密接觸點, 以確保環境衞生。
- 食物業員工如患有或懷疑患有傳染病或出現病徵,應停止 處理食物和盡早求醫。

Key Points to Note

- 1. Aquatic food animals are unlikely to be infected by COVID-19 virus, and there is no evidence suggesting that humans can be infected by the virus via food.
- Similar to objects or surfaces, aquatic food animals and their products may potentially become contaminated with the virus.
- With proper food handling and sanitation, the likelihood of contamination of aquatic animals or their products with COVID-19 virus should be very small.

Advice to Consumers

- Maintain personal, food and environmental hygiene at all times, and cook food thoroughly to safeguard food safety.
- Susceptible populations should avoid consuming raw and undercooked foods to minimise the risk of foodborne illnesses.

Advice to the Trade

- Adopt physical distancing measures and enhance hygiene in food business environment.
- Food workers should always keep their hands clean, and frequently clean and disinfect surfaces, especially food contact surfaces and high-touch points in food premises, to ensure environmental hygiene.
- Food workers should cease engaging in any food handling work and seek medical advice promptly when suffering or suspected to be suffering from an infectious disease or symptoms of illness.

Food Safety Focus



重新考慮甜味劑的使用 Rethinking Sweeteners

食物安全中心風險傳達組 科學主任鄧紹平博士報告

圖2:健康在你手-選擇含有較少或不含糖/甜味劑的飲品

Figure 2: Your health is in your hands - choose beverages with less or no

Reported by Dr. Anna SP TANG, Scientific Officer, Risk Communication Section, Centre for Food Safety



世界衞生組織建議,糖攝取量應限制於每日所需總熱量的10%以下,如能進一步降低至5%或以下,則對健康有更多的益處。人造甜味劑提供甜味但無熱量,似乎是減少糖分攝取的理想選擇。然而,新的科學證據顯示,以人造甜味劑代替糖未必會帶來預期的健康益處。現在是時候重新考慮,我們可否只以甜味劑代替糖。

人造甜味劑是什麼?

人造甜味劑,例如天冬酰胺、醋磺內酯及三氯半乳蔗糖,是低熱量或不含熱量的化學物質,食品工業廣泛用作糖的替代品來使食物及飲品適合糖尿病患量的食物及飲品適合糖尿病患引。舉例來說,1克天冬酰胺可食果例來說,1克天冬酰胺可能量只有4千卡路里,而非蔗糖的800千卡路里。

在本港,批准用於食物 中的甜味劑都通過國際機構

的安全評估,包括聯合國糧食及農業組織/世界衞生組織聯合食品添加劑專家委員會,並受《公眾衞生及市政條例》(第132章)下的《食物內甜味劑規例》所規管。批准在食物中使用的甜味劑包括:醋磺內酯鉀、縮二氮酸基酰胺、天冬酰胺、天冬酰胺-醋磺內酯鹽、環己基氨基磺酸、糖精、三氯半乳蔗糖、索馬甜、紐甜及甜菊醇糖苷。所有預先包裝食品如添加了甜味劑,必須在配料表內妥為標明其名稱或識別編號。

sugar/sweeteners

人造甜味劑是減糖之友?

人造甜味劑在不同的司法管轄區各有不同的處理方式。英國公共 衛生署建議人造甜味劑用於改良食品配方;新加坡則讓符合標準的含 甜味劑飲品標上「較健康選擇」的標誌。

不過,人造甜味劑在其他地方卻不大受歡迎。以歐洲聯盟為例,供應給學校的蔬果及牛奶不得含有甜味劑;法國等部分歐洲國家甚至對含人造甜味劑的飲品徵稅;北歐國家禁止把甜味劑用於「鎖眼」(Keyhole)食物標籤制度下標示為健康之選的包裝食品;美國膳食指引諮詢委員會則重申,添加於食物中的糖不應以低熱量甜味劑取代,而是作出健康的選擇,例如不喝加糖飲品,改為喝水。

利弊參半

早前一些研究顯示,如使用得當,人造甜味劑可能有助減少糖攝取量,從而在短期內減輕體重。令人關注的是,使用人造甜味劑的人士可能會認為熱量攝取量減少了,便傾向吃下更多其他食物,因而透過其他來源吸收本來減少了的熱量。經常食用甜味劑會過度刺激糖受體,可能令人較難將甜味與熱量攝取聯想起來,導致更偏好甜食,增加體重。

人造甜味劑對健康有何影響的新近研究

二零一九年,有兩項關於人造甜味劑對健康有何影響的研 究指出,人造甜味劑並非減糖及保健的靈丹妙藥。由考科藍團隊 The World Health Organization recommends limiting sugar intake to less than 10% of daily caloric intake, with a proposal to lower this level to 5% or less for additional health benefits. By offering the taste of sweetness without any calories, artificial sweeteners appear to be one promising answer to sugar reduction. New scientific evidence, however, suggests that replacing sugar with artificial sweeteners may not have the health benefits we have expected. It is high time to rethink whether we can just replace sugars with sweeteners.

What are Artificial Sweeteners?

Artificial sweeteners, such as aspartame, acesulfame and sucralose, are low-calorie or calorie-free chemical substances widely used to replace sugar to sweeten foods and drinks by the food industry. Such food and beverage products with lower energy contents are suitable for diabetic patients and appealing to weight-watchers. For example, 1g of aspartame can replace 200g of sucrose, providing 4 kilocalories of energy instead of 800 kilocalories from sucrose.

In Hong Kong, sweeteners approved for food uses have undergone safety evaluations by international authorities including the Joint FAO/WHO Expert Committee on Food Additives, and are regulated under the Sweeteners in Food Regulations of the Public Health and Municipal Services Ordinance,

Cap.132. Sweeteners permitted to be used in food include Acesulfame Potassium, Alitame, Aspartame, Aspartame - acesulfame Salt, Cyclamic Acid, Saccharin, Sucralose, Thaumatin, Neotame and Steviol Glycosides. All prepackaged foods added with sweeteners are required to be properly labelled with their names or identification numbers in the ingredient list.

Are Artificial Sweeteners Friends to Sugar Reduction Policies?

Artificial sweeteners are treated differently across different jurisdictions. Public Health England has recommended their use for food reformulation among others. Sweetener-laden beverages are gaining kudos in Singapore, credited with the Healthier Choice Symbol.

However, artificial sweeteners are less welcome elsewhere. For example, fruit, vegetables and milk distributed to schools in the European Union must not contain sweeteners; some European countries, like France, even levy tax on drinks with artificial sweeteners. The Nordics ban the use of sweeteners in Keyhole products, a type of healthier packaged food choices branded within a food labelling scheme. The US Dietary Guidelines Advisory Committee reiterated that added sugar should not be replaced with low-calorie sweeteners, but rather with healthy options, such as water in place of sugar-sweetened drinks.

Take the Bitter with the Sweet

Artificial sweeteners, if used judiciously, may facilitate reductions in sugar intake, thereby facilitating short term weight loss, as shown by some earlier studies. One concern is people using artificial sweeteners may think they have less calorie intake and have the tendency to consume more of other foods, hence the lost calories are replaced through other sources. Overstimulation of sugar receptors from frequent use of sweeteners may prevent people from associating sweetness with caloric intake. As a result, people may crave for more sweets and gain weight.

Recent Studies on Artificial Sweeteners on Health Impacts

In 2019, two studies on health impacts of artificial sweeteners emerged showing that they are no magic bullets for sugar reduction and health promotion. A big systematic review of over 10,000 records conducted by the Cochrane group, suggested no significant health benefits of non-sugar

Food Safety Focus

(Cochrane) 對一萬多項記錄進行的大型系統性研究顯示,使用非 糖甜味劑對健康在各方面(包括體重指數及減輕體重)並沒有明顯的益 處。與此同時,國際癌症研究機構及其他機構對歐洲超過450,000人 進行的世代研究發現,每日飲用兩杯或以上含糖或人造甜味劑汽水的 人士,他們比較每月飲用少於一杯汽水的人士因各種原因而死亡的風 險更高。

少糖及少甜味劑

要有更理想的健康生活,便要選擇含有較少或沒有添加糖/甜味 劑的食物及飲品。消費者可參閱預先包裝食品上的食物標籤,作出有 依據的選擇。飲食要少糖、少甜味劑,需要業界與市民的共同努力。 食物業宜透過逐步減少糖及甜味劑的用量來降低食物的甜味,以便市 民慢慢適應味道較清淡的食物,最終改變飲食習慣。

sweetener use on a range of health outcomes, including body mass index and weight loss. Concurrently, a cohort study of over 450,000 individuals in Europe from the International Agency for Research on Cancer and other institutes found that regular consumption (two or more glasses daily) of soft drinks - both sugar sweetened and artificially sweetened - was associated with a greater risk of all causes of death compared with those who drank less than one glass per month.

Less Sugar and Less Sweeteners

A better approach for healthy living is to select foods and beverages with less or no sugar/sweeteners added. Consumers can refer to the food labels on prepackaged foods to have informed choices. Taking in less sugar and less sweeteners in our diet requires the joint efforts of the trade and the public. The food trade is encouraged to reduce the sweetness of food by using less sugar and sweeteners stepwise, allowing the public to adapt gradually to the lighterflavoured food and, eventually, alter their dietary habits.

食物事故點滴

食品包裝與2019冠狀病毒病的傳播



Food Incident Highlight

Food Packaging and COVID-19 Transmission 六月,一名負責在進口食品貼上標籤的本地貨倉員工感染了 In June, there was a patient infected with COVID-19 who affixed labels on

世界衞生組織表示,2019冠狀病毒病主要透過接觸患者咳嗽和 打噴嚏所產生的呼吸道飛沫來傳播。雖然實驗證明,這病毒可在塑膠 或紙板等表面存活,但冠狀病毒不能在食物中繁殖。直到目前為止, 並沒有2019冠狀病毒病經食物或食品包裝傳播的證實病例。人類透 過處理食物或食品包裝感染此病的可能性不高。

2019冠狀病毒病,這使公眾關注到此病是否可經食品包裝傳播。

消費者可選擇對食品包裝進行消毒,但更重要的是注意良好的 個人及環境衞生,以減少傳播2019冠狀病毒病的風險。市民及業界 應經常洗手,特別是處理食物前後。此外,如出現病徵,便不應上班。 把食物徹底煮熟才食用,大致上已可減低患上食源性疾病的風險。

imported food products at a local warehouse. This has raised public concern about whether COVID-19 can be transmitted through food packaging.

According to the World Health Organization, COVID-19 is spread primarily by contacting respiratory droplets from coughing and sneezing of patients. Even though experimental evidence indicated that the virus can survive on surfaces such as plastic or cardboard, covonaviruses cannot multiply in food. So far there is no confirmed case of COVID-19 transmitted through food or food packaging. It is unlikely that people can contract COVID-19 through handling food or food packaging.

While consumers may choose to sanitise product packaging, it is more important to practise good personal and environmental hygiene in order to minimise the risk of COVID-19 transmission. The public and the trade should wash hands frequently, especially before and after handling food. In addition, workers should refrain from work if having symptoms. Cook food thoroughly before consmption can in general reduce the risk of foodborne diseases.

魚翅頭檢出含高分量水銀



High Levels of Mercury Found in Shark Fin Trimmings

最近有研究報告指,在本港及中國內地所收集的魚翅頭等樣本 中檢出高分量的水銀(汞)。

鯊魚屬體型較大的捕獵性魚類,可透過食物鏈天然積聚水銀於 體內。人類進食捕獵性魚類時,進入人體的水銀可影響神經系統,尤 其是胎兒及嬰兒發育中的腦部。

在二零一八年至二零二零年六月期間,食物安全中心從市面抽 取了15個魚翅樣本進行水銀檢測,結果全部合格。

本地很多食肆都已採取更具環保意識的做法,以其他菜式取代 魚翅。消費者也可響應環保減少進食魚翅,而同時保持均衡飲食,從 而得到吃魚的益處,又減少從膳食中攝入水銀的風險。

A recent study reported that high levels of mercury were detected in samples of dried shark fin trimmings collected in both Hong Kong and Mainland China.

Sharks are large predatory species and can naturally accumulate mercury up the food chain. When people eat <u>predatory fish</u>, the mercury that enters the bodies can affect the nervous system, especially the developing brain of fetuses and infants.

From 2018 to June 2020, the Centre for Food Safety collected 15 samples of shark fins from the market for mercury analysis. The results of all samples were satisfactory.

Many local restaurants have adopted a more environmentally-conscious approach to replacing shark fins with other dishes. Consumers can be environmentally-friendly by reducing the intake of shark fin while at the same time maintaining a balanced diet in order to reap the benefits of fish consumption and reduce the risk of mercury exposure from diet.



風險傳達工作一覽(二零二零年六月)



Summary of Risk Communication Work (June 2020)

Incidents/ Food Safety Cases:

公眾查詢 **Public Enquiries:**

業界查詢 Trade Enquiries: 200

食物投訴 Food Complaints:

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:

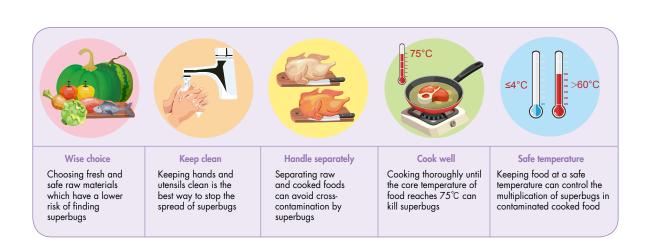
懷疑食物中毒個案通報 Suspected Food Poisoning Alerts: 教育研討會/ 演講/ 講座/ 輔導 Educational Seminars/ Lectures/ Talks/ Counselling:

上載到食物安全中心網頁的新訊息 New Messages Put on the CFS Website: 51













During shopping



Practice physical distancing



Perform hand hygiene frequently, especially after contacting with high-touch points



Wear surgical mask when staying in crowded places



Avoid touching eyes, nose, and mouth

After returning home



Wash hands once home



Store food properly and be mindful of expiry date, if outer pack is removed



Clean recycle bags, where necessary



Wash hands again after placing groceries

Handling food



Wash hands frequently, especially before and after handling food



Clean and sanitise kitchen counters regularly



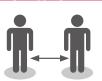
Wash fresh fruit and vegetables thoroughly



Cook food thoroughly



During shopping 購物時



Practice physical distancing 減少社交接觸



Perform hand hygiene frequently, especially after contacting with hightouch points

經常保持雙手清潔,尤其在觸 摸頻密接觸點後



Wear surgical mask when staying in crowded places

在人多擠迫的地方逗留時佩戴 外科口罩



Avoid touching eyes, nose, and mouth 避免觸摸眼、鼻、口

After returning home 回家後



Wash hands once home 回家後立即洗手



Store food properly and be mindful of expiry date, if outer pack is removed 妥善貯存食物,如外層包裝已除去,要注意食用期限



Clean recycle bags, where necessary 在需要時清潔循環再用的袋



Wash hands again after placing groceries

放置好食物後再次洗手

Handling food 處理食物時



Wash hands frequently, especially before and after handling food 經常洗手,尤其在處理食物前後



Clean and sanitise kitchen counters regularly 定期清潔和消毒廚盆



Wash fresh fruit and vegetables thoroughly 徹底清洗新鮮蔬果



Cook food thoroughly 徹底煮熟食物