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精明選擇粥品，避免鈉攝取量過高 How to Choose Congee Wisely to Avoid High Sodium Intake

食物安全中心風險傳達組
科學主任鄧紹平博士報告

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

食物安全中心(食安中心)於上月公布中式粥品的鈉含量研究調查結果。儘管沒有樣本達“高鈉”水平(即每100克含多於600毫克鈉)，但由於粥的分量通常頗大，食用某幾款粥品(例如一碗豬鬃粥)的鈉攝取量可能已達世界衛生組織(世衛)建議的每日攝取量上限。在本文中，我們會探討如何減少鈉攝取量，並以較健康的方式食用這種受歡迎的傳統中式食物。

世衛有關減少攝取鈉的指引

鈉攝取量過高與高血壓有密切關係，而高血壓是導致心血管疾病及中風等非傳染病的風險因素。世衛建議，成年人每日的鹽攝取量應少於5克(即約2,000毫克鈉)。根據衛生署進行的《二零二零至二零二二年度人口健康調查》，本港15至84歲人士每日的鹽攝取量為8.5克(即約3,400毫克鈉)，超出世衛成年人每日鹽攝取量的建議水平。因此，減少膳食中鈉的攝取量對本港市民很重要。

The Centre for Food Safety (CFS) released the study results on the [Sodium Content in Chinese Congee](#) last month. Although none of the samples were considered “high” in sodium (i.e. over 600mg/100g), the sodium intake from consuming one bowl of certain types of congee, such as congee with pig’s liver, may already reach the World Health Organization (WHO)’s recommended daily intake upper limit due to the considerable volume consumed. Here we will explore how to reduce sodium intake and to eat this classic Chinese favourite in a healthier way.

The WHO Guidelines on Reducing Sodium Intake

Excessive sodium intake is closely related to hypertension, which is a risk factor for non-communicable diseases (NCDs) including cardiovascular diseases and stroke. The WHO recommends a daily salt intake of less than 5g (i.e. around 2,000mg of sodium) for adults. In Hong Kong, according to the Population Health Survey 2020-22 conducted by the Department of Health, persons aged 15-84 years consumed 8.5g of salt (i.e. around 3,400mg sodium) per day, which exceeded the WHO’s recommendation of salt intake per day for adults. Therefore, it is important to reduce sodium intake in the diet of Hong Kong people.

Risk Assessment Study on Sodium Content in Chinese Congee



圖1: 作出健康選擇以減少進食粥品所攝取的鈉: 選用鈉含量較低的配料如魚肉和蔬菜、選用只加入少許或不加調味料的白粥作為粥底及進食分量較少的粥品

Figure 1: Making healthy choices to reduce the amount of sodium intake from congee: choose ingredients with lower sodium contents such as fish and vegetables, choose plain congee with little or no seasoning added as the base, and to consume smaller portions

有關中式粥品的鈉含量的風險評估研究

研究內容

食安中心從本地中式食肆、快餐店和粥品店收集了174個樣本，當中包括12款有配料的中式粥品，以及可供選擇的白粥底和有味粥底，並分析各樣本中的鈉含量。研究結果載於表1。所有有配料粥品樣本的鈉含量介乎每100克含33毫克至460毫克之間，平均鈉含量為每100克含270毫克。研究發現同款的粥品樣本其鈉含量存在甚大差異。有關結果顯示業界有減低這些粥品的鈉含量的空間。白粥底的鈉含量遠低於有味粥底，顯示選用白粥而非有味粥作為製作有配料粥品的粥底，能大幅減少進食粥品所攝取的鈉。

鈉含量最高的粥款

豬膶粥、雞粥、及第粥和皮蛋瘦肉粥的平均鈉含量最高，原因很可能是肝臟及其他內臟本身鈉含量較高，而且在醃製雞肉、豬肉和其他肉類配料時，通常會使用較多調味料。

鈉含量最低的粥款

南瓜粥、魚片粥/魚腩粥和粟米粥的平均鈉含量最低，因為蔬菜配料和魚肉一般不會在烹煮前調味/醃製，而用於煮粥的魚柳通常只會加入薑和香料。

如何以較健康的方式減少食用粥品時的鈉攝取量

享用粥品時可以較健康的方式避免攝取過量鈉：選用鈉含量較低的配料如魚肉和蔬菜；減少選用鈉含量高的內臟和肉類；如粥品分量大，亦可與他人分享；要求白粥底而非有味粥底，可大幅減少進食粥品所攝取的鈉。業界應盡量減少使用鹽和調味料配製粥底及配料，向消費者提供分量較少的粥品選擇，並在標準的有味粥底外提供只加入少許或不加鹽的白粥作為粥底，供消費者選擇。此外，在家配製粥品時減少用鹽或調味料，也是控制及減低鈉攝取量的好方法。

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粥品款式 Type of Congee Product	平均鈉含量[範圍] (毫克/100克) Average Sodium Content [range] (mg/100g)	每碗粥的平均鈉攝取量(毫克) Mean Sodium Intake per bowl of congee (mg)	佔世衛建議每日鈉攝取量上限(2000毫克)的百分比 Contribution to WHO's Recommended Daily Sodium Intake Upper Limit (2000mg)
1 Congee with preserved egg and pork (皮蛋瘦肉粥)	290 [250-350]	1600	80%
2 Congee with dried fish, peanut and pork (柴魚花生粥)	240 [33-400]	1200	60%
3 Boat congee (艇仔粥)	270 [220-340]	1500	75%
4 Congee with pig giblets (及第粥)	290 [250-350]	1800	90%
5 Congee with fish (魚片粥/魚腩粥)	220 [170-260]	1300	65%
6 Congee with pig's blood (豬紅粥)	270 [170-360]	1500	75%
7 Congee with beef (牛肉粥)	260 [170-320]	1400	70%
8 Congee with dace ball (鯪魚球粥)	280 [250-340]	1600	80%
9 Congee with pig's liver (豬膶粥)	330 [230-460]	2000	100%
10 Congee with chicken (雞粥)	300 [240-390]	1800	90%
11 Congee with sweet corn (粟米粥)	220 [160-310]	1200	60%
12 Congee with pumpkin (南瓜粥)	180 [130-240]	940	47%
A Plain congee base (白粥底)	8.6 [3.5-37]	43	2%
B Seasoned congee base (有味粥底)	110 [6.4-300]	1000	50%
OVERALL	3.5 - 460	43 - 2000	2% - 100%

表1: 每碗粥的鈉含量和攝取量 (佔世衛建議每日鈉攝取量上限的百分比)
Table 1: Sodium contents & intake of one bowl of congee (contribution to WHO's recommended daily sodium intake upper limit)

給消費者的建議

- 留意中式粥品的鈉含量並小心選擇。
- 點選以白粥底而非以有味粥底烹煮的粥品。
- 留意食用粥品的分量，如分量大，可考慮與他人分享。
- 保持均衡和多元化的飲食。

給業界的建議

- 參考食安中心的《降低食物中鈉含量的業界指引》，改良粥底的製作方法，以減少粥底和有配料粥品的鈉含量（例如：選用鈉含量較低的配料，以及使用天然配料調味和醃製食物）。
- 提供只加入少許或不加調味料的白粥作為烹煮有配料粥品的粥底，供消費者選擇。
- 除提供標準分量的粥品外，可提供分量較少的粥品，讓消費者按需要選擇。

The Study

174 samples including 12 types of Chinese congee with ingredients, as well as the plain congee base and seasoned congee base available as the choice of congee base for cooking, were collected from local Chinese restaurants, fast food restaurants and congee shops; and analysed for sodium contents. The study results are shown in Table 1. The sodium contents of various samples of congee with ingredients ranged from 33mg/100g to 460mg/100g, with an average of 270mg/100g. The wide variations in sodium content observed within the same type of congee samples highlighted the potential for sodium reduction in these congees by the trade. The sodium content of plain congee base was substantially lower than that of seasoned congee base, indicating that sodium intake from the consumption of congee can be lowered to a great extent by choosing plain congee instead of seasoned congee as the base for making congee with ingredients.

Congee Types with the Highest Sodium Contents

Congee with pig's liver, congee with chicken, congee with pig giblets and congee with preserved egg and pork had the highest average sodium contents. This is probably due to the naturally higher sodium content in liver and other organ meats, and the higher amounts of seasoning typically used to marinate chicken, pork and meat ingredients.

Congee Types with the Lowest Sodium Contents

Pumpkin, fish and sweet corn congee types had the lowest average sodium contents because vegetable ingredients and fish are usually not seasoned/marinated before cooking, while ginger and spices are often added instead to the fish fillets used to make congee.

Healthier Ways to Eat Congee to Take in Less Sodium

There are healthier ways to enjoy a bowl of congee to avoid too much sodium intake: choosing ingredients with lower sodium contents such as fish and vegetables; choosing less internal organs and meat with high sodium contents; sharing a bowl of congee when the portion is large; and requesting for plain congee instead of seasoned congee as a base makes a great difference in lowering sodium intake from congee. The trade should strive to use less salt and seasoning in preparing the congee base and ingredients, offer the choice of smaller portions of congee to consumers, and provide the choice of plain congee with little or no salt added as the base for cooking congee in addition to the regular seasoned congee base. Furthermore, using less salt or seasoning when preparing congee at home is a great way to control and reduce the amount of sodium intake.

Advice to Consumers

- Pay attention to the sodium contents in Chinese congee and choose carefully.
- Order congee cooked with plain congee base instead of seasoned congee base.

- Pay attention to the amount of congee consumed. Consider sharing the congee when the portion is large.
- Maintain a balanced diet with variety.

Advice to the Trade

- Reduce the sodium contents of the congee base and that of congee with ingredients through product reformulation by making reference to the CFS's "Trade Guidelines for Reducing Sodium in Foods" (e.g. by choosing ingredients with lower sodium content, and using natural ingredients for flavouring and marinating).
- Provide the choice of plain congee with little or no seasoning added as the base for cooking congee with ingredients.
- Apart from providing the standard portion size of congee, offer congee in a smaller portion size for consumers to choose based on their needs.

安全食用火鍋的重要要點

Hot Tips for Safe Hot Pot

食物安全中心風險傳達組
科學主任游天頌先生報告

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

火鍋是用餐的一個熱門選擇，特別是天氣寒冷時。火鍋亦方便多人在家中相聚時享用，在一鍋置於餐桌上的水、湯或粥中把切片肉、海鮮、蔬菜和麵煮熟，蘸上各種調味料後在輕鬆談天時進食。在本文中，我們來了解較安全健康的火鍋餐要注意的地方。

精明運用“食物安全五要點”為火鍋做好準備

精明選擇：

向信譽良好的持牌店鋪購買火鍋材料，並確保火鍋配料新鮮及質優。如選用預先包裝食物，要確保包裝完好，以及食物沒有超逾食用限期。

保持清潔：

預備食物時，須時刻保持個人、食物及環境衛生。處理食物前、進食前、接觸生的肉類或海鮮後及接觸即食食物前要用視液正確洗手最少20秒。用具和食物接觸面須要定時清潔。清洗蔬菜時，要用流動的水徹底沖洗。預備介貝類及雙貝類時，要以刷子及清水擦洗外殼，以去除污垢。以清水浸泡活生的雙貝類半天，減少其沙粒及微生物含量。去除扇貝的腸臟和生殖器官，以降低污染物的風險。但是，沖洗生肉及家禽時要注意，以免病原體通過飛濺的水花造成污染。沖洗食物後水槽及四周範圍要清潔及消毒。

生熟分開：

進食火鍋時，生和熟的配料往往會毗鄰放置以便取用。此舉會使生料中的病原體更容易污染熟食，並令交叉污染的風險增加。應使用兩套不同的筷子和用具來分別處理生和熟的食物。桌上不應擺放過多碟子，以減低食物互相接觸而導致交叉污染的可能性。

徹底煮熟：

沒有徹底煮熟食物是火鍋主要的食物安全風險。生的食物若沒有徹底煮熟，其可能含有有害的細菌及病毒，便可繼續存活，繼而在進食後引致食物中毒。每次加添水或湯汁後，應待湯汁沸騰後才可把食物拿起。不要在鍋內過量添加食物，以免烹煮不均勻。較大塊的食物亦要多加留意，確保在進食前徹底煮熟至食物的中心溫度至少達到攝氏75度。蠔及介貝類的加熱要求更嚴格，應加熱至內部溫度達攝氏90度並維持90秒，或在攝氏100度的沸水中烹煮至外殼打開，然後再煮3至5分鐘，以確保能消滅常見的食源性病毒如甲型肝炎病毒和諾如病毒。徹底煮熟食物可殺死可能存在於火鍋配料內的沙門氏菌類、副溶血性弧菌、李斯特菌等常見致病菌或諾如病毒和甲型肝炎病毒等常見病毒。

安全溫度：

火鍋配料採買回家後應妥為存放。冷藏食物應放在攝氏-18度或以下的冰箱內，冷凍食物則應放在雪櫃內攝氏4度或以下的冷凍櫃內。不要在室溫下解凍食物，最好在雪櫃內解凍一夜，或用流動的冷水或微波爐妥為解凍。食物解凍後應馬上烹煮，若以後兩種方法解凍，切勿再冷藏已解凍的食物。部分細小的冷藏食物如餃子和魚蛋可直接從冷藏狀態煮沸，無須解凍。

Hot pot is a popular choice for meals, especially when the weather is cold. It also easily accommodates many people for social gatherings at home, where sliced meat, seafood, vegetables and noodles are boiled in a pot of water, soup or congee set on the dining table, and consumed after dipping in condiments, along with lively conversations. In this article, we will share some tips for a safe and healthy hot pot meal.

Be Smart and Use “5 Keys to Food Safety” When Preparing Hot Pot

Choose:

When purchasing hot pot ingredients, buy from reputable, licensed retailers. Make sure that the hot pot ingredients are fresh and in good condition. For prepackaged food, ensure the packages are intact and the products are still within the [use-by date](#).

Clean:

Maintaining personal, food, and environmental hygiene is necessary throughout preparation. Wash your hands before handling food, before eating, after touching raw meat or seafood, and before touching ready-to-eat food. [Wash hands](#) properly with [liquid soap](#) for at least 20 seconds. Utensils and food contact surfaces should be cleansed regularly. When [washing vegetables](#), wash them thoroughly under running water. When preparing [shellfishes and bivalves](#), scrub and wash the outer shells with water to remove dirt. Soak live bivalves like clams in water for half a day to reduce the amount of sand and microorganisms. [Remove the intestines and gonads](#) from scallops to reduce the risk of contaminants. However, be careful when washing raw meat and poultry, as pathogens may cause contamination through splashes. Clean and disinfect the sink and its surroundings afterwards.

Separate:

During a hot pot meal, raw and cooked ingredients are often put close to each other for ease of use. Such practice will increase the chance of pathogens from the raw ingredients contaminating the cooked food and also the risk of cross contamination. Use different sets of chopsticks and utensils to handle raw and cooked food separately. Avoid putting too many dishes on the table to minimise food-to-food cross-contamination.

Cook:

Inadequate cooking is a major food safety risk in a hot pot. Raw products may harbour harmful bacteria and viruses which may still survive if food is undercooked. It can subsequently cause food poisoning after consumption. Whenever water or soup is added, food should only be picked up after the soup has come to a full boil. Do not overfill the pot to prevent uneven cooking. Care should be taken to ensure that larger pieces of food are [thoroughly cooked](#) to a core temperature of at least 75°C before consumption. Oysters and shellfish should be heated to a more stringent requirement of an internal temperature of 90°C for 90 seconds or boiled at 100°C until their shells are open and continue for 3 to 5 minutes to ensure the inactivation of common foodborne viruses like hepatitis A and Norovirus. Thorough cooking can destroy common [pathogenic bacteria](#) like [Salmonella spp.](#), [Vibrio parahaemolyticus](#),

[Listeria monocytogenes](#), or [viruses](#) like [Norovirus](#) and [hepatitis A](#) that may be present in hot pot ingredients.

Safe Temperature:

After bringing the hot pot ingredients home, store them properly. Keep frozen products in a freezer at -18°C or below and chilled products in the chiller compartment of a refrigerator at 4°C or below. Do not defrost food at room temperature. [Defrost properly](#), preferably in a chiller overnight, or under cold running water or in a microwave. Cook the food instantly and do not re-freeze it if the latter two defrosting methods were used. Some small frozen items like dumplings and fish balls can be boiled directly from a frozen state and defrosting is not necessary.



圖2: 火鍋是在家(特別一羣人)用膳的熱門選擇
Figure 2: Hot pot is popular choice for dining at home, especially when with a group of people

其他應注意的事項

不要進食生蛋，也不要用作蘸汁的一部分，因為生蛋或含有沙門氏菌。應使用經巴士德消毒的帶殼蛋。此外，用以醃製生海鮮的日式芥辣或烈酒等調味料不能殺死海鮮內的細菌或寄生蟲。只有擬供生吃的食物才可以生吃。選用清水或清湯等脂肪和鈉含量較低的湯底。保持均衡飲食，在火鍋食物中多加入蔬菜，避免進食過多鹽（鈉）含量高及/或高脂食物，如魚蛋、牛丸、蟹柳、香腸、即食麵、脂肪高的肉類、內臟和骨頭、沙茶及麻辣湯底等。盡量少用豉油等調味料。不要進食仍然滾燙的食物。起筷！

Other Issues that are Worth Noting

Avoid consuming raw eggs, including as part of a dip, due to the Salmonella risk. Use pasteurised shell eggs instead. Also, condiments like wasabi or strong wine used in marinating raw seafood cannot kill the bacteria or parasites present. Only foods that are intended for raw consumption can be eaten raw. Choose soup bases with a lower fat and sodium content like plain water or a clear broth. Maintain a balanced diet and include more vegetables as part of the hot pot meal, avoid overindulgence in [high salt \(sodium\) and/or high fat food](#) like fish balls, beef balls, imitation crab sticks, sausages, instant noodles, fatty meat, offal and bones, sacha and mala soup bases. Use condiments like soy sauce sparingly. Do not consume foods when they are still scalding hot. Bon Appetit!

食物中的甲氧滴滴涕 Methoxychlor in Food

甲氧滴滴涕是一種有機氯除害劑，目前多個國家已禁止作農業用途。甲氧滴滴涕在環境中的殘留期長，而且極具遠距離環境遷移的潛力。食物安全中心已進行一項風險評估研究，以估算本港成年人從膳食攝入甲氧滴滴涕的分量，以及評估相關的健康風險。

有關研究結果顯示，本港成年人從膳食攝入甲氧滴滴涕的分量遠低於聯合國糧食及農業組織/世界衛生組織農藥殘留聯席會議訂定的每日可攝入量（即每公斤體重100微克的每日可攝入量）。因此，本港成年人在一般進食情況下因攝入甲氧滴滴涕而對健康造成影響的機會不大，故市民無須改變基本的健康飲食習慣。

要有效清除殘留在農產品的除害劑，同時保留農產品本身的營養價值，市民可用流動的清水徹底沖洗農產品，用清潔的刷子刷洗表層堅硬的農產品，以去除污垢和其他物質（包括除害劑和污染物）。

Methoxychlor (MXC) is an organochlorine pesticide and is currently prohibited for use in agriculture in many countries. MXC persists in the environment and has a strong potential for long-range environmental transportation. The Centre for Food Safety has conducted a risk assessment study to estimate the dietary exposure to MXC of the local adult population and assess the associated health risk.

The study results showed that the dietary exposures of local adult population were much lower than the acceptable daily intake established by the Joint Food and Agriculture Organization/World Health Organization Meeting on Pesticide residues (i.e. 100 µg/kg bw per day). Hence, the health concern for the local adult population due to their MXC exposure upon usual consumption of food was low and changes to the basic dietary advice on healthy eating were not justified.

To remove pesticide residues in agricultural products while retaining their nutritional values, the public can wash them thoroughly under clean running water, scrub produce with hard surfaces with a clean produce brush to remove dirt and substances including pesticides and contaminants.

慎防椴木毒素中毒 Beware of Grayanotoxin Poisoning

本港最近發生一宗懷疑椴木毒素中毒個案，患者曾進食友人由尼泊爾寄來的蜂蜜。椴木毒素是一種神經毒素，可影響神經和肌肉，杜鵑花科植物的花、葉和枝均含有這種毒素。進食含椴木毒素的蜂蜜可能令喉嚨有燒灼感及帶有苦味。相關中毒徵狀包括噁心、嘔吐、肚瀉、頭暈和乏力，一般會在進食受椴木毒素污染的蜂蜜約30分鐘後出現。嚴重個案可能會出現低血壓、心律下跌或休克。

要預防椴木毒素中毒，市民應向可靠的來源購買蜂蜜。如蜂蜜帶有苦味或澀味，便應棄掉。此外，市民應特別注意購自過去曾發生蜂蜜引致的椴木毒素中毒個案的地區（如土耳其黑海地區和尼泊爾），或從這些地區進口的蜂蜜。

Recently, a suspected case of grayanotoxin poisoning involving a person consuming honey mailed from Nepal by a friend was reported locally. Grayanotoxins are neurotoxins which can affect nerves and muscles. The toxins exist in the flowers, leaves and twigs of plants of the Ericaceae family. Grayanotoxin-containing honey may cause a burning sensation in the throat and a bitter taste. Symptoms of poisoning include nausea, vomiting, diarrhoea, dizziness and weakness which commonly occur around 30 minutes after consuming honey contaminated by grayanotoxin. In severe cases, hypotension, bradycardia or shock may occur.

To avoid grayanotoxins poisoning, the public is reminded to purchase honey from a reliable source. Honey with a bitter or astringent taste should be discarded. It is also advised to pay special attention to honey imported or purchased from regions in which honey related grayanotoxin poisoning cases have been previously reported like Black Sea area of Türkiye and Nepal.



風險傳達工作一覽（二零二三年十二月）

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