

食物安全焦點

Food Safety Focus



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Centre for Food Safety

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食物安全中心
風險評估組
科學主任馮慧中女士報告

Reported by Ms. Jacqueline FUNG, Scientific Officer,
Risk Assessment Section,
Centre for Food Safety

香港正面對癌症、心臟病、中風和糖尿病等慢性非傳染病日益增加的重大挑戰。在二零一三年的所有登記死亡個案中，近六成由慢性非傳染病引致。多種慢性非傳染病與不健康的飲食、缺乏體能活動、吸煙及酗酒有密切關係。在我們的日常飲食中，如果經常食用高鈉高糖的食物可能對健康有不良影響。本文將探討減少本港膳食中的鈉(鹽)和糖的情況。

與鈉和糖的膳食攝取量有關的本港公共衛生情況

根據政府統計處在二零一一年所作的一項調查顯示，本港55歲或以上患有高血壓的人口達34%，而在年齡65歲或以上這個年齡組別中，比率更攀升至46%。另一個令人關注的健康問題是肥胖症。衛生署在二零一二年進行的行為風險因素調查發現，在18至64歲的人口中，有36.6%屬過重或肥胖(即體重指標 ≥ 23)。

身體攝入過量的鈉會增加患上高血壓、中風和心血管疾病的風險；而攝入過量的糖再加上活動量不足，當能量的攝取大於消耗時或會導致過重和患肥胖症。此外，攝入過多糖亦會增加蛀牙的機會。

世界衛生組織建議，每人每日的鈉攝取量應少於2 000毫克，而游離糖的攝取量則應少於每日所需能量的10%。

Hong Kong is facing the challenge of chronic non-communicable diseases (NCDs), such as cancer, heart diseases, stroke and diabetes, which are the major causes of death and accounted for nearly 60% of all registered deaths in 2013. Many NCDs are closely related to unhealthy diet, physical inactivity, smoking and excessive alcohol drinking. Foods high in sodium and sugars may negatively affect health when they make up a large proportion of our diet. This article discusses the reduction of dietary sodium (salt) and sugars in Hong Kong.

Local Public Health Situation in Relation to Dietary Intake of Sodium and Sugars

According to a survey conducted by the Census and Statistics Department in 2011, 34% of Hong Kong residents aged 55 and above had hypertension and the proportion increased to 46% for those aged 65 and above. Obesity is another health concern, the Behavioral Risk Factor Survey conducted by the Department of Health (DH) in 2012 revealed that 36.6% of the population aged 18-64 years were overweight or obese (BMI ≥ 23).

Excessive sodium intake is associated with increased risks of hypertension, stroke and cardiovascular disease (CVD); whereas excessive sugars intake, along with inadequate physical activity, resulting in energy imbalance may lead to overweight and obesity. Besides, high sugars intake may cause dental caries.

According to the World Health Organization, the population nutrient intake goal for sodium is less than 2 000mg per day while that for free sugars is less than 10% of total energy requirement.



每天應攝入少於2 000毫克的鈉，即略少於一平茶匙食鹽(一平茶匙食鹽約重5.8克，含2 300毫克鈉)。
Nutrient intake goal of sodium is less than 2 000mg per day, which is slightly less than one level teaspoon of salt (one teaspoon of salt weighs about 5.8g and contains 2 300mg of sodium).



以2 000千卡能量的膳食計算，游離糖的攝取量應少於所需能量的10%，即相當於約10粒方糖(每粒約重5克)。
For a 2 000 kcal-diet, free sugars shall contribute less than 10% of total energy, which is approximately 10 sugar cubes (weighs about 5g each).

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致力通過減少鈉和糖的膳食攝入量來預防慢性非傳染病

食物安全中心(中心)為了減少慢性非傳染病及相關的行為風險因素進行了一系列的工作，包括進行食物所含營養素的風險評估研究；推行營養資料標籤制度；以及制定降低食物中鈉、糖和脂肪含量的業界指引等。此外，衛生署亦透過以環境為本的健康飲食活動，例如“有「營」食肆運動”及“健康飲食在校園運動”，鼓勵市民建立健康的飲食習慣。

為推動減低膳食中鈉和糖的含量，以及借鑒國際間在這方面的成功經驗，中心成立了降低香港食物中的鈉和糖國際諮詢委員會(委員會)。在委員會最近一次會議中，五位來自海外和內地的知名學者分享了他們在這方面的經驗，並對如何降低香港膳食中鈉和糖含量的整體策略、活動計劃、設立指標和公眾教育策略等四方面提供了專業意見。委員會指出，改變個人的飲食習慣是減少從膳食中攝入鈉和糖的方法之一。除了健康教育外，委員會亦大力建議改良食物配方，認為此舉可令整個社會受惠。此外，非政府機構的積極參與及與傳媒的合作對於支援和監察減鈉減糖工作的成效亦是不可或缺的。

要成功減少港人的鈉和糖攝入量，有賴各方持份者，特別是政府、食物業界及消費者三方的通力合作。政府除推廣健康飲食外，亦會擔當主導角色，與業界商討如何減少食物中的鈉和糖。食物業界亦應關注有關問題，致力改良食物配方和食譜，為消費者提供更多低鈉及低糖食品。

消費者則應主動改變飲食習慣，例如參考營養標籤，減少購買高鈉和高糖的加工食品；外出用膳時多選擇較健康的菜式，並要求食肆減少用鹽和糖配製食物；以及進食時減少在食物中添加糖和含鹽／鈉的調味料，讓味蕾慢慢習慣清淡的口味。

注意要點

- 身體攝入過量的鈉會增加患上高血壓、中風和心血管疾病的風險。
- 從膳食中攝入過多的糖有可能導致過重／患肥胖症和蛀牙。
- 要成功減少港人的鈉和糖攝入量，有賴政府、食物業界及消費者三方的通力合作。

給業界的建議

1. 改良食物配方，生產含較少鈉和糖的食品。
2. 配製食物時減少使用糖和含鹽／鈉的調味料。

給市民的建議

1. 進食時減少在食物中添加糖和含鹽／鈉的調味料。
2. 外出用膳時多選擇較健康的菜式，並要求食肆減少用鹽和糖配製食物。
3. 參考營養標籤，減少購買高鈉和高糖的加工食品。

Efforts on Reducing the Prevalence of NCDs Related to Dietary Intakes of Sodium and Sugars

Effort has been made to reduce the prevalence of NCDs and related behavioural risk factors. The Centre for Food Safety (CFS) has conducted risk assessment studies related to nutrients in food, implemented the Nutrition Labelling Scheme, and issued trade guidelines for sodium, sugars and fat reduction in foods. Besides, the DH also organises healthy eating promotion programmes, such as “EatSmart@restaurant.hk” and “EatSmart@school.hk”, which encourage healthy eating through a setting-based approach.

To focus on the reduction of dietary sodium and sugars and learn from international successful experience, an International Advisory Panel (IAP) on Reduction of Dietary Sodium and Sugars in Hong Kong was established. In a recent meeting, five renowned experts from overseas and the Mainland shared their experience and provided expert advice on the overall strategy, programmes, target-setting and public health education strategy on reduction of sodium and sugars in Hong Kong. Relying on individuals' dietary change is one of the approaches to reduce dietary intake of sodium and sugars. Other than health education, IAP strongly suggests product reformulation that will benefit the society as a whole. Furthermore, active participation of non-governmental organisations and collaboration with the media are essential to support and monitor the change.

A successful promotion of reduction of dietary intakes of sodium and sugars in Hong Kong relies on the collaboration among different stakeholders, particularly the government, food trade and consumers. Besides health promotion, the government will take on the lead to discuss with various sectors of the food trade in reducing sodium and sugars in foods, whereas the food trade should also be concerned about this issue and make efforts to revise product formulations and modify recipes to provide food with less sodium and sugars.

Consumers should be proactive and make positive changes in dietary habits, such as cutting down on high sodium/sugars processed food consumption by using nutrition label during purchase; ordering healthier options from the menu and requesting less salt/sugars used in food preparation when dining out; and reducing salt/sodium-containing seasonings and sugars added to food at the table. These actions will allow the taste buds to adapt gradually to the light-flavoured food.

Key Points to Note

- Excessive sodium intake is associated with risks of hypertension, stroke and CVD.
- High consumption of sugars may lead to overweight/obesity and may also lead to dental caries.
- Tripartite collaboration among the government, food trade and consumers is crucial for success in reducing dietary sodium and sugars intakes.

Advice to the Trade

1. Reformulating food products with less sodium and sugars.
2. Reducing the use of salt/sodium-containing seasonings and sugars during food preparation.

Advice to the Public

1. Reducing the amount of salt/sodium-containing seasonings and sugars added to food at the table.
2. Ordering healthier options from the menu and requesting less salt/sugars used in food preparation when dining out.
3. Cutting down on high sodium/sugars processed food consumption by using nutrition label during purchase.

過了期的食物還能吃嗎？ To Eat or Not to Eat After Expiry Date?

食物安全中心
風險評估組
科學主任馬嘉明女士報告

Reported by Ms. Janny MA, Scientific Officer,
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你曾否把一件剛過了食用日期的食物放到鼻子上聞一聞，心裏疑惑着還能吃嗎？在這種情況下，鼻子的用處不大，從標籤上“此日期前最佳”或“此日期或之前食用”日期倒是能略知端倪。

“此日期前最佳”和“此日期或之前食用”有何不同？

為使消費者清楚知道食物的保質期，香港像澳洲、新西蘭和歐盟等地，規定預先包裝食物必須以“此日期前最佳”或“此日期或之前食用”字眼標示食用日期。

“此日期前最佳”屬食物質素(例如味道、質感、香味和外觀等)的標記。該日期表示食物若加以適當貯存，可合理地預期在該日及該日之前食物能保存其特質。一般而言，該日期適用於一些不含及/或不利於引致食物中毒的細菌滋生的食物(例如罐頭食物和冷藏食物)，以及食用前須烹煮或處理以減少或消滅引致食物中毒的細菌的食物(例如新鮮的肉類)。此外，“此日期前最佳”日期亦適用於一些在尚未構成食物安全威脅前已經會出現明顯變壞迹象(如發霉、發臭或變質)的食物(例如方包)。

相反，“此日期或之前食用”屬食物安全標記，適用於從微生物學觀點看，極容易腐壞，因而在一段短時間後可能對人類健康構成即時危險的食物。例如一些在出現變壞迹象前可能含有並有利於引致食物中毒的細菌生長至危險水平的冷藏即食食物必須標示“此日期或之前食用”日期。

目前，對於哪種食物必須標示哪種食用日期並沒有明確規定。業界特別是生產商最清楚其產品所用的配料和特性，故有責任適當地選擇標示“此日期前最佳”或“此日期或之前食用”日期，以及清晰說明保持其特定品質達至所示保質期的貯存方式(例如“需要冷藏”)。

還能吃嗎？

過了“此日期前最佳”日期 After the “Best Before” Date	過了“此日期或之前食用”日期 After the “Use By” Date
食物如按照生產商的指示貯存，過期後雖然不在最佳狀態，但可能仍然是安全的。不過，消費者應避免進食已變壞的食物。 Foods kept in accordance with the manufacturer’s instruction may still be safe to eat but they may have lost some quality. However, consumers should avoid eating spoiled food.	不能吃。食物過期後即使外觀和味道沒問題也不一定安全，因為大部分引致食物中毒的細菌都不會令食物出現變壞迹象。 No. The food may be unsafe to eat even if it looks and smells fine as a majority of food poisoning bacteria do not spoil food.

不過，只要當食物開封後，上述的建議及食用日期便不能作準。舉例來說，以超高溫法處理的奶類可貯存在密封容器內而無須冷藏長達數月，但一旦開封，細菌便可乘虛而入並不斷滋生。因此，我們應遵循生產商有關食品開封後貯存時間和貯存方式的指示，例如“開封後須放入攝氏4度或以下的雪櫃冷藏，並在七天內吃完”。

Have you ever sniffed at a food that has just passed the date marked on food label and wondered if it is still safe to eat? Your nose will not tell you much but the “best before” or “use by” dates provided along may give you some clues.

“Best Before” and “Use By” Dates? What is the Difference?

In Hong Kong, like some other places such as Australia, New Zealand and the European Union, both “best before” and “use by” dates are the compulsory form of date marking, which provide consumers with a guide to the shelf life of prepackaged food.



以超高溫法處理的奶類包裝上生產商有關開封後的指示
Manufacturer’s instruction as shown on the packaging of UHT milk after opening

“Best before” dates relate to food quality for example taste, texture, aroma and appearance. If the food is stored properly, it can reasonably be expected to retain its specific properties up to and including the specified date. In general, foods that do not contain and/or support the growth of food poisoning bacteria (e.g. canned foods and frozen foods), as well as foods that require cooking or other processing to reduce or eliminate food poisoning bacteria before consumption (e.g. fresh meat) may carry a “best before” date. A “best before” date may also be applied to foods, such as plain bread, that obviously spoiled (e.g. mouldy, rancid or stale) before posing a food safety risk to the consumer.

On the contrary, “use by” dates refer to food safety. From microbiological point of view, the food is highly perishable and is therefore likely after a short period to constitute an immediate danger to human health. For instance, some refrigerated ready-to-eat foods that may contain and support the growth of food poisoning bacteria to unsafe levels before noticeably spoiled should carry a “use by” date.

Currently, there is no definitive list of which foods should carry a particular type of date mark. The trade, particularly the manufacturers who are the ones more familiar with the nature of and ingredients used in the final product, has the responsibility to set the appropriate date mark i.e. either a “best before” or “use by” date, together with the storage instructions (e.g. “keep refrigerated”) to achieve the stated shelf life.

To Eat or Not to Eat?

Nevertheless, once the packaging of the food is opened, the above suggestions as well as the date mark may become irrelevant. For instance, ultra-high-temperature (UHT) treated milk can be kept safely in its sealed container without refrigeration for months; yet, after opening, bacteria can enter and begin to grow in the milk. We should therefore follow the manufacturer’s instruction, for example “after opening, keep refrigerated at or below 4°C and finish the product within seven days”, regarding the length of time and storage condition after opening.

給市民的建議

- 購買及進食食物時應留意“此日期前最佳”或“此日期或之前食用”日期。
- 不應購買及進食已過了“此日期或之前食用”日期的食物；而過了“此日期前最佳”日期的食物則應留意其品質。
- 切勿購買或進食包裝有損的食物，因為即使未過標籤上的食用日期，但如包裝破損，食物亦可能已受污染或變壞。

給業界的建議

- 切勿出售已過“此日期或之前食用”日期的食物。
- 如出售已過“此日期前最佳”日期的食物，應確保食物仍然適宜供人食用。
- 在決定標示“此日期前最佳”還是“此日期或之前食用”日期時諮詢專業人員的意見。

Advice to the Public

- Take note of the “use by” or “best before” date of the food items before purchase or consumption.
- Food beyond its “use by” date should be avoided while be wary of the quality of food beyond the “best before” date.
- Do not purchase or consume food if the packaging is damaged as it may have been contaminated or deteriorated even if it is still within the date marked on the food label.

Advice to the Trade

- Do not sell food after its “use by” date.
- Ensure food sold after its “best before” date is still fit for human consumption.
- Consult with technical experts before giving a “use by” or “best before” date mark for a food.

食物事故點滴 Food Incident Highlight

豆芽中的植物生長調節劑

傳媒不時有關於應用植物生長調節劑(用以調節和控制植物生長和發育的化合物)來種植無根豆芽並縮短其生長時間的報道。為了解本港豆芽中植物調節劑殘餘的情況，食物安全中心從本地市場抽取豆芽樣本作檢測，並對其中植物調節劑殘餘量最高的豆芽樣本作風險評估。評估結果顯示，正常食用這些豆芽不會影響健康。

在農業中應用植物生長調節劑可提高農作物的產量和質量，但施用時須按照優良務農規範的規定，把食物中的植物生長調節劑殘餘量減至最低。業界亦須確保出產的豆芽適宜供人食用並符合本港法例的規定。市民在食用豆芽前可先用水沖洗豆芽數次，然後放在清水中浸泡一小時。

Plant Growth Regulators in Bean Sprouts

From time to time, there are media reports about the use of plant growth regulators (PGRs), compounds that modify and control the growth and development of plants, to produce rootless bean sprouts and shorten their growing time. To understand the local situation on PGR residues in bean sprout, the Centre for Food Safety has collected bean sprout samples from the local market for testing. Risk assessment based on the highest levels of PGR residues detected shows that normal consumption of the bean sprout samples will not pose health risk to consumers.

While PGRs can be used in agriculture to produce crops with enhanced yield and quality, members of the trade are advised to use PGRs in accordance with Good Agricultural Practice to keep the levels of PGR residues in food to a minimum. They should also ensure the bean sprout produced is fit for human consumption and complies with local regulations. The public can wash bean sprouts well for several times; then soak them in water for one hour before consumption.

關於香港成年人從膳食中攝取礦物質的總膳食研究

食物安全中心本月發表了總膳食研究第九份研究報告，這次是研究本港成年人從膳食中攝取13種礦物質的情況。研究結果顯示，一般成年市民從膳食中攝入鈣、鐵和鉀的分量不足，但攝入鈉的分量則過多。

礦物質是促進我們生長、發育和維持身體正常功能的重要營養素。攝入過少或過多的礦物質，都會對人體健康造成不良影響。

為了從膳食中攝取更多鈣、鐵和鉀，市民應保持均衡飲食，多吃含豐富鈣、鐵及鉀的食物，如奶類製品、豆類、蔬菜（特別是深綠色蔬菜）、水果和適量的堅果等。礦物質強化食品(例如高鈣奶)亦是相關營養素的來源。另一方面，市民應選購鹽或鈉含量低的食物，以減少鈉的攝入量。

Total Diet Study Report on Dietary Minerals Intake in Hong Kong Adults

The Centre for Food Safety released the ninth report of the First Hong Kong Total Diet Study this month. The report, on the dietary intakes of 13 minerals of the general adult population, reveals that the intakes of calcium, iron, and potassium are inadequate, while that of sodium is in excess.

Minerals are essential nutrients for growth, development and normal body functions. Adverse health consequences to the human body can arise from inadequate or excessive intakes of minerals.

To increase the dietary intakes of calcium, iron and potassium, consumers are advised to include, as part of a balanced diet, more food rich in these nutrients, such as dairy products, beans, vegetables (especially dark green vegetables) and fruits, and a moderate amount of nuts. Fortified foods are considered as sources of respective minerals as well (e.g. calcium fortified milk). Contrarily, they are advised to reduce sodium intake by choosing foods with less salt or sodium.

風險傳達 工作一覽 Summary of Risk Communication Work

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