

湯水的鈉含量

Sodium Content in Soups



業界諮詢論壇
Trade Consultation Forum
17-6-2016

背景

Background



鈉對健康的影響

Health effects of sodium

- 鈉是維持人體機能正常運作的必需元素，但攝取過多可能會增加患上高血壓的風險。
- 高血壓若不及早診治，可引致心臟病和中風等慢性疾病。
- Sodium is essential for body functions, but excessive intake of sodium may increase the risk of developing hypertension.
- Untreated high blood pressure can lead to chronic diseases such as heart attack and stroke.



世衛鈉攝取量建議

WHO's sodium intake recommendation

➤ 鈉

- 一般成年人每日的鈉攝取量應少於2,000毫克 (5克鹽，即略少於一平茶匙食鹽)
- 建議各國到2025年鹽的攝取量目標應相對減少30%



➤ Sodium

- The daily intake of sodium of an average adult should be less than 2,000 mg of sodium (5 g of salt, slightly less than 1 level teaspoon of salt)
- Recommends to reduce the dietary intake of salt by a relative 30% as a target by 2025



飲食中的鈉的來源

Sources of dietary sodium

- 食物安全中心的總膳食研究指出，湯水是本地成年人從食物攝取鈉的第二大來源(佔約14%)，排在醬料及調味品之後
- CFS' total diet study indicated that subsequent to condiment and sauce, soups are the second major contributors (~14%) to the total dietary sodium intake of the local adult population
- 湯水是每日飲食的一部分
- Soups are parts of our daily diet
- 故中心和消委會進行是次聯合研究
- CFS and CC thus conduct this joint study



是次研究

The Study



目的 Objectives

- 監察13種本港食肆常見的湯水的鈉（鹽）含量
- 比較同一種湯水在不同食肆或商店的鈉含量，藉此增加公眾認識
- 推動食物業界透過改良食品配方提供減鈉的湯水
- To provide an update on the levels of sodium (salt) contents in 13 types of common soups
- To compare the sodium contents in these products from different food outlets, with a view to informing the public
- To urge the trade to provide soups with less sodium through product reformulation



研究範疇 Scope of Study

➤ 不同類別的湯水

- 中式清湯
- 中式湯羹
- 西式湯水
- 亞洲湯水

➤ 涵蓋非預先包裝湯品 及預先包裝湯品

➤ Styles of soups

- Chinese clear soups
- Chinese thick soups
- Western soups
- Asian soups

➤ Included both non-prepackaged as well as prepackaged soup products



方法

Method



採樣 Sampling

➤ 抽取樣本時間

- 2015年8月至11月

➤ 地點

- 非預先包裝湯品

- ◆ 中式食肆、西式食肆、亞洲風味食肆、港式茶餐廳及快餐店等

- 預先包裝湯品

- ◆ 湯品零售店及超市等

➤ Sampling period

- August to November 2015

➤ Location

- Non-prepackaged soup products

- ◆ Chinese restaurants, Western restaurants, Asian style restaurants, HK style cafés, fast-food restaurants, etc.

- Prepackaged soup products

- ◆ Soups retail shops, supermarkets, etc.



湯水種類 Types of soup	湯水類別 Styles of soup	非預先包裝樣本數目 No. of <u>non-prepackaged</u> samples collected	預先包裝樣本數目 No. of <u>prepackaged</u> samples collected
粉葛湯 Kudzu root soup	Chinese clear soups	9	1
響螺煲雞湯 Chicken with conch soup		7	3
青紅蘿蔔豬肉湯 Pork with green radish and carrot soup		9	1
海鮮羹 Seafood thick soup	Chinese thick soups	10	0
西湖牛肉羹 Xihu beef thick soup		10	0
酸辣湯 Hot and sour soup		10	0
洋蔥湯 Onion soup	Western soups	10	0
忌廉蘑菇湯 Cream of mushroom soup		10	0
羅宋湯 Borsch		10	0
人參雞湯 Ginseng chicken soup	Asian soups	10	0
肉骨茶 Bak kut teh		10	0
麵豉湯 Miso soup		10	0
冬蔭功湯 Tom Yum Goong soup		10	0
	整體 Overall	125	5

測試項目 Test Items

- 測試由食物安全中心食物研究化驗所進行
- 非預先包裝湯品
 - 檢測樣本中的鈉含量
- 預先包裝湯品
 - 檢視了這些樣本營養標籤
- Testing conducted by Food Research Laboratory of Centre for Food Safety
- Non-prepackaged soup products
 - Tested for sodium content
- Prepackaged soup products
 - Referred to the nutrition label



結果分析 Data analysis (1)

每100克食物鈉含量（毫克） Sodium content per 100 g (mg)	鈉含量水平 Level of sodium content
$\leq 5^*$	「不含鈉（或鹽）」 “Sodium-free”
$\leq 40^*$	「很低鈉（或鹽）」 “Very low sodium”
$\leq 120^*$	「低鈉（或鹽）」 “Low sodium”
$> 1.5\text{g salt (600mg sodium)}^\#$	「高鹽（鈉）」 “High salt”

*根據本地現行的營養標籤規例
The existing Nutrition Labelling Regulation in HK

^\#根據英國衛生部及英國食物標準局於2013年的“Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets”
According to the “Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets” published by the UK Department of Health and the Food Standards Agency in 2013.



結果分析 Data analysis (2)

➤ 鈉攝入量分析

- 評估公眾可能從飲用這些湯水攝入鈉的分量
- 把攝入鈉的分量與世衛的建議攝取限量，即每日應攝取少於2,000毫克鈉（5克鹽），作比較

➤ Analysis of sodium intake

- Estimate the amount of sodium intake the public may have after consuming these types of soups
- The amount of sodium intake is compared with the WHO's recommendation, which is less than 2,000mg sodium (5g salt) per day



結果

Findings



不同類別湯水樣本的鈉〔鹽〕含量

Sodium [salt] content of different styles of soup samples

湯水類別 Styles of soup	每100克湯水鈉含量(毫克) [鹽含量(克)] Sodium content per 100 g of soup (mg) [salt content (g)]		
	平均值 Average	最低值 Minimum	最高值 Maximum
中式清湯 Chinese clear soups	191 [0.48]	27 [0.07]	330 [0.83]
中式湯羹 Chinese thick soups	327 [0.82]	140 [0.35]	670 [1.68]
西式湯水 Western soups	333 [0.83]	110 [0.28]	550 [1.38]
亞洲湯水 Asian soups	335 [0.84]	57 [0.14]	840 [2.10]
整體 Overall	299 [0.75]	27 [0.07]	840 [2.10]



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中式湯羹 Chinese thick soups	327 [0.82]	中式清湯的平均鈉含量較低，其餘三類湯水的平均鈉含量分別不大。	
西式湯水 Western soups	333 [0.83]		
亞洲湯水 Asian soups	335 [0.84]	57 [0.14]	840 [2.10]
整體 Overall	299 [0.75]	27 [0.07]	840 [2.10]



不同種類湯水樣本的鈉〔鹽〕含量

Sodium [salt] content of different types of soup samples

湯水種類 Types of soup	每100克湯水鈉含量(毫克)[鹽含量(克)] Sodium content per 100 g of soup (mg) [salt content (g)]		
	平均值 Average	最低值 Minimum	最高值 Maximum
粉葛湯 Kudzu root soup	139 [0.35]	27 [0.07]	220 [0.55]
響螺煲雞湯 Chicken with conch soup	217 [0.54]	120 [0.30]	300 [0.75]
青紅蘿蔔豬肉湯 Pork with green radish and carrot soup	218 [0.55]	89 [0.22]	330 [0.83]
海鮮羹 Seafood thick soup	291 [0.73]	220 [0.55]	460 [1.15]
西湖牛肉羹 Xihu beef thick soup	309 [0.77]	140 [0.35]	480 [1.20]
酸辣湯 Hot and sour soup	380 [0.95]	290 [0.73]	670 [1.68]
洋蔥湯 Onion soup	273 [0.68]	110 [0.28]	450 [1.13]
忌廉蘑菇湯 Cream of mushroom soup	327 [0.82]	160 [0.40]	480 [1.20]
羅宋湯 Borsch	398 [1.00]	160 [0.40]	550 [1.38]
人參雞湯 Ginseng chicken soup	169 [0.42]	57 [0.14]	270 [0.68]
肉骨茶 Bak kut teh	282 [0.71]	150 [0.38]	390 [0.98]
麵豉湯 Miso soup	361 [0.90]	230 [0.58]	480 [1.20]
冬蔞功湯 Tom Yum Goong soup	529 [1.32]	370 [0.93]	840 [2.10]

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平均鈉含量最低的種類是粉葛湯

平均鈉含量最高的種類是冬蔭功湯

不同種類湯水樣本的鈉〔鹽〕含量

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響螺煲雞湯 Chicken with conch soup	217 [0.54]	120 [0.30]	300 [0.75]
青紅蘿蔔豬肉湯 Pork with green radish and carrot soup	218 [0.55]	各種湯水的鈉含量有很大差異，當中以粉葛湯的差異最大，相差為7倍。	
海鮮羹 Seafood thick soup	291 [0.73]		
西湖牛肉羹 Xihu beef thick soup	309 [0.77]		
酸辣湯 Hot and sour soup	380 [0.95]	290 [0.73]	670 [1.68]
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湯水樣本的鈉含量水平

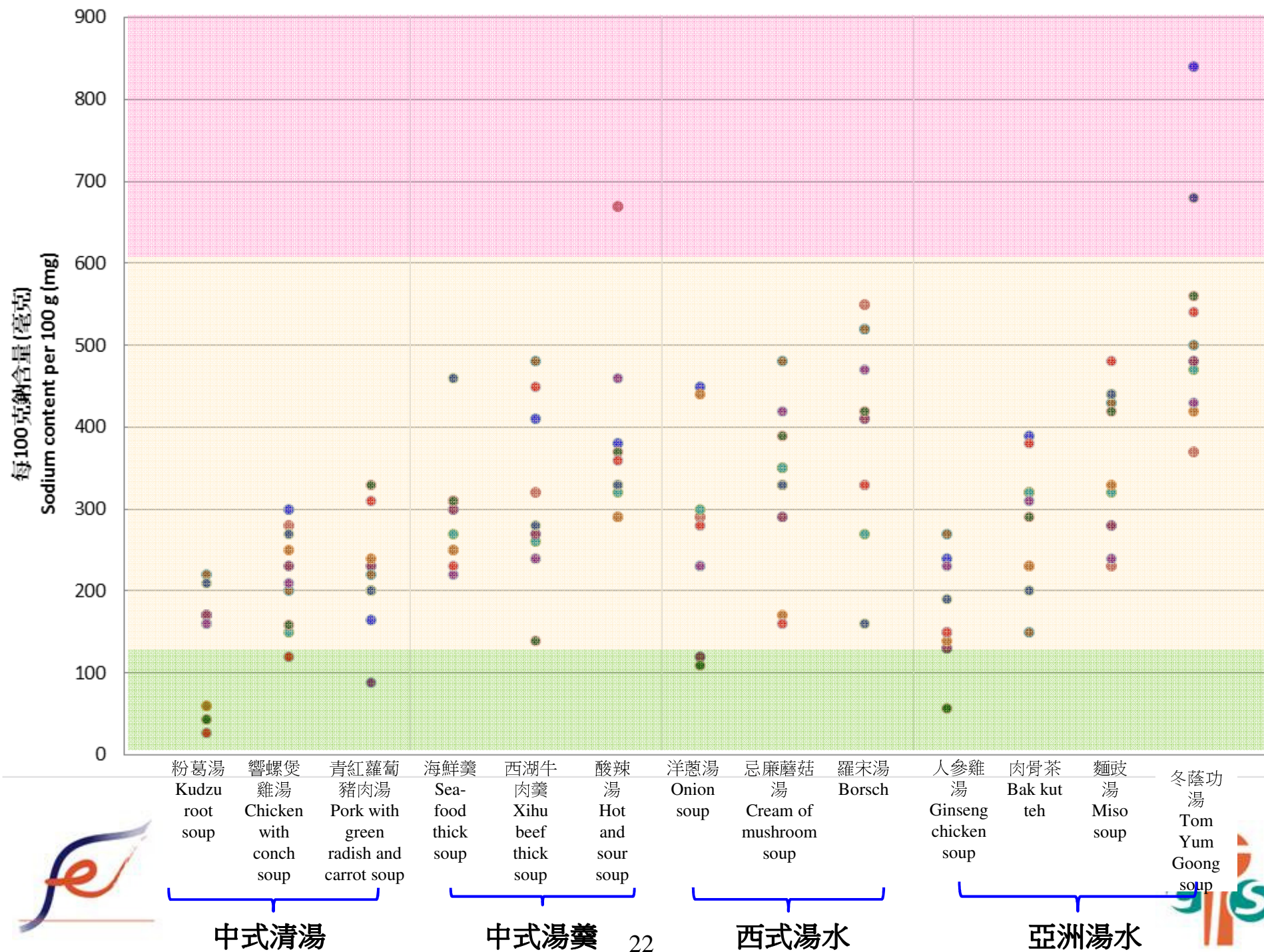
Sodium levels of soup samples

湯水種類 Types of soup	樣本數目 No. of samples			
	很低鈉樣本 Very Low Sodium Samples (≤40mg/100g)	低鈉樣本 Low Sodium Samples (≤120mg/100g)	其他樣本 Other Samples	高鈉樣本 High Sodium samples (>600mg/100g)
粉葛湯 Kudzu root soup	1	2	7	0
響螺煲雞湯 Chicken with conch soup	0	1	9	0
青紅蘿蔔豬肉湯 Pork soup with green radish and carrot	0	1	9	0
洋蔥湯 Onion soup	0	2	8	0
人參雞湯 Ginseng chicken soup	0	1	9	0
酸辣湯 Hot and sour soup	0	0	9	1
冬蔭功湯 Tom Yum Goong soup	0	0	8	2
其他湯水種類* Other types of soup*	0	0	60	0
整體 Overall	1	7	119	3

*包括：海鮮羹，西湖牛肉羹，忌廉蘑菇湯，羅宋湯，肉骨茶，麵豉湯

*Include : Seafood thick soup, Xihu beef thick soup, Cream of mushroom soup, Borsch, Bak kut teh, and Miso soup





湯水鈉含量佔每日建議攝取限量比重

Sodium contribution of soups to recommended daily intake

湯水種類 Types of soups	平均鈉含量佔每日建議攝取限量 Mean sodium contribution to recommended daily intake (2,000mg/day)			
	以平均飲湯分量（1碗）計算* Based on an average consumption (1 bowl of soup)*		以較高飲湯分量（2.5碗）計算* Based on a higher consumption (2.5 bowls of soup)*	
粉葛湯 Kudzu root soup	17%	23%	42%	57%
響螺煲雞湯 Chicken with conch soup	26%		65%	
青紅蘿蔔豬肉湯 Pork with green radish and carrot soup	26%		66%	
海鮮羹 Seafood thick soup	35%	39%	87%	98%
西湖牛肉羹 Xihu beef thick soup	37%		93%	
酸辣湯 Hot and sour soup	46%		114%	
洋蔥湯 Onion soup	33%	40%	82%	100%
忌廉蘑菇湯 Cream of mushroom soup	39%		98%	
羅宋湯 Borsch	48%		119%	
人參雞湯 Ginseng chicken soup	20%	40%	51%	101%
肉骨茶 Bak kut teh	34%		85%	
麵豉湯 Miso soup	43%		108%	
冬蔭功湯 Tom Yum Goong	63%		159%	
全部整體 Total	36%		90%	

* 1 碗湯水份量為約 240 克，而 2.5 碗湯水份量為約 600 克。

* One bowl of soup contains ~240g, while 2.5 bowls of soup contain ~600 g.

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冬蔭功湯 Tom Yum Goong	63%			
全部整體 Total	36%			

平均1碗冬蔭功湯的鈉攝取量已超過每日建議限量的六成

* 1 碗湯水份量為約 240 克，而 2.5 碗湯水份量為約 600 克。

* One bowl of soup contains ~240g, while 2.5 bowls of soup contain ~600 g.

結果1:

- 每款湯水中鈉含量最高與最低的樣本有很大差距（約1倍至7倍不等）。

這表示業界降低這些湯水的鈉含量是切實可行的。

Finding 1:

- Large variations were found between the maximum and minimum sodium contents of the same type of soup (~1-7 times).

This reflects the possibility of the Trade to reduce the sodium contents of these soups



結果2:

- 湯水仍是本地人口其中一個攝取鈉的主要食物來源。即使中式清湯平均鈉含量較低，但平均飲用1碗亦攝取到接近每日建議限量的四份之一。

業界應改良食譜以減少湯水的鈉含量。
市民應注意從湯水攝入的鈉份量及均衡飲食。

Finding 2:

- Soups are still one of the main dietary sources of sodium in the local population. Although the average sodium content of Chinese clear soups was lower, an average bowl could contribute $\frac{1}{4}$ of the recommended limit of daily sodium intake.

The Trade should consider reforming the recipes to reduce the sodium content in soups. The public should be aware of the amount of sodium intake through soup and maintain a balanced diet.

為湯水訂立減鈉目標水平

Setting sodium reduction target for soups (1)

- 根據「降低食物中鹽和糖國際諮詢委員會」的建議，改良配方以減低食物中鈉含量是最有效的措施。
 - 本研究的結果可作為制訂湯水減鈉目標水平的參考數據
- With reference to the recommendations from the International Advisory Panel on Reduction of Salt and Sugar in Food, product reformulation is the most effective measure to reduce the sodium content in food
 - The data obtained in this study can be used as a reference to set sodium reduction target for soups



為湯水訂立減鈉目標水平

Setting sodium reduction target for soups (2)

三個可行的方案

1. 訂立「鈉含量上限」

鈉含量的分布範圍第50個和第75個百分位數之間的數值

2. 訂立「鈉含量平均限值」

3. 訂立「減鈉百分率」

3 possible options

1. “Maximum level” approach

A ceiling level is set between the 50th and 75th percentiles of the sodium content distribution

2. “Average/mean level” approach

3. “Percentage reduction target” approach



為湯水訂立減鈉目標水平

Setting sodium reduction target for soups (3)

- 改良食品配方是一個循序漸進的過程，必須逐步減少食物中的鈉含量，讓消費者的味覺慢慢適應較淡的味道，以制定切實可行的減鈉目標和時間表。
- Product reformulation is a gradual process. The sodium content in food must be reduced step by step, so that consumers can adapt a milder taste gradually and hence a practical salt reduction target and timeline can be established.



建議 Advice

給業界的建議

Advice to Trade (1)

- 改良食譜，例如轉變配料或調節食用分量
- 參考食安中心的《降低食物中鈉含量的業界指引》，減低湯水的鈉含量
- 在改良配方時，記錄用鹽分量、湯水味道和顧客意見等以監察減鹽成效
- Reform recipes, such as changing ingredients or adjusting serving size
- Reduce sodium content in soups by making reference to the CFS' "Trade Guidelines for Reducing Sodium in Foods"
- Record the amount of salt used, the flavour of soups and comments from customers during recipe reformulation in order to monitor the effects of salt reduction



給業界的建議

Advice to Trade (2)

- 在菜單或價目表上提供：
 - 營養成分資料
 - 建議食用份量
- 鼓勵消費者避免在湯水中加鹽，例如：
 - 不要在食肆餐桌上放置鹽瓶
 - 落單時客人可要求彈性調製減鹽食譜
- On menus and price list, provide:
 - Nutrition information
 - Suggested number of serves
- Encourage consumers not to add extra salt in soups:
 - Remove the salt shaker from the dining table
 - Allow consumers to ask for recipes using reduced amount of salt when making order



給消費者的建議

Advice to Consumers (1)

- 市民應注意從湯水攝入的鈉份量
- 市面上供應的湯水的鈉含量有很大差異，外出飲湯時：
 - ✓ 應反映想盡量少鹽
 - ✓ 分量過大時可與他人分享
- Beware of the amount of sodium intake through soup
- Take note of the wide variation of sodium content in soups in the market. When having soups in the restaurants:
 - ✓ Ask for less salt
 - ✓ Share with others when the portion is large



給消費者的建議

Advice to Consumers (2)

- 在家自製湯水時：
 - 如分量過大可分數次享用
 - 適量添加食鹽及其他調味料，甚至不加鹽
- 保持均衡和多元化的飲食，限制進食高鹽分的食品如加工食品
- When making soups at home:
 - Consume in several times when the portion is large
 - Add suitable amount of salt and other condiments, or even do not add salt
- Maintain a balanced diet by including a wide variety of foods, limit the consumption of other high sodium foods, such as processed foods



謝謝
Thank You

