

Non-Communicable Diseases Watch

February 2013

Health Tips

Reducing sodium intake is one of the most effective ways to prevent high blood pressure and therefore can substantially decrease the risk for developing heart disease, stroke and renal disease – the three major killer diseases both globally and locally.

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Salt and the City

Salt is primarily composed of sodium chloride (NaCl) and is approximately 40% sodium and 60% chloride by weight. Salt is the main source of sodium in our diet. Sodium is a mineral essential for optimal body function. It helps to regulate the amount of fluid in the body and is important for nerve impulse transmission, but eating too much sodium can be detrimental to health.

In fact, only a small portion of the sodium we eat every day comes from those naturally occurring in foods. The biggest source of sodium in our diet actually comes from the salt added in commercially processed and restaurant foods, e.g. breads and crackers, ready-to-eat breakfast cereals, processed meats, preserved vegetables, canned and frozen foods, and cheese. In many Asian countries (such as China and Japan), various condiments and sauces, as well as salt added during cooking and at the table, are the major sources of sodium in the diet. Salt has been the best-known food preservative, especially for meat, for many years. Although it has been used less as a method of food preservation with the advent of refrigeration, the food industry today still relies heavily on salt in food processing to promote the taste, texture, colour and appearance of the products and to prolong their shelf life. Yet there is also a wide range of salt content in these processed foods, depending on how much has been added. Because salt can be included in commercially processed food items which do not taste salty, such as pre-packaged bread and cereals, sometimes we may have eaten too much salt / sodium without knowing it.

Health Risks of Eating Too Much Salt/Sodium

Epidemiological studies have demonstrated associations between high salt or sodium intake and increased risk of some chronic diseases, including hypertension, heart disease, stroke, renal disease, stomach cancer, and reduced bone density. In these studies, the salt or sodium intake was estimated either directly by measuring urine sodium or indirectly from dietary survey.

Hypertension and other cardiovascular diseases

The mechanisms by which consuming too much salt increases blood pressure are not fully understood, but they seem to be related to the inability of the kidneys to fully excrete excess sodium and to regulate extracellular fluid volume.¹



Our kidneys naturally balance the amount of sodium stored in our body for optimal health. When sodium level is low, the kidneys will hold onto the sodium. When sodium level is high, the excess sodium will be excreted in urine by our kidneys. If for some reasons the kidneys fail to remove all the excess sodium, the sodium which accumulates in the blood will attract and hold water, and the blood volume increases. Increased blood volume makes our heart work harder to move more blood through our blood vessels, which increases pressure in the arteries. Observational and intervention studies in humans and animals show that excessive sodium intake is a major factor contributing to the development of hypertension, which in turn increases the risk of stroke, coronary heart disease as well as heart failure. A recent study that prospectively analysed association between sodium intake and the incidence of hypertension on non-hypertensive adults found that people who were in the highest quartile of sodium intake had a 29% increased risk of hypertension compared to those who were in the lowest quartile of sodium intake.² The relationship between sodium intake and increased blood pressure was also demonstrated in children and adolescents. For example, a study in the U.S. on children and adolescents aged 8 to 18 years reported that each 1 g/day sodium intake was associated with an increase of about 1.0 mmHg in systolic blood pressure (SBP) among all subjects and an increase of about 1.5 mmHg among overweight/obese subjects.³

Increased salt intake is associated with other cardiovascular diseases as well. A meta-analysis of 13 cohort studies reported that higher salt intake was associated with a 23% increase in **stroke** and a 14% increase in **cardiovascular disease**.⁴ An observational analyses of 2 cohorts with 28 880 participants with a median follow-up of 56 months further revealed that people with the urinary sodium excretion of over 8 g/day would have a respective 48% and 51% increased risk of **myocardial infarction** and hospitalisation for **congestive heart failure** compared to those with urinary sodium excretion of 4 to 5.99 g/day respectively. The corresponding risk of the former cohort for **cardiovascular death** was also 66% higher.⁵

Renal diseases

High salt intake can be detrimental to the kidneys. Increased sodium load raises blood pressure, increases the rate of blood filtering through the kidneys, and resulting in proteinuria (protein excretion in urine), all of which can increase the risk for **progressive renal disease** (and cardiovascular disease) and exacerbate **chronic renal damage**.^{6,7} For example, a prospective study in the Netherlands showed that urinary albumin excretion increased by 4.6 mg/day for each additional 1 g of sodium consumed.²



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Although studies cannot find a significant association between salt intake and renal stone risk, eating too much salt can increase urinary calcium excretion and thus may increase the risk of developing calcium stones in the kidneys. A study on healthy men found that increasing salt intake not only increased urinary calcium, but also decreased urinary citrate, a change that may lead to **calcium renal stone formation**.⁸

Stomach cancer

Eating too much salt is believed to promote stomach cancer by damaging the stomach lining and enhancing colonisation of the bacterium Helicobacter pylori, which is classified as a cancercausing agent by the International Agency for Research on Cancer.⁹ A meta-analysis of 7 prospective studies showed that people with 'high' and 'moderately high' salt intake had a respective 68% and 41% increased risk of stomach cancer compared to those with 'low' salt intake. Besides, 'high' consumption of pickled foods, salted fish and processed meat was also associated with a 27%, 24% and 24% increased risk of stomach cancer cancer respectively.¹⁰

Reduced bone density

Eating too much sodium may also reduce bone density. Numerous studies have indicated that higher dietary sodium intake can increase the urinary excretion of calcium, which is a major component of bone. Over time, urinary calcium loss may lead to bone resorption, resulting in osteopenia or even osteoporosis. A local study among 1 010 Hong Kong Chinese men and women aged 25 - 74 found that sodium was the leading dietary factor associated with urinary calcium excretion. For each 100 mmol (or 2.3 g) increase in urinary sodium, urinary calcium excretion would increase by about 1.4 mmol (or 0.03 g).¹¹ Some other

overseas studies have examined the effect of sodium intake on bone density in women. Among healthy non-obese women aged 19 - 35 years, a Canadian study observed an inverse association between 24-hr urinary sodium and areal bone mineral density at the hip for all participants and also among women with lower calcium intake.¹² Another longitudinal study in Australia on postmenopausal women also showed that urinary sodium excretion was a significant determinant of changes in hip bone density: the higher the urinary sodium excretion, the greater the bone loss, but no bone loss occurred at the hips if urinary sodium excretion was below 2.1 g/day.¹³

Intake and Dietary Sources of Sodium around the World

The World Health Organization (WHO) recommends that a healthy adult should consume less than 2 000 mg of sodium per day (i.e. less than 5 g of salt per day). Children should consume less salt than adults, and the younger the children, the smaller amount of salt they require per day. However, data from various countries indicate that most people are unaware of the recommendations and the adverse effects of eating too much salt on health.^{14, 15} Very often, they eat salt far in excess.

Intake

A study released in 2009 presented a comprehensive overview of sodium intakes among adults and children around the world, using standardised 24-hour sodium excretion estimates for adults from the international INTERSALT (1985–87) and INTERMAP (1996–99) studies, and recent dietary and urinary sodium data from observational or interventional studies on adults and children. The study reported that most adult populations had mean sodium intakes well in excess of 2.3 g/day, and many (especially in the Asian countries) in excess of 4.6 g/day. In children over 5 years old, sodium intakes were commonly > 2.3 g/day, and the intakes increased with age. High sodium intakes (with a mean intake > 3.2 g/day) were observed among boys from certain parts of Europe; and among boys and girls from rural Shanxi (China) and the United States. In young children 5 years old or less, sodium intakes were consistently < 2.3 g/day.¹⁶

Sources

The sources of dietary sodium intake vary among different countries and regions, largely determined by cultural preference. To identify the major dietary sources of sodium in East Asian and Western adult populations, a study analysed dietary information from individuals aged 40 - 59 from the United Kingdom (U.K.), the United States (U.S.), China and Japan. Results showed that processed foods (including breads, cereals, grains) contributed heavily to sodium intake in the U.K. (95%) and U.S. (at least 71%). In China, most (75.8%) dietary sodium were from salt added during cooking and at the table, followed by soy sauce (6.4%). In Japan, the most important dietary sources of sodium included soy sauce (20%), miso and other soups (16.4%), and commercially processed fish or seafood (15%).¹⁷

In children, especially the younger ones, data on dietary sources of sodium were limited,¹⁶ but surveys showed that the major sources largely reflected those for adults. In the U.S., the top ten ranked food categories (including bread and rolls, cold cuts/cured meats, pizza, poultry, soups, sandwiches, cheese, pasta mixed dishes, meat mixed dishes and savoury snacks) contributed 46.6% of the overall

sodium intake among persons aged 2 - 19 years.¹⁸ Among children and adolescents in the U.K. (aged 4 - 18 years) and Australia (9 - 13 years), the major sources of sodium included cereals or cereal-based products (38% - 43%) and meat products (16% -24%).^{16,19}

Pattern of Salt Consumption in Local Population

Surveys showed that local people consume too much sodium, many local foods contain 'a lot' of salt, and people's awareness pertaining to salt consumption is rather low.

Intake

In 1995/96, the Hong Kong Adult Dietary Survey interviewed a random sample of 1 010 Chinese persons aged 25 - 74 and estimated sodium intake by spot urinary sodium excretion. Results showed that sodium intake increased with age: from about 4.8 g/day among men aged 34 or less to about 5.2 g/day among men aged 55 and above; for women, the corresponding values for the two age groups were about 3.7 g/day and 4.5 g/day respectively. Overall, less than one quarter (22%) of participants had a daily intake of sodium 2.3 g or less.²⁰

Sodium levels in local food

To obtain a better picture on sodium levels in local food, the Centre for Food Safety (CFS) of the Food and Environment Hygiene Department (FEHD) conducted a study between January and April 2012 to determine the sodium level in local commercially processed and restaurant foods. The study analysed the sodium content of about 1 000 non-prepackaged and prepackaged food items from nine food groups collected from local restaurants, retail food markets, supermarkets or convenience stores. The nine food groups are: (1) Western fast foods; (2) Asian foods and dim sum; (3) condiments and sauces; (4) processed meat products; (5) processed vegetables products; (6) snacks; (7) bakery products; (8) ready-to-eat and condensed soup; and (9) other foods such as ready-to-eat vegetarian snacks, cold dishes/appetisers in non-prepackaged foods and breakfast cereals in prepackaged foods. Results showed that the sodium content of food items among **non-prepackaged foods** (tested by the Food Research Laboratory of CFS) varied greatly, from undetected to 17 000 mg/100 g of food. "Processed vegetable products" (e.g. preserved leaf mustard, preserved mustard and preserved cabbage, etc.) had the highest average sodium content at 5 784 mg/100 g of food. For the two food groups of "Asian foods and dim sum" (e.g. 'siu mai') and "Western fast food" (e.g. 'burgers'), even for the same food item, a great variation in the average sodium content was also observed. In the eight selected food items in the two food groups, the average sodium content ranged from 269 mg/100 g in "steamed rice with satay beef" to 598 mg/100 g in "siu mai" (Table 1).²¹

Table 1: Sodium content in the eight selected non-prepackaged food items

	Sodium content (mg/100 g of food)	
Food item	Average	(Range)
Asian food and dim sum:		
Steamed rice with satay beef	269	(150 – 400)
Fried rice with diced chicken and salted fish	401	(280 – 520)
"Pan-fried turnip cake" *	415	(320 – 520)
"Ha gau"	473	(340 – 650)
Fried noodles with preserved vegetables and spare rib	519	(370 – 770)
"Siu mai"	598	(330 – 800)
Western fast food:		
Meat sauce spaghetti	310	(200 – 400)
Hamburger	445	(340 – 720)

Note: * Indicates that some item(s) may have sauce served separately and the sauce was not analysed. Source: Risk Assessment Studies Report No. 49; 2012. For bakery products, they had the lowest average sodium content at 315 mg/100 g of food. However, the average sodium content could range from 1 mg/100 g in "Chinese bakeries" to 660 mg/100 g in "Fried dough products" (Table 2). As for **prepackaged food items** (information on nutrition label), the sodium content (excluding salt) varied from 12 to 16 807 mg/100g of food. "Condiments and sauces" (e.g. soy sauce, mono-

sodium glutamate (MSG) and stock powder/cubes, salad dressing and ketchup, etc.) had the highest average sodium content at 3 585 mg/100g, followed by "ready-to-eat and condensed soup" at 2 183 mg/100g and "processed vegetable products" at 2 177 mg/100g. Of note, certain pre-packaged snacks had very high sodium contents - up to 8 121 mg/100 g of sodium in some preserved fruits (Table 3). ²¹

Table 2: Sodium content in non-prepackaged bakery products

S	Sodium content	um content (mg/100g of food)	
Bakery products (food items included)	Average	(Range)	
Chinese bakeries (almond biscuit; walnut cookies; crispy shell; fried rice cake; "Kong biscuit; peanut cookies; preserved egg cake; wife cake)	So" 93	(1 – 220)	
Stuffed breads without meat (garlic bread, cocktail bun; "pineapple" bun; coconut an cream bun)	nd 244	(110 – 430)	
Tart/Pie (egg/Portuguese tart; coconut tart; chicken/beef pie; apple/taro pie)	236	(48 – 440)	
Plain breads/cakes (white bread; whole-meal bread; piggy bun; chiffon cake; pound ca	ike) 350	(56 – 630)	
Western cookies (cookies)	356	(180 – 480)	
Fried dough products (fried fritters; doughnut)	420	(230 - 660)	
Puff pastries (curry puff; samosa; croissant)	447	(270 – 600)	
Stuffed/Pizza breads containing meat (sausage bun; tuna fish bun; ham and egg bun cheese and ham bun; meat floss bun)	n; 462	(260 – 650)	

Source: Risk Assessment Studies Report No. 49; 2012.

Table 3: Sodium content in prepackaged snacks

	Sodium content (dium content (mg/100g of food)	
Snacks (food items included)	Average	(Range)	
Potato chips (original; lightly salted; BBQ; other flavours)*	438	(172 – 741)	
Salted nuts / seeds (cashew; almond; hazelnut; peanut; pistachio nut; pumpkin seeds; sunflower seeds; watermelon seeds; macadamia nuts, etc.)	747	(167 – 4 367)	
Crisp or extruded snacks (prawn crackers; corn chips/Tortilla chips; cheese flavoured ring/ball; rice cracker; fish ball crackers, etc)*	a 832	(193 – 1 800)	
Noodle snacks (noodle snack)	1 275	(708 – 2 112)	
Preserved meat snacks (dried pork/beef jerky/floss; egg)	1 280	(819 – 2 000)	
Preserved seafood snacks (squid/cuttle fish snack floss (baked; satay); roasted fish; fi sausage)	ïsh 1 660	(851 – 2 664)	
Preserved fruits (lemon; raisins; orange peel; plum)	3 036	(239 – 8 121)	
Other snacks (seaweed snacks; dried beancurd; dried mock roast duck; green peas; tapic chips)	oca 855	(318 – 2 185)	

Note: * Indicates same products with different series of varied sodium content claims and/or nutrient comparative claims on salt/ sodium included.

Source: Risk Assessment Studies Report No. 49; 2012.

Behaviours

Hong Kong is one of the culinary capitals of Asia with well-assorted cuisines from all over the world, and it was no wonder many people in Hong Kong, young and old, enjoy eating out. For example, the Behavioural Risk Factor Survey April 2010 of the Department of Health (DH) found that 26.9%, 46.4% and 9.4% of people aged 18 - 64 ate out for breakfast, lunch and dinner 5 times or more a week respectively.²² The Child Health Survey 2005/2006 reported that 71.7% children aged 2 - 14 ate at fast food restaurants at least once per week.²³ Although the salt content of different categories of fast foods may vary, many people may not be aware that these are usually high in salt.²⁴ Children and adolescents who frequently consume fast foods (such as pizza and hamburgers) may develop a preference for salt taste.²⁵ Salt is also a driver of sugar-sweetened soft drink consumption, contributing to childhood obesity.²⁶

Despite frequently eating out, the local population had extremely low awareness of the maximum level of daily salt intake recommended by the WHO.

A telephone survey conducted in April 2012 on over 2 000 community-dwelling people aged 18 - 64 found that only 2.6% of respondents could correctly state the WHO's recommended maximum daily intake of 5 g of salt for a healthy adult. When asked how often they would add sauces (including soy sauce, oyster sauce, ketchup, chili sauce, bean chili sauce or other seasonings containing salt) to cooked dishes at the table, 12.2% of respondents reported that they would always (1.6%) or often (10.6%) do so. Furthermore, less than one-fifth (18.4%) of them claimed that they would always (7.9%) or often (10.5%) check labels for salt content when purchasing pre-packaged food (Figure 1).²⁷ As for adding sauces while eating out, another telephone survey conducted in April 2010 also showed that that 75.3% of community-dwelling people aged 18 - 64 reported that they never (65.9%) or seldom (9.4%) requested soy sauce/seasoning to be served on the side; 68.6% of respondents reported that they never (59.2%) or seldom (9.4%) requested rice with 'siu mei' or steamed rice with meat in pot to be served without adding 'siu mei' sauce/soy sauce.²²



Figure 1: Frequency of adding sauces to cooked dishes and checking labels for salt content when purchasing pre-packaged food among community-dwelling people aged 18 - 64

Note: Excluding respondents who reported "do not remember". Source: Behavioural Risk factor Survey April 2012.

Cutting Back on Salt

Studies have shown that reducing sodium intake is one of the most effective ways to prevent high blood pressure, which in turn substantially decreases the risk for developing heart disease, stroke and renal disease – the three major killer diseases both globally and locally. A meta-analysis of 6 randomised trials on salt reduction and risk of cardiovascular events reported that a small reduction in salt intake of 2.0 - 2.3 g/day was associated with a 20% decrease in cardiovascular events.²⁸ Another meta-analysis of 10 trials in children and adolescents aged 8 - 16 years showed that a 42% reduction in salt intake (equivalent to a decrease of about 3 g/day, from 8 g/day to 5 g/day) led to a fall in systolic and diastolic blood pressure of about 1.2 mmHg and 1.3 mmHg respectively.²⁹ In the U.S., it has been estimated that a modest population-wide reduction in dietary salt of 1 g/day would reduce the annual number of new cases of coronary heart disease by 20 000 - 40 000, stroke by 11 000 - 23 000, and deaths from any cause by 15 000 - 32 000.³⁰ Another economic modelling study for 23 low- and middle-income countries also estimated that 8.5 million cardiovascular deaths could be prevented over 10 years for a reduction on the salt intake of 15% (by 1.7 g/day); and as many as 28.3 million deaths could be prevented over the same period for a reduction in salt intake from about 11.3 g/day to 5 g/day.³¹

Population level

Changing personal behaviour and choice alone is not an effective option when the majority of salt is added to food before it is sold and food marketing relies on taste. Food manufacturers can greatly help in halting or even reversing the epidemic of non-communicable diseases, and disease prevention implemented through food reformulation and effective voluntary market intervention. In view of the scientific evidence, many countries around the world have taken or are starting to take actions to reduce dietary salt intake on the population level.³² In Hong Kong, the Government has been working with food industries, food traders, professional groups, non-governmental organisations and academia in building a supportive environment for a lower population salt intake in the past few years. For example, the DH published school-based nutritional guidelines targeting schools and parents stipulating supply of healthier diet for children. The DH also launched the EatSmart@restaurant.hk Campaign in 2008 to actively promote '3 Less' dishes (i.e. dishes that are prepared with less salt, along with oil and sugar) through partnership with the food industry. To assist the general public in making informed food choices, the Government implemented the Nutrition Labelling Scheme in 2010 requiring all pre-packaged foods sold in Hong Kong to declare sodium content on a nutrient label. In September 2012, the CFS issued "Trade Guidelines for Reducing Sodium in Foods" to encourage the trade to produce and promote healthier foods with lower sodium content. Compliance with this set of guidelines is voluntary, and food premises and food industries are encouraged to implement the guidelines. Those who can achieve sodium reduction targets should be commended for their efforts and contribution to public health.

Individual level

Apart from reducing salt intake on the population level, there is something we as individuals could actively do to cut back on our own salt intake and that of our family's. Here are some practical tips that help cutting back on salt:

Get fresh. Use fresh produce wherever possible. Limit consumption of salt preserved foods, such as processed meat, salted eggs or fish, pickled vegetables, canned soup or the seasoning of instant noodles. Use sauces made with fresh ingredients, such as tomato, pumpkin or spinach, to replace ready-to-use sauces.

Substitute salt with healthier alternatives. Use herbs and spices, such as garlic, pepper, lemon juice, or vinegar, instead of salt and condiments to flavour foods. Replace crisps, salted crackers and other salty snacks with low salt alternatives, such as fresh fruit, green salad, boiled egg or unsalted nuts. When ordering pizza, choose fresh produce like vegetables or chicken toppings instead of pepperoni, bacon and ham.

Limit commercially processed foods and drinks that are high in salt. Limit takeaways and fast foods, such as burgers, fried chicken and pizza to an occasional treat because these food items often contain high salt content. Avoid sports beverages that contain added sodium, unless you are engaged in vigorous physical activity or strenuous exercise and replenishment of sodium is necessary. Use plain water instead.

Remove excessive salt from food / add less salt to food. Rinse canned vegetables or soak preserved vegetables in potable water before cooking or eating. Cut down the amount of salt and sauces used in cooking and avoid adding them at the table.

Choose low sodium menu items when dining out. Check restaurants for '3 Less' dishes. Avoid ordering dishes that contain high salt ingredients including Asian sauces, cured meats and preserved vegetables. Ask for meals prepared without added salt and MSG, and ask for sauces and other condiments to be served on the side rather than on the meal. Do not add salt or sodium-containing seasonings to dishes.

Downsize the portions. Skip the supersize as the bigger a meal is, the more sodium it has. Sharing a dish can help cut down salt intake.

Check nutrition labels. Select lower sodium options wherever possible when shopping for prepackaged foods.

Remember, healthy adults should aim to consume less than 5 g of salt a day i.e. less than about a level teaspoon of table salt a day (or sodium intake of less than 2 000 mg/day). The younger the children, the smaller amount of sodium they should have. Those living with a chronic disease (including heart disease, kidney disease or liver disease) should consult their family doctor or nutritionist/ dietitian for a customised sodium intake level. Members of the public may also visit the Nutrient Information Inquiry System (NIIS) of the CFS at http://www.cfs.gov.hk/english/nutrient/index.shtml. The Inquiry System is a web-based searchable database containing nutrient data (including sodium) of commonly consumed food items which are of relevance and interest to our local community.

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News Bites

Physical activity reduces the level of blood pressure increase caused by high salt intake, a study reported.

The study, conducted between October 2003 and July 2005, followed the change in blood pressure of 1 906 persons aged 16 years or older living in rural northern China. The participants were instructed to have a low-sodium diet (3 g or 51.3 mmol of sodium/day) for 7 days, followed by a high-sodium diet (18 g or 307.8 mmol of sodium/day) for another 7 days. The blood pressure of the participants was measured in the two periods. Using a standard questionnaire, the participants' usual physical activity level during the past twelve months was assessed at baseline. Results showed that participants in the lowest quartile of physical activity had an average of 5.21 mmHg increase in systolic blood pressure when they changed their diet from low-sodium to high-sodium, and the increase was higher than that among the highest quartile of physical activity (an average of 3.96 mmHg increase). Compared with those in the lowest quartile of physical activity had a 34% less risk of high salt sensitivity of systolic blood pressure (defined as an increase in systolic blood pressure of 5% or more when one changes from the low-sodium diet to the high-salt diet).

Blood pressure responses to dietary sodium intake vary among individuals, a phenomenon called "salt sensitivity" of blood pressure. Different responses in salt sensitivity are influenced by age, sex, race, body weight, alcohol intake, hypertension status, and genetic factors. This study showed that higher levels of physical activity may protect against salt sensitivity of blood pressure, in addition to other factors that may affect salt sensitivity of blood pressure. As recommended by the World Health Organization, adults should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or at least 75 minutes of vigorous-intensity aerobic physical throughout the week, or an equivalent combination of both.

[Source: Rebhloz CM, Gu, D, Chen J, et al. Physical activity reduces salt sensitivity of blood pressure. The Genetic Epidemiology Network of Salt Sensitivity Study. Am J Epidemiol 2012; 176(Suppl): S106-S113.]

World Salt Awareness Week

11-17 March 2013



The World Action on Salt and Health (WASH) is a global group with the mission to improve the health of populations throughout the world by achieving a gradual reduction in salt intake. It runs World Salt Awareness Week (WSAW) every year, which serves to highlight the importance of reducing salt intake in all populations throughout the world.

Each year, the WSAW is focused on a particular topic. For 2013, the focus is "**Eat less salt**", as to highlight to the catering industry, chefs and others involved the importance of adding less salt to our food and the long-term health implications of eating a high salt diet.

To know more about the WSAW 2013 and the past events, please visit its designated website at http://www.worldactiononsalt.com/awarenessweek/index.html.

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	Dr KH Kung	Dr Lilian Wan	Th
	Dr Winnie Lau	Dr Francisco Wong	
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Non-Communicable Diseases (NCD) WATCH is dedicated to promote public's awareness of and disseminate health information about non-communicable diseases and related issues, and the importance of their prevention and control. It is also an indication of our commitments in responsive risk communication and to address the growing non-communicable disease threats to the health of our community.

he Editorial Board welcomes your views and comments. Please send all comments and/or questions to so_dp3@dh.gov.hk.