

Non-Communicable Diseases Watch

June 2018



衛生防護中心
Centre for Health Protection



衛生署
Department of Health

Be Salt Aware

Key Messages

- ※ Consuming too much salt (sodium) is detrimental to health. Excess salt intake raises blood pressure, which is an established risk factor for cardiovascular diseases (including heart diseases and stroke). Excess salt intake is also associated with an increased risk of kidney diseases (including kidney stones and chronic kidney damage), stomach cancer and osteoporosis.
- ※ As the World Health Organization (WHO) recommends, healthy adults should consume below 5 g/day of salt, or below 2 g/day of sodium. Children should consume less salt than adults. The younger the children, the smaller amount of salt they require per day.
- ※ In Hong Kong, the Population Health Survey 2014/15 estimated that the average salt intake among non-institutionalised persons aged 15–84 was 8.8 g/day. Overall, 86.3% (91% for males; 82% for females) of persons had dietary salt intake above the WHO recommended daily limit of less than 5 g/day.
- ※ The Hong Kong SAR Government has been promoting healthy diet all along, which is fundamental to reducing the salt intake of our population. In May 2018, the Government launched “Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong” with a list of committed actions and clear targets, including Target 4 that Hong Kong will pursue to achieve a 30% relative reduction in mean population daily intake of salt/sodium by 2025.
- ※ Individuals could proactively cut back on their own salt intake and that of their families by observing the ‘5 Ways to 5 Grams’: get fresh; substitute salt with healthier alternatives; add less salt to food and remove excessive salt from food; check food labels and choose less salty options; choose low salt menu items when dining out.



香港非傳染病防控策略及行動計劃
Strategy and Action Plan to
Prevent and Control NCD in Hong Kong



Target 4: A 30% relative reduction in mean population daily intake of salt/sodium

Be Salt Aware

Dietary salt (sodium) intake is closely related to health. As a mineral and also an electrolyte, sodium is essential for the regulation of the body's overall fluid balance, transmission of nerve impulses and maintenance of normal cell functions. While the body generally only needs a small amount of sodium for proper functioning (the physiological requirements for sodium in most healthy adults are less than 500 mg/day), consuming too much sodium is detrimental to health.^{1, 2} As the World Health Organization (WHO) recommends, healthy adults should consume below 2 g/day of sodium, or below 5 g/day of salt (which is composed of approximately 40% sodium and 60% chloride by weight). Children should consume less sodium than adults. The younger the children, the smaller amount of sodium they require per day.¹ For example, the Chinese Nutrition Society recommends children aged 4–6 to take less than 1 200 mg of sodium (about half teaspoon of salt) a day.³ However, most people are unaware of the WHO's recommendations and very often consume salt excessively, especially from processed foods.

Salt Intake across the Globe

A systematic analysis of 24-hour urinary sodium excretion and dietary surveys worldwide estimated that the global mean sodium intake among adults in 2010 was 3.95 g/day which was nearly twice the WHO's recommendation of a maximum sodium intake of 2 g/day. By gender, the mean sodium intake in men (4.14 g/day) was higher than that in women (3.77 g/day). By age, there was relatively little variation. Overall, 99.2% of the adult population in the world had mean levels of sodium intake exceeding the limit recommended by the WHO. East Asia, Central Asia and Eastern Europe had the highest sodium intake (with mean over 4.20 g/day).⁴

For children and adolescents, a literature review of 41 reports from 20 countries on 4 continents found that sodium intake were commonly more than 2.30 g/day in children over 5 years old, and increased with age.⁵

Perils of Excess Sodium Intake

Evidence has shown that excess sodium intake raises blood pressure, which is an established risk factor for cardiovascular diseases (including heart diseases and stroke). In 2010, an estimated 1.65 million deaths arose from cardiovascular causes globally. Among them, about 1 of 10 deaths were attributed to excessive sodium intake (more than 2 g/day).⁶ In addition, excess sodium intake is associated with an increased risk of kidney diseases (including kidney stones and chronic kidney damage), stomach cancer and osteoporosis. As in adults, dietary sodium is a determinant of raised blood pressure in children. Compared with children who eat lower sodium diets (less than 2.30 g/2 000 calories), children who eat higher sodium diets are about 17% (2.30 g – 3.45 g) to 36% (more than 3.45 g) more likely to have elevated blood pressure.⁷ There is considerable evidence to support a link between higher levels of blood pressure in childhood and blood pressure related cardiovascular diseases in adulthood.⁸ Thus, it is particularly important to help children develop a good eating habit and reduce sodium intake.

Salt Intake in Hong Kong Population

Likewise, local people consume salt excessively. The Population Health Survey 2014/15 of the Department of Health (DH), which assessed dietary salt intake by measuring sodium excretion from 24-hour urine collection, estimated that the average salt intake among non-institutionalised persons aged 15–84 was 8.8 g/day (or equivalent to 3.52 g/day of sodium). Males (9.8 g/day) had higher mean daily salt intake than females (7.9 g/day). Persons aged 35–44 (9.5 g/day) and those aged 45–54 (9.4 g/day) had higher mean daily salt intake compared to other age groups (Table 1). Overall, 86.3% (91% for males; 82% for females) of persons aged 15–84 had dietary salt intake above the WHO recommended daily limit of less than 5 g/day.⁹

High sodium intake was also observed in local young children. A study used the 24-hour dietary recall method to assess the diet quality and eating behaviour of 302 preschool children aged 30–60 months in 2012/13. For sodium intake, the study reported a mean sodium intake of 1.87 g/day which was significantly higher than the recommended limit of 1.5 g/day (for children aged 2.5–3 years) from the U.S. Institute of Medicine.¹⁰

Table 1: Mean daily salt intake (g) among non-institutionalised persons aged 15–84 by age group and gender

Age group	Male	Female	Total
15 – 24	9.2	7.9	8.6
25 – 34	9.9	8.0	8.9
35 – 44	10.6	8.5	9.5
45 – 54	10.4	8.6	9.4
55 – 64	9.7	7.5	8.6
65 – 84	8.7	6.8	7.7
Total	9.8	7.9	8.8

Note: To convert gram of salt to gram of sodium, divide the salt figure in gram by 2.5.

Base: All respondents aged 15–84 who had participated in the health examination with valid urinary sodium results.

Source: Population Health Survey 2014/15, Department of Health.

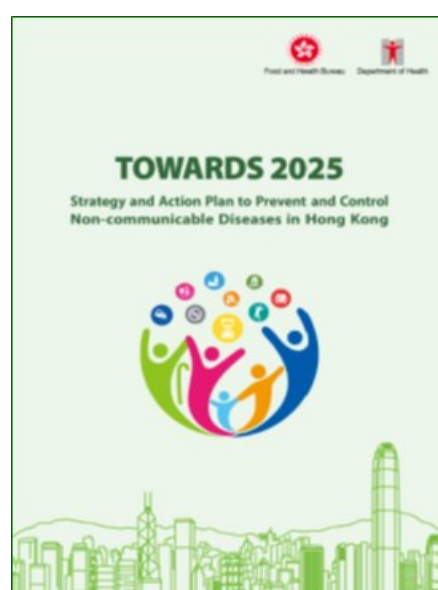
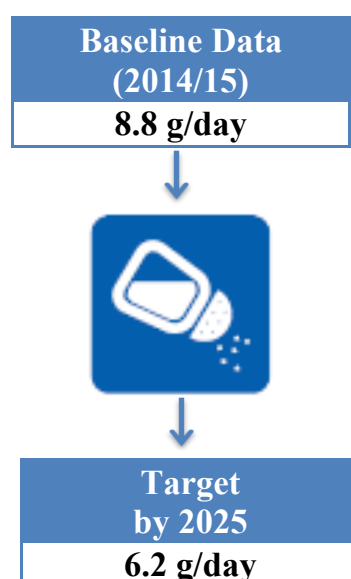
Cut Salt, Save Lives

Reducing population intake of salt has been identified as a priority public health action and chosen as one of the global targets by the WHO for the prevention and control of NCDs. The Hong Kong SAR Government has been promoting healthy diet all along, which is fundamental to reducing the salt intake of our population. Since 2015, the Government has set up the Committee on Reduction of Salt and Sugar in Food to make recommendations on the policy and work plans to reduce the intake of salt (and sugar) of the population. In May 2018, the Government launched “Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong” (SAP), with a list of committed actions and clear targets, including Target 4: a 30% relative reduction in mean population daily intake of salt/sodium by 2025 (Box 1) that is in line with the WHO recommended voluntary global salt reduction target.¹¹

To bring Hong Kong closer to the target of a 30% relative reduction in mean daily population intake of salt, the Government will continue working with different stakeholders and taking the lead on ‘intervention at an early age’ as to help children develop healthy dietary habit (such as the ‘Salt Reduction Scheme for School Lunches’, see page 6), ‘enhancing transparency of information’ as to empower consumers make a healthier choice (such as the “Salt/Sugar” Label Scheme for Prepackaged Food Products’, see page 7), and ‘strengthening publicity and education’ as to influence public’s awareness and behaviours in relation to reducing salt intake.¹¹ As individuals, we could proactively cut back on our own salt intake and that of our families by observing the ‘5 Ways to 5 Grams’ (Box 2).

For more information about the key initiatives and specific actions taken by the Government to bring about a reduction in the salt/sodium intake among local population, please refer to the SAP which can be found at the Change for Health Website of DH at www.change4health.gov.hk/en/saptowards2025.

Box 1: Salt reduction target for achievement by the year 2025



Box 2: 5 Ways to 5 Grams

- ✓ **Get fresh.** Use fresh products wherever possible. Limit consumption of salt-preserved foods, such as processed meat, salted egg or fish, pickled vegetables, canned food 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, spices (such as garlic and pepper), lemon juice or vinegar in place of salt and condiments to flavour food. Replace crisps, salted crackers and other salty snacks with low salt alternatives, such as fresh fruit, green salad, boiled egg or unsalted nuts. Avoid sports beverages that contained added sodium, unless replenishment of sodium is necessary after engaging in vigorous physical activity. Drink plain water instead.
- ✓ **Add less salt to food and remove excessive salt from food.** Cut down the amount of salt and sauces used in cooking. Take salt and other condiments off the table so younger family members would not develop the habit of adding salt.
- ✓ **Check food labels** when shopping for prepackaged foods and **choose less salty options.**
- ✓ **Choose low salt menu items when dining out.** Check EatSmart restaurants for '3 Less' dishes. Ask for meals prepared without added salt and monosodium glutamate (MSG), and ask for less sauce and other condiments or have them to be served on the side rather than on the meal.

Reference

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Building a healthy eating habit from a young age is important in terms of healthy growth and prevention of chronic diseases down the road. However, the ‘Nutrient Testing of School Lunches in Primary Schools in Hong Kong 2013’ conducted by the Department of Health (DH) revealed that the sodium content in over 90% of the examined lunches exceeded the recommended intake for a meal. Excessive intake of sodium could lead to hypertension, which is a major cause of cardiovascular diseases and stroke. According to the World Health Organization, decreasing dietary intake of salt to 5 g/day would reduce the risk of cardiovascular diseases by 17% and that of stroke by 23 %.

In view of this, the DH launched the ‘Salt Reduction Scheme for School Lunches’ (the Scheme) in the 2017/18 school year, with a target of cutting down the average sodium level of each primary school lunch to not more than 500 mg in 10 years, which is about a third of the daily intake upper limit of a 7-year old children.[#] A phased sodium reduction approach, which aligns with the recommendations and strategies adopted by the Committee on Reduction of Salt and Sugar in Food and other international sodium reduction efforts, helps students’ palates gradually adapt to the change in taste and increases their acceptance of less sodium in foods. As of May 2018, 13 school lunch suppliers have participated in the Scheme, supplying sodium-reduced lunch options to more than 450 local primary schools. These lunch suppliers have committed to offering more than 1 000 sodium-reduced lunch options for schools to choose from, with an average sodium reduction of about 8%.



(Press Conference on the ‘Salt Reduction Scheme for School Lunches’)

Apart from reviewing the recipes of sodium-reduced lunches to assess the sodium level, the DH in collaboration with the Centre for Food Safety of the Food and Environmental Hygiene Department, are now conducting a study to examine the energy and nutrient content of lunch samples including sodium. The results will help to review the measures taken to achieve the sodium reduction target. For more information on the Scheme, please visit the thematic website of the “EatSmart@school.hk” Campaign at <https://school.eatsmart.gov.hk/en/template/index.asp?pid=2009&id=3566>.

[#] Chinese Dietary Reference intake – 2013, Proposed Intakes for Preventing Non-Communicable Chronic Diseases, PI-NCD

"Salt/Sugar" Label Scheme for Prepackaged Food Products

The Committee on Reduction of Salt and Sugar in Food, the Food and Health Bureau and the Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department (FEHD) have jointly introduced a voluntary "Salt / Sugar" Label Scheme for Prepackaged Food Products (the Scheme) to help consumers identify low-salt-low-sugar products more easily and make informed choices. It is also wished that the Scheme will serve as a catalyst for the trade to provide more varieties of low-salt-low-sugar products for consumers.



Any prepackaged food falling within the definition of "low salt", "no salt", "low sugar" and "no sugar" under the Food and Drugs (Composition and Labelling) Regulations (Cap. 132 W) may display the labels. Members of the public are encouraged to "Read Labels, Choose Smartly" by making reference to the labels.

Nutrient	Description of claim	Conditions
Sodium (Salt)	Low	Food, solid or liquid, containing not more than 0.12 g of sodium per 100 g/mL of food.
	No	Food, solid or liquid, containing not more than 0.005 g of sodium per 100 g/mL of food.
Sugars	Low	Solid food containing not more than 5 g of sugars per 100 g of food; or liquid food containing not more than 5 g of sugars per 100 mL of food.
	No	Solid food containing not more than 0.5 g of sugars per 100 g of food; or liquid food containing not more than 0.5 g of sugars per 100 mL of food.

For more information about the Scheme, please visit the dedicated webpage of the FEHD's CFS website at http://www.cfs.gov.hk/english/programme/programme_rdss/programme_Salt_Sugar_Label_Scheme.html.

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

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