

Fact Sheet and Call to Action on Dietary Sodium

Canada 2019

High Dietary Sodium is a Health Risk

- Unhealthy diet was the second leading risk for death in Canada, estimated to cause almost 50,000 deaths in 2017 (1).
- High dietary sodium was the leading dietary risk contributing to the disease burden in Canada, estimated to cause over 12,000 deaths and over 150,000 years of disability in 2017 (1).
- Over thirty percent of hypertension is accounted for by high dietary sodium in Canada (2).
- Hypertension is the leading risk factor for death globally and affects more than one in five Canadians (1, 3).
- An estimated 2 million Canadians have hypertension caused by excess dietary sodium (2, 3) and roughly 90 per cent of Canadians are expected to develop hypertension over their life span (4).
- High dietary sodium is also likely to be a major contributor to the development of stomach cancer and has been associated with many other important diseases (5, 6).
- Very little sodium is found in fresh foods and most of our dietary sodium ($\frac{3}{4}$ ^{ths}) is added in food processing, with in most cases, small amounts added in cooking and at the table (7).
- It is desirable that the usual or safe dose of any ingested substance is vastly different than the lethal dose, requiring near-absurd quantities to cause death. Acute illness and death have occurred from rapidly consuming as little as 4 tablespoons of salt (25 g sodium) in adults and as little as 5 teaspoons (10 g sodium) in children (8). The amounts of sodium that can cause rapid death are less than 10 times higher than the average person eats in a day, and are typically found in Canadian kitchens in 1 kg boxes.
- Globally, dietary risks are the leading risk for death (attributed to over 10 million deaths in 2017) with high sodium intake being the leading dietary risk, being attributed to over 3 million deaths in 2017 (1).



Canadians Are Consuming Too Much Sodium

- Currently, expert scientific committees recommend consuming no more than 2,300 mg of sodium per day (9). At close to 3,500 mg per day, the average sodium consumption by Canadians far exceeds this limit (10, 11).
- More than 90 per cent of Canadian children aged four to eight years are exceeding dietary sodium guidelines, putting them at increased risk for hypertension as they age (11).
- Health Canada set voluntary targets to reduce the sodium content of processed foods, however, at the end of 2016 (5 years later), there was little improvement with only 14% of foods meeting the targets. Almost half of food categories not only did not meet the targets, but had either no reduction in sodium or even an increase in sodium content (12).
- Health Canada also reported a small reduction in dietary sodium of 240 mg/day from processed food sources between 2010 and 2017 (13). The average sodium intake from the food recall survey was 2760 mg/day. Food recall underestimates dietary sodium often by about 25% so the average Canadian intake is likely close to 3500 mg/day.
- About 75 per cent of the sodium consumed by Canadians comes from processed, packaged and restaurant foods (9).
- Increased consumption of a variety of fresh, unsalted canned or freshly frozen fruits, vegetables, nuts, seeds, whole grains, legumes and low fat dairy products with limited amounts of unprocessed fish, poultry and red meats are the key components of a healthy diet. Such a diet is consistent with Canada's Food Guide, the DASH (Dietary Approaches to Stop Hypertension) and Mediterranean diets. Avoidance of highly processed and restaurant foods are key strategies to reduce dietary salt and improve Canadian diets.

Sodium Reduction is a Cost-Effective Strategy to Reduce Hypertension

- Reducing Canadians' average sodium intake by 1,840 mg per day would lead to an estimated 30 per cent reduction in hypertension prevalence and save \$1.38 billion annually (9).
- Canada's most vulnerable populations (such as Aboriginal peoples, new Canadians, low-income Canadians, and black Canadians) have higher burdens of hypertension and are expected to benefit the most from reducing salt in processed foods.



- Regulatory approaches to reduce sodium in foods are more cost-effective than public education, voluntary, industry-led reduction initiatives, or clinical approaches to hypertension control (14).
- Population wide interventions to reduce sodium intake are considered a 'best buy' by the World Health Organization to prevent non-communicable disease (15).

Sodium reduction is strongly supported by national and international health and consumer groups

Uniformly reducing dietary sodium to 2,400 mg per day or less is internationally recommended with many leading health and scientific groups around the world calling for action to reduce dietary sodium (16-18) (Table 1). Recent dietary recommendations of governmental organizations continue to recommend reductions in dietary salt:

- The Canadian Government set an interim target to reduce dietary sodium to 2300 mg/day to be achieved by 2016 (9). Ultimately the target is to ensure nearly all Canadians consume less than 2300 mg sodium day with adequate intake of sodium being 1500 mg/day for a middle-aged adult with lower levels recommended for most other age groups (9, 19).
- The updated 2017 Australian and New Zealand Nutrient Reference Values indicate an adequate sodium intake for adults (and those aged 14-18) is 460-920 mg/ day with a suggested target intake of 2000 mg sodium /day (20).
- The World Health Assembly has set a target to reduce dietary sodium by 30 per cent by the year 2025.

In 2013, 60 health and citizen groups signed a joint statement of support for a Sodium Reduction Strategy for Canada Act (21). Joint statement of Canadian Health and Citizens' Groups in support of Bill C -460, Sodium Reduction Strategy for Canada Act. April 2013. (Retrieved from: <http://healthscienceandlaw.ca/wp-content/uploads/2018/01/salty-to-a-fault.2013-Update.pdf>)

There is strong public support for sodium reduction strategies: 76 per cent of Canadians support mandatory warning labels on high-sodium products and 68 per cent believe that regulations about allowable levels of sodium in foods are very or extremely important (22).

Studies and reviews challenging the evidence in support of population sodium reduction have been criticized as being methodologically flawed; focused on limited evidence (i.e. cohort studies) and/or outcomes (i.e. cardiovascular); and fraught with potential financial conflicts of interest (23-25).

Dietary sodium reduction opportunities for Canada

Federal, Provincial and Territorial Governments

- Implement the key policy recommendations of the Sodium Working Group, which include:
 - Educating Canadians about the health risks from high dietary sodium and how to reduce intake;
 - Restricting marketing of foods and beverages high in sodium to children;
 - Cautionary front of package labels to help consumers better identify high sodium foods and beverages; and
 - Adopt healthy food and beverage procurement policies in all settings where food products are served and sold.
- Fund research on optimum means of reducing the sodium content of foods and beverages and encourage industry to adopt those practices.
- Monitor and publicly report industry compliance at the individual product level with the sodium

levels set out in the 2012 Guidance Report for the Food Industry on Reducing Sodium in Processed Foods (26).

- Update the 2012 Guidance Report to include targets and timelines for restaurant foods as recommended by the Sodium Working Group.
- Require restaurants to disclose and display sodium and calorie levels of their food products on over-head and table menus.
- Tax unhealthy foods such as those high in sodium and use the revenue to subsidize healthy food.
- Move from voluntary benchmarks over a fixed time period to mandatory policy for industry to reduce sodium content. Ensure that the mandatory targets are reassessed and revised periodically to optimize Canadians intake of sodium.
- Improve cross-provincial consistency of school-food nutrition criteria to ensure children are not eating excessive sodium in school foods.

Health and Scientific Organizations

- Fund and prioritize population-based sodium reduction interventions.
- Work with the federal government to monitor industry compliance with the Food Industries progress in Reducing Sodium in Processed and restaurant Foods (26).
- Work with the federal, provincial and territorial governments to educate Canadians about sodium reduction.

Industry

- Formulate all foods and beverages so that they meet Health Canada's sodium targets (26).

Priority Actions

Define

Healthy and unhealthy foods (e.g. those high in sodium) for public policies, using the best scientific evidence, to aid Canadians improve their diets

Educate

Canadians about the health risks from high dietary sodium and how to reduce sodium intake

Inform

Canadians by including sodium and caloric information in the nutrition information listed on chain restaurant menus

Alert

Canadians to restaurant and processed foods that contain more than maximum recommended levels of sodium per serving by requiring warning labels

Tax

Unhealthy foods (e.g. those high in sodium) and use the revenue to subsidize healthy whole real foods.

Procure

Healthy food for use in public buildings and when using public funds

Prioritize

Research on the health effects of diet and dietary constituents, healthy food policies and how to implement them

Reduce

The impact of commercial influence on healthy public policies

Disclose

Product-specific sodium level information on all processed and chain restaurant food products semi-annually.

Mandate commercial entities to publicly disclose financial transactions with health care professionals and scientists and non-governmental organizations

Monitor

Canadian diets for major health risks on a regular basis

Table 1

Report	Recommendations & Conclusions
Institute of Medicine Dietary Reference Intake for sodium (2004, reiterated 2014)	Less than 2,300 mg sodium/day in adults with adequate intake 1500 mg/day for middle-aged adults.
Sodium Reduction Strategy for Canada: recommendations of the Sodium Working Group (2010)	Average intake of 2,300 mg sodium/day by 2016 with an ultimate goal of (95% of) Canadians consuming less than 2,300mg sodium/day.
Provincial and territorial progress report on reducing sodium intake of Canadians (2012)	Average intake of 2,300 mg sodium/day by 2016.
2015 Dietary Guidelines Advisory Committee (USA)	Reduce intake to less than 2400 mg/day in adults. Reducing to 1500 mg/day will further reduce blood pressure.
WHO Guidelines: Sodium intake for adults and children (2012)	Adults should consume less than 2,000 mg of sodium/day, or 5 grams of salt, with lower levels of intake in children.
WHO NCD Global Monitoring Framework (2012)	30% relative reduction in mean salt intake by 2025. Endorsed by United Nations as global target.
American Heart Association Sodium Reduction Recommendations (updated 2012)	Adults to limit daily sodium intake to no more than 2,300 mg/day and ideally to 1,500 mg sodium/day. Sodium reductions by at least 1000 mg/day are recommended even if the desired daily sodium intake is not yet achieved.
2017 Australian and New Zealand Nutrient Reference intakes	Adults adequate intake is 460-920 mg/ day with a suggested target intake of 2000 mg sodium /day.
Hypertension Canada Guidelines	Individuals to reduce sodium intake towards 2,000 mg (5g of salt) / per day to prevent and control hypertension.

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