Commentary

Dietary sodium reduction in Canada: more action is needed to reach the 2025 global targets

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Excess dietary sodium is a leading dietary risk factor for death and disability worldwide, owing to its adverse impacts on cardiovascular health.[1] The World Health Organization prioritized dietary sodium reduction as a "best buy" population health intervention, and included a "30% reduction in population sodium intakes by 2025" as 1 of 9 global targets for noncommunicable disease prevention.[2] This goal is supported by a recent meta-analysis showing a linear association between high sodium intake and cardiovascular disease and death, with a 26% reduction in risk of cardiovascular disease and a 16% reduction in risk of death at the population level when mean sodium intake decreased from 3646 mg/d to 2690 mg/d.[3,4]

In 2010, a Sodium Reduction Strategy was adopted by Canada's federal government and was strongly endorsed provincially. The importance of sodium reduction was re-emphasized in 2019 with Canada's revised Food Guide (https://food-guide.canada.ca). Although Canada has seen some success in sodium reduction, most people in Canada consume more sodium than recommended, with 97% of men and 81% of women exceeding the Adequate Intake level (1500 mg/d), and 74% of men and 49% of women exceeding the Chronic Disease Risk Reduction level (< 2300 mg/d).[5] In 2017, high dietary sodium was associated with more than 150 000 disability-adjusted life years in Canada.[2] Here, we discuss the action that is needed to support people in Canada to reduce their sodium intake and ensure that Canada meets the 2025 global target for dietary sodium.

Strong policy interventions to create a supportive food environment are essential to achieve sodium reduction. In Canada, people obtain most of their dietary sodium from packaged and restaurant foods (e.g., bakery products, processed meats, soups, condiments); salt added during cooking or at the table accounts for only 11% of sodium intake.[6] Reducing sodium in packaged foods is currently left to the discretion of food manufacturers, guided by Health Canada's targets for sodium reduction. However, since 2010, the change in the sodium content of packaged foods in Canada has been minimal.[7] In 2020, Health Canada made only minor revisions to their sodium targets, with no new policy measures to encourage industry compliance. Regulating maximum sodium levels in key food categories would likely yield population-level benefits.[8] Sodium targets for restaurant foods would further support sodium reduction. Government-mandated, healthy food procurement policies for all public settings (e.g., hospitals, schools) could ensure public funds are spent on lower sodium foods and, in turn, drive reformulation efforts by the food industry. Increased use of low sodium salt (in which sodium is partly replaced by potassium) is safe, reduces the risk of cardiovascular disease and death, and should be encouraged except for people susceptible to hyperkalemia.[9]

Food labelling and marketing policies are critical to support consumers to make healthy choices. Front-of-pack warning labels for high-sodium foods, known to promote food reformulation and healthier consumer food choices, have been proposed but have not been approved in Canada.[10] Legislation to prohibit the marketing of unhealthy food (including high-sodium foods) to children was blocked at the Senate in 2019 but should be retabled. Policies regarding labelling, placement and communication of nutritional information in the digital food environment (e.g., online food retailers, food delivery apps) are important in a postpandemic society that has rapidly gravitated to these spaces.

Dietary sodium reduction is recommended in the management of patients with hypertension, heart failure and chronic kidney disease, as well as for disease prevention. Most physicians believe a low-sodium diet is important; however, delivery of this advice may

Key points

- The World Health Organization prioritized dietary sodium reduction and declared a "30% reduction in population sodium intakes by 2025" as 1 of 9 global targets for noncommunicable disease prevention.
- Although Canada has seen some success in sodium reduction, most people in Canada still consume more sodium than recommended.
- Policy-makers should promote food reformulation and improve nutrition labelling and marketing.
- Health care providers should routinely screen patients and advise them on dietary sodium as necessary to manage and prevent disease.
- Public education and use of sodium self-screening tools could help people take personal action in limiting their sodium intake.

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be challenged by time constraints, lack of knowledge and doubts that patients will adhere.[11] Health care providers should routinely question patients regarding consumption of foods known to be high in sodium and advise on sodium reduction. Although routine assessment of sodium intake with 24-hour urine collections is impractical, new tools can support screening and guide dietary discussions. For example, the Canada-based Sodium Calculator (www.projectbiglife.ca/sodium/home) can estimate the amount and sources of sodium a patient consumes. In a recent online survey of primary care physicians, 25% indicated that they believed there to be scientific controversy around dietary sodium, despite the high level of expert consensus.[4,11,12] Improving training on nutrition in medical education curricula could provide physicians with a deeper understanding of nutritional concepts. Publications such as the Science of Salt systematic reviews provide up-to-date summaries on the latest sodium research.[13] In primary care, improved funding for registered dietitians would give patients easy access to high-quality nutritional guidance. Finally, since 2011, major Canadian health organizations have advocated for the implementation of healthy food policies, including policies related to sodium (https://hypertension.ca/advocacy/). More advocacy from health professionals is needed.

To encourage change in dietary behaviour among people in Canada, social marketing interventions may be more effective than traditional mass media campaigns that focus on information sharing. In addition, warning labels on the front of food packages could effectively support consumers in making informed choices. Many opt not to read the Nutrition Facts table; and if they do, they often have difficulty understanding its components, including the percent daily value (% DV).[14] Another major challenge is that, although consumers often know that the national sodium intake is high, they may believe their personal sodium intake is not high, perhaps because common dietary sources of sodium are not perceived as salty foods.[15] Public use of sodium self-screening tools (e.g., the Sodium Calculator) could increase personal awareness about sodium and stimulate public concern and support for sodium reduction in Canada, placing pressure on governments and the food industry to act.

Canada is lagging on global targets for sodium intake. Several mechanisms, including greater action and advocacy by policymakers, health care professionals and consumers can help reduce sodium intake and meaningfully reduce the burden of cardiovascular disease in Canada.

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