



Reducing the Sodium Intake of Canadians:

A Provincial and Territorial Report on Progress
and Recommendations for Future Action

June 2012





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Government of Québec

Although Québec contributed to this report on sodium reduction by supplying information about its own initiatives, and shares the general goals of the report, Québec does not subscribe to a Canada wide strategy in this area and intends to remain solely responsible for developing and implementing healthy living policies, programs, guidelines and initiatives within its territory. Québec will continue sharing information and best practices with other governments in Canada.

Executive Summary

Health promotion and chronic disease prevention are fundamental to improving the health and wellness of Canadian families and communities. Canada's provincial and territorial Ministers of Health and Healthy Living are committed to supporting all Canadians to achieve better health and to reducing the burden of cost on health care systems by making health promotion and the prevention of disease, disability and injury a priority.

Today, most occurrences of disease and disability are the result of chronic conditions that can be prevented or delayed by addressing the factors in our environment that influence our ability to make healthy choices, such as eating healthier foods or being more physically active.

High sodium diets are contributing significantly to the incidence of hypertension and associated conditions of heart disease, stroke and kidney disease in Canada and around the world. Evidence shows that reducing population sodium intake will result in improved health and help ensure the sustainability of our health care systems.

Canadians consume, on average, 3400 mg of sodium per day; more than twice the recommended adequate intake for adults (1500 mg per day) and far in excess of the tolerable upper intake of 2300 mg/day. Reducing average sodium to the recommended level would decrease the incidence of hypertension by 30 per cent, prevent 23,500 cardiovascular disease events each year in Canada, and generate direct health care savings of \$1.38 billion annually.

Canada's Premiers have endorsed sodium reduction as an important healthy living measure, and the federal, provincial and territorial Ministers of Health and Healthy Living, except Québec, have committed to achieving an interim population average intake goal of 2300 mg per day by 2016.

Provinces and territories are implementing measures alone, together, and in collaboration with partners and stakeholders to lower sodium consumption across the country, based on the approach recommended by the federally commissioned multi-stakeholder Sodium Working Group. This approach includes action in four areas: lowering sodium in the food supply; awareness and education; research; and monitoring and evaluation.

Future actions that provinces and territories and multi-sectoral partners could take through 2012 and beyond have also been identified in each of the four areas.

Future Actions for the Food Supply

- Having made the development of more consistent guidelines and policies for the procurement of foods in publicly funded places a priority, provinces and territories will develop a set of best-fit nutrition criteria by March 2013.
- Provinces and territories will continue to collaborate with the restaurant and foodservices sector and other partners to reduce

sodium in foods and beverages served in these establishments, and explore BC's Informed Dining Program as a model for the development of a framework for providing nutrition information by March 2013.

- Provinces and territories will continue to explore incentive programs where possible to help industry lower sodium in the food supply, and propose hosting a multi-sectoral meeting in Fall 2012 to foster greater commitment and facilitate an exchange of ideas for improving sodium levels in the food supply.
- The food industry is asked to join governments in publicly committing to the 2016 sodium reduction goal.

Future Actions for Awareness and Education

- Provinces and territories will continue to collaborate with partners to develop tools and resources that can be shared among governments, health organizations, educators and industry, focusing in 2012/13 on resources for health and food/culinary education.
- Health and education organizations, the food industry and other sectors will be encouraged to use the sodium reduction messages in their healthy living and nutrition information and activities to increase public awareness of the importance of reducing sodium in the diet. Provinces and territories will continue to incorporate the messages in government materials to the extent possible, and to monitor their effectiveness.
- Supported by the release of best-fit nutrition criteria in March 2013, provinces and territories will encourage broader implementation of existing policies, guidelines and tools to decrease the marketing of foods and beverages high in fat, sugar or sodium in various media in public settings including schools, daycares, recreation centres and hospitals.¹

Future Actions for Research

- Provinces and territories will continue to support sodium reduction research where possible with enhanced research capacity, knowledge exchange and dissemination of information related to sodium reduction.
- Provinces and territories will encourage provincial health research organizations, health non-governmental organizations, and the food industry to increase investments in sodium reduction research, and provide an opportunity for discussion on research collaboration at a proposed multi-sectoral meeting in Fall 2012.

¹ This does not apply in Québec where marketing to children is not permitted under the provincial *Consumer Protection Act*.

Future Actions to Support Monitoring

- Provinces and territories will continue to share the results of provincially funded monitoring and evaluation activities to facilitate the uptake of best practices in sodium reduction and, by Fall 2012, put in place an expert-based committee to oversee the development of consistent standards and practices in evaluation.
- Provinces and territories will provide a forum to discuss monitoring and evaluation at a proposed multi-sectoral meeting in Fall 2012 and will identify options for monitoring sodium reduction in the food supply by Spring 2013.
- All partners are asked to explore how existing and new data can support the development of measures for monitoring progress on sodium reduction.

The federal government also has a role to play in supporting the health of Canadians, and the provinces and territories have identified opportunities where federal engagement could support and complement the work to reduce sodium intakes.

Opportunities for Future Actions for the Food Supply

- The five elements of the structured voluntary approach recommended by the Sodium Working Group provide a framework to guide federal, provincial and territorial governments, industry and other stakeholder in their efforts to reduce sodium in the food supply. Provinces and territories ask the federal government to work with them, industry and other partners to implement the elements of such a framework.
- Consumers could be better supported in choosing lower sodium products and consuming less sodium with improvements in product labelling such as updating the % Daily Value and serving size requirements, and exploring a front-of-pack labelling system that includes sodium. The federal government should consult with provinces and territories as well as industry on improvements to nutrition labelling.
- A consistent approach to providing nutrition information in restaurants and foodservices across the country, which makes use of existing experience such as BC's Informed Dining Program, will contribute to achieving the 2016 sodium reduction goal. The federal government could work with provinces and territories to achieve a solution by March 2013.

Opportunities for Future Actions for Awareness and Education

- Voluntary marketing practices in Canada would provide a more supportive environment for children if common standards were developed and adopted by all companies that market to children. The federal government could work with provinces and territories to expedite the development of clearly defined evidence-based

nutrition criteria (and other standards) that would determine what food and beverages could be marketed to children.

- Children and families would be better supported to make healthier choices if the *Broadcast Code for Advertising to Children* were to include common standards for nutrition and other criteria for marketing to children as part of the condition for licensing by the CRTC.

Opportunities for Future Actions for Research

- The agenda of research priorities for sodium reduction provides the blueprint for ongoing strategic coordinated investments. Other research questions may emerge, such as studying the impact of providing nutrition information, including sodium information, in restaurants and other foodservice establishments. CIHR and other research funders are asked to continue to invest in these research priorities to build capacity and fill the knowledge gaps needed to achieve the 2016 goal.

Opportunities for Future Actions to Support Monitoring

- Objective monitoring by someone other than the food industry is necessary for evaluating industry progress in lowering sodium in food products, and would both create a level playing field and provide appropriate recognition for companies who are meeting commitments. The federal government is asked to work with provinces and territories, industry and other stakeholders on a plan for independent monitoring of the food supply.
- Opportunities to enhance existing tools should be explored, such as adding the capability to provide a nutrition report on the territorial and Aboriginal populations, incorporating a sample of 24-hour urinary sodium excretion analysis representative of the Canadian population, and working with provinces and territories to develop rapid assessment tools.

By releasing this report, provincial and territorial Ministers of Health and Healthy Living hope to draw greater awareness of the need to reduce sodium consumption in Canada, highlight activities underway, and encourage all partners, including the federal government, non-governmental organizations, food manufacturers, restaurant and food service establishments, communities, schools, recreation centres, daycare centres, the media, the Canadian public and the many other stakeholders who can and are contributing to this important work, to continue to take an active role in achieving the 2016 sodium reduction goal.

Government of Québec

Although Québec contributed to this report on sodium reduction by supplying information about its own initiatives, and shares the general goals of the report, Québec does not subscribe to a Canada wide strategy in this area and intends to remain solely responsible for developing and implementing healthy living policies, programs, guidelines and initiatives within its territory. Québec will continue sharing information and best practices with other governments in Canada.

Preamble

Canada's provincial and territorial Ministers of Health and Healthy Living are committed to supporting all Canadians to achieve better health and to reducing the burden of cost on health care systems by making health promotion and the prevention of disease, disability and injury a priority.

In September 2010, this commitment was made public with federal, provincial and territorial Health and Healthy Living Ministers', except Québec, endorsement of the *Declaration on Prevention and Promotion*, and galvanized by their decision to take action on two complementary priorities: promoting healthy weights in children and lowering the sodium intake of Canadians.

Today, most occurrences of disease and disability are the result of chronic conditions that can be prevented or delayed by addressing the factors in our environment that influence our ability to make healthy choices, such as eating healthier foods or being more physically active.

Excess dietary sodium is linked to a variety of chronic conditions, and dietary sodium reduction is a critical and cost-effective measure for helping Canadians live healthier lives.

Provinces and territories are working within their own jurisdictions and together to reduce sodium in the Canadian diet, and are sharing best practices and resources and collaborating on initiatives to create a consistent, coordinated approach across the country.

Many of the initiatives underway have been developed in response to recommendations in *Sodium Reduction Strategy for Canada: Recommendations of the Sodium Working Group* (July 2010).

This report is intended to raise awareness of the need to reduce sodium consumption in Canada and how that might be achieved, highlight activities underway, and encourage key partners, including the federal government, non-governmental organizations, manufacturers, restaurant and food service establishments, communities, schools, recreation centres, daycare centres, the media, the Canadian public and the many other stakeholders who can and are contributing to the important work of reducing dietary sodium, and helping Canadians to live healthier lives while reducing costs to our health systems.

Introduction

Health promotion and chronic disease prevention are fundamental to improving the health and wellness of Canadian families and communities, and to reducing the demand on health services and ensuring the sustainability of Canada's health system. Evidence shows that strategies to reduce dietary sodium are highly cost-effective compared to other interventions, and lead to better health outcomes for citizens.^{2,3,4,5} In 2010, the federally commissioned multi-stakeholder Sodium Working Group (the Sodium Working Group, or SWG) released its report and 33 recommendations for reducing sodium intake in Canada.⁶

Since then, Premiers have endorsed sodium reduction as an important healthy living measure. Provincial and territorial Ministers of Health and Healthy Living, except Québec, have considered the Sodium Working Group's recommendations and are implementing measures internally and across jurisdictions to lower the sodium intake of Canadians.

Why is Too Much Sodium a Problem?

A certain amount of sodium is needed to help balance fluids and electrolytes in our bodies, but most of us consume two to three times the recommended daily amount. The evidence linking high dietary sodium to increased blood pressure is strong⁷; excess sodium is associated with 30 per cent of all high blood pressure cases in Canada today⁸. High blood pressure is a major risk factor for heart attacks, strokes and kidney disease, and costs to the Canadian health system and the economy are significant.

Almost 40 per cent of Canadian adults have high blood pressure or are pre-hypertensive. According to the World Health Organization (WHO), hypertension is the leading preventable risk factor for death worldwide, and responsible for 13 per cent of deaths globally.⁹

Sodium in the Body

As excess sodium accumulates in the blood it attracts and holds water, increasing blood volume. Increased blood volume requires the heart to work harder to move more blood through the blood vessels, which increases blood pressure and, if prolonged, causes damage to the arteries over time. This situation contributes to hypertension and increased risk of stroke, heart disease, dementia, and kidney failure.

Hypertension in Canada

Hypertension has been rising steadily over the past decade. In 2007/08 about 6 million Canadians had been diagnosed with high blood pressure. That number is expected to increase to 7.4 million by 2013, accounting for more than one quarter of the Canadian adult population.

Report from the Canadian Chronic Disease Surveillance System: Hypertension in Canada, 2010. Public Health Agency of Canada. <http://www.phac-aspc.gc.ca/cd-mc/cvd-mcv/ccdss-snsmc-2010/index-eng.php>

- 2 WHO Forum on Reducing Salt Intake in Populations (2006 : Paris, France) Reducing salt intake in populations : report of a WHO forum and technical meeting, 5-7 October 2006, Paris, France. http://www.who.int/dietphysicalactivity/Salt_Report_VC_april07.pdf
- 3 Smith-Spangler CM (MD), Jussola JL, Enns, EA, Owens DK, Garber AM (MD, PhD). Population Strategies to Decrease Sodium Intake and the Burden of Cardiovascular Disease – A Cost-Effectiveness Analysis. *Annals of Internal Medicine* (2010). <http://www.annals.org/content/early/2010/02/25/0003-4819-152-8-201004200-00212.full>.
- 4 Bobbins-Domingo K, Chertow GM, Coxson PG, Moran A, Lightwood JM, Plecher MJ, et al. Projected effect of dietary salt reductions on future cardiovascular disease. *N Engl J Med* (2010) 362:590-99..
- 5 Joffres MR, Campbell NRC, Manns B, Tu K. Estimate of the benefits of a population-based reduction in dietary sodium additives on hypertension and its related health care costs in Canada. *Can J Cardiol*. (2007) 23:437–43.
- 6 Sodium Reduction Strategy for Canada – *Recommendations of the Sodium Working Group July 2010*. <http://www.hc-sc.gc.ca/fn-an/nutrition/sodium/related-info-connexes/strategy/reduct-strat-eng.php>
- 7 Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases (2002 : Geneva, Switzerland) Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation, Geneva, 28 January -- 1 February 2002. WHO technical report series ; 916.
- 8 Joffres, Estimate of the benefits of a population-based reduction in dietary sodium additives on hypertension and its related health care costs in Canada.
- 9 Global health risks: mortality and burden of disease attributable to selected major risks. World Health Organization (2009). http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf.

Sodium and Salt

Na (from the Latin word natrium) is the chemical symbol for sodium. Na makes up 40% of the compound sodium chloride (NaCl), commonly known as salt.

Recommended Daily Sodium Intake for Most Canadians

Scientists in Canada and the United States work together to define nutrient needs for healthy people, which are published by the Institute of Medicine.

Based on available scientific evidence, the Adequate Intake for sodium is set at 1500 mg per day for people aged 9 to 50 years (and lower for those younger and older).

The Tolerable Upper Intake Level for sodium, the highest level likely to pose no risk of adverse health effects for most people, is 2300 mg per day (and lower for children under 14).

Dietary Reference Intakes: The Essential Guide to Nutrient Requirements. Institute of Medicine of the National Academies. The National Academies Press. 2006. <http://www.iom.edu/Reports/2006/Dietary-Reference-Intakes-Essential-Guide-Nutrient-Requirements.aspx>

Sodium Reduction Around the World

Thirty-two countries have implemented sodium reduction strategies that focus on lowering sodium in the food supply and consumer awareness. Ten include front-of-pack labelling schemes.

Any reduction in population sodium intake has been shown to be beneficial: The UK estimates its 10 per cent reduction is saving the health system about \$1.5 billion and an estimated 6,000 lives annually. Finland has seen a 60 per cent drop in stroke and coronary heart disease mortality since implementing its own sodium reduction plan; however, evidence shows the voluntary approach is slow, and achieving Canada's goal of a one-third reduction in sodium intakes by 2016 will take concerted effort.

Webster, Jacqueline L, Elizabeth K. Dunford, Corinna Hawkes and Bruce C. Neal. Salt reduction initiatives around the world. *Journal of Hypertension* (2011), 29:1043-1050.
Agency publishes 2012 salt reduction targets. Food Standards Agency, May 18, 2009. <http://tna.europarchive.org/20111116080332/http://www.food.gov.uk/news/pressreleases/2009/may/salttargets>

The prevalence of this largely avoidable condition puts a significant burden of cost on health systems when physician visits, lab tests, blood pressure medications, and hospital treatments for those who experience heart disease, stroke or kidney disease are included.

Canadians consume, on average, 3400 mg of sodium per day; more than twice the recommended intake for adults (1500 mg per day) and far in excess of the upper tolerable limit of 2300 mg per day.¹⁰ As cited in the Sodium Working Group report, reducing average sodium intake by about 1800 mg per day would decrease the incidence of hypertension by 30 per cent, prevent 23,500 cardiovascular disease events each year in Canada, and generate direct health care savings of \$1.38 billion annually. If the indirect costs are included, that rises to \$2.99 billion per year.

Educating people on the dangers of a high sodium diet and advising them to eat less is an important step, but it is only the beginning: nearly 80 per cent of dietary sodium is found in processed foods and foods served in restaurants and cafeterias. Moreover, international producers and fast food chains add more sodium to their Canadian products than they add to the same products marketed in other jurisdictions. A 2009 survey by the World Action on Salt and Health (WASH) found that Canadian products had the highest sodium content by portion in five of 15 food categories surveyed internationally¹¹. If we want to reduce sodium consumption in Canada, the focus must also be on lowering the amount of sodium added in the food manufacturing and food service industries.

High sodium intake is a worldwide problem and both the United Nations and World Health Organization have called for nations to adopt population-wide sodium reduction strategies^{12,13}. A number of jurisdictions have comprehensive initiatives, including Finland, Japan, the European Union, the United Kingdom and the United States. Canada's governments, including the federal government, have similarly recognized the importance of population sodium reduction in helping Canadians live healthier lives and reducing health care costs. In 2007, the federal government established a multi-stakeholder Sodium Working Group and charged it with examining the evidence and developing a population health strategy for reducing sodium intake among Canadians.

A Population Health Approach to Sodium Reduction in Canada

The Sodium Working Group delivered its report, *Sodium Reduction Strategy for Canada – Recommendations of the Sodium Working Group*¹⁴, to the Federal

10 Dietary Reference Intakes: The Essential Guide to Nutrient Requirements. Institute of Medicine of the National Academies. The National Academies Press. (2006). <http://www.iom.edu/Reports/2006/Dietary-Reference-Intakes-Essential-Guide-Nutrient-Requirements.aspx>

11 International Products Survey. World Action on Salt & Health (WASH) (2009). <http://www.worldactiononsalt.com/less/surveys/2009/international/index.html>

12 WHO Technical Report Series. Diet, Nutrition and the Prevention of Chronic Diseases. WHO Technical Report Series. World Health. http://whqlibdoc.who.int/trs/who_trs_916.pdf.

13 Prevention and control of non-communicable diseases – Report of the Secretary General. United Nations General Assembly. (2011). http://www.un.org/ga/search/view_doc.asp?symbol=A/66/83&Lang=E

14 Sodium Reduction Strategy for Canada – Recommendations of the Sodium Working Group. July 2010. http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/nutrition/sodium/strategy/reduct-strat-eng.pdf

Health Minister in July 2010. The report outlined 33 recommendations for reducing sodium in the food supply, education and awareness, research, and monitoring and evaluation. The SWG recommended an interim goal of reducing population average sodium intake to 2300 mg per day by 2016, with the ultimate goal of lowering intakes to a population mean whereby as many individuals as possible (i.e., greater than 95 per cent) have a daily intake below 2300 mg per day.

In September 2010, federal, provincial and territorial Ministers of Health and Healthy Living, except Québec, adopted the interim goal and asked officials to come up with a workplan of actions, including a plan for monitoring progress, within one year. Federal, provincial and territorial public health officials worked together and in collaboration with health, education, research and food sector partners and stakeholders to develop a plan of actions based on the four-pillared approach recommended by the Sodium Working Group.

A report on the workplan was provided to federal, provincial and territorial Ministers of Health and Healthy Living, except Québec, in November 2011, however, while Ministers reiterated their commitment to sodium reduction, consensus was not reached between the federal and provincial/territorial governments on the best approach to achieving the 2016 population average intake goal, and the report's release was not supported at the federal level.

To build on the commitment and momentum of work underway, provincial and territorial Ministers resolved to focus on provincial/territorial initiatives to reduce the sodium intake of Canadians. By profiling the actions underway within and across jurisdictions and identifying opportunities for further action, Ministers hope to draw greater awareness to the issue and better engage the federal government, the food and food services industries, and other stakeholders in this important work.

While progress is being made in many areas, more needs to be done to have a real impact, and all orders of government and all sectors of society will need to take an active role in the work to reduce sodium consumption to achieve the 2016 goal.

This report highlights progress to date and outlines future actions for provincial and territorial governments, in collaboration with partners, through 2012 and beyond. Recognizing the federal government also has a role to play in supporting the health of Canadians, the report identifies opportunities for federal engagement to complement the work of the provinces and territories.

Provincial and territorial Ministers of Health and Healthy Living recognize the efforts of those who have been and continue to be involved in this important work, including the federal government, the Sodium Working Group, industry, non-governmental organizations, researchers, and the many participants from various other sectors in Canada.

Canada's Sodium Reduction Goal

In September 2010, Canada's Ministers of Health and Healthy Living agreed to an interim goal of a population average sodium intake of 2300 mg of sodium per day by 2016, and to encourage Canadians to reduce their consumption to close to 1500 mg per day, the recommended daily intake for Canadians aged 9 to 50 years of age (less for those younger and older).

The Four Pillars of the Population Health Approach to Sodium Reduction

- Reducing Sodium in the Food Supply
- Awareness and Education
- Research
- Monitoring and Evaluation

Responsibility for Public Health

Responsibility for public health is shared by the provincial / territorial and federal governments in Canada, and both levels of government have authority to legislate and regulate to protect the health of the public, including acting to impact sodium consumption, depending on the nature and scope of the concern.

Main Sources of Dietary Sodium

Sodium chloride (salt) accounts for about 90 per cent of total sodium intake in the United States. Most of the sodium chloride found in the typical diet is added to food during processing.

Dietary Reference Intakes: The Essential Guide to Nutrient Requirements. Institute of Medicine of the National Academies. The National Academies Press. (2006). <http://www.iom.edu/Reports/2006/Dietary-Reference-Intakes-Essential-Guide-Nutrient-Requirements.aspx>

I. Provincial and Territorial Actions to Reduce the Sodium Intake of Canadians

Provinces and territories have initiated an array of policies and programs to reduce the amount of sodium Canadians consume, and are working independently, together, and with various stakeholders to bring about reductions in the sodium content of the foods that Canadians eat, and to educate individuals and professionals about the importance of reducing dietary sodium and how to do it. Provincial and territorial officials of the Public Health Network, the pan-Canadian forum for cooperation and collaboration on issues related to public health continue to review next steps for further action on sodium reduction.

Pillar One: Sodium Reduction in the Food Supply

The sodium content of commercially prepared foods is a major factor in the sodium intake of Canadians. With almost 80 per cent of Canadians' dietary sodium coming from processed and prepared foods, much of the work to reduce sodium intake must focus on the food supply. Added sodium, mainly from salt, is pervasive in the foods we eat. While it plays an important role in food safety and stability, taste, and other aspects of food processing, the high sodium levels in foods such as breads, processed meats, canned vegetables and vegetable juices, soups, pasta sauces, cheeses, breakfast cereals, and in restaurant meals must be addressed.

Provinces and territories are collaborating with industry to promote new and reformulated products that are lower in sodium, and increase the access and availability of these products for Canadians.

Guidelines and Procurement Policies

One way to promote the development of products lower in sodium would be through the implementation of a framework – either regulatory or voluntary (as recommended by the Sodium Working Group) – that sets sodium content limits for foods and beverages sold and served in Canada.

In the absence of such a framework, provinces and territories are looking at the use of policies and programs that utilize market forces to achieve the same goal.

The development of consistent guidelines and policies governing the procurement of foods and beverages that can be sold or served in publicly funded places such as schools, daycares, hospitals and recreational facilities shows potential. Consistent guidelines that determine the nutritional criteria for products that can be made available in publicly funded places will make the most of provinces' and territories' considerable purchasing powers to stimulate the market to produce foods and beverages lower in sodium (as well as calories, fat and sugar), and create a level playing field for manufacturers and suppliers – something that industry has identified as

important. Furthermore, consumer demand driven by children and adults who live, learn, work and play in these venues is expected to grow as the supply and access to healthier foods improves.

A Place to Start: More Consistent School Food Guidelines

Schools are a critical setting for promoting and supporting healthy eating, and school food guidelines are one tool that is helping shift the food environment by stimulating the development of healthier products and increasing the access and availability of foods lower in sodium. All provinces have some form of guidelines that identify nutritional criteria for foods and beverages that can be made available in schools (see Appendix A). The overall concepts and principles are the same, however, because they have been developed by each jurisdiction, regional differences in nutrition criteria have led to inconsistencies.

Provinces and territories are focusing on improving the consistency of school food guidelines across jurisdictions. The Government of Alberta has the role of provincial/territorial Champion for school food guidelines and is chairing a working group to develop a set of best-fit nutrition criteria that jurisdictions can work towards as they develop or revise their own policies and guidelines. The criteria can also serve as a basis for what foods and beverages can be marketed to children in schools.

On October 11, 2011, Alberta hosted an *Engagement Dialogue on Improving Consistency of School Food Guidelines for Canadian Schools* for those who develop or provide access to food and beverage products and those who have knowledge and experience in developing school food guideline criteria. The dialogue was the first in a series of activities that will support the development of a set of best-fit nutrient criteria.

Guidelines in other Public Settings

Best-fit school nutrition criteria can also inform consistent guidelines for other public settings. Jurisdictions are making progress in the development of procurement standards in hospitals, residential care facilities, daycares and recreational facilities:

- Guidelines or standards for food procurement in childcare facilities are in place in Alberta, Northwest Territories and Nova Scotia, and under consideration or development in Manitoba, New Brunswick, PEI, and Newfoundland.
- Northwest Territories and Québec have guidelines and policy, respectively, for the provision of food and beverages in health and residential care facilities; these are also being explored and initiated in BC, Alberta, Manitoba, Nunavut, New Brunswick, and Nova Scotia.
- Nutrition guidelines for recreation facilities have been created by Saskatchewan health authorities and similar efforts are being championed in New Brunswick, Nova Scotia and PEI.
- Recognizing the importance of culturally sensitive procurement standards, Nunavut is working with partners on standards for the procurement of traditional foods in public settings.

Consistent Procurement Guidelines: A Provincial/Territorial Priority

The development of more consistent procurement guidelines is a key recommendation in both the Sodium Working Group report, and *Curbing Childhood Obesity: A Federal, Provincial Territorial Framework for Action to Promote Healthy Weights – Actions Taken and Future Directions 2011*. In November 2011 provincial and territorial Health Ministers, except Québec, agreed to make the development of such guidelines a priority.

Alberta's Nutrition Guidelines

Alberta's nutrition guidelines, released in June 2008, and revised in March 2011, provide advice for childcare, schools and recreation/community centres. The criteria are used to procure foods for the children's hospitals in the province. Alberta's Adult Guidelines, released in March 2011, are used to procure foods for Alberta's hospitals. Currently, 60 per cent of the foods procured in Alberta hospitals meet the Alberta Nutrition Guidelines for Adults.

Provinces and territories are moving ahead in different areas and sharing results and resources, which are helping to broaden efforts and create consistency across the country.

Collaboration with Restaurants and Foodservices

About one-fifth¹⁵ of Canadians' sodium intake is from foods consumed away from home, making the restaurant and foodservices sector an important partner in sodium reduction efforts. Increasing consumer awareness of the nutritional content of foods served in restaurants and foodservices, and lowering the sodium content in prepared meals and snacks are important initiatives within this sector.

There is considerable movement both within Canada and internationally to consider requiring restaurants and foodservice establishments to provide nutrition information for their menu items and products. While the evidence linking behaviour change to the provision of nutrition information is mixed, providing nutrition details for menu items in eating establishments is comparable to providing the Nutrition Facts table on processed foods in grocery stores – and this has been shown to lead to the reformulation of products lower in sodium. What's more, a recent survey by the Public Health Agency of Canada shows that the majority of Canadians want this information available to them¹⁶.

In 2005, the Canadian Restaurant and Foodservices Association (CRFA) developed voluntary guidelines for providing nutrition information and a number of members have taken steps to make this information available to consumers.

In August 2011, British Columbia launched its Informed Dining Program with the endorsement of the CRFA, Heart & Stroke Foundation and other industry leaders. Under the program, participating restaurants provide information similar to that found on the Nutrition Facts table (with a focus on sodium and calories) for menu items before or at the point of ordering to help consumers make informed choices when eating out. BC officials are working with over 50 restaurants that have expressed an interest in the program, including small independents and provincial and national chains. The program incorporates ongoing stakeholder consultation, marketing, recognition and other supports for participants. Participation is voluntary for the private sector but will be mandatory for retail food service establishments in provincial health care facilities through a phased in approach beginning in 2012.

The Informed Dining Program is the first of its kind in Canada. Other provinces and territories are also consulting with the restaurant industry on ways to make nutrition information available to consumers. CRFA members have signalled their interest for a consistent approach across the country.

15 *The importance of including food service establishments in the Strategy*. Sodium Reduction Strategy for Canada – Recommendations of the Sodium Working Group July 2010. p. 12. http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/nutrition/sodium/strateg/reduct-strat-eng.pdf

16 *Canadians' Perceptions of, and Support for, Potential Measures to Prevent and Reduce Childhood Obesity*. Ipsos Reid. (2011). <http://www.sportmatters.ca/files/Reports/Ipsos%20Obesity%202011.pdf>.

Nutrition experts from BC, Alberta, Ontario, Newfoundland and Labrador and the federal government are exploring the development of a framework for such an approach.

Other Programs and Initiatives

Provinces and territories are also working with stakeholders and partners to increase the availability of foods lower in sodium through other initiatives that stimulate new or reformulated food products.

Alberta's Food for Health Awards - A Premier's Award recognizes and rewards food processors, producers and researchers for their work to create healthy food for Albertans. Since 2009, 94 companies have participated and eight companies have received awards to support further investigation into the development of healthy foods. Program criteria are based on Alberta's nutrition guidelines.

Recreational facilities are a cornerstone of many communities, especially in rural areas, but often the foods and beverages sold and served in these pivotal centres are high in fat, sugar, or sodium. In September 2011, New Brunswick introduced a grant program to help recreational facilities change the face of their food offerings by providing access to nutrition expertise and seed funding for new equipment and or marketing new healthy food options. Consumer trends indicate that many recreational facility users are looking for healthier options, and that this is an un-tapped marketing opportunity for concession operators.

In November 2011, the Melior¹⁷ Program was launched in Québec. The program, inspired by a similar program in France, is designed to improve the food supply by increasing access and availability of healthier food products and menu items, including consideration for products lower in sodium, making it easier for Québec consumers to eat healthy. Under the program, which is managed by the Le Conseil des initiatives pour le progrès en alimentation (CIPA) / Council for Food Progress Initiatives (CFPI) and funded by Québec en Forme, food companies and restaurants develop Charters of Voluntary Commitments to Nutritional Progress. These commitments are signed agreements that CIPA/CFPI monitors and are an example of an industry voluntary approach that is occurring at the provincial level.

Provinces and territories are also collaborating to expand the Health Check™ program to local and regionally based chain restaurants. To date, British Columbia, Alberta and Ontario have partnered with the Heart and Stroke Foundation to expand the program within their jurisdictions and are collaborating on resources, research and other projects related to implementation. Newfoundland and Labrador is exploring the program with the Newfoundland Restaurant Association, Newfoundland Chef's Association and Newfoundland Heart and Stroke Foundation.

Another sector stepping up to support the availability of healthier foods in Canada is the convenience store sector. In BC, the Western Convenience Store Association has partnered with government to increase healthier

Alberta Food for Health Awards – A Premier's Award

To celebrate healthy food products that are developed in Alberta, the Government of Alberta introduced the *Alberta Food for Health Awards - A Premier's Award* in 2009. This program recognizes food processors, producers and researchers for their work in creating healthy food for Albertans. The food products being submitted for an award must meet the specified fat, sodium and sugar nutrition criteria, in addition to others, as per the Alberta Nutrition Guidelines. The awards also recognize the important role that industry and the research community play in improving our understanding of the health benefits of food.

¹⁷ Melior comes from the Latin word *meliorare*, which means "to improve". <http://progresalimentaire.org/en/the-melior-program/what-is-the-melior-program>.

Health Check™ Restaurant Program



The Heart and Stroke Foundation's Health Check™ Restaurant Program is another initiative that is lowering sodium in the food supply by stimulating the procurement and development of menu items that meet or exceed criteria for sodium and other nutrients. Diners can be assured that menu items with the Health Check™ designation meet the criteria for healthier levels of sodium, sugar, fat and calories.

Health Promoting Business Opportunities

Many Canadians are trying to make changes in their health, and recreational facilities are impacted by these trends. Two surveys among customers at arenas in Ontario found:

- 90% of respondents wished they had healthy food options to buy at recreation facilities.
- 34% of respondents did not buy any food while they were at recreational facilities.
- 47% of respondents brought food from home, most of which (86%) was food that would be considered "healthier".

Healthy Foods in Recreation Facilities: It Just Makes Sense. Government of New Brunswick [accessed] 2012. <http://www.gnb.ca/0131/PDF/W/HealthyFoods.pdf>

choices for people eating on the run under its *Healthy Convenience Store Initiative*. Major convenience store chains are exploring multiple initiatives including posting nutrition information for ready-to-eat, unpackaged foods such as nachos, pizza and sandwiches, and increasing floor and shelf space for healthier foods and beverages. Mac's Convenience Stores have also teamed up with the Heart and Stroke Foundation to pilot three food offerings that meet the Health Check™ criteria in all BC locations.

Together, these programs are helping to promote the development of new products, and drive consumer demand for healthier choices in publicly funded places, grocery stores, convenience stores, restaurants, cafeterias, canteens and other eating establishments across the country.

Future Actions for the Food Supply

- Having made the development of more consistent guidelines and policies for the procurement of foods in publicly funded places a priority, provinces and territories will develop a set of best-fit nutrition criteria by March 2013.
- Provinces and territories will continue to collaborate with the restaurant and foodservices sector and other partners to reduce sodium in foods and beverages served in these establishments, and explore BC's Informed Dining Program as a model for the development of a framework for providing nutrition information by March 2013.
- Provinces and territories will continue to explore incentive programs where possible to help industry lower sodium in the food supply, and propose hosting a multi-sectoral meeting in Fall 2012 to foster greater commitment and facilitate an exchange of ideas for improving sodium levels in the food supply.
- The food industry is asked to join governments in publicly committing to the 2016 sodium reduction goal.

Pillar Two: Awareness and Education

Public opinion research has shown that most Canadians are aware that a diet high in sodium is a health concern, but do not perceive it as being their own problem.¹⁸ Few actually know how much sodium to aim for in their diet, and most aren't aware that Canadians consume too much. Although many Canadians have decided not to add salt at the table and in cooking, they continue to buy and consume high-sodium processed foods.

Awareness and education activities must target a variety of audiences including consumers, educators, and food industry and health professionals.

Government efforts are complementing the activities of non-governmental organizations that have taken the lead in educating Canadians about the risk of high sodium intakes. Hypertension Canada's website provides guidance on sodium reduction both to the general public and to health professionals. The Canadian Stroke Network website, *Sodium 101*, educates consumers about the high sodium content of the food supply.

Building Awareness of Sodium as a Nutritional Concern

Provincial and territorial governments are working together and collaborating with the federal government and with non-governmental health organizations to develop information and resources for consumers and health and education intermediaries to support healthy eating. *Canada's Food Guide*, nutrition labels, and educational tips and tools for reducing sodium all help consumers improve their diet and reduce their risk of hypertension, and informed consumers are creating the demand for healthier, low sodium food products.

British Columbia, in collaboration with Dietitians of Canada, EatRight Ontario and Health Canada, developed and consumer tested common messages about sodium reduction to share with stakeholders and partners across Canada. Provinces and territories are incorporating these common messages into new and existing programs and resources, such as community and clinical dietitian services, sodium reduction campaigns, and broader healthy eating initiatives.

In July, 2011 British Columbia introduced a multi-faceted sodium education and awareness campaign as part of its *Healthy Families BC* strategy. The strategy includes enhanced tele-dietitian services to help consumers make lower sodium food choices and assist the food industry in offering lower sodium food products, as well as a website with sodium reduction tips and messages, an online tool ("Sodium Sense") to help families create low sodium meals, posters, print ads, and a 30-second television ad.

The Yukon is currently developing a sodium campaign using the common messages. The campaign will include radio public service announcements, newspaper ads, posters and brochures targeted to adults.

Sodium Reduction Messages

The British Columbia Ministry of Health, Dietitians of Canada, EatRight Ontario and Health Canada have worked collaboratively to develop and test sodium reduction messages and tips with the public and health intermediaries. These messages and tips were developed to raise awareness and increase consumer knowledge about high sodium intakes and health consequences.

Fact: Sodium is found in salt.

- All types of salt are high in sodium.
- Kosher salt, sea salt, fleur de sel, gourmet salt and smoked salt all have about the same amount of sodium as table salt. They are not healthier choices.

Fact: We eat too much sodium.

- We all need some sodium, but most of us eat about 3400 mg per day. This is more than double the amount of sodium we need.
- Healthy adults need only 1500 mg of sodium per day. Healthy children need only 1000-1500 mg of sodium per day.

Fact: Eating too much sodium can be harmful to our health.

- Eating too much sodium can cause high blood pressure, stroke, heart disease and kidney disease.
- Eating less sodium can help you and your family stay healthy and feel your best.

Fact: Most of the foods we eat contain too much sodium.

- Over 75% of the sodium we eat comes from processed foods such as cheese, deli meats, pizza, sauces and soups.
- Packaged and ready-to-eat foods, fast foods and restaurant meals are often high in sodium.
- Breads, breakfast cereals and bakery products also contain sodium even though they may not taste salty.

For more information please visit www.healthycanadians.gc.ca/sodium

18. *Canadians' and Health Care Professionals' Views on Sodium*. Decima Research (2009). http://epe.lac-bac.gc.ca/100/200/301/pwgsc-tpsgc/por-ef/public_health_agency_canada/2009/117-08/report.pdf



DINNER IN JUST A FEW MINUTES. HEALTH PROBLEMS IN JUST A FEW YEARS.

Too much sodium can lead to high blood pressure or heart disease.
So always read the label, and aim for 15% Daily Value or less.
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The EatRight Ontario publication *Making Lower Sodium Food Choices* is being adapted and translated for African/Caribbean, Latin/Hispanic and South Asian audiences.

New Brunswick has incorporated the sodium reduction messages in a new resource for teaching food skills in the after-school time period.

Provinces and territories also partner with community-based organizations that are engaging a broad range of community health experts and leaders in raising awareness on sodium. Examples include the Champlain Cardiovascular Disease Prevention Network (CCPN) in Ontario, which carried out the *Give Your Head a Shake* media campaign, and the Community Sector Council of Newfoundland and Labrador, which created a sodium reduction resource for physicians to distribute to patients.

Marketing to Children

In addition to providing information about the dangers of a high sodium diet and how to avoid them, it is important to limit the positive messages and marketing of foods and beverages that are high in sodium.

As described in *Curbing Childhood Obesity: An F/P/T Framework for Action to Promote Healthy Weights*, decreasing children's exposure to the marketing of foods and beverages high in fat, sugar and sodium is key to reducing consumption and assisting parents in making healthy choices with and for their children.

Children are particularly vulnerable to and easily influenced by marketing, and today's children are exposed to a greater intensity and frequency of advertisements than ever before. As cited in the WHO report (Set of recommendations on the marketing of foods and non-alcoholic beverages to children), reviews on the extent, nature and effects of food marketing to children show that advertising and other forms of marketing to children are extensive and widespread around the world. Most is for foods high in fat, sugar or salt. Evidence also shows that television advertising influences children's food preferences, purchase requests and consumption patterns.

In Canada, Québec prohibits advertising targeted to children under age 13 (subject to limited exemptions), under the *Consumer Protection Act*. Elsewhere in Canada, the main interventions are self-regulatory through the *Broadcast Code for Advertising to Children* (BCAC) which was developed by industry in cooperation with broadcasters and overseen by the Canadian Radio-television Telecommunications Commission (CRTC), and the industry-led *Canadian Children's Food and Beverage Advertising Initiative* (CCFBAI).

In acting to promote healthy weights in children, provinces and territories (with the exception of Québec where marketing to children is prohibited) have committed to working collaboratively with the federal government and with industry and other partners to strengthen voluntary codes of practice for commercial advertising to children in Canada, and to promote the implementation of common standards for all companies that choose to market to children.

In addition, provincial and territorial governments have the ability to control what is marketed in public buildings and other spaces such as daycares, schools, recreation and community centres, and sporting events. They can also work with their municipal counterparts to decrease the marketing of unhealthy foods and other products on billboards and other media in the built environment.

The work that provinces and territories are doing to develop guidelines for the procurement, sales and serving of foods and beverages in public settings could be applied to marketing and promotion activities as well. For example, the best-fit criteria used to inform guidelines about what can be sold and served in public schools can also inform guidelines for what can be marketed and promoted in those settings. Where jurisdictions have developed policies and resources, work is underway to share experiences and build on existing successes.

Nova Scotia has made significant progress in reducing marketing and promotion of unhealthy foods and beverages in schools and licensed childcare centres, with policies that cover fundraising, promotion and advertising. In 2010, the CEOs of all nine district health authorities and the IWK Health Centre committed to promoting and supporting healthy eating across the province in health care settings, and work is currently underway to develop a healthy eating policy that will include policies for fundraising, promotion and advertising. New Brunswick also has policies in place governing the marketing of foods in schools.

Nutrition Labelling and the Nutrition Facts Table

An important resource that assists Canadians in understanding the sodium content of processed and packaged foods is Health Canada’s Nutrition Facts table (NFT), which appears on almost all processed and packaged foods. The information contained in the Nutrition Facts table is not always easy to use or interpret, however, and increasing awareness of the NFT and how to use it, through measures such as the “Read the Label” section of *Canada’s Food Guide*,¹⁹ is necessary.

Provinces and territories are developing resources and tools to increase education and awareness of the NFT in a variety of settings. For example, nutrition labelling is included or being included in resources to support education in schools in BC, Alberta, Saskatchewan, Ontario, New Brunswick, Prince Edward Island, and Newfoundland and Labrador.

Alberta uses the NFT as the format for outlining the nutrition criteria in the “chose most often,” “choose sometimes” and “choose least often” food categories of the *Alberta Nutrition Guidelines for Children and Youth*, and *Adult Guidelines*. The *Healthy U Food Checker*, an on-line, smartphone-accessible NFT tool, is being used by food industry manufacturers and suppliers to assess if a food or beverage fits the nutrition guidelines. Alberta has also developed three low literacy resources to assist childcare centres, schools, recreation facilities and community centres to read the Nutrition Facts table and apply the guidelines in their facilities.

World Health Organization
Recommendations for Ad-free
Zones

In 2010, the WHO released a set of recommendations to promote responsible marketing and reduce the exposure of children to the marketing of foods high in fat, sugar or sodium. Included in the recommendations is a suggestion for governments to make the places where children gather free from all forms of marketing of foods high in fat, sugar or salt, supported by monitoring and evaluation.

Set of recommendations on the marketing of foods and non-alcoholic beverages to children. World Health Organization. (2010). <http://www.who.int/dietphysicalactivity/marketing-food-to-children/en/index.html>

Understanding Sodium Content
through the Nutrition Facts Table



19 *Eating Well with Canada’s Food Guide*. http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/food-guide-aliment/view_eatwell_vue_bienmang-eng.pdf

Food Industry Resources in Québec

In Québec, the Conseil de la transformation agroalimentaire et produits de consommation has developed *Guide de réduction du sodium pour l'industrie alimentaire/Salt Reduction Guide for the Food Industry*, a comprehensive guide on sodium reduction, available in both French and English; l'Institut du tourisme et d'hôtellerie foundation is leading *La Santé au Menu*, funded by Québec en Forme, which offers information and various online tools to change the practices of restaurant and food service operators; and *Nos petits mangeurs*, also funded by Québec en Forme, supports daycare workers to offer healthier menus and improve food preparation practices.

In Newfoundland and Labrador, education and awareness of the NfT is being provided by dietitians employed in health regions and grocery stores.

Education and Awareness for Education, Health and Food Industry Professionals

A number of industry tools and resources are available to assist food manufacturers with practical approaches to reducing sodium in their products. For example, the Canadian Restaurant and Foodservices Association has developed a guide entitled *How to Reduce Sodium in Menu Items*²⁰ for restaurant and foodservice operators, funded by Agriculture and Agri-Food Canada.

Provinces and territories are similarly developing information and resources to support those working in education, health and food industry sectors to expand the availability of healthier choices for consumers. For example:

- Manitoba is exploring opportunities to promote nutrition and healthy eating, including sodium reduction, through home economics and culinary arts education. The University of Manitoba is collecting quantitative and qualitative data, including trends on home economics education, which will include other provinces. Manitoba will use this data to develop policy and program recommendations regarding cooking skills in schools.
- Québec is developing a college certificate in healthy eating for chefs, culinary workers and others.
- Government officials in Newfoundland and Labrador are working with the Newfoundland Restaurant Association, Newfoundland Chef's Association and the Newfoundland Heart and Stroke Foundation to develop educational opportunities for students of culinary programs at three post-secondary institutions, to raise awareness of sodium as a nutrient of concern.

Future Actions for Awareness and Education

- Provinces and territories will continue to collaborate with partners to develop tools and resources that can be shared among governments, health organizations, educators and industry, focusing in 2012/13 on resources for health and food/culinary education.
- Health and education organizations, the food industry and other sectors will be encouraged to use the sodium reduction messages in their healthy living and nutrition information and activities to increase public awareness of the importance of reducing sodium in the diet. Provinces and territories will continue to incorporate the messages in government materials to the extent possible, and to monitor their effectiveness.

20 *How to Reduce Sodium in Menu Items: A User's Guide for Foodservice Operators*. Canadian Restaurant and Foodservices Association (2010). http://www.crfa.ca/pdf/sodium_guide.pdf

- Supported by the release of best-fit nutrition criteria in March 2013, provinces and territories will encourage broader implementation of existing policies, guidelines and tools to decrease the marketing of foods and beverages high in fat, sugar or sodium in various media in public settings including schools, daycares, recreation centres and hospitals.²¹

²¹ This does not apply in Québec where marketing to children is not permitted under the provincial *Consumer Protection Act*.

Leveraging Research Dollars in Alberta

Provinces and territories also support the post secondary research infrastructure needed to build capacity and attract additional research funding.

Researchers at the University of Alberta are investigating how kidneys regulate sodium and calcium, which they anticipate will lead to new treatments for hypertension and osteoporosis. Start-up funding from the Alberta Women and Children's Health Research Institute has made it possible to attract additional research dollars including a CIHR clinician scientist Phase I award and a three-year CIHR clinician scientist Phase II award valued at \$100,000 a year, as well as a KRESCENT (Kidney Research Scientist Core Education and National Training Program) new investigator grant (\$25,000) and a two-year Kidney Foundation of Canada operating grant (\$40,000 a year).

Pillar Three: Research

The research supporting the link between reduced sodium consumption and improved health is strong. At the same time, increasing the capacity for research to support the work to lower sodium in the diet is an important part of the overall approach to sodium reduction and achieving the 2016 goal.

Health research is supported by a continuum of agencies across Canada. At the federal level, funding bodies such as the Canadian Institutes for Health Research (CIHR), Canada Foundation for Innovation (CFI), Canada Research Chairs, and not-for-profit organizations such as the Heart and Stroke Foundation support and promote health research that is being done by a wide range of researchers, most of whom are affiliated with universities and research centres. Several provinces and territories have also established provincial health research funding agencies to fund the work of researchers and support efforts to grow the research capacity within their jurisdictions.

CIHR is the largest funder of health research in Canada. Based on the recommendations of the Sodium Working Group, CIHR has developed a research agenda and set aside priority funding for sodium research in four areas: health and human physiology, food science, knowledge-to-action, and monitoring and evaluation. Investments of \$1.1 million have enabled four three-year research projects in the areas of health and human physiology and knowledge-to-action. These studies are being lead by the University of Toronto, McMaster University, the University of Calgary and the University of Alberta, and will continue until 2014.

Other research within provinces and territories specific to sodium or to nutrition and health more generally is helping inform the approach to sodium reduction. This includes:

- Landmark research by Dr. Norman Campbell and researchers at the University of Calgary and Simon Fraser University on population health sodium reduction;
- Investigations at the University of Ottawa Heart Institute and Memorial University of Newfoundland into patterns of salt-induced hypertension;
- Work funded by the Heart and Stroke Foundation by the University of Toronto to measure the amount of sodium removed from products as a result of the Health Check™ grocery store program; and
- McMaster University's participation in the Prospective Urban Rural Epidemiology (PURE) study, a global study investigating social, environmental and biological influences on the development of risk factors for chronic disease.

Provinces and territories will continue to ensure policies, planning, and decision-making with respect to sodium reduction efforts are informed by strong evidence derived from quality internal analysis, the ever-growing body of international health research literature, and direct commissioning of new research when necessary.

The PURE Study

Over 120,000 individuals in 15 countries have been recruited to participate in this 10 year study that includes four sites in Canada, Vancouver, Québec City, Ottawa and Hamilton. The study will help find new ways to influence social and environmental conditions to combat chronic disease.

Future Actions for Research

- Provinces and territories will continue to support sodium reduction research where possible with enhanced research capacity, knowledge exchange and dissemination of information related to sodium reduction.
- Provinces and territories will encourage provincial health research organizations, health non-governmental organizations, and the food industry to increase investments in sodium reduction research, and provide an opportunity for discussion on research collaboration at a proposed multi-sectoral meeting in Fall 2012.

Research in Québec

In Québec, a research program on preserving and improving the nutritional value of foods was launched in 2010. By November 2011, \$1.3 million had been invested in six research projects over three years.

The program was developed in partnership with the Fondation des maladies du Cœur du Québec et Visez santé (FMCQ), the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ), the Ministère de la Santé et des Services sociaux (MSSS), the Fonds québécois de la recherche sur la nature et les technologies (FQRNT) and the Fonds de la recherche en santé du Québec (FRSQ).

Pillar Four: Monitoring and Evaluation

Determining the effectiveness of the independent and collaborative work planned and underway will require monitoring and evaluation of activities under the other three pillars of the sodium reduction approach. Ultimately, the success of the approach will be measured through changes in sodium intake levels and health outcomes.

To achieve high quality, comparable data, provinces and territories collaborate with various agencies of the federal government, including Health Canada, the Public Health Agency of Canada and Statistics Canada, who collect data at a national level. The Canadian Institutes for Health Information (CIHI), an arms-length, not-for-profit corporation funded by federal, provincial, and territorial governments, is also a key source for reliable, comparable health information. Provinces and territories undertake regional and program-related monitoring and evaluation, such as public opinion research, to inform program and policy decisions, and routinely share results to facilitate the uptake of best practices. Monitoring and evaluation is also one of the themes for priority research funding on sodium and health.

Monitoring Activities

Food Supply

Two population health studies funded by CIHR will look at efforts to reduce sodium in the food supply:

- Researchers at the University of Toronto Department of Nutritional Sciences obtained three-year project funding to conduct a detailed analysis of the changing Canadian food supply including sodium levels, changes in nutritional composition, labelling, and prices, using a database of nutritional information from approximately 12,000 food product labels and 6,000 restaurant foods. Using web-based tools, researchers will also be able to evaluate the impact of awareness and education campaigns on consumers by monitoring changes in Canadians' knowledge, attitudes and behaviour toward sodium and how these changes are influencing eating patterns.
- Researchers at the University of Calgary will use sodium reduction as a case study to examine the impact of population health interventions, positive or negative, on health inequities. Evidence shows certain populations are disproportionately affected by chronic conditions due to determinants such as education level, income, and ethnicity. The research will provide new knowledge to ensure that policies and programs work to close the gap or do not worsen health disparities.

Alberta is currently evaluating the *Alberta Food for Health Awards - A Premier's Award* with a view to making any adjustments needed prior to offering it again.

Awareness and Education

A number of regionally-based initiatives are evaluating the impacts of activities intended to raise awareness:

- British Columbia and Ontario are evaluating sodium awareness and education campaigns.
- Manitoba is supporting a university-led Consumer Food Panel that is monitoring changes in public opinion toward food and healthy eating generally, including attitudes and understanding of sodium.
- Québec is evaluating its food policies in schools and health care settings. Last year, the province conducted a health survey on the adolescent high school population which included a component on eating habits. Results are being analysed. Measures of food accessibility in the province are also being developed by the Institut national de la santé publique du Québec.

Monitoring Outcomes

Dietary Intake

The Canadian Community Health Survey (CCHS) administered by Statistics Canada is a critical evaluation tool that provides data at both the national and provincial level.

The 2004 CCHS (which focused on nutrition for the first time in more than thirty years) gathered information about the Canadian diet, and made it possible to calculate the baseline sodium intake of Canadians and identify the main sources of dietary sodium. The survey also assessed Canadians' weight, physical activity level, food security, general health, risk factors and social determinants.

The focus on nutrition will be repeated in the 2015 CCHS, which will enable governments to collect the same data and measure changes against the baseline data collected in 2004 and progress toward the 2016 goal. When surveying the eating habits and nutritional health of Canadians, it will be important to simultaneously evaluate whether any unintended nutritional or health consequences are occurring as a result of sodium reduction. All provinces and territories are participating on an expert advisory committee to provide input to the parameters of the survey.

Health Outcomes

The Canadian Chronic Disease Surveillance System (CCDSS), a network of provincial and territorial surveillance systems supported by the pan-Canadian Public Health Network, is another important tool for monitoring health outcomes related to sodium reduction. The CCDSS links provincial and territorial health administration databases, enabling jurisdictions to monitor the occurrence of diagnosed hypertension in Canada. Work is underway to expand the monitoring to other chronic conditions such as heart disease and stroke, which are also associated with a high sodium diet.

Public Opinion Research in BC Early Results

An evaluation of BC's sodium reduction media campaign showed overall that the ads were serving as a reminder to those who were already engaged in sodium reduction, but needed to be more "hard hitting" to get the attention of those less engaged. At the same time, a significant rise in parents' concern for their children's sodium consumption occurred as a result of the campaign.

Ministry of Health: 2011 Ad Tracking – Sodium. Ipsos ASI (The Advertising Research Specialists).

Establishing the Baseline Sodium Intake of the Canadian Population

Sodium intake levels based on food data collected in the 2004 Canadian Community Health Survey (CCHS), plus 11% to account for salt added in cooking and at the table, was used to establish the baseline estimated average sodium intake of Canadians of 3,400 mg per day.

Collaborating to Achieve Sodium Reduction

Collaboration is an overarching principle of the approach to sodium reduction and policy and program development by provinces and territories. Provinces and territories are working with and partnering with the federal government, municipalities, national and regional non-profit health organizations, the food industry, academia, and community-based organizations on sodium reduction initiatives under the four pillars of the approach.

While provinces and territories are championing sodium reduction as a healthy living and disease prevention strategy, leadership is needed from all sectors in order to implement change and achieve the sodium reduction goal.

Multi-Sectoral Collaboration in Ontario

In February 2012, a group of stakeholders including the Heart and Stroke Foundation of Ontario, Public Health Ontario, Ontario Stroke Network, Champlain Cardiovascular Disease Prevention Network, Ontario Medical Association and University of Toronto organized an Ontario Sodium Summit and invited experts from across Canada to participate in a discussion on actions to reduce sodium consumption in Ontario.

Future Actions for Monitoring and Evaluation

- Provinces and territories will continue to share the results of provincially funded monitoring and evaluation activities to facilitate the uptake of best practices in sodium reduction and, by Fall 2012, put in place an expert-based committee to oversee the development of consistent standards and practices in evaluation.
- Provinces and territories will provide a forum to discuss monitoring and evaluation at a proposed multi-sectoral meeting in Fall 2012 and will identify options for monitoring sodium reduction in the food supply by Spring 2013.
- All partners are asked to explore how existing and new data can support the development of measures for monitoring progress on sodium reduction.

Sodium Reduction in Broader Healthy Living Strategies

Activities, programs and policies that address healthy eating more broadly are also contributing to lowering the sodium intake of Canadians. Unfortunately, it is not possible to feature all these initiatives in this report.

Most jurisdictions have implemented or are developing healthy living or healthy eating strategies to guide program and policy development. While some of these strategies – such as British Columbia's *Healthy Families BC* – have sodium reduction as a distinct focus, many are aimed at supporting healthy eating more generally, seeking to help Canadians lower their consumption of foods high in fat, sugar and sodium and increase their consumption of fresh fruits and vegetables. These strategies are supporting sodium reduction in a more general way while lowering other risk factors by helping Canadians to maintain a healthy weight and improving food security.

The breadth of initiatives to support healthy eating is extensive and varied. Examples include awareness-raising campaigns; resources to educate consumers about portion size; tools and resources to support public facilities and food providers to offer healthier foods in cafeterias, cafes, canteens and vending machines; and partnerships with municipalities and community-based organizations to increase the access and availability of fresh fruits and vegetables in urban and rural/remote communities.

Provinces and territories, except Québec²², are also working together and in collaboration with the federal government to reverse the rising rates of childhood obesity in Canada²³. Several initiatives, such as the development of guidelines for the sale, serving and marketing of healthier foods in publicly funded places address both sodium reduction and childhood obesity.

22 Québec shares the general goals of promoting healthy weights in children (curbing childhood obesity) and will continue to exchange information and best practices with other governments of Canada, but does not subscribe to a Canada-wide strategy in this area.

23 *Curbing Childhood Obesity: A Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights Actions Taken and Future Directions 2011*. <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/framework-cadre/2011/overview-resume-eng.php>

Need for a Strong Federal Commitment

A strong federal commitment and meaningful collaboration with provinces and territories is important in order to significantly reduce childhood obesity and sodium consumption in Canada. Provincial and territorial Health and Wellness Ministers have committed to helping Canadians make healthy choices to avoid and reduce obesity, and to avoid hypertension and other conditions associated with a high sodium diet. They (except Québec) endorsed two reports focused on increasing access and availability of healthy foods, decreasing marketing of unhealthy foods to children, reducing sodium in the food supply, raising awareness and monitoring progress, and committed to the development of meaningful reporting mechanisms. Ministers also recognized the leadership role that the federal government has in this debate as well as their part in addressing these complex issues. Ministers look forward to further collaboration and ask the Government of Canada to champion a healthy living agenda for Canadians.

While Québec shares the general goals of sodium reduction and healthy weights, it does not subscribe to a Canada wide strategy in these areas. Québec intends to remain solely responsible for developing and implementing programs for promoting healthy living within its territory. However, Québec does intend to continue exchanging information and best practices with other governments in Canada.

Press release: P/T Health and Wellness Ministers Work Together to Advance Solutions. 2011. <http://www.scics.gc.ca/english/conferences.asp?a=viewdocument&id=1639>.

II. Opportunities for Federal Engagement

In September 2010, the federal government joined with the provincial and territorial governments in committing to the interim population average sodium intake goal of 2300 mg per day by 2016.

In its report presented to the federal Minister in July 2010, the SWG identified many opportunities for federal action that would support Canadians to avoid the risks associated with a high sodium diet.

The following pages identify areas where the federal government could act to complement the work underway by provinces and territories, facilitate consistency across the country and contribute to the achievement of the 2016 goal based on the recommendations of the Sodium Working Group.

Pillar One: Sodium Reduction in the Food Supply

With oversight for the safety and nutritional value of foods sold in Canada under the *Food and Drugs Act*, the federal government has tools and resources at its disposal that can complement provincial and territorial efforts to reduce the sodium content of foods, not the least of which is an effective collaborative relationship with the food industry and the potential to influence sodium levels in foods through voluntary or mandated approaches. The scope of the Act covers the sale of foods in Canada, food additives and food standards in manufacturing, and product nutrition information disclosure through nutrition labelling, health and nutrition claims.

Lowering Sodium Levels in Processed Foods

The Sodium Working Group identified five elements for a successful voluntary approach to lowering sodium in the food supply:

- published sodium reduction targets
- defined timelines
- a mechanism for public commitment by industry
- a plan for independent monitoring, and
- independent evaluation of progress and the option of taking stronger measures if necessary.

In September 2010, federal, provincial and territorial Health Ministers, except Québec, supported the immediate implementation of voluntary measures as outlined in the SWG report, and asked for monitoring plans to be in place within three months. The federal government began consulting with industry in September 2009 but has not yet released a plan. To stimulate progress in this area, provinces and territories propose hosting a multi-sectoral meeting in Fall 2012 and inviting the federal government to build on existing efforts and move forward.

Lowering sodium levels in the food supply could be further facilitated by improving federal food labelling standards and adopting guidelines for procurement in federally funded facilities.

Nutrition Labelling

The Nutrition Facts Table

The Nutrition Facts table, which provides information on the number of calories and the amount, and % Daily Value, of 13 core nutrients on the back of food products, is a valuable tool in helping Canadians make better food choices, however, serving sizes are not always consistent, which makes it difficult to compare products and understand how much sodium (and other nutrients) is being consumed in a single serving.

In addition, the Nutrition Facts table bases the % Daily Value for sodium on a daily intake of 2400 mg per day of sodium, rather than a daily intake of 1500 mg day of sodium – the Adequate Intake established by the Institute of Medicine in 2004 and the amount most Canadians are urged to aim for. The Nutrition Facts Education Campaign, which is helping Canadians use and understand the per cent Daily Value, would be more beneficial if it reflected the current recommended intake.

Front of Pack Labelling

Increasingly, front-of-pack labelling is used to denote the healthier option. Mandatory and voluntary schemes introduced by various jurisdictions include warning labels, health logos, % daily value and “traffic light” systems, which are based on consistent nutrition standards.

Experience in Canada and internationally shows that visually simple approaches to nutrition labelling on the front of products is supported by consumers, stimulates food manufacturers to reformulate and create new products, and is an important part of a population-based approach to sodium reduction and healthy eating.

Finland introduced mandatory salt labelling in 1993, which included a clear and simple warning on high-sodium food products. As a result, many of these products disappeared from the market. The UK introduced a voluntary FOP traffic light scheme in 2007 and since then about 40 per cent of food manufacturers have adopted the system. This system is attracting significant interest from other jurisdictions.

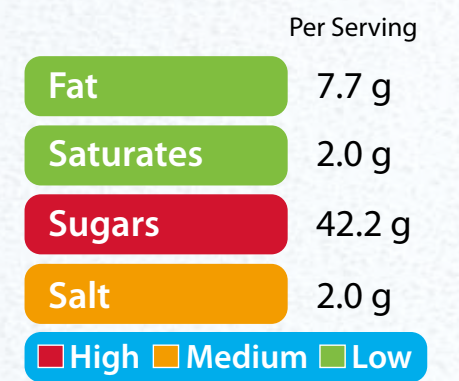
In Canada, the Heart and Stroke Foundation has been at the forefront with its voluntary Health Check™ program (see page 14). About 1600 grocery store products and 200 restaurant meals that have applied meet the Health Check™ criteria for fats, sodium, sugar and fibre content and carry the Health Check™ logo.

Federal regulations support food manufacturers to make health and nutrition claims and enable FOP labelling, and a variety of industry-led FOP labelling schemes are appearing on grocery store shelves.

Front-of-Pack (FOP) Labelling in the United Kingdom

Since 2007, food manufacturers and food service providers in the United Kingdom have embraced the Food Standard’s Agency’s guidelines for FOP nutrition labelling. The simplicity benefits consumers who can see nutritional content for sodium (and other nutrients) at a glance, and manufacturers and retailers are able to tailor the approach to fit their product and brand.

Example:



Front-of-pack Traffic light signpost labelling
Technical Guidance. Food Standards Agency
(2007). <http://www.food.gov.uk/multimedia/pdfs/frontofpackguidance2.pdf>

Food Additives and Food Standards

Health Canada can consider on a case by case basis extending the use of an approved additive to different foods or permitting an increase in the level of its use if it can be shown to reduce sodium levels.

In addition, new policies developed in response to the Weatherill report allow priority to be given to submissions for new food additives or technologies that have the potential to improve food safety, giving Health Canada the ability to prioritize new additives or technologies that may replace sodium.

Priority to applications does not change the rigorous review process in place.

Priority Scheduling and Expedited Handling of Submissions that have the Capacity to Enhance Food Safety. Health Canada, January, 2011. <http://www.hc-sc.gc.ca/fn-an/securit/addit/priority-priorite/index-eng.php>

Recent reports commissioned in the United States and Australia/New Zealand provide recommendations for better use of FOP labelling to promote health and highlight the opportunity to explore improvements in Canada.^{24,25}

Collaboration with Restaurants and Foodservices

Since March 2011, the federal government has been facilitating a process with provinces and territories, food industry partners, non-governmental health organizations and other stakeholders to develop a consistent approach to nutrition disclosure in restaurants and other foodservice establishments. A multi-stakeholder Think Tank took place in March 2011 to explore the evidence, and in February 2012, a consultation was held to obtain early input. Provinces and territories are committed to developing a framework for a consistent approach by March 2013.

Opportunities for Future Action for the Food Supply

- The five elements of the structured voluntary approach provide a framework to guide federal, provincial and territorial governments, industry and other stakeholder in their efforts to reduce sodium in the food supply. Provinces and territories ask the federal government to work with them, industry and other partners to implement the elements of such a framework.
- Consumers could be better supported in choosing lower sodium products and consuming less sodium with improvements in product labelling such as updating the % Daily Value and serving size requirements, and exploring a front-of-pack labelling system that includes sodium. The federal government should consult with provinces and territories as well as industry on improvements to nutrition labelling.
- A consistent approach to providing nutrition information in restaurants and foodservices across the country, which makes use of existing experience such as BC's Informed Dining Program, will contribute to achieving the 2016 sodium reduction goal. The federal government could work with provinces and territories to achieve a solution by March 2013.

24 *Review of Food Labelling Law and Policy* Australia and New Zealand Food Regulation Ministerial Council (2011). <http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/content/home>.

25 *Front-of-Package Nutrition Rating Systems and Symbols: Promoting Healthier Choices*. Institute of Medicine of the National Academies (2011). <http://www.iom.edu/Reports/2011/Front-of-Package-Nutrition-Rating-Systems-and-Symbols-Promoting-Healthier-Choices.aspx>.

Pillar Two: Awareness and Education

The federal government (Health Canada) serves as a focal point and authoritative source on nutrition and health by collaborating with provinces and territories, the United States and other national and international partners to define, promote and implement evidence-based nutrition standards and policies. Most Canadians recognize *Canada's Food Guide*; other activities include dietary reference intakes, food and nutrition surveillance, nutrition and health policy research, and international collaboration such as Canada's endorsement of the World Health Organization *Recommendations on the Marketing of Foods and Non-Alcoholic Beverages to Children* (May 2010)²⁶.

The federal government is supporting consumer awareness and education in collaboration with provinces and territories and other key partners to promote healthy eating in Canada. The Nutrition Facts Education Campaign is one example of this and, in March 2012, \$4 million in multi-year funding was committed for new activities, including working collaboratively on social marketing activities that build on the development and dissemination of the sodium reduction messages.²⁷

Marketing to Children

In September 2010, federal, provincial and territorial Health Ministers, except Québec, agreed decreasing marketing to children would be a focus of collaboration for promoting healthy weights in children and would also address sodium reduction.

While Québec prohibits advertising targeted to children under age 13, the rest of Canada relies on the *Broadcast Code for Advertising to Children* (BCAC), published and administered by Advertising Standards Canada in cooperation with the Canadian Broadcast Standards Council and overseen by the CRTC. The BCAC, which supplements the general principles of the *Canadian Code of Advertising Standards* and applies to all types of advertising to children, recognizes the special characteristics of the children's audience and guides advertisers in the development of commercial messaging. Canadian broadcasters agree to adhere to the code as a condition of license by the CRTC.

This is augmented by the industry-led *Canadian Children's Food and Beverage Advertising Initiative* (CCFBAI), a voluntary initiative by 19 of Canada's food and beverage companies that have agreed to change their advertising practices directed at children under 12 to promote healthier dietary choices and healthy active living, or to not advertise to children at all. While clearly a step in the right direction, not all companies advertising food and beverages to children in Canada participate in this initiative and, further, when products marketed in compliance with the CCFBAI's standards and criteria were examined, it was found that as many as 62 per cent would not be acceptable

Public Support for Stronger Regulation of Marketing and Advertising to Children

Results from a national stakeholder and public engagement process led by Health Canada (*Our Health Our Future: A National Dialogue on Healthy Weights*), revealed that unlike industry, most citizens and stakeholders believe that stronger government regulation of marketing and advertising is needed.

Our Health Our Future – A National Dialogue on Healthy Weights Dialogue Report. (2011). http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/ohof-nsna/index-eng.php?utm_source=VanityURL&utm_medium=URL&utm_campaign=ourhealthourfuture.gc.ca.

26 *Set of recommendations on the marketing of foods and non-alcoholic beverages to children.* <http://www.who.int/dietphysicalactivity/marketing-food-to-children/en/index.html>.

27 *Harper Government Announces Funding for Healthy Eating Initiative.* Health Canada, February 27, 2012. http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/_2012/2012-29-eng.php.

International Approaches to Advertising to Children

Various countries are taking different approaches to the marketing of unhealthy food and beverages to children. Governments in Sweden, Norway, and the UK regulate advertising to children, and national nutrition standards for voluntary compliance have been developed in Denmark, New Zealand, Brazil and are under development in the US.

to promote to children by national government nutrition standards established in the UK, Denmark, Brazil or New Zealand. The products most often rejected were ready-to-serve snacks, ready-to-eat-cereals and other breakfast foods.²⁸

In November 2011, the federal government committed to improving voluntary practices by working with provinces and territories, industry and other stakeholders to implement common guidelines for marketing to children, including defining the scope of marketing techniques, children's age, and methods to monitor progress. (This does not apply in Québec where marketing to children is not permitted under the provincial *Consumer Protection Act*.)

Most importantly, evidence supports the need for clearly defined common nutrition standards for food and beverage companies marketing to children in Canada.

This approach is consistent with World Health Organization recommendations as well as the position of Dietitians of Canada who have called for the establishment of consistent evidence-based standards with monitoring and the participation of all food companies in all settings²⁹.

Opportunities for Future Action for Awareness and Education

- Voluntary marketing practices in Canada would provide a more supportive environment for children if common standards were developed and adopted by all companies that market to children. The federal government could work with provinces and territories to expedite the development of clearly defined evidence-based nutrition criteria (and other standards) that would determine what food and beverages could be marketed to children.
- Children and families would be better supported to make healthier choices if the *Broadcast Code for Advertising to Children* were to include common standards for nutrition and other criteria for marketing to children as part of the condition for licensing by the CRTC.

28 *Actions Taken and Future Directions 2011 – Curbing Childhood Obesity: A Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights*. <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/framework-cadre/2011/hw-os-2011-eng.php>

29 *Advertising of food and beverages to children: Position of Dietitians of Canada*. Dietitians of Canada (2010). <http://www.dietitians.ca/Downloadable-Content/Public/Advertising-to-Children-position-paper.aspx>.

Pillar Three: Research

The federal government invests in research through various agencies including the Canadian Institutes for Health Research (CIHR). CIHR has taken the lead in developing a coordinated agenda for sodium research in Canada and issuing priority sodium funding announcements.

CIHR has also partnered with the Natural Sciences and Engineering Research Council of Canada (NSERC) to further opportunities for research on sodium reduction in the food supply; having an industry partner is a condition of funding.

The March 2011 Think Tank to review evidence on the effectiveness of nutrition information in restaurants and foodservices and inform consistent approaches identified a number of research gaps. Members of the Canadian Restaurant and Foodservices Association have indicated they are willing to have consumer research conducted in their facilities.

Opportunities for Future Action for Research

- The agenda of research priorities for sodium reduction provides the blueprint for ongoing strategic coordinated investments. Other research questions may emerge, such as studying the impact of providing nutrition information, including sodium information, in restaurants and other foodservice establishments. CIHR and other research funders are asked to continue to invest in these research priorities to build capacity and fill the knowledge gaps needed to achieve the 2016 goal.

Monitoring Population-based Sodium Reduction Approaches

Internationally, the federal government facilitated a World Health Organization technical meeting in Calgary in October 2010 to discuss strategies for monitoring and evaluating population health sodium reduction approaches. A report and recommendations for governments, non-governmental organizations and industry was released to provide jurisdictions with an additional resource on effective monitoring and evaluation for sodium reduction.

Strategies to monitor and evaluate population sodium consumption and sources of sodium in the diet : report of a joint technical meeting convened by WHO and the Government of Canada. Canada, October 2010. World Health Organization (2011). http://whqlibdoc.who.int/publications/2011/9789241501699_eng.pdf

Pillar Four: Monitoring

The Public Health Agency, Health Canada and Statistics Canada collaborate with experts from provinces and territories to collect data and report on the health of Canadians at both the provincial/territorial and national level. The pan-Canadian Public Health Network brings together experts from across the country on strengthening public health surveillance.

Other collaborating structures include the Canadian Institute for Health Information (CIHI), which works with a range of experts to develop complementary data and reports.

Monitoring Activities

Independent or arms-length monitoring is an observed part of successful industry voluntary measures and helps create a level playing field and provide appropriate recognition for companies that are making a real effort to meet their commitments. To support progress, provinces and territories ask federal partners to participate in a proposed multi-sectoral meeting in Fall 2012, to help identify opportunities for monitoring the food supply.

With a plan to report on promoting healthy weights every two years, the Public Health Network will oversee a collaborative process for measuring improvements in voluntary marketing practices and determine next steps as required.

The support of CIHR in monitoring how well the research agenda is supporting efforts and how well knowledge is translating into action on the ground will be an asset for comprehensive monitoring.

Monitoring Outcomes

The effectiveness of the sodium reduction approach is best measured through assessing changes in the dietary intake of sodium, and ultimately, the health of Canadians.

Dietary Intake

Statistics Canada's *Canadian Community Health Survey* (CCHS) is an important measurement and monitoring tool for provinces and territories, and the decision by StatsCan to repeat the focus on nutrition in 2015 will enable governments to measure progress in reducing the sodium intake of Canadians compared to the baseline developed from the same survey in 2004.

A significant information gap for policy makers is baseline data on sodium consumption, dietary habits and other health indicators for northern and Aboriginal populations. The 2004 survey collected data from the ten provincial jurisdictions only, and provinces and territories advocated strongly for the 2015 survey to be expanded to include data from the territories and a sample of the Aboriginal population to provide insight into the nutrient

intakes, food consumption patterns, and dietary needs and opportunities of these populations. This would enable provinces and territories and Aboriginal organizations to tailor programs and services to meet their needs.

To ensure dietary sodium is not being underestimated, dietary intake data could be validated by incorporating, where feasible, a representative sample of 24-hour sodium urinary analysis, which is considered the gold standard for measuring population sodium intake, into existing tools.

The development of less costly, more frequent, rapid assessment tools such as new Food Frequency Questionnaires would provide governments and other partners with faster measures for evaluating progress and making adjustments in between survey cycles.

Health Outcomes

In terms of measuring health outcomes, provinces and territories are continuing to work with the Public Health Agency of Canada to expand monitoring within the CCDSS to include other chronic conditions such as heart disease and stroke.

All partners need to consider how existing and new data and survey tools can support measures for monitoring the progress and success of the efforts to reduce sodium consumption, and the existing infrastructure and research agenda provide many possibilities for collaboration.

Opportunities for Future Action to Support Monitoring

- Objective monitoring by someone other than the food industry is necessary for evaluating industry progress in lowering sodium in food products, and would both create a level playing field and provide appropriate recognition for companies who are meeting commitments. The federal government is asked to work with provinces and territories, industry and other stakeholders on a plan for independent monitoring of the food supply.
- Opportunities to enhance existing tools should be explored, such as adding the capability to provide a nutrition report on the territorial and Aboriginal populations, incorporating a sample of 24-hour urinary sodium excretion analysis representative of the Canadian population, and working with provinces and territories to develop rapid assessment tools.

Looking Ahead

Provincial and territorial Health Ministers agree that Canadians' high sodium intake is a significant health risk and are committed to working together to decrease dietary sodium and the associated – and largely preventable – risks of hypertension, cardiovascular disease and stroke (and other non-communicable diseases).

The prevention of chronic disease, disability and injury is a priority not only for improving the lives of Canadians but for reducing health care costs and ensuring the sustainability of the health system. Provinces and territories carry the vast majority of health care costs associated with a high sodium diet and recognize that if people can be kept out of doctor's offices and hospitals by preventing illness in the first place, health care resources will be freed up for treating things that cannot be prevented, and for building new hospitals and investing in new therapies.



This report presents provincial and territorial government actions since the September 2010 Health Ministers Meeting and proposes future actions for ongoing work through 2012 and beyond, as well as opportunities where the federal government can work with provinces and territories, industry and other stakeholders to have the most impact. Everyone has a role to play and steps are being taken by all sectors to reduce sodium in the Canadian diet, and to support Canada in achieving the goal of a population average of 2300 mg of sodium per person per day by 2016.

Ongoing collaboration between all partners across all four pillars of the sodium reduction approach is needed to reach this goal and make a difference in the health, and the lives, of Canadians.

Appendix A

Summary of Provincial and Territorial Sodium Reduction Activities

	BC	AB	SK	MB	YK	NT	NU	ON	QC	NB	NS	PE	NL
FOOD SUPPLY													
Voluntary sodium reduction targets in food products													
Sodium reduction in restaurant and food service establishments													
Mechanism for industry to demonstrate commitment													
Provision of nutrition information in restaurants and food services													
Food guidelines													
• Schools													
• Childcare Facilities													
• Recreation Centres													
• Hospitals and other publicly funded institutions													
Procurement standards for health and publicly funded places													
AWARENESS AND EDUCATION													
Building awareness of sodium as a nutritional concern													
Decreasing children's exposure to the marketing of foods high in sodium													
Opportunities to increase education and awareness of the Nutrition Facts Table													
Curriculum/education programs for food & health professionals													
RESEARCH													
Research													
MONITORING AND EVALUATION													
Food Supply													
Dietary Intake													
Education and Awareness													
Research													

LEGEND  activity in place / in implementation phase
 activity under consideration / work underway / or awaiting implementation

(A) FOOD SUPPLY

Voluntary Sodium Reduction Targets in Food Products

- AB supports the Alberta Food for Health Premier's Award that includes recognizing and rewarding food processors in the development of new or improved healthy food products, including criteria for sodium.
- Québec en Forme (An organization funded by the Québec Government and Lucie and André Chagnon Foundation) is financing CTAC (Conseil de la transformation alimentaire et des produits de consommation) to lead a project aimed at developing voluntary charters of nutritional progress for food industries. These charters will most likely target the sodium levels in foods. The model developed in France has inspired the development of this project. QC has also published a Vision of Healthy Eating: creating healthy food environments to guide future work with industry and other stakeholders.

Sodium Reduction in Restaurants and Food Service Establishments

- BC, AB and ON have partnered with the Heart and Stroke Foundation to expand the Health Check Restaurant Program to support restaurants to provide healthier (and lower sodium) food choices. Menu items that meet or exceed the nutrient criteria set out by the Heart and Stroke Foundation receive the Health Check symbol. NL will explore options available with the NL Restaurant Association, NL Chef's Association and the NL Heart and Stroke Foundation.
- NT is interested in collaborating on adapting an existing successful initiative.
- The ON "Eat Smart" program is an award program that recognizes schools, workplaces and recreation centres that provide a healthy eating environment including exceptional standards for nutrition in cafeterias, cafes, snack bars and vending machines. These standards include criteria for sodium.
- In QC, the Reference for Charters of Voluntary Commitments to Nutritional Progress (managed by Le Conseil des initiatives pour le progrès en alimentation/Council for Food Progress Initiatives (CIPA/CFPI) and supported by Québec en Forme) take sodium reduction into account. The program is designed to have food industries and restaurants adopt charters that reflect commitments to improving the nutritional value of food products and menu items.

Mechanism for Industry to Demonstrate Commitment

- In QC, under the charter project led by CTAC, food industries will be required to sign a "Voluntary Commitment Charter for nutritional progress" to demonstrate their commitments.

Identification & Consideration of Regulatory Instruments

- In QC, under the charter project led by CTAC, food industries will be required to sign a "Voluntary Commitment Charter for nutritional progress" to demonstrate their commitments. These commitments are signed and controlled. It is not a regulation, but it is an example of "self regulation" by industry.

Provision of Nutrition Information in Restaurants and Food services

- BC introduced the Informed Dining Program on August 10, 2011, as part of the Healthy Families BC health promotion strategy. Developed in collaboration with the Canadian and BC Restaurant & Foodservices Associations, the Heart & Stroke Foundation of Canada, and supported by an ongoing stakeholder advisory committee, participating restaurants will provide nutrition information (with a focus on calories and sodium) for all standard menu items before or at the point of ordering. The program is voluntary for the private sector, but will be mandated for provincial buildings. A public awareness campaign is planned for Spring 2012 to promote restaurants participating in the program and to get customers to "stop guessing and start asking".
- BC is also working with the Western Convenience Store Association to develop and implement the Healthy Convenience Store Initiative, announced on August 11, 2011. Participating stores who post nutrition information at the point of purchase for ready to eat, unpackaged foods, such as nachos, sandwiches and pizza, as well as dedicate increased floor and shelf space for healthy food and beverage options will receive a healthy convenience store designation from the association.
- MB has met with the Manitoba branch of the Canadian Restaurant and Foodservices Association to discuss its role in promoting healthy eating, including making nutrition information readily available to the public.
- ON has met with the Canadian Restaurant and Foodservices Association to discuss nutrition information disclosure.
- NT is interested in collaborating on adapting an existing successful initiative.

Food Guidelines

School Food Guidelines:

- BC, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, PEI and Newfoundland have school nutrition guidelines or policies in place which include guidelines for sodium. BC is currently revising their guidelines in 2011. In SK, workshops for school food service providers/caterers have been delivered and regional health authorities are working with vendors/caterers to determine products that meet the school nutrition guidelines. In NT guidelines for schools are under review.
- The QC framework policy on healthy eating and active living, Going the Healthy Route at School, was adopted by the Ministère de l'Éducation, du Loisir et du Sport in 2007. An evaluation is underway. There are no specific measures to reduce the sodium content of foods offered in schools. Pamphlets joint to the policy give general advice for food service managers to choose foods that contain less sodium. The Ministère de la Santé et des Services Sociaux works in collaboration with the Ministère de l'Éducation, du Loisir et du Sport and are planning to discuss options to take into consideration the sodium levels of foods served in schools.

Food Guidelines in other settings:

- BC has nutrition guidelines for vending in recreation facilities, food and beverages available at sporting events, and in provincial public buildings. As of March 2012, BC, in partnership with health authorities, has developed for further consultation sodium procurement guidelines for acute and residential health care facilities owned or operated by health authorities.
- AB's Nutrition Guidelines for Children and Youth (ANGCY) are for use in childcare facilities, schools, recreation/community centres and sporting events, and are for foods sold and served, including vending, canteens, etc. Three low literacy resources have also been developed. Alberta Health Services (AHS) follows ANGCY for all children's hospitals and are looking to implement guidelines for all hospitals and LT care facilities. AHS currently has a trans fat policy for foods procured, served and sold and has initiated adding additional nutrients into their procurement policies based on Alberta nutrition guidelines.
- SK has menu-planning guidelines for childcare facilities. Regional health authorities have developed guidelines for nutrition policy development in workplaces and recreation facilities, including criteria for sodium.
- MB is in the early stages of developing a healthy food policy initiative in child care settings, and exploring other settings including provincial government and health facilities food service contracts.
- In NT, guidelines for childcare facilities are also under review. NT is currently reviewing its Healthy Foods in Facilities guidelines, which includes a sodium component, and applies to foods and beverages provided in most health care facilities through vending machines, cafeterias, meetings and special events. NT is actively promoting the adoption of "healthy foods in facilities" guidelines for all NT (publicly funded) facilities.
- NU has developed standards and guidelines for nutrition care and food services for health care facilities and residential settings pending approval. An environmental scan was undertaken to better understand what foods are being served in other government-funded settings (e.g. community recreation events, day cares, after school events, home economic classes, etc.) to support the development of further guidelines. In addition, standards are being developed to better support the procurement of traditional foods in a variety of public settings. NU is working with dietitians, environmental health inspectors and cultural advisors to create procurement standards that will enable hunters, trappers and non-industry fishers to participate in the food supply market for regulated health and public facilities.
- In QC, efforts are being made in implementing food policies in different settings. Québec has a framework food policy for all health and social services establishments: hospitals, long-term care facilities, child protection centers, and rehabilitation centers. Ministry of Health and regional health agencies have to comply with the policy. This policy has guidelines for sodium. QC is also working with different ministries and sector partners including food producers, processors and distributors, universities, health and consumers on a Policy for Healthy Eating; the scope of the policy is on changes to the environment.
- In NB, development of guidelines for a food policy for child daycares is in progress. A grant program has been introduced which encourages Community Recreation Facilities to work with dietitians and introduce healthier foods in their canteens and vending machines. Additionally, the development of guidelines for hospitals has been initiated within regional health authorities, and is in its very early stages.
- Since April 1, 2011, NS has been implementing new food and nutrition standards for licensed childcare, which include nutrient criteria for sodium. NS has started discussions with universities and recreation facilities on healthy eating policies for these settings. NS is in the process of developing a provincial healthy eating policy for District Health Authorities, which will include all hospitals in the province.
- In PEI, guidelines for the early childhood sector and for recreation facilities are under discussion. PEI is exploring the potential for adapting the school food guidelines for use in these settings in partnership with the province's Healthy Eating Alliance.
- In NL, standards and guidelines for childcare facilities are developed; implementation is pending. NL is exploring sustainability for the Eat Great and Participate project, which aims to raise awareness of the importance of healthy eating and move towards healthy eating guidelines for sport, recreation and community centers. Project funding sunsets March 31, 2012. NL is interested in collaborating on food procurement standards within health authorities for patient and retail food services.

(B) AWARENESS AND EDUCATION**Building Awareness of Sodium as a Nutritional Concern**

- BC launched a comprehensive public education/awareness campaign focusing on sodium reduction in June 2011 and again in November 2011. An interactive tool – Sodium Sense – was launched in early January 2012 on the Healthy Families BC website, which consumers can be use to plan low sodium meals. BC has also enhanced its tele-dietitian service (DS@HLBC) to assist consumers to make lower sodium food choices.
- Alberta's Healthy U campaign includes sodium messages as part of its healthy eating information. The healthy eating toolkit includes nutrition guidelines for adults as well as other resources and tools to help Albertans eat healthier at work and at home. Alberta Health Services has developed a campaign called Healthy Eating Starts Here: Steps to a Healthier You to provide employees, patients and visitors information and tips on how they can incorporate healthy eating into their lifestyles.
- In SK, sodium is part of public education provided by regional Public Health Nutritionists as well as patient education provided by clinical and community dietitians. The sodium reduction messages will be built into other existing initiatives where possible.
- In MB, an options paper for action on sodium and trans fat reduction is currently under consideration, including consistent messaging on sodium and public education through Dial-a-Dietitian.

- YK is promoting healthy eating broadly through its Yukon Nutrition Framework, building sodium messages into existing initiatives where appropriate. Yukon is currently developing a small media campaign on sodium using the common messages. The campaign will be targeted to adults and will include radio public service announcements, newspaper ads, posters, and brochures.
- NT emphasizes the need for northern and Aboriginal input in the development of education materials, and the consideration of local context, including food preferences, cultural practices and literacy levels.
- NU is building sodium messages into new and existing initiatives where appropriate. A revised Nunavut food guide discourages some frequently consumed high sodium items. Nunavut emphasizes the need for any strategies, programs and educational materials to be culturally appropriate and relevant, with a strong community engagement process. Materials produced need to be translated into Inuktitut, Inuinnaqtun, French and English.
- In ON, the “Give Your Head a Shake” media campaign created by the Champlain Cardiovascular Disease Prevention Network (CCPN) was delivered between 2009 and 2011 to help residents learn simple ways to make healthy choices and reduce sodium from their diets: (<http://www.giveyourheadashake.ca/>). “Eat Right Ontario” is a free service offering advice by phone or online from registered dietitians, supporting people to make healthy food choices including reducing their sodium intake.
- In QC, sodium is included in messages around healthy food offerings in different environments. Le Ministère de la Santé et des Services Sociaux is working with Exenso (reference center on nutrition at Université de Montréal) and Enzyme Communication to share with different stakeholders the Vision of Healthy Eating: creating healthy food environments. This vision is global but there are concrete opportunities to raise issues around sodium. Another project funded by Québec en Forme, Nos petits mangeurs, aims to support day care workers in offering healthier menus and improving food preparation practices.
- NB has a social marketing campaign to celebrate momentum on Wellness in NB, which includes messaging around healthy eating (www.boomboomclap.ca). NB has developed a toolkit for recreation facilities Healthy Foods in Recreation Facilities: It Just Makes Sense to increase awareness and availability of healthier food choices. Sodium reduction messages have been incorporated in a new resource for teaching food skills in the after school time period.
- In PEI, sodium is part of patient education provided by clinical and community dietitians.
- NL is building sodium messages into new and existing initiatives where appropriate. The Community Sector Council of NL has established a working group to engage community groups in activities related to sodium reduction. The council aims to connect experts, researchers and NGO's in making the matter a high profile community concern. One initiative was the production and distribution of pamphlets to family physicians for distribution to patients.

Decreasing Children's Exposure to the Marketing of Foods High in Sodium

- BC is in discussion with the food industry on voluntary action in this area, and with the Heart and Stroke Foundation on adding this to their advocacy agenda.
- In QC, the Consumer Protection Act prohibits marketing to children under 13 years of age.
- In NB, the Dept of Education's policy (Healthier Foods and Nutrition in New Brunswick Public Schools) includes the requirement that the sale and promotion of foods, including items in vending machines, will consist of foods with moderate and maximum nutritional value only.
- In NS, components covering fundraising, promotion and advertising are included in Food and Nutrition Standards for regulated Child Care Facilities and School Food Nutrition Policy.

Opportunities to Increase Consumer Education and Awareness of the Nutrition Facts Table (NFT)

- AB's Nutrition Guidelines utilize the NFT as a method of noting the nutrition criteria for foods in the guidelines' choose most often, choose sometimes and choose least often food categories.
- SK incorporates education about the NFT into initiatives such as its resources to support the school nutrition criteria. Regional Public Health Nutritionists also provide NFT education as appropriate within other initiatives.
- In the fall of 2012, NU will launch community nutritional outreach programs at local grocery stores across the territory that will provide Nunavummiut opportunities to interact with health professionals on food and nutrition, including food preparation techniques through a 'recipe of the month', nutrition education on sodium and other nutrients, and advice on food shopping.
- In NB, as a first step, links have been added to the Wellness Branch website on the Nutrition Facts Education Campaign, and will be promoted on the Wellness Branch Social Marketing facebook page. Additionally, activities related to the Nutrition Facts Education Campaign are being incorporated into a new resource for teaching food skills in the after school time period.
- PEI incorporates education about the NFT into initiatives such as the school nutrition criteria and the go! PEI Healthy 101 classes.
- In NL, education and awareness of the NFT is supported by Regional Nutritionists in the health regions within the context of healthy eating (as limited human resources allow) and by a limited number of dietitians employed by grocery chains in urban areas.

Curriculum/Education Programs for Food and Health Professionals

- BC is supporting Dietitians of Canada to develop new professional and counselling resources.
- MB is exploring opportunities to promote nutrition and healthy eating, including sodium reduction, within home economics and culinary arts education.
- NT is revising the daycare manual, school and facility food policies, and Nutrition North Canada to include sodium messaging.

- NU updated and released a new food guide in the fall of 2011 and dietitians, throughout 2012, are visiting every school in the territory to provide educators with curriculum materials and activities that can be used across various age groups to enhance nutrition education.
- The Québec Government Action Plan to Promote Healthy Lifestyles and Prevent Weight-Related Problems, Investing for the future includes the integration of the principles of healthy eating in curriculum programs for food and other professionals. In addition, a specific training program on healthy eating for chefs and food services employees is under development. The Institut du tourisme et d'hôtellerie Foundation is leading a project La Sante au Menu funded by Québec en Forme. This project aims at revising practices of restaurant and food service operators. Different tools have been developed and are available on their web site.
- NB introduced a grant program to help recreational facilities change the face of their food offerings by providing access to nutrition and/or marketing expertise, as well as seed funding for purchasing new equipment and/or marketing their new healthy food options.
- NL is engaging with the NL Restaurant Association, NL Chef's Association and NL Heart and Stroke Foundation. A workshop with local Chefs and students in three culinary and food service programs in community colleges to raise awareness about sodium is under consideration. Content on the Healthy Students Healthy Schools website will provide links to Health Canada's website to provide home economics teachers and food service providers in schools with additional information on reading nutrition labels.

(C) RESEARCH

Research

- In BC, UBC studied the food patterns of children and the sodium content of those foods, demonstrating that Canadian children have high sodium intakes. BC is working to align its research support with its Innovation and Change Agenda, which includes new policies and programs to decrease sodium intake under a broader Healthy Families BC prevention strategy.
- In AB, through a Fall 2010 priority announcement, CIHR funded a project at the University of Alberta to investigate brain mechanisms and hypertension; funding from CIHR, the Kidney Foundation and other sources also supports another team studying how the kidneys regulate sodium and calcium in the body. Under a Winter 2011 priority announcement on sodium and health, CIHR funded researchers at the University of Calgary to study the implications of population health interventions on socioeconomic inequities. The researchers will focus on dietary sodium as a case study. The Heart and Stroke Foundation and CIHR fund a Chair in Hypertension Prevention and Control (Dr. Norm Campbell) at the University of Calgary. Dr. Campbell recently co-authored an article on the variability of salt levels in fast foods across six countries; findings show that Canada often has higher levels of salt in fast food products than other countries.
- NT emphasizes the need to include northern and Aboriginal communities in research. NT has conducted an initial survey of nutrition personnel in Health and Social Services Authorities on their priority needs for sodium in the NT.

- In ON, through the Winter 2011 priority announcement on sodium and health, CIHR funded two projects: McMaster University will investigate the mechanisms involved in the development of kidney disease; the University of Toronto Department of Nutritional Sciences will evaluate progress on the Sodium Working Group's recommendations for population sodium reduction, particularly changes in the sodium levels and nutritional composition of processed and restaurant foods, and changes in the sodium knowledge, attitudes and behaviour of Canadian consumers. This project has received partner funding from the Canadian Stroke Network. The University of Toronto also received funding from the Heart and Stroke Foundation to quantify reductions in sodium levels in products with the Health Check™ logo; the University of Ottawa Heart Institute is investigating the link between brain mechanisms and salt induced hypertension; McMaster University is participating in a global study (the PURE study), which is examining the factors influencing chronic disease.
- In QC, a research program on preserving and improving the nutritional value in foods related to health was launched in 2010. To date, six research projects have been funded for three years (2011-2014).
- In NL, a research team at Memorial University of Newfoundland is studying the effects of sodium on blood pressure.

(D) MONITORING

Food Supply

- AB is currently evaluating its Alberta Food for Health Awards - A Premier's Award program.
- In QC, evaluations of school food policy and food policies in health care settings are underway. Measures of food accessibility in the province are being developed by the Institut national de la santé publique du Québec. In addition, a research program on nutritional value preservation and improvement was launched in 2010 in partnership with the Fondation des maladies du Cœur du Québec et Visez santé (FMCQ), the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ), the Ministère de la Santé et des Services sociaux (MSSS), the Fonds Québécois de la recherche sur la nature et les technologies (FQRNT) and the Fonds de la recherche en santé du Québec (FRSQ). In November 2011, \$1.3 million was invested in six research projects over three years.

Dietary Intake

- NT emphasizes the need to collect baseline data and food supply information to monitor sodium consumption specifically in the north, and to be included in the next CCHS nutrition module.
- QC has conducted a health survey on adolescents in high schools. Food habits are a theme of the study. Data collection is complete and analysis will follow.

Education and Awareness

- BC carried out public opinion research studies following each delivery of its sodium reduction media campaign.
- MB is supporting a university-led Consumer Food Panel to monitor public awareness, attitudes and behaviors with respect to food and healthy eating issues.
- In ON, with support from PHAC, the "Give Your Head a Shake" media campaign is currently being evaluated.



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