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EDITORIAL

Canada's New Healthy Eating Strategy: Implications for Health Care Professionals and a Call to Action.

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Abstract

Nearly two-thirds of all deaths worldwide are from noncommunicable chronic diseases, with a similar proportion in Canada. According to the Global Burden of Disease Study, unhealthy eating is the leading risk for death and the second leading risk for disability in Canada. It is clear that to adequately address this major health issue, we need a comprehensive approach that includes strong governmental policy. In 2016, the Canadian government released its Healthy Eating Strategy, for which updating Canada's Food Guide was a key element. The government released the first wave of documents (including the new food guide and dietary guidelines) in January 2019, with the healthy eating patterns guidance to follow later in 2019. Much of this work aligns with a number of policies that have been developed and adopted by the Canadian health and scientific organizations that are members of the Canadian Hypertension Advisory Committee. As such, the current editorial is a call to action for the health care and scientific community, both individuals and organizations, to ensure they have policies consistent with and supportive of those that have been developed through the Hypertension Advisory Committee collaboration and to actively participate in providing input and feedback on the Healthy Eating Strategy through the Health Canada Stakeholder Registry. **Health & Fitness Journal of Canada 2019;12(1):3-16**.

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The Impact of Unhealthy Diets on Canadians

The World Health Organization (WHO) estimates that 63% of deaths worldwide result from noncommunicable chronic diseases (NCDs) (e.g., cardiovascular disease, cancer, diabetes and obesity)(Flegal, Kruszon-Moran, Carroll,

Fryar, & Ogden, 2016; Fryar, Carroll, & Ogden, 2015; World Health Organization, 2005). It is estimated that NCDs cost Canada \$190 billion/year (Chronic Disease Prevention Alliance of Canada, 2017), a financial burden that continues to grow as NCD morbidity, comorbidity and mortality are increasing (World Health

Organization, 2011) Superimposed on these changes has been an escalation in the absolute numbers of people with hypertension (Padwal, Bienek, McAlister, & Campbell, 2016; Schiffrin et al., 2016), dyslipidemia (Asghari et al., 2015), and diabetes (Cheng, 2013) all of which also significantly contribute to mortality and morbidity (Asghari et al., 2015; Padwal et al., 2016; Vasan et al., 2005).

To ensure that this call for action (or elements of it) has as wide an impact as possible, it is being simultaneously published in the following journals and newsletters: Canadian Pharmacists Journal, Canadian Journal of Diabetes, Canadian Journal of General Internal Medicine, Health and Fitness Journal of Canada and CV Edge.

Unhealthy eating is the leading risk for death and the second leading risk for disability in Canada. According to the Global Burden of Disease Study, dietary risks are estimated to have killed approximately 48,000 Canadians and resulted in over 800,000 years of disability in 2016 (Institute for Health Metrics and Evaluation, 2016). The economic burden of unhealthy eating in Canada is high, accounting for an estimated \$13.8 billion/year (Lieffers, Ekwaru, Ohinmaa, & Veugelers, 2018). Key drivers of this unhealthy eating pattern in Canadians are increased consumption of processed foods high in calories, salt, sugar and saturated fat and a lack of whole grains, nuts, seeds, legumes, fruits and vegetables (Garriguet, 2007; Langlois & Garriguet, 2011). For example, 75% of Canadians surpass the recommended dietary salt intake, and over half of Canadians are consuming diets above the

recommended sugar and saturated fat levels (Garriguet, 2007).

Box 1: Informative Websites

• Health Canada's healthy eating strategy:

 $\frac{https://www.canada.ca/en/services/health/campaign}{s/vision-healthy-canada/healthy-eating.html}$

• Canada's Food Guide:

https://food-guide.canada.ca/en/

• Canada's Dietary Guidelines:

https://food-guide.canada.ca/en/guidelines/

• Canada's food guide stakeholder toolkit:

https://www.canada.ca/en/healthcanada/services/canada-foodguide/resources/stakeholder-toolkit.html

• Calgary Statement Petition:

https://www.change.org/p/enact-food-policies-to-curb-chronic-disease-and-health-inequity-for-all-canadians

• Health Canada Stakeholder Registry:

https://www.canada.ca/en/health-canada/corporate/about-health-canada/publicengagement/stakeholder-registry.html

• Revision process for Canada's Food Guide:

https://www.canada.ca/en/health-canada/services/canada-food-guides/revision-process.html

Meetings and correspondence on the healthy eating strategy:

https://www.canada.ca/en/services/health/campaigns/vision-healthy-canada/healthy-eating/meetings-correspondence.html)

The Role of Policy in Diet

Historically, limited access to food has been the major challenge facing humans (Jones, 2016; Mokyr, 2012). However, the Second Agricultural Revolution around the 18th century was seen as a major shift in food production, leading to the Industrial Revolution and a rapid expansion in food availability (Kessler, 1995). Since that time, there has been a concerted effort by governments to develop policies to increase the production and distribution of low-cost and more durable food that is free from infectious pathogens and detrimental toxins, with a specific emphasis on food security and economics (Mozaffarian, Angell, Lang, & Rivera, 2018). Examples of government policies include varied subsidy programs, healthy eating advertising campaigns, assessment of food for bacteria or toxins, food labelling and nutritional assistance to lowincome citizens (Wilde, 2013).

It is clear that individual dietary eating patterns are influenced by a series of elements (Afshin. complex Micha. Khatibzadeh, Schmidt, & Mozaffarian, 2014). However, to date, most Canadian government policies around the impacts of diet on NCDs have generally been based on education and target personal choice (Mozaffarian et al., 2018). Unfortunately, at the sociocultural. many factors community environment and corporate commercial level work together to directly affect an individual's capacity to purchase, prepare and consume foods (Brug, 2008; Brug, Kremers, Lenthe, Ball, & Crawford, 2008; Mason & Lang, 2017; Mozaffarian, 2013). All of these factors can be strongly influenced by government policy and/or regulation. For example, Mozaffarian et al. (2018)highlighted ways in which governments can positively shape the dietary patterns of their citizens. These

are wide-ranging strategies that are based on current behavioural and policy science and a growing evidence base for their effectiveness. Taken together, it is clear that government policy is a key driver for significantly affecting the major role diet plays in the health of Canadians (Canadian Hypertension Advisory Committee, 2016). Furthermore, many Canadian health and scientific organizations have already supported a broad range of policy statements supporting healthy public food policy (Norm Campbell et al., 2012; Healthy Blood Pressure Framework Steering and Drafting Committee, 2012).

Canada's new Healthy Eating Strategy

In October 2016, the Government of Canada, through Health Canada, released new Healthy Eating Strategy (Government of Canada, 2018a), the vision for which is "Make the healthier choice the easier choice for all Canadians." As highlighted above, a number of synergistic policy strategies can be leveraged to improve the diet of Canadians and "no single intervention can tackle complexities of the current food system" (Canadian Hypertension Advisory Committee, 2016; Mozaffarian et al., 2018). As such, it is unsurprising that a number of internationally recommended food policies have been included in the Healthy Eating Strategy. Specifically, the strategy targets providing better nutrition information, a focus on eating behaviour, improved food quality, protecting vulnerable populations and improving availability. access and cornerstone initiatives of this strategy are the following:

- Revision of Canada's Food Guide
- Improved food label information and front-of-package labelling
- Reducing sodium in food

- Eliminating industrial trans fats
- Running a campaign to reduce sugary drink consumption
- Restricting marketing of unhealthy foods and beverages to children
- Expanding and updating Nutrition North Canada

Of these initiatives, the revision and reconceptualization of the Food Guide is a critical element, providing the evidence-based context for eating patterns and behaviours of Canadians and having the greatest impact on the day-to-day activities of health care professionals.

Canada's new Food Guide

Today we have unprecedented access to information. The majority of Canadians obtain various health care and related information from the Internet (Underhill & McKeown, 2008). This phenomenon, coupled with the surge in usage of social media (Smith & Anderson, 2018), has created nutrition information a that with environment is strewn contradictory messages and potentially erroneous, misleading or harmful advice (Fox & Duggan, 2013; Nagler, 2014). In this context, it is unsurprising that the majority of people felt that the Canadian Guide. which Food was originally developed in 1992 and updated in 2007, needed to be updated not only for content but also for usability (Ipsos Public Affairs, 2016).

To achieve its goal of developing a new approach to food and nutrition (Government of Canada, 2018b), the Canadian government has a multiphase approach planned: assessing current evidence to update dietary guidance policy, provision of simplified resources (including visuals, tips and messages) and launching an integrated, mobile-first online solution. The government has

proposed that the Dietary Guidance Policy be further broken down with staged releases of the new Food Guide (Government of Canada, 2019b) and Canada's Dietary Guidelines (Government of Canada, 2019a) (which were released in January 2019) and health eating patterns (planned release later in 2019).

The 2019 Food Guide (Government of Canada, 2019b) has been built around 3 of the 4 guiding principles of the Dietary Guidelines (Government of Canada. 2019a), rather than being a predominantly prescriptive food guide like the previous version. The key elements that have informed the new Food Guide are as follows: 1) "foundation for healthy eating" (i.e., evidence-based foods that improve health) (Health Canada, 2016), 2) "foods and beverages that undermine healthy eating" (i.e., evidence-based foods that are detrimental to health)(Health Canada, 2016) and 3) "importance of food skills" (i.e., the skills and knowledge that are needed to be able to implement points 1 and 2, as well as allowing people to navigate the complex food environment that we live in). An example of how a dietary guideline translates to the food guide and then to policy would be the following: processed foods and beverages are likely to contribute to excess sodium, free sugars or saturated fat consumption. which undermine healthy eating (Government of Canada, 2019a). This then translates into a recommendation in the food guide to "limit highly processed foods " and to "replace sugary drinks with water" (Government of Canada, 2019b). which, in theory, should tie to federal, provincial or local policy changes around the use of trans fats in industrially produced foods, taxation of sugary drinks or purchasing practices (N. Campbell et al., 2014) (aspects that align with the fourth

element of the Dietary Guidelines: implementation).

It is envisaged that these guiding principles will also be the pillars for the development of Canada's Healthy Eating Pattern for Health Professionals and Policy Makers, which will be part of the next release. Given the diversity of the Canadian population, it is clear that a document that provides static rudimentary guidelines on food groups is probably going to be inadequate to service the majority of Canadians. As such, the proposed Canada's Healthy Eating Pattern suite of tools will provide information on potential eating plans (i.e., more specific guidance on the amounts and types of food based on contextual considerations of an individual, such as sociodemographic data). It is anticipated that these will also incorporate up-to-date statistical data from ongoing food surveillance surveys (e.g., Canadian Community Health Survey) and evolving nutritional science data (e.g., systematic reviews of macro- and micronutrient food intake and NCD risk). achieved, these "healthy eating patterns/plans" will provide tailored information that is up to date and context specific to any Canadian.

To ensure that the core tenets of the new Food Guide reach as many people as possible, the fourth guiding principle of the Dietary Guidelines (Government of Canada. 2019a) focuses on implementation. Health Canada has indicated it is also developing a series of tools that will hopefully improve the effectiveness of the guide. A series of visual aids around key messaging and including actionable tips, simplified information and promoting food skills. have already been developed (Government of Canada, 2019c).

with dissemination through various media such as videos and social media already under way. However, the critical driver of these efforts will be the development of an interactive web-based application. It is anticipated that this mobile interface, which is due for release later in 2019, will provide customized usable information that will enhance the Food Guide experience for both the general population and health care professionals.

The Role of Health Care Professionals in the new Healthy Eating Strategy and Food Guide

Moving forward, there are 3 key areas where health care professionals will be critical for the success of the Healthy Eating Strategy and Food Guide: consultation, implementation and holding government to account (Health Canada, 2016).

Consultation

Transparency in the food guideline development is a driving tenet in the new strategy. One criticism of previous food guides was that too many vested interests were represented (e.g., the food industry) (Kondro. 2006: Vogel. 2018). hallmarks of the current process include extensive consultation with health care professional, academic. patient. community and health care groups (with all meetings and correspondence on healthy eating being published on a website (Government of Canada, 2016)) (Figure 1). Industry has not participated in the process. Moving forward, it is expected that this will continue. It is intended that there will be continual consultation with key academic and clinical experts on the content of the Dietary Guidance Policy, as

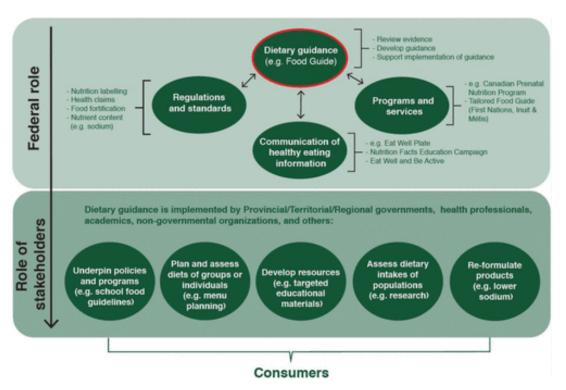


Figure 1: Federal and stakeholder roles in the Healthy Eating Strategy. Reproduced with permission from Health Canada. 37

well as user-driven changes made to the web-based application and tools to

enhance accessibility and usability.

Health Canada has facilitated this process by setting up a Stakeholder Registry (Government of Canada, 2017) where anyone can sign up to participate in the consultation process. As clinicians and academics, we have an opportunity to ensure that all aspects of the Healthy Eating Strategy stay current, meaningful and accessible.

Implementation

Ultimately, the success of the Healthy Eating Strategy will be measured by the way it has affected the dietary habits of Canadians and thus made meaningful improvements in the long-term health of the nation. Although the government will undoubtedly undertake a variety of campaigns to raise awareness of the various elements and tools of the Healthy

Eating Strategy and Food Guide, health care professionals will play a significant role in implementing these at the individual level and through our organizations at a population level.

It is hoped that the tools that will be developed, especially around the Food Guide (Government of Canada, 2019c), will be pertinent for both patients and health care professionals. Furthermore, making health care professionals aware of these tools and how best to optimally implement them will be important. Identifying the key drivers of why and how health care professionals would want to incorporate these into their practice will be critical in empowering patients in their behaviour change efforts. Examples of where health care practitioners can work to enhance implementation include using the personalization feature for the Food Guide to better tailor meals for patients with complex NCDs, developing

local healthy food procurement policies (N. Campbell et al., 2014), enhancing the education of health care providers through reforming preand postcertification curriculum and working to incorporate dietary quality and food assessment into standard security electronic health records. Developing local, provincial and national quality measures of implementation can provide an appropriate framework to engage the community and track success (Ingram, Scutchfield, & Costich, 2015).

Accountability

As intimated above, the first step of accountability is to be able systematically monitor any implemented changes so that they can be evaluated for progress and potential readjustment. This means that systems need to be developed that can be leveraged to hold the federal government accountable. Individuals, as well as health institutions, societies and associations, need to ensure that the Healthy Eating Strategy is actually translated into meaningful action by the federal government.

Given the decentralized health care structure in Canada, pushing to provide a coherent and interconnected extension to the Healthy Eating Strategy across all levels of governance (i.e., the local health care environment, city and borough levels and provincially), as well as a system for monitoring its implementation, is also important. Having a coordinated strategy across different ministries and governmental bodies would provide the optimal scenario to affect the health of Canadians.

One final aspect of accountability that needs to be addressed is that of conflicts of interest. There is clear evidence in the United States that industry, through its lobbyists, can have undue influence on policy (Brownell & Battle Horgen, 2003; Shipan & Volden, 2006), While Health Canada has done an unprecedented job of developing the Healthy Eating Strategy independently from industry, we all must be cognizant of our own biases and conflicts. This is especially true as we work to develop more comprehensive implementation and surveillance plans.

Conclusion

There is clear evidence that dietary factors are the greatest modifiable risk factor for NCDs. Past successes in tackling national behavioural issues (e.g., tobacco use) have relied on a multipronged approach, meaning that we as health care professionals need to be actively involved in all aspects to ensure that there is a major culture change around diet and eating behaviours, leading to a subsequent improvement in health. Historically, Canada's Food Guide has provided a more limited role than one would hope in dietary patterns affecting the Canadians. Through the Healthy Eating Strategy, Health Canada has developed a platform that has the potential to lay the foundation for meaningful change in improving the eating behaviours of Canadians. The new Food Guide has been developed through extensive consultation, a process that is expected to continue to ensure its relevancy and has been structured to provide flexibility for the majority of Canadians. However, it is important to remember that it is difficult for many Canadians to eat healthily in their current food environment. As the recent Calgary highlighted in Statement on policies for nutrition and health (see Appendix 1, also available online at www.cpjournal.ca), "There is a need to create food environments through

public policies that support Canadians in maintaining healthy diets where they live, learn, work and play." As such, the Healthy Eating Strategy can be seen as a starting point for the continued development of policies that emphasize the best interests of Canadians, rather than those of industry or certain agricultural sectors.

Canadian health care professionals and academics have a key role to play in the implementation of the policies and tools from the Healthy Eating Strategy (e.g., the Food Guide), ensuring accountability at all of levels and the evolution philosophies that underpin the Healthy Eating Strategy through the continual development of appropriate policies. If we are able to meaningfully improve the Canadian diet, we will be able to reap significant health, economic and societal benefits. In 2011, Canadian health care and scientific organizations developed a Framework for the prevention and control of hypertension (Norm Campbell et al., 2012; Healthy Blood Pressure Framework Steering and Drafting Committee, 2012). Given that 80% of hypertension is associated with unhealthy diets, the Framework highlighted the central role of unhealthy diets and emphasized the need to create healthy eating environments through health food policies. It is notable that Canadian health care and scientific organizations give the highest priority to efforts to implement healthy food policies in the Framework (Norm Campbell et al., Furthermore. since 2012). development of the Framework, Canadian health and scientific organizations of the Canadian Hypertension Advisorv Committee have created consensus policy statements on restrictions of marketing unhealthy food to children; healthy food procurement: increasing research. monitoring and evaluation of Canada's

food supply and food policies; defining healthy foods; taxation of unhealthy food and subsidies for healthy food; and reducing financial conflicts of interest with the food sector. They have also created fact sheets and calls to action on dietary sodium and unhealthy eating (Hypertension Canada. 2018a: Hypertension Canada, 2018b). All of these would seem to align with the main tenets of the Healthy Eating Strategy and provide a pathway to translate policy to action.

Call to Action

We call on the whole Canadian health care and scientific community, both individuals and organizations, to ensure they have policies consistent with and supportive of those in the Calgary Statement (The Calgary Statement, 2018) and the Call for Action to Implement a Healthy Food Policy Agenda (Canadian Hypertension Advisory Committee, 2016), including all the related policy statements (Hypertension Canada. 2018a: Hypertension Canada. 2018b). and advocate to all levels of government to rapidly implement such policies. For example, Canadian health care and scientific organizations can actively encourage their membership to consider signing the Calgary Statement Petition and join other healthy food policy advocacy efforts. Furthermore, we encourage the community to actively participate in providing input and feedback on the Healthy Eating Strategy through the Health Canada Stakeholder Registry (Government of Canada, 2017). This could be the most important thing we do for our patients and our society.

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Appendix 1: Calgary Statement on Policies For Nutrition And Health

https://www.change.org/p/enact-food-policies-to-curb-chronic-disease-and-health-inequity-for-all-canadians

Unhealthy dietary patterns are a leading risk factor for death and disability in Canada. Best available evidence supports a diet rich in whole, unprocessed vegetables, fruits, whole grains and protein foods, with an emphasis on protein foods that are plant-based such as nuts, seeds and legumes, and moderate amounts of animal-based protein sources such as fish, poultry, meats and low-fat dairy products. Processed foods high in sodium, sugar and saturated and trans fats should be avoided. Canada's new Food Guide should provide a foundation for healthy eating. However, it is difficult for many Canadians to eat healthily within the current food environment. There is a need to create food environments through public policies that support Canadians in maintaining healthy diets where they live, learn, work, and play. Such policies must include those that ensure that:

- Nutritious foods and beverages are accessible and affordable to all Canadians, including those who are socioeconomically disadvantaged and those who live in remote and/or northern communities;
- Dietary inequities decline over time;
- Children are protected from the marketing of unhealthy foods and beverages;
- Children have access to nutritious foods and beverages where they learn and play;
- Processed foods and beverages high in sodium, sugar, and saturated fats have frontof-package warning labels;
- Public funds are not spent on unhealthy foods and beverages;
- The health and societal costs associated with unhealthy foods and beverages are recovered through taxation of unhealthy foods;
- All foods, including those obtained in restaurants, are labelled so it is easy to understand if they are healthy or unhealthy;
- Ongoing monitoring and evaluation of the quality of Canadians' dietary intakes and the food supply; and
- The influence of the food industry on government healthy food policies is minimized.
 Policies should promote the intake of healthy, whole foods, while acknowledging the
 many interlinked factors that shape Canadians' dietary patterns. The Calgary
 Statement calls on all Canadians, and specifically those in government and non governmental organizations, to prioritize the implementation of policies and
 programs that enable all Canadians to maintain a healthy diet throughout the entire
 course of their lives.

Appendix 2: Organizations that have endorsed at least one Canadian Hypertension Advisory Committee position statement or call to action.

Alberta Policy Coalition for Chronic Disease Prevention*

Alberta Public Health Association

Canadian Association of Cardiovascular Prevention and Rehabilitation*

Canadian Association of Paediatric Nephrologists*

Canadian Cardiovascular Society

Canadian Council of Cardiovascular Nurses*

Canadian Dental Association

Canadian Medical Association*

Canadian Nurses Association*

Canadian Pharmacists Association*

Canadian Public Health Association

Canadian Society of Internal Medicine*

Canadian Society of Nephrology*

Canadian Stroke Network*

Childhood Obesity Foundation

College of Family Physicians of Canada*

Diabetes Canada*

Dietitians of Canada*

Food Secure Canada*

Heart and Stroke Foundation of Canada*

Hypertension Canada*

Kidney Foundation of Canada

Public Health Physicians of Canada

Quebec Coalition on Weight-Related Problems (Weight Coalition)

^{*} Organizations that specifically endorsed the Call for Action to Implement a Healthy Food Policy Agenda