July 31, 2017

Dr. Hasan Hutchinson,
Director General/ Directeur general
Director General, Office of Nutrition Policy and Promotion
Office of Nutrition Policy and Promotion/ Bureau de la politique et de la promotion Santé

RE: Revising Canada’s Food Guide Consultation

Dear Dr. Hutchinson:

The Canadian Nutrition Society / Société canadienne de nutrition (CNS/SCN) is the leading Canadian society that integrates disciplines and professions interested in food and nutrition. We promote food and nutrition science and education, and advocate for the application of best practice and policies for the promotion of health and the prevention and treatment of disease. The CNS/SCN is pleased to participate in the Revising Food Guide Consultation opportunity. It is our hope that the CNS/SCN will continue to be invited to provide its expertise throughout Health Canada’s process.

In preparing this response, the CNS/SCN is grateful to our Expert Working Group comprised of some of Canada’s leading researchers on this topic, including:

- Alison Duncan, PhD, RD, Department of Human Health and Nutritional Sciences, University of Guelph / Working Group Chair
- Stéphanie Chevalier, PhD, Assistant Professor, Department of Medicine, McGill University, Associate Member, School of Human Nutrition, MUHC-Research Institute
- Mark Dekker, PhD, Principal Scientist, Nutrition Sciences, PepsiCo Canada
- May Faraj, PhD, Associate Professor, Université de Montréal
- Melissa Anne Fernandez, RD, School of Nutrition, Laval University
- Marcella Garsetti, Ph.D, Principal Scientist - Nutrition & Health, Unilever North America
- Christine Lowry, MSc, RD, Healthy Grains Institute
- David Ma, PhD, Associate Professor, Human Health and Nutritional Sciences, University of Guelph
- Sara Mahdavi, RD, Faculty of Medicine, University of Toronto
- Saira Mohammed, BHE, MSc, CCRP, Project Lead, Providence Health Care, BC Centre for Excellence in HIV/AIDS
- Rachel Murphy, PhD, Assistant Professor, School of Population and Public Health, University of British Columbia
- Sandhya Nair, RD, PhD, Research Scientist, Omniactive Health Technologies
- Roseann Nasser, RD, CNSC, Regina Qu’Appelle Health Region, Nutrition and Food Services
- Zannat Reza, RD, President, Thrive360
- Joseph Telch, MD, Paediatrician, Bloorview Kids Rehab Centre
- Pat Vanderkooy, RD, Public Affairs Manager, Dietitians of Canada
- Tom Wolever, PhD, MD, University of Toronto
- Andrea Grantham, Executive Director, Canadian Nutrition Society
Further, the response included engagement from the CNS-SCN Board of Directors:

- David Ma, PhD, CNS-SCN President / Professor, Department of Human Health and Nutritional Sciences, University of Guelph
- Jim House, PhD, CNS-SCN President-Elect and VP Research / Head of the Department of Human Nutritional Sciences, University of Manitoba
- Mei Tom, RD, CNS-SCN VP Clinical / Director - Nutrition Service, Edmonton Zone, Alberta Health Services
- Robert Bertolo, PhD, CNS-SCN Past-President / Canada Research Chair in Human Nutrition and Professor, Department of Biochemistry, Memorial University of Newfoundland
- Alison Duncan, PhD, RD, CNS-SCN Treasurer / Professor, Human Health and Nutritional Sciences, University of Guelph
- Vera Mazurak, PhD CNS-SCN Director-at-large / Associate Professor, University of Alberta
- Guylaine Ferland, PhD, CNS-SCN Director-at-large / Professor, Université de Montréal
- Rupinder Dhaliwal, RD CNS-SCN Director-at-large / Director of Operations, Metabolic Syndrome Canada

The CNS/SCN has taken significant effort to put forth the following comprehensive response to this consultation. All Working Group members completed the consultation questions via CNS/SCN. CNS/SCN reviewed all comments, consolidated and used the input provided to prepare this response. It is important to inform that although all Working Group members completed the questions relating to AGREE/DISAGREE/DON'T KNOW polls, this information is not being included in this response. It is our belief that the outcomes of these questions are misleading given that, in almost all cases, they were not a definitive AGREE/DISAGREE answer, as multiple considerations on each question need to be reviewed. CNS/SCN has outlined these considerations throughout.

RECOMMENDATION: the CNS/SCN wishes to particularly highlight the need for a continuous cycle of Evidence Review (as initiated by ONPP) and further evaluation and review of Canada's Food Guide, ideally every 5-7 years. With the pace of nutrition research expanding quickly, it is essential that it is reviewed more frequently.

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REVISING CANADA’S FOOD GUIDE – CNS DRAFT RESPONSE

GUIDING PRINCIPLE 1 (GP1)/Recommendation 1
Regular intake of vegetables, fruit, whole grains, and protein-rich foods – especially plant-based sources of protein

GP1/Recommendation 1 - What do you like about this recommendation?
- The approach is positive as it focuses on what to eat and is based on an overall healthful dietary pattern rather than an individual food. Further, it stems from the observation that dietary patterns including these foods are associated with positive health outcomes.
- There is good emphasis on plant-based sources of protein with respect to an intake of protein-rich foods and examples of such foods.

GP1/Recommendation 1 - What do you dislike about this recommendation?
This recommendation is not fully aligned with the conclusions of Health Canada’s 2015 Evidence Review for Dietary Guidance (ERDG) that concluded that there is convincing evidence that dietary patterns characterized by higher consumption of vegetables, fruits, whole grains, low-fat dairy, seafood, lower consumption of red and processed meats, refined grains, and sugar-sweetened foods and beverages are associated with positive cardiovascular disease outcomes.

The focus only on low-fat dairy is of concern. Low-fat yogurt and cheese are promoted. For scientific reasons and the fact that cheese is a nutritious food, it is better to eat cheese with normal fat than to not eat cheese. More evidence shows that dairy fat has a neutral effect on CVD risk, thus reducing saturated fat from these sources may not be justified. These foods are rich in other nutrients, (e.g. calcium and vitamin D). Reduced-fat cheese and yogurt products are not as tasty and palatable as the original and are, by default, more processed which is against the concept of avoiding more processed foods. For yogurt, when fat is reduced, more sugar or sweeteners are generally added to mask the acidic taste, on top of gelatin or starch for texture. This results in a more altered product than the original one. Reduced-fat cheese has a very different texture that is not appreciated by most people.

The recommendation for homogenized (3.25% M.F.) milk should not be restricted for only young children as it is a nutrient-dense food that can fit into a healthy diet.

A sole focus on whole grains is inappropriate. Only promoting whole grains leaves the impression that food choices made with refined enriched grains are nutritionally inferior. We fail to see the body of evidence that would lead to the reduction of enriched non-wholegrain foods, (bread, cereal, pasta) found in Tier 1 and Tier 2 of Canada’s Food Guide classification of foods. In fact, recent data has demonstrated the positive health outcomes associated with certain grain food patterns consumption. [1] Additionally, the consumption of enriched non-whole grain products, according to Health Canada, is responsible for the 46% reduction rate of neural tube defects in 7 provinces since 1998. [2]

Consumers don’t eat whole grains or refined grains, they eat products made from these grains, such as bread, cereal, bagels, pasta, etc. Whole grains do not fit into a list of foods (vegetables, fruits, protein-rich foods), therefore consumers may be confused over what whole grains means in terms of foods.

Consideration of consumers’ current eating patterns and current food supply is missing, as well as the impact of food environments where people buy and eat food.

The word "regular" for the intake of the described nutritious foods is vague as servings will depend on gender, age, etc.

Quality of plant-based protein should be considered since many are not complete proteins.

It is important to acknowledge and identify that environmental sustainability of our food supply is a part of healthy eating. It is not healthy if our current eating choices create gaps/barriers for future generations who won’t be able to eat certain foods or if those foods are too contaminated due to neglectful practices.

GP1/Recommendation 2
Inclusion of foods that contain mostly unsaturated fat instead of foods that contain mostly saturated fat

GP1/Recommendation 2 - What do you like about this recommendation
- This recommendation is consistent with the available evidence, which consistently shows a robust association between replacement of saturated fat with unsaturated fat and reduction of blood cholesterol.
- This recommendation is in support of the 2015 ERDG Report examining the association between saturated fat intakes and health outcomes including reduction of cardiovascular disease risk.
- It is clear, it makes sense, consistent with evidence and it generally and applies to most foods.

GP1/Recommendation 2 - What do you dislike about this recommendation?

- The arbitrary distinction that all saturated fat is bad for you is not consistent with all healthy dietary patterns. From a nutritional perspective, saturated fat has a place within a balanced diet. This recommendation does not distinguish between the sources of saturated fat which are not the same. For example, saturated fat from dairy does not have the same physiological effects as saturated fat from other sources. Further, there are many nutrients (i.e. protein, vitamin D and calcium) found in full-fat dairy products that are low in the diets of Canadians. A statement to reduce saturated fats from less nutritious sources, such as commercial bakery products, crackers, processed meats, instead of from highly-nutritious foods like meat and cheese would be more appropriate.
- This recommendation notably omits consideration of monounsaturated fats (MUFAs). Consumers may be confused about where foods containing mostly MUFAs fit within this recommendation. As a result, further explanation is needed to encourage intake of MUFAs and omega-3s as sources of unsaturated fats (USFAs) because there is controversy around omega-6s (linoleic acid vs arachidonic). The types of food items containing the most needed and least consumed USFAs should be stressed, especially omega-3 polyunsaturated fats (PUFAs) (fish oils and seafood products), followed by MUFAs (olive oil, nuts and seeds), as omega-6 PUFAs (such as from safflower oil are already well consumed. There is evidence that pre-school-aged children are omega-6 deficient. Only this group should be recommended to consume more arachidonic acid (animal fat) to support growth and development.
- Since beverages contain saturated fats, they should be mentioned alongside foods. Such beverages with saturated fats include specialty coffees, milkshakes, cocoa, and alcoholic drinks with cream.
- More specific and exemplary language will need to be used when talking to consumers. It will be important to provide like-for-like advice such as "replace butter with vegetable oils", or "consume nuts more often than meat", in order to help Canadians change their behavior. Revising the recommendation to be more positive and including examples would help. RECOMMEND wording: “Include foods that have unsaturated fats (e.g. olive oil, canola oil, avocado).”

GP1/Recommendation 3

Regular intake of Water

GP1/Recommendation 3 – What do you like about this recommendation

- This recommendation is simple, straightforward and doesn't confuse the message with other "healthy drinks" like milk or 100% fruit juice. Regular intake of water is the best way for body's proper functioning and detoxification. Water is non-caloric, readily accessible and freely available to most Canadians. This recommendation is consistent with GP #2 to
promote drinking more water instead of sugar-sweetened beverages (SSB) and promote oral health.

**GP1/Recommendation 3 – What do you dislike about this recommendation**

- This recommendation, although clearly stated, is too simplistic. Water is not assessed against all outcomes in its ERDG, while it assessed tea, coffee and SSB. It does not acknowledge that Canadians consume other beverages (coffee, tea, sweetened and unsweetened drinks, alcoholic beverages) and does not offer alternative choices to Canadians. Beverages that are appealing and taste good are more likely to be consumed and can be helpful in achieving adequate total water intake on a regular basis. It also does not consider personal, cultural, religious preferences with respect to fluid intake. Proper hydration can be achieved by suggesting to "choose more often lower/non-caloric beverages, such as water, tea, coffee, water-rich fruits and vegetables, soups.
- The dietary guidance policy document should be written with more guidance for Food Policy for Canada and address drinking water in public spaces, less bottled water, when there is justification for bottled water (addressing the problems in communities where water isn't safe/clean).

**Guiding Principle 1**

*Is there anything else you would like to say about Guiding Principle 1 and its recommendations?*

- The importance of healthy dietary patterns and overall diet should be considered rather than such a strong focus on individual foods or nutrients. Health Canada should develop policy using the most recent CCHS data. It should also consider a similar approach to the USDA that promotes a balanced approach, including being mindful of dietary choices (https://health.gov/dietaryguidelines/2015/guidelines/executive-summary/). This approach recommends to: *Follow a healthy eating pattern across the lifespan. All food and beverage choices matter. Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce the risk of chronic disease.*
- There is an inconsistent use of foods vs nutrients which could confuse Canadians. It is recommended that the guiding principle focus on foods rather than nutrients.
- Although the listed considerations (determinants of health; cultural diversity; environment) were noted as relevant, it is recommended that these considerations be integrated into each Guiding Principle rather than listed at the end.
- We look forward to seeing the next layer of detail about guidance on the amount of food to be consumed, including caloric needs and differences (e.g., based on age, gender, physical activity), as well as caloric density and/or nutrient density. Including this would be consistent with the ERDG which noted evidence for a positive association of portion sizes and body weight. Consideration of calories and/or serving sizes to enable consumers to practice moderation should be included. We also suggest that Health Canada carefully include examination of the following considerations:
  - Focus on variety, nutrient density, and amount. To meet nutrient needs within calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts. By choosing nutrient dense foods, you can guide consumers to choose the foods in Tier 1 and Tier 2 groups, supporting the
consumption of enriched non-whole grain foods, which contain key nutrients like folic acid and iron.

- Limit calories from added sugars and saturated fats and reduce sodium intake. Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.

- Shift to healthier food and beverage choices. Choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices. Consider cultural and personal preferences to make these shifts easier to accomplish and maintain.

- Support healthy eating patterns for all. Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities."

- The concept of processed foods needs to be better explained. It is recommended that Health Canada follow the example of the Brazilian food guide in which they distinguish minimally processed from ultra-processed foods and include examples. This would encapsulate eating less saturated fat, that would come from commercial bakery goods, crackers, chips, French fries or sausage.

- The word nutritious needs to be clearly defined since many Canadians may not know what it means. Related to this, it should be noted that meat, regular-fat dairy, 100% fruit juice, and flavored-plant based beverages such as soy milk are nutritious foods. SUGGEST revised wording: "A variety of whole and minimally-processed foods and beverages are the basis of healthy eating".

- Foods need to be evaluated on their nutritional quality, not their degree of processing. We can discourage the consumption of baked goods, cracker chips, French Fries based on their high levels of sugar, fat, and sodium. It is a false statement to imply processing of food is related to a poor nutritional choice when cut vegetables are processed and grains are processed in to breakfast cereal. Similarly, it is also incorrect to encourage whole grains and discourage refined enriched grains, when there are many high fat crackers/chips made with whole grains. We need to use to use the Food Tier system developed by CFG to help consumers make better food choices, and not use sweeping generalizations like eat less processed foods or refined grains.

- It is recommended that saturated fats from dairy and meat not be specifically mentioned. There is no evidence to support that eating regular-fat dairy and meat every day on the basis of a healthy diet is harmful for health, as proposed by these recommendations. Meat can be a healthy nutrient-dense food that can be part of a healthy diet, especially in women who have great difficulty meeting iron and zinc needs and in older people needing higher quality protein and vitamin B12.

- Eating "more" or "less" requires clarification. Many people will eat more of something thinking it is good for them with no understanding of calories and portion size. It is challenging to advise when there is no knowledge of the person's current dietary pattern. It is recommended that different terms be used that reflect frequency rather than relative terms.

- The emphasis on low-fat dairy is a concern since it is not based on evidence and can prevent consumption of a nutrient-dense food. Related to this is the concern of using a single nutrient approach and classifying a food as good or bad. Saturated fat from dairy is not related to CVD; recent meta-analyses found a 2% lower risk for CVD with each 10g of cheese (Guo et al. Eur J Epidemiol). At the worst, cheese has a neutral relationship to CVD despite its high saturated fat content, and should not be singled out as a negative food. Some foods
that contain saturated fats (e.g. cheese, yogurt) have many other beneficial nutrients that are not present in foods with unsaturated fats. Calcium and vitamin D intakes are highlighted in the evidence review as having a high prevalence of inadequate intake and this recommendation may exacerbate this problem.


**Guiding Principle 1 - Based on your experience working with older adults, children and youth, Indigenous populations, low-income people, newcomers, or people with low literacy, is there any further feedback that you would like to give us?**

- Canada’s Food Guide needs to reflect the diverse needs of the Canadian population. The guiding principles should also address specific groups like young/preschool children, pregnancy/lactation, and older adults. Among older adults there is concern about recommendations to reduce good protein sources, such as meat which is meant to apply to those consuming too much. Further, recommending cheese and yogurt is totally appropriate as these are great sources of protein (and other nutrients). Lower fat versions are not palatable and thus may result in these valuable foods being avoided altogether.


- When developing tools and resources, Health Canada should consider different population groups, levels of nutrition literacy, different dietary preferences linked to their cultural and
religious heritage, different level of access of nutritious foods and different food budget. The definitions used in this Guiding Principle are not universal. Many people do not know what whole grains are and differences between unsaturated and saturated fat. The communication needs to be simple, positive and inspirational. People should not feel guilty. Rather, we should focus on suggestions to help nudge people in the right direction.

GUIDING PRINCIPLE 2 (GP2)/Recommendation 1
Limited intake of processed or prepared foods high in sodium, sugars, or saturated fat

GP2/Recommendation 1 – What do you like about this recommendation
- The evidence is strong for foods high in sodium and sugars (and fat depending on the source) and the 2015 ERDG summarizes convincing evidence of deleterious effects. These should be limited in the diet to prevent chronic diseases such as cardiovascular disease, diabetes, and cancer. Citation: 1. Moubarac JC, Martins AP, Claro RM, Levy RB, Cannon G, Monteiro CA. Consumption of ultra-processed foods and likely impact on human health. Evidence from Canada. Public Health Nutr. 2013;16(12):2240-8.
- Consumers do eat foods high in sugar, sodium and fat (e.g. potato chips, ice cream, candy) and they need to limit their consumption of these foods.
- Emphasis on processed meats is warranted given the recent classification of processed meats as a carcinogen by the WHO. As found by Health Canada in its 2015 ERDG review, only processed red meat is convincingly associated to some type of cancer.
- This recommendation is realistic in that it does not suggest entirely removing specific items from the diet.

GP2/Recommendation 1 – What do you dislike about this recommendation
- Processed is a subjective term that many health professionals misuse and falsely categorize foods into an "unhealthy" category. Food needs to be evaluated on its nutritional content, not its degree of processing or based on a single nutrient. Many processed or prepared foods are nutrient dense and can contribute substantially towards meeting daily nutritional needs of nutrients and food groups, these include cooked, canned, frozen, and packaged vegetables or fruit (e.g. hardboiled egg, canned tuna, roasted nuts, frozen peas) which are minimally processed. There is no rationale or evidence that pasteurization, freezing or canning is harmful.
- Avoiding PROCESSED meats needs to be added to the section where it indicates "Eat less red meat (beef, pork, lamb and goat)". Scientific evidence links processed meats to cancer risk.
- There is no recommendation on types of meat, processed red meat (for which evidence of risk was deemed convincing in the ERDG), regular-fat dairy or refined grains. Specific recommendations on these food groups, which have a significant role in the diet of Canadians, is needed.
- The evidence addressing processed meats and their relationship to cancer should be considered with a potential inclusion of guidance on frequency of consumption.
- It is important to acknowledge that some processed foods provide healthful nutrition in a convenient manner, can serve to reduce fresh food waste due to their extended shelf-life in many cases and may be more appropriate for rural and remote communities where access to fresh food and food ingredients may be seasonally limited. Some processed and prepared foods serve a variety of purposes, including convenience, nutrition variety in a cost-competitive nature, and the provision of quality nutritional products throughout the
seasonal cycle of fresh products. These can meet the needs of modern families who are faced with time constraints.

- The term "prepared foods" in this context is confusing as it can be interpreted as foods minimally prepared at home, such as cutting fruit. The term should be revised to "commercially prepared foods".
- There needs to be education about why some packaged foods should be avoided and how to make healthy choices.
- The definition of limited intake is vague. It refers to frequency rather than amount. Given the increase in portion sizes over the past decades, referring only to frequency is potentially problematic for the obesity epidemic Canada is experiencing. It is also unclear as to what ‘high in’ means, although one can speculate that it is referring to greater than 15% DV.

GP2/Recommendation 2 – Avoidance of processed or prepared beverages high in sugars*

* Processed or prepared beverages that can be high in sugars include: soft drinks, fruit-flavoured drinks, 100% fruit juice, flavoured waters with added sugars, energy drinks, sport drinks, and other sweetened hot or cold beverages, such as flavoured milks and flavoured plant-based beverages.

GP2/Recommendation 2 – What do you like about this recommendation

- The evidence for limiting sugar sweetened beverages (SSBs) for overall health and particularly dental health is convincing. The uptake of this recommendation can have very important effects on the health of Canadians. Processed and prepared beverages are rich in added sugars to improve taste and consistency. Over-consumption of these beverages is an etiological factor for type 2 diabetes, obesity, high blood pressure. Over-consumption of SSBs is associated with increased body weight in both epidemiological and clinical trials. This recommendation is consistent with the conclusion of the 2015 ERDG that found that there was more robust evidence, since 2005, that SSBs increase adiposity in children.
- This recommendation is complementary to the recommendation for Guiding Principle #1 on drinking water regularly. The promotion of this recommendation to avoid the intake of high-sugar beverages such as processed or prepared beverages will promote more water intake.

GP2/Recommendation 2 – What do you dislike about this recommendation

- This recommendation doesn’t properly refer to the issue of ADDED sugar as being the issue of concern. All beverages we consume are prepared or processed in some way, so this is an important point that needs to be articulated.
- There is evidence to support the inclusion of 100% fruit juice in the Food Guide as appropriate and the right thing to do for Canadians, and continue to respect the guidance that Canadians have whole vegetables and fruit more often than juice. While too much consumption of 100% fruit juice is not recommended, one small glass (e.g. 125ml) daily is a good source of vitamin C and potassium and may be how some people get most of their vitamin C.
- This is a myopic view of foods and drinks, which exist on a continuum of health. This guiding principle will slot foods into a black/white camp of good vs bad. It is arbitrary and discriminatory to recommend “avoidance” of any processed or prepared beverages high in sugars, while at the same time recommending that foods that are high in sugars should have a “limited intake”. This translates into a dietary pattern where it is acceptable to "limit" the intake of sugary foods like cake, candy, chocolate, chocolate bars, cookies, danishes, donuts, ice cream, popsicles, breakfast cereals while seeking to "avoid" beverages like 100% juice
and flavoured milks that are nutrient dense and contribute to adequate daily intake of vitamins and minerals.

- Having separate recommendations for water and SSB is disjointed. All recommendations for beverages should be grouped together.
- "High" is meaningless without context. RECOMMEND wording "Avoidance of beverages containing added sugars" which is simple and accurate, OR "replace SSB with water or other non-caloric beverages" OR "choose water and non-caloric beverages more often than SSB"
- Undermine is a strong word. Consider using positive language.
- Examples of flavored milks and flavored plant-based beverages are missing and should be provided. Chocolate milk is a flavored drink which is high in sugar but palatable among children (1) and provides the required nutrients for growth and development among children and adolescents (2,3). Thus, there should be a footnote on this point. Citations: 1. Fayet-Moore F. Effect of flavored milk vs plain milk on total milk intake and nutrient provision in children. Nutr Rev. 2016 Jan;74(1):1-17. 2. Murphy MM, Douglass JS, Johnson RK, Spence LAJ. Drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effects on weight status in US children and adolescents. Am Diet Assoc. 2008;108(4):631-9. 3. Fayet F, Ridges LA, Wright JK, Petocz P. Australian children who drink milk (plain or flavored) have higher milk and micronutrient intakes but similar body mass index to those who do not drink milk. Nutr Res. 2013;33(2):95-102.

Guiding Principle 2
Is there anything else you would like to say about Guiding Principle 2 and its recommendations?

- There is a concern that the Guiding Principle 2 statement as written ("Processed or prepared foods that are high in sodium, sugars, or saturated fats undermine healthy eating.") is incorrect. None of the foods listed will have a negative impact on health if consumed occasionally based on a healthy diet; rather, it is a global diet high in these foods that undermines healthy eating, not single foods.
- The focus on single nutrients is too one-dimensional. This statement equates all sources of sodium and all sources of added sugars as being equally detrimental to health which is not the case. There are some foods that have added sugar that are considered nutritious foods that offer sources of micronutrients and fiber. Data from the US and the UK shows that people with intakes of added sugars below the mean have lower intakes of key nutrients (e.g. calcium, iron, folate) than those consuming average intakes of added sugars. Sweetened milk such as chocolate milk may be high in sugar, it is also a nutrient-dense food and sometimes the only way that some children consume milk. Pooling sweetened milk with other SSBs is not a fair categorization.
- The evidence for sodium reduction is not clear – some evidence suggests that the current mean intake is acceptable and that less may be harmful. The DASH study showed that with a high intake of potassium (fresh vegetables), added sodium has little or no negative impact (and makes the vegetables taste better).
- We recommendation that the word “added” be incorporated into the statement: "Limited intake of processed or prepared foods high in added sodium, sugars, and saturated fats". Otherwise, fruits (high in sugar), cheese and meat (high in saturated fats) would be part of this restrictive recommendation and they should not be.
• Snacking has become an integral part of individual’s daily lives, sometimes up to a third of daily calories. Messaging should promote the importance of choosing healthier options that are less sugary, salty and fatty while trying to eat on the go.

• This Guiding Principle and its recommendations are important to convey to Canadians from a health standpoint to support healthy eating practices; however, the language needs to be clear and concise for better understanding. Wording should be similar for foods and beverages. The language used should be positive. It should be supported by scientific principles and the ERDG review and should aim to support Canadians in making healthy choices (not shift blame).

Guiding Principle 2 - Based on your experience working with older adults, children and youth, Indigenous populations, low-income people, newcomers, or people with low literacy, is there any further feedback that you would like to give us?

• As Health Canada itself notes, “Food choices are not simply a matter of personal choice. There are many interrelated factors that influence our ability to make healthy food choices, including access to and availability of nutritious foods, culture, and the social and physical environment.” [Canada’s Food Guide Consultation: Summary of Guiding Principles and Recommendations (detailed); webpage accessed 2017/06/26]. It is important to better acknowledge that people from some subgroups face unstable housing situations (1,2) who would not have the means to access nutritious food affordably and conveniently to prepare at home. This principle will do nothing to help them make better choices. Individuals susceptible to food insecurity including older adults, children, indigenous people, low-income households, and newcomers are more likely to access affordable foods such as snacks and fast food which are poor in nutrition quality. For Canadians to adopt these recommendations, there needs to be further support from the government to make housing affordable to support a healthy food environment and improve food access. A massive educational plan with constant support from all levels of government and public health will be/is needed. Citations: 1. Li N, Dachner N, Tarasuk V. The impact of changes in social policies on household food insecurity in British Columbia, 2005-2012. Prev Med. 2016;93:151-158. 2. Fafard St-Germain AA and Tarasuk V. High vulnerability to household food insecurity in a sample of Canadian renter households in government-subsidized housing. Can J Public Health. 2017;108(2):e129-e134.

• Additional information is needed for different populations, particularly children. Specific recommendations about beverages to children should be explicit so that schools and institutions will adopt the recommendations into policies. For example, children should be given water or unsweetened milk as beverages of choice and sweetened or processed beverages should be avoided or limited.

• The word “avoid” in dietary recommendations is not helpful, as no single food is unhealthy if consumed occasionally when the global diet is healthy.

• Education for the understanding of Guiding Principle #2 needs to start very early in life and continue through life.
GUIDING PRINCIPLE 3 (GP3)/Recommendation 1 – Selecting nutritious foods when shopping or eating out.

GP3/Recommendation 1 – What do you like about this recommendation

• This recommendation promotes healthy food purchases when shopping and eating out. Affordable, nutritious food choices should be encouraged and recommendations should identify examples of optimal, nutritious food choices from each food group. Citation: 1. Primavesi L, Caccavelli G, Ciliberto A. et al. Nutrieconomic model can facilitate healthy and low-cost food choices. Public Health Nutr. 2015;18(5):827-35.

• This recommendation also acknowledges that CFG must be about the process of how we choose and acquire foods, about food environments. Consumers need to understand about education that’s available to understand labelling etc. It recognizes the social aspect of eating and the importance of social and environmental influences of food.

GP3/Recommendation 1 – What do you dislike about this recommendation

• "Nutritious" is vague and may be perceived as meaning low in added sugars, sodium and saturated fat since this seems to be what the recommendations are focusing on. This recommendation offers no guidance on helping to make that choice. For example, the Brazilian food-based dietary guidelines recommend "Out of home, prefer places that serve freshly made meals" and "Shop in places that offer a variety of natural or minimally processed foods".

• Food acquired outside of shopping is not addressed, such as hunting and gathering (especially Indigenous and people living in remote/rural areas), urban gardeners, food sharing, gleaning. It doesn’t expressly address food environments as an important part of consumer choice.

• Selecting nutritious foods when grocery shopping or dining out can be a challenge for individuals who are not health conscious or who lead an unhealthy lifestyle (1). The recommendation needs to consider the economic and financial constraints of households as those who are facing food insecurity are more likely to shop at convenience stores with unhealthful food options (2). Those with low education levels and those from low-income households are least likely to purchase nutritious foods (high in fiber, low in salt, fat, and sugar) (3). Citations: 1. Beydoun MA, Powell LM, Wang Y. Investigation on the role of consumer health orientation in the use of food labels. Public Health. 2017;147:119-127. 2. Ma X, Liese AD, Hibbert J, Bell BA, Wilcox S, Sharpe PA. The Association between Food Security and Store-Specific and Overall Food Shopping Behaviors. J Acad Nutr Diet. 2017;2672(17)30119-3. 3. Turrell G, Kavanagh AM. Socio-economic pathways to diet: modelling the association between socio-economic position and food purchasing behaviour. Public Health Nutr. 2006;9(3):375-83.

• Canada’s Food Guide is meant to be Dietary Guidance for Canada (not just individuals), and to inform development of Food Policy for Canada. As such, more population and environment guidance is needed. This Dietary Guidance sounds too much like "Canada’s Food Guide", but what is needed are tools like Canada’s Food Guide and the Dietary Guidance for professionals and educators. This should not be written as if it’s talking to individual consumers.
GP3/Recommendation 2
Planning and preparing healthy meals and snacks

GP3/Recommendation 2 – What do you like about this recommendation

- This is an excellent recommendation as preparing healthy meals and snacks at home can be economical and enjoyable to eat. The promotion of this recommendation with proper education and marketing strategies can encourage a high-quality diet. Citation: 1. Beydoun MA, Powell LM, Wang Y. Reduced away-from-home food expenditure and better nutrition knowledge and belief can improve quality of dietary intake among US adults. Public Health Nutr. 2009;12(3):369-81.
- This recommendation also recognizes the importance of food skills, and encourages people to think about what they eat and prepare their own meals as much as possible. It is consistent with the emphasis on reducing processed foods. It promotes development of long-term dietary behaviour change.

GP3/Recommendation 2 – What do you dislike about this recommendation

- With food skills in Canada being very low, Health Canada needs to develop concrete plans for addressing this problem. This recommendation needs to acknowledge the importance of a plan for a community level intervention (i.e. municipal policy) for the uptake of this recommendation (e.g. community-based cooking program, community gardens, community kitchens). There is evidence showing that community-based cooking programs can help with cooking, confidence, time management, food purchasing behavior and reduce barriers of cost, waste, and knowledge (1,2). This recommendation should emphasize the physical skill of food preparation and encourage it as a life-long learning process. Citations: 1. Garcia AL, Reardon R, Hammond E, Parrett A, Gebbie-Diben A. Evaluation of the "Eat Better Feel Better" Cooking Programme to Tackle Barriers to Healthy Eating. Int J Environ Res Public Health. 2017 Apr 4;14(4): E380. 2. Herbert J, Flego A, Gibbs L, Waters E, Swinburn B, Reynolds J, Moodie M. Wider impacts of a 10-week community cooking skills program--Jamie’s Ministry of Food, Australia. BMC Public Health. 2014;14:1161.
- The effect of planning and preparation in its ERDG has not been formally assessed. This recommendation does not recognize that healthy eating is possible outside this framework as 1) it is possible to buy prepackaged healthy snacks and meals 2) planning leads to more variety only when food and nutrition literacy is adequate. Preparing at home snacks and meals lead to healthier food choices only if Canadians are adequately educated about healthy diets. This should be an additional consideration for Canadians rather than a strict recommendation.
- It has been simplified too much and needs to be further qualified. Healthy needs to be defined.

GP3/Recommendation 3 – Sharing meals with family and friends whenever possible

GP3/Recommendation 3 – What do you like about this recommendation

- This recommendation addresses the social aspect of eating. There is growing evidence that eating together leads to healthier eating habits. This is also important for older adults and it is also important for children. In many studies, children eating their food with family show better academic performance and are least likely to be overweight. From a nutritional perspective, family meals provide opportunities to taste a variety of healthy food choices, new tastes and learn to respect appetite as a guide to satiety. Evidence also indicates that

**GP3/Recommendation 3 – What do you dislike about this recommendation**

- The addition of appropriate environments would be beneficial for this recommendation, as the evidence is largely around sharing meals with family and friends in the home rather than at restaurants. An appreciation for timing of meals (regular meals versus snacking) is also needed. Consider adding another recommendation about valuing food with environmental consideration (less waste), with SES (no shame in eating on a budget), with culture (it’s an integral part of social support, celebration).

- There should be some consideration of the family structure and social interactions/networks when making such a recommendation. For instance, friendships among adolescents influence healthy food consumption (1). Thus, the recommendation may not be applicable for certain age groups such as adolescents. It has been also documented that families where the parent is single, divorced, or separated are more likely to have family meals than parents who are married or partnered (2). Thus, the recommendation should be made without any generalization. Citations: 1. Sawka KJ, McCormack GR, Nettel-Aguirre A, Swanson K. Associations between aspects of friendship networks and dietary behavior in youth: Findings from a systematized review. Eat Behav. 2015;18:7-15. 2. Skeer MR, Yantsides KE, Eliasziw M, Tracy MR, Carlton-Smith AR, Spirito A. Sociodemographic characteristics associated with frequency and duration of eating family meals: a cross-sectional analysis. Springerplus. 2016;5(1):2062.

- Many social occasions and family gatherings are opportunities for over consumption as well. Celebrations like Thanksgiving and the winter holidays are typically associated with consumption of a large amount of food (predominantly home-made). Thus, caution about over-consumption should be addressed within this recommendation.

- It is important to caution that although there is growing evidence, this recommendation is not science-based. There is a signal that adolescents who share family meals have healthier eating habits and body weight, higher academic achievement, better psychological well-being, and lower risk of substance use and delinquency, this evidence is not yet convincing. In this case, it is hoped that common sense would suggest that sharing meals with friends have physical, emotional and mental benefits. For this reason, this recommendation could be an additional consideration.

- The language used is exclusive. What if a person doesn’t have family or friends nearby?

**Guiding Principle 3 - Is there anything else you would like to say about Guiding Principle 3 and its recommendations?**

- The terms "nutritious" and "healthy" are vague. It seems that "healthy" will be defined as foods low in sodium, saturated fat and added sugars - which is a vast oversimplification.

- This Guiding Principle and its recommendation may have a better place in 'Additional Considerations as they are based more on common sense than on science. At the basis of this additional consideration is the concept that food literacy and nutrition literacy are...
paramount. Knowing how to cook is important as well as knowing to read a label. One can eat well alone or with friends. Planning is not required to eat well but is likely to lead to more variety only if the individual has an adequate nutrition literacy. Tools and resources will need to be available to help the public build the necessary skill-set to plan and prepare meals. Further intervention or marketing plans, especially to target subgroups (e.g. low income, older people, children and youth, newcomers, indigenous people, people with low literacy) that require such measures for the successful implementation of these recommendations.

Guiding Principle 3 - Based on your experience working with older adults, children and youth, Indigenous populations, low-income people, newcomers, or people with low literacy, is there any further feedback that you would like to give us?

- The elderly are often socially isolated and are susceptible to malnutrition (1). Thus, it cannot be assumed that people or households are in a family unit or have a social network. This recommendation should be re-worded to encourage communal eating or should be clarified to make it applicable across all subgroups. Citation: 1. Boulos C, Salameh P, Barberger-Gateau P. Social isolation and risk for malnutrition among older people. Geriatr Gerontol Int. 2017;17(2):286-294.
- Low-income households tend to access convenience stores and may be concerned with food purchasing power to buy food at grocery stores. More education to help identify affordable, nutritious foods and support community-based gardens, kitchens, and cooking programs.
- Additional information should be added about the importance of including children in food preparation and transferring knowledge and skills to the next generation. As there is no evidence about the best types of messages or best wording, there is some risk of adverse effects.
- Healthy can be very subjective in different populations - more specific information and examples might be helpful in this area.
- Food security is a huge problem for indigenous, low-income and newcomers. These populations are very concerned with cost; therefore, information on economic choices need to be provided.

What do you like about these considerations?

- The considerations bear in mind the many factors influencing food choices. Cultural diversity needs to be considered as traditions and customs do influence food eating practices and choices. Environmental considerations are important as a healthy sustainable dietary approach should be advocated to reduce food waste, reduce greenhouse emissions, preserve resources, and promote a healthy, nutritious diet.
- Determinants of health are not only on food choices but also income and social status, education level, support from families, friends and communities, gender, genetics etc.
- The considerations on Determinant of Health & Cultural Diversity are important to ensure that Health Canada’s healthy eating recommendations are relevant for all Canadians irrespective of their cultural heritage, or health status.
- Canadians have a role to play in producing and choosing a diet that is more sustainable. It is important that dietary recommendations consider not only human health, but also environmental sustainability considerations.
- The recommendations include a holistic view of eating.
What do you dislike about these considerations?

- These recommendations should not be presented separately; instead they should be integrated into the principles.
- Need to use more simple language.
- The environmental issue should be made more strongly. Global food ways is a major contributor to greenhouse gas emissions (30-50%) from 4 sources:
  - the types of foods we choose (especially beef),
  - transportation (particularly transporting fruits and veg by air),
  - processing (particularly packaging). The emphasis on reduced calories has led to increased packaging to food ratio for many things) and
  - food waste - as noted.

Environment or sustainable diets should have a more important role in Canada’s Food Guide. Embedding health and sustainability objectives will impact food policy in Canada and is more likely to lead to healthier Canadians and a healthier planet. The environmental considerations can go even further and speak about supporting sustainable food sources and responsible agriculture when possible. The environment is more than just food waste, and extends to unethically farmed foods that are in our food supply, such as palm oil.

- Affordable eating is not an option for people in certain situations of geographic areas.
- It does not mention anywhere in the document that there is not just one way to eat healthy, and a healthy diet may look different for different people.
- HC appears to be contradictory with some of the other Principles. For example, a range of nutritious foods form the foundation of healthy eating. Frozen, packaged and canned products are convenient and nutritious options, especially when fresh food is out of season, more costly or unavailable. This statement appears to be contradictory to the warnings against the consumption of processed or prepared food (that may have sodium, sat fat, sugar). Frozen, packaged and canned foods are clearly processed or prepared foods and we agree with Health Canada that they are convenient and nutritious options that should not be under special undue prejudice due to their manufacturing methods.
- The document reads more negative than positive, and there are more restrictions on what not to eat than promotion of what to eat. Words that would be more helpful include: enjoy eating, sit down and take your time to taste foods, try foods you have not had before, have a colorful plate, enjoy cooking with others, etc. There are some of these notions in the last paragraph of Guiding Principle 3 on p.13, but they could be a bold guiding principle in itself.
- Additional elements that should be a part of “Additional Considerations” and integrated throughout:
  - Older adults – guidance on how to cook and eat alone
  - Kids/teens – how to gain food skills as life skills before leaving home
  - Indigenous – offering different context for “grocery shopping”
  - Low income – some are so low income that no amount of budgeting will help them buy sufficient food, how can this be overcome
  - Household food insecurity – MUST be acknowledged somewhere in this Dietary Guidance. Health Canada needs to give direction about what to do to address this issue, namely to address it as an income problem
  - Newcomers and residents - cultural aspects of food and how it’s eaten - some cultures prefer to eat alone. These differences need to be acknowledged.
  - Low literacy individuals – interventions need to be developed, including resources with pictures/illustrations.

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*Canadian Nutrition Society/la Société canadienne de nutrition (CNS/SCN) is the leading society integrating disciplines and professions interested in nutrition. We promote nutrition science and education, and advocate for the application of best practice and policies for the promotion of health and the prevention and treatment of disease.*
The CNS/SCN hopes that our response to the public consultation process on Revising Canada’s Food Guide provides feedback of value to your process. We hope that you will continue to engage our expertise at all stages of your process. Further the CNS/SCN would be pleased to support access to expertise to assist Health Canada in this ongoing process. Please feel free to contact us for further information or clarification.

Sincerely,

Alison Duncan, PhD, RD  
CNS/SCN PHO Working Group Chair

Andrea Grantham  
CNS/SCN Executive Director
## Appendix A – Working Group/Board of Director Disclosures

<table>
<thead>
<tr>
<th>Name</th>
<th>Disclosures</th>
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<tbody>
<tr>
<td>Alison Duncan, University of Guelph</td>
<td>• Research funding from: Agriculture and Agri-food Canada, American Institute of Cancer Research, Canadian Foundation for Dietetic Research, CIHR, Danone Institute, OMAFRA, Public Health Agency of Canada, Pulse Canada, Saskatchewan Pulse Growers</td>
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<tr>
<td></td>
<td>• Currently serve on Scientific Advisory Boards for Bioenterprise and Guiding Stars Licensing Company</td>
</tr>
<tr>
<td></td>
<td>• No financial or personal interest in any agriculture or food companies.</td>
</tr>
<tr>
<td>Robert Bertolo, Memorial University</td>
<td>• No disclosures to report</td>
</tr>
<tr>
<td>Stéphanie Chevalier, McGill University</td>
<td>• No disclosures to report</td>
</tr>
<tr>
<td>Mark Dekker, PepsiCo Canada</td>
<td>• Employee of PepsiCo Canada</td>
</tr>
<tr>
<td>Rupinder Dhaliwal, Metabolic Syndrome</td>
<td>• From 2001-2015, salary partially supported by research grants from Queen's University from Nestle, Baxter, Fresenius Kabi and Dietitians of Canada. I have received funding from Nestle and Baxter for travel to scientific meetings/conferences and honoraria for speaking engagements.</td>
</tr>
<tr>
<td>Canada</td>
<td>• No financial interests in agri-food/nutrition companies.</td>
</tr>
<tr>
<td>May Faraj, Université de Montréal</td>
<td>• No disclosures to report</td>
</tr>
<tr>
<td>Guylaine Ferland, Université de Montréal</td>
<td>• No disclosures to report</td>
</tr>
<tr>
<td>Melissa Anne Fernandez, Laval University</td>
<td>• Works in partnership with the yogurt industry, participated in the recently published book on yogurt and health funded by Danone International</td>
</tr>
<tr>
<td>Marcella Gassertti, Unilever North America</td>
<td>• Employee of Unilever North America</td>
</tr>
<tr>
<td>Jim House, University of Manitoba</td>
<td>• Current Grants &amp; Contracts</td>
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<td>• MITACS Canada</td>
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<td>• Current Participation on Advisory Boards and Grant Review Panels</td>
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<tr>
<td></td>
<td>o AOAC International Editorial Board</td>
</tr>
<tr>
<td></td>
<td>• No financial interests in agri-food/nutrition companies</td>
</tr>
<tr>
<td>Christine Lowry, Healthy Grains Institute</td>
<td>• No disclosures to report</td>
</tr>
<tr>
<td>David Ma, University of Guelph</td>
<td>• Research funding from: CIHR, NSERC, Canada Foundation for Innovation, Dairy Farmers of Canada, Canola Council, OMAFRA, University of Toronto, University of Guelph, American Institute of Cancer Research, Bickel Foundation.</td>
</tr>
<tr>
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<td>• Provided consulting services/reviews and/or received honoraria and travel reimbursements from: Unilever, Dairy Farmers of Canada, Vegetable Oils Industry of Canada, Pepsi, Heinz infant institute, North American Meat Scientific Advisory Network/Canadian Meat Council, Governmental of Alberta, Government of Newfoundland, Michael Smith Foundation, Dietitians of Canada, American Oil Chemists Society, Dietitians of Toronto,</td>
</tr>
<tr>
<td>Sara Mahdavi, University of Toronto</td>
<td>• No disclosures to report</td>
</tr>
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<td>Vera Mazurak, University of Alberta</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Saira Mohammed, BC Centre for Excellence in HIV/AIDS/Providence Health Care</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Rachel Murphy, School of Population and Public Health, University of British Columbia</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Sandhya Nair, Omniactives Health Technologies</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Roseanne Nasser, Regina Qu’Appelle Health Region</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Zannat Reza, Thrive360</td>
<td>Work with various agrifood organizations with respect to communications and public education. Active clients include: Canola Growers of Manitoba, Canadian Lentils, HealthyFlax, Sask Mustard.</td>
</tr>
<tr>
<td>Joseph Telch, Holland Bloorview Kids Rehabilitation Hospital</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Mei Tom</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Pat Vanderkooy, Dietitians of Canada</td>
<td>No disclosures to report</td>
</tr>
<tr>
<td>Tom Wolever, University of Toronto</td>
<td>President, medical director and part owner or GI Labs, a contract research organization (<a href="http://www.gilabs.com">www.gilabs.com</a>)</td>
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