



The Honourable Jane Philpott
Minister of Health

November 15, 2016

RE: Canada's Food Guide

Dear Minister Philpott,

The Healthy Grains Institute is a not-for-profit organization with a mission to inform and enhance Canadians' knowledge and understanding of the health benefits of wheat and other grains. The Healthy Grains Institute is guided by an independent and multidisciplinary Scientific Advisory Council consisting of recognized plant science and nutritional experts from across North America. We are committed to providing Canadians with science-based information on the benefits of grain-based foods as an important part of a healthy, balanced diet.

Knowing that Health Canada is working towards a revision to Canada's Food Guide, we are pleased to take the opportunity to provide some comments.

In particular, having reviewed the Senate report "Obesity in Canada: A Whole-of-Society Approach for a Healthier Canada," we agree that beneficial changes to diets could drive significant improvements to the health of Canadians. We support both the motivation behind the report, many of its findings and the goal of updating Canada's Food Guide to provide easier-to-understand guidance for Canadians who want to adopt healthy eating patterns.

With that in mind, we want outline concerns with a few specific elements in the Senate report and provide some context for the development of an updated Canada's Food Guide.

Scientific Consensus

The concerns outlined below mainly reflect the manner in which the information contained within the report has been collected. The report is based entirely on the submissions of witnesses who spoke to the committee. As a result, the report provides a good summary of witness perspectives, but little in the way carefully derived data, which are needed for arriving at a valid scientific assessment.

We encourage Health Canada, when collecting information to drive revisions to Canada's Food Guide, to conduct an examination of peer-reviewed literature in order to ensure that policies are based on an evidence-based approach. The concerns outlined below are backed by science, which would be made clear by such a literature review.

Refined and Enriched Grains

The report (see pages five and six, as well as Recommendation 6), categorizes grains as "whole foods," including whole grains, and "refined grains." The report takes the position that, of the two categories, only those containing whole grain provide nutritional value for the people who eat them, which is an inaccurate characterization.

In Canada, by law, refined wheat or white flour is enriched with vitamins and minerals, to a level equal to or higher than in whole grains. The regulations governing enrichment represent a triumph for Canadian health policy that should not be ignored. All enriched flours contain thiamine (vitamin B1), riboflavin (vitamin B2), niacin (vitamin B3), folic acid and iron at levels equal to or greater than that found in whole wheat flour.

The addition of folic acid, particularly, has driven significant positive health impacts for Canadians. The benefits of folic acid in reducing the risk of neural tube defects like spina bifida are well known¹. As a result, expectant mothers are encouraged to take folic acid supplements, beginning before trying to conceive. According to a peer-reviewed study in the journal *Studies in Family Planning*², 51% of pregnancies in North America (defined as Canada and the United States for the purposes of that study) are unplanned. For these pregnancies, the inclusion of folic acid in an everyday staple like bread has driven tremendous benefit. Health Canada points to a 7-province study that showed a 46% reduction in the rates of neural tube defects following the introduction of mandatory fortification³.

The Company We Keep

In Recommendation 9 and Recommendation 10, the report references “emerging evidence” that total carbohydrate intake leads to weight gain. This approach contradicts scientific evidence, which shows whole and refined grain consumption is associated with lower BMI. This perspective is lost in many reports because they combine indulgent grain products with large serving sizes and large quantities of sugar and fat (such as donuts or cakes) in the analysis with enriched and refined grains staples such as bread. This causes a false dichotomy and inaccurate deductions from the data. Data that examines enriched grains eaten in the form of staples such as bread, rice, and pasta, shows that these foods contribute to the overall diet quality.

For example, a recent study published in the peer-reviewed journal *Food and Nutrition Sciences*, shows that the consumption of enriched grain products are associated with lower, not higher, BMIs. An analysis of publicly-available data from the National Health and Nutrition Examination Survey (NHANES) 2005–2010, which consisted of over 14,000 U.S. adults, showed that adults whose diet patterns had a balance of whole and enriched grains including pasta, cooked cereals and rice grains had better overall diet quality, greater intake of vital nutrients, lower total sugar intake and lower average body weight than those who did not predominantly eat grains⁴. Similarly, another large meta-analysis of data from diverse cohorts around the globe, showed that those who consume three servings (~48g) of whole grain per day were associated with having a 32% lower risk of developing metabolic syndrome⁵, a collection of symptoms that are strongly associated with the development of diabetes and cardiovascular disease. This will come as no surprise, but contrary to the Senate Report’s position, what is interesting is that intake of refined grains gave a relative risk of 0.95, demonstrating that refined grains had no impact on risk.

While these findings are derived from data from around the world, there are a number of North American, primarily US, cohorts in the analyses which are recognized to provide a high level of evidence for dietary guidance.

Next Steps

As the Executive Director of the Healthy Grains Institute, I merely call your attention to the credible science that shows that the consumption of products made from wheat, both whole grain and enriched refined grains can provide significant health benefits for Canadians.

¹ <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/med/folic-folique-eng.php>

² <http://onlinelibrary.wiley.com/doi/10.1111/j.1728-4465.2014.00393.x/epdf>

³ <http://www.phac-aspc.gc.ca/fa-af/fa-af08-eng.php>

⁴ <http://www.scirp.org/Journal/PaperInformation.aspx?PaperID=68936>

⁵ Aune, D. et al. *Eur J Epidemiol.* 2013; 28:845-58



I would be happy to make myself available, along with the Canadian members of the Healthy Grains Institute's Scientific Advisory Council, which includes leading experts like Dr. Ravindar Chibbar, Professor and Canadian Research Chair, (Molecular Biology and Genetics) Department of Plant Science, University of Saskatchewan and Dr. G. Harvey Anderson, Professor, Nutrition Sciences and Physiology, Department of Medicine, University of Toronto, who can provide leading expertise in crop, food and nutrition sciences. If we can be of any assistance in contributing to a scientific or evidentiary review to the new Canada's Foods Guide, please don't hesitate to contact me.

Yours truly,

A handwritten signature in black ink, appearing to read "C. Lowry", is positioned below the "Yours truly," text.

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