

The Honourable Dr. Jane Philpott, Minister of Health House of Commons Ottawa, ON Canada, K1A 0A6 Jane.Philpott@parl.gc.ca

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Dear Minister Philpott:

As an organization directed by physicians that seeks to improve human health by protecting the planet, we wish to congratulate you on the draft <u>guiding principles</u> for Canada's next food guide. We believe the guiding principles are consistent with the direction that needs to be taken to improve health for current and future Canadians.

We strongly support many of the recommendations; particularly the emphasis on plant-based protein, which has been shown to be superior to a diet containing high amounts of animal protein, in terms of human health, water use, land use, and greenhouse-gas emissions (1, 2). Vegetarian diets have been shown to reduce colorectal cancer (3) and improve glycemic control among those with Type II Diabetes (4) (5). We also support the recommendation to shift from foods containing saturated fats towards those containing unsaturated fats, a measure which is also made possible by a shift to plant-based protein (6).

We do have a significant concern with the language in the report which treats health and the environment as separate entities. We believe that human and environmental health are intimately and inextricably connected. Passages such as, "The primary focus of Health Canada's proposed healthy eating recommendations is to support health. However, there are also potential environmental benefits of shifting towards healthy eating", create the impression that there is a distinct box for health and another for the environment. Among many health professionals, there is increasing recognition that the ecosystem is a fundamental determinant of health. The Canadian Public Health Association's discussion paper on the ecological determinants of health states that: "there is a growing recognition that the Earth is itself a living system and that the ultimate determinant of human health (and that of all other species) is the health of the Earth's life-supporting systems" (7).

There is a growing international consensus that failing planetary health puts human health at risk—and that taking action on planetary health is our generation's greatest health opportunity. The Lancet's First Climate-Health Commission states that, "climate change is the greatest global health threat of the 21st Century," (8) while the Lancet's Second Climate-Health Commission tells us that, "Tackling climate change could be the greatest global health opportunity of the

21st century". Such is international concern that there has been the recent creation of a new field—that of planetary health -- defined as, "health of human civilization and the state of the natural systems on which it depends" (2). The time has come for Health Canada to fold this frame into its thinking—and Canada's Food Guide is the perfect place to help our population start to make the links between land, food and human health.

As you look at incorporating a planetary health frame into Health Canada's messaging, we suggest drawing inspiration from our Indigenous colleagues and invoking the concept of planning for the protection of seven generations. It is apparent that traditional Indigenous practices around food have been taken into account in the draft recommendations, as reflected in passages such as this, "Part of this diversity is represented in the traditions, culture and lifestyles of Indigenous populations. Traditional foods and the harvesting of traditional foods are intrinsically linked to identity and culture, and contribute to overall health." We suggest going further and incorporating Indigenous wisdom into the overall thrust of the document by drawing the links between planetary health, sustainability, and the health of the current generation and of those that will follow.

We are very fortunate here in Canada to benefit from a resilient Indigenous population whose worldview naturally honours sustainability and planetary health (9). As we step forward towards reconciliation, and planetary survival, let us honour Indigenous wisdom—by incorporating it into our shared approach.

Taking planetary health concerns into account, we would like to point out that there is no mention in this version of the food guide about methods of cultivation. Although the evidence base on organic versus non-organic food lacks long-term cohort studies focused on chronic disease and controlled human health dietary intervention studies, recent studies have shown advantages to organic food over conventionally-grown food for human health (10). A metaanalysis based on 343 peer-reviewed publications found higher concentrations of a range of anti-oxidants, many of which have been linked to a reduced risk of chronic disease including cardiovascular disease and neurodegenerative disease and certain cancers (11). This study also found that organic crops had decreased levels of the toxic element cadmium, as well as decreased pesticide residues (11). It is recognized that there are huge gaps in our understanding of the health impacts of pesticides, particularly for those that are endocrine disruptors, with regards to their impact on children (2). Prenatal exposure to organophosphate pesticides has been associated with cognitive deficits in children (12) and childhood exposure to pesticides has been linked to neurodevelopmental deficiencies (13, 14). Childhood cancers, including leukemia, brain cancer, non-Hodgkin's lymphoma and neuroblastoma, may also be associated with pesticide exposure (15, 16). Accurate exposure assessment remains a challenge and many knowledge gaps remain (16).

Action must reflect the available research base. A 2012 Systematic Review on the health effects of pesticides done by the Ontario College of Family Physicians found associations with low birth weight, hypospadias, neural tube defects, congenital diaphragmatic hernia and asthma.(17) The review concluded that family physicians should counsel preconception and

pre-natal patients to reduce pesticide exposure, advise parents to reduce use of indoor, home and garden pesticides, and alert new parents who have unavoidable pesticide exposure to the protective benefits for themselves and for their children of wearing personal protective equipment.(17)

Some of the research gaps reflect global power structures. As pointed out in the 2017 report of the UN Special Rapporteur on the Right to Food, "pesticides are responsible for an estimated 200,000 acute poisoning deaths each year, 99 percent of which occur in developing countries" (18). These statistics allude to the reality that research efforts have been impeded by "systematic denial, fuelled by the pesticide and agroindustry, of the magnitude of the damage inflicted by these chemicals, and aggressive, unethical marketing tactics remain unchallenged" (18). The UN Special Rapporteur goes on to state that, "Without or with minimal use of toxic chemicals, it is possible to produce healthier, nutrient-rich food, with higher yields in the longer term, without polluting and exhausting environmental resources" (18). They called for a revamp of the international food system, a call which is echoed in the Planetary Health Commission's report (2).

Overall, we are conscious of the concurrent development of a National Food Policy. We strongly encourage Health Canada to advocate strongly for plant-based foods around the table, and to also take a Planetary Health Approach in its approach when providing advice around agriculture as that strategy develops.

We thank you very much for your efforts and look forward to a final product which will improve not only the health of citizens today, but also the health of future generations of Canadians.

Sincerely,

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