

Climate-Friendly Diets

Exploring Dietary Shifts as a Climate-Change Mitigation Strategy

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BACKGROUND

Action on climate change mitigation and adaptation at Toronto Public Health (TPH) is guided by the *Climate Change and Health Strategy for Toronto*¹. One action mandated in this strategy is for TPH to “examine the promotion of sustainable diets that consider low-carbon strategies in the context of Toronto’s diverse population”¹.

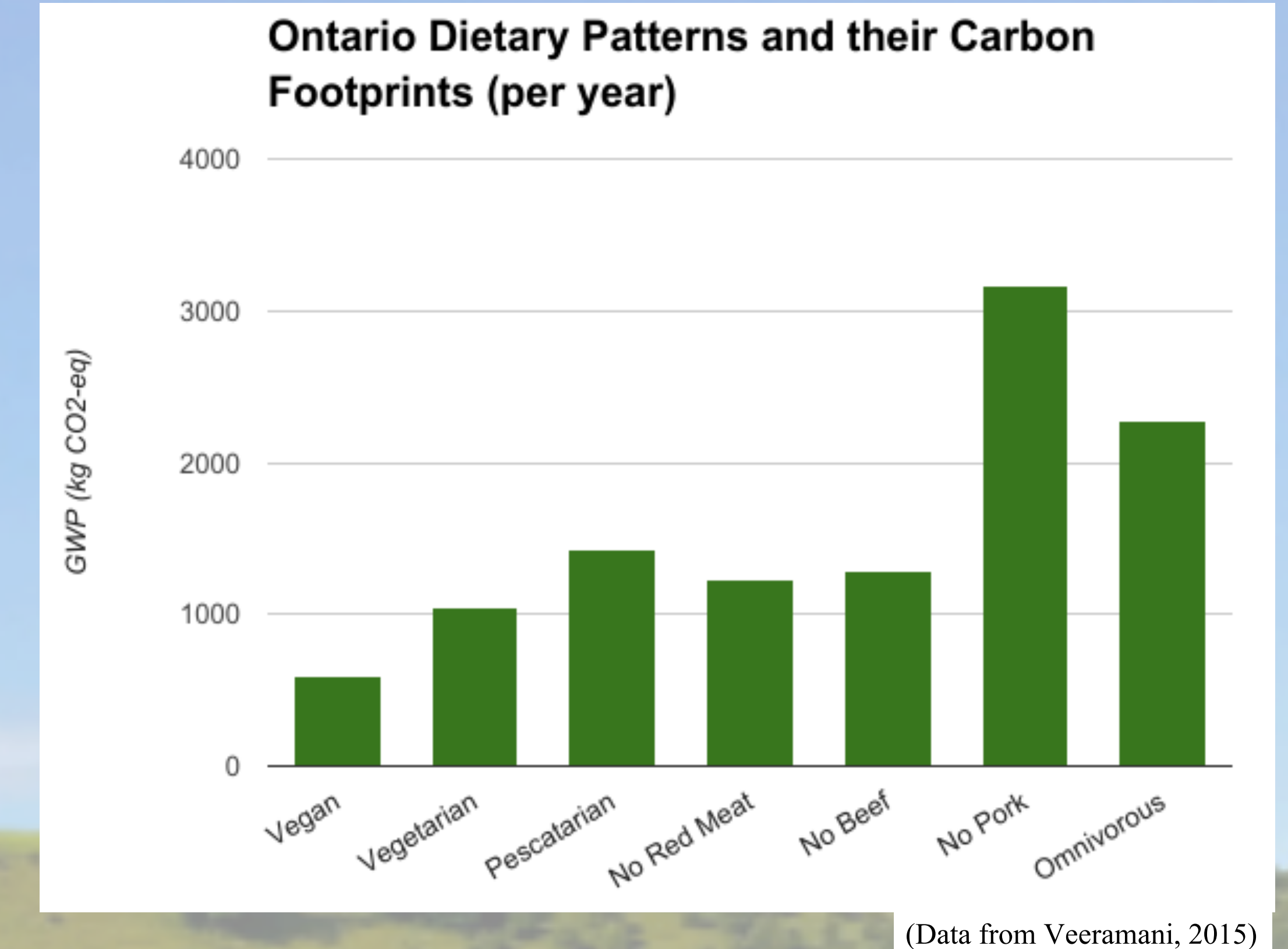
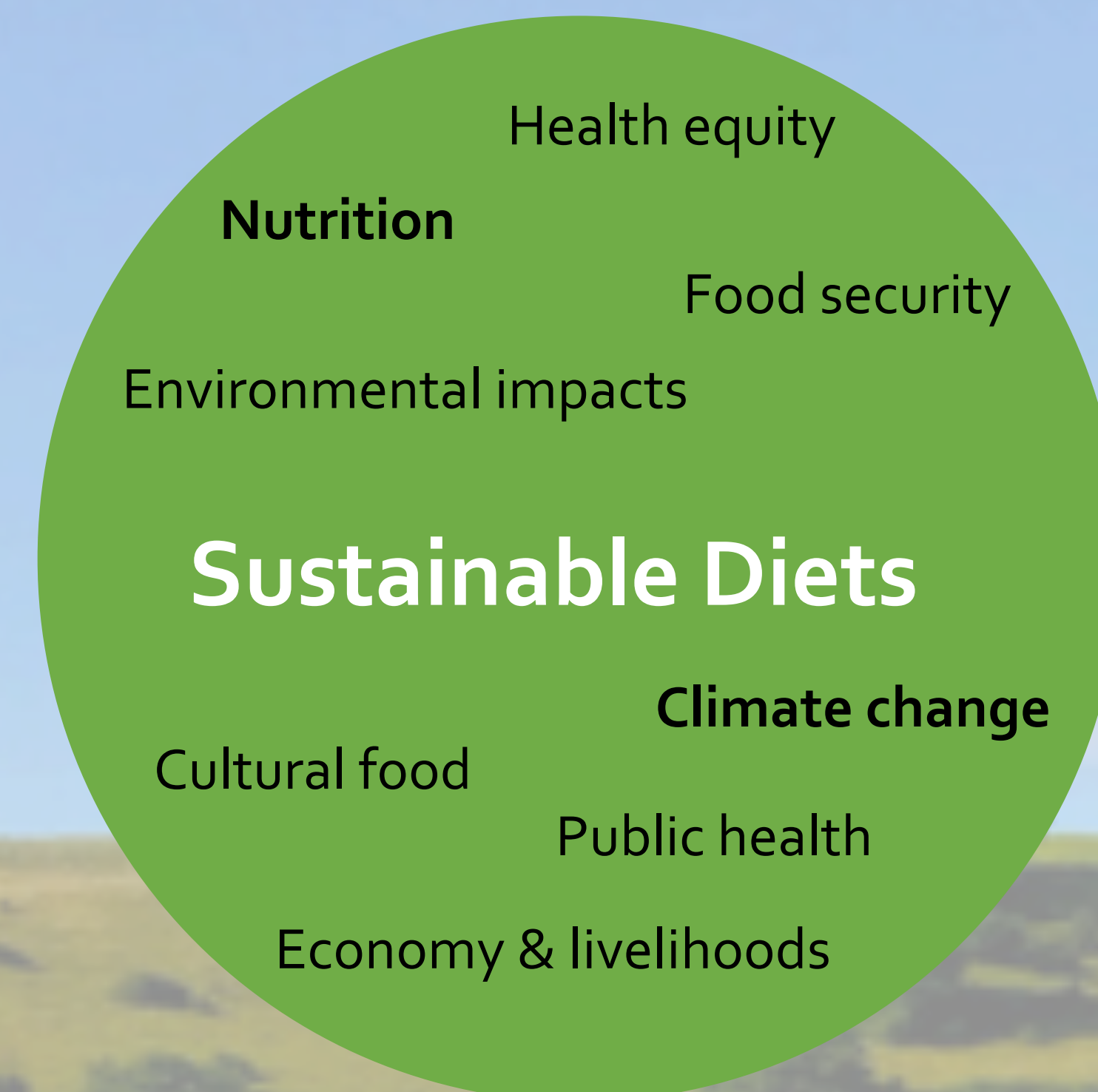
This project came out of a placement at Healthy Public Policy at TPH. Aside from TPH’s *Strategy*, two external factors motivated the research:

1. A noted increase in food and sustainability questions from the public by TPH staff
2. Public consultations (TransformTO) that found that Toronto residents are interested in learning about how to lead a sustainable lifestyle, including through their food choices².

While there have been many calls for action from governments and interest groups around the world on sustainable diets, few specific, politically acceptable recommendations have emerged.

In May 2015, Prime Minister Trudeau announced a national plan to reduce GHG emissions to 30% below 2005 levels by 2030¹⁰. Sustainable diets and food systems offer an opportunity to help meet this target by reducing emissions while also improving population health.

Conceptual framework of sustainable diets, demonstrating their complexity and convergence with multiple other issues and sectors. Climate-friendly diets are one aspect of the larger concept of sustainable diets.



EVIDENCE SUMMARY

Agriculture and food receive less attention than other sectors in climate change mitigation strategies³. Yet livestock production for food (mainly meat and dairy) contributes at least 18% of global anthropogenic greenhouse gas emissions⁴. Environmental research often recommends reducing meat and dairy consumption for this reason⁵, but few consumers are aware of the link between meat and climate change⁶.

Livestock emissions account for 62% of Canada’s agricultural emissions: animal agriculture generates substantial amounts of methane and diverts a large proportion of crops for use as feed, which emits high amounts of nitrous oxide⁷. Livestock is also the primary contributor to global deforestation, which reduces carbon sink activity.

Authoritative nutrition bodies like the Academy of Nutrition and Dietetics (in the United States) have concluded that vegan and vegetarian diets are healthy for all stages in the lifecycle, but that they require some planning to meet nutrient needs (especially iron, calcium, zinc, and vitamin B₁₂).⁹

DIETARY PATTERNS

Different dietary patterns in Ontario have diverse impacts on climate change, and engaging registered dietitians and other food system actors in the climate-change discussion will help to operationalize research findings from climate science into pragmatic food and nutrition support for the public.

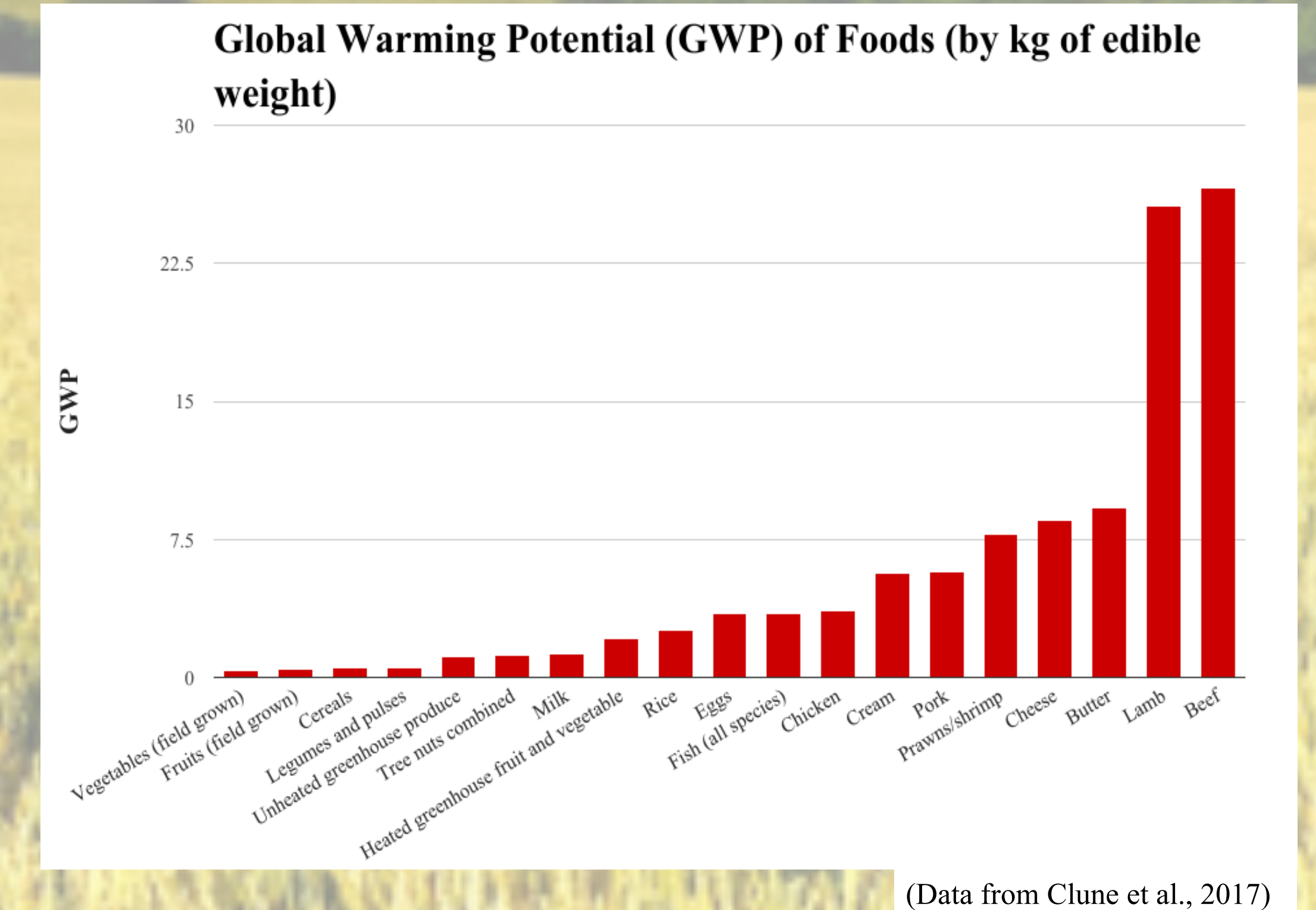
Vegan, vegetarian, and pescatarian diets have much lower climate impacts than high-meat diets in Ontario (1.6, 2.9, 3.9, and 8.7 kg CO₂ -eq per day, respectively)⁸. Promoting healthy diets low in meat would raise awareness about the environmental impacts of meat production, and could also prompt a shift in the food industry to offer more plant-based meals and to incorporate more plant protein.

Action on climate-friendly diets has so far been slow, perhaps partly due to nutrition concerns. Given that a meat-reduction approach to climate change can be aligned with nutritional health benefits, an interdisciplinary, public health approach to climate-friendly diets could shift demand away from foods with the greatest emissions, while preventing risk of nutrient deficiencies and some chronic diseases.

FUTURE DIRECTIONS

There are now many grassroots initiatives advocating for individuals to adopt sustainable diets, but broader population change will require policy change and a public health strategy in Canada. Policy options are not well understood in this research area. Several options for action exist for Toronto, Ontario, and Canada:

1. *Add sustainable diets to the revised version of Canada’s Food Guide.* The Netherlands has added an upper limit on meat intake to their national dietary guidelines¹¹, and others have incorporated sustainability concerns
2. *Conduct research* into consumer behaviour and meat (for example, gender), and the implications of climate-friendly diets for cultural diets and food security in Canada
3. *Import successful initiatives* from other jurisdictions. Paris has a sustainable diets strategy; the United Kingdom’s Wellcome Trust Programme has partnered with Sainsbury’s, a supermarket chain, to research consumer purchases and potential nudges to change behaviour.¹²
4. *Engage and incentivize the food industry.* “Menus of Change” is an innovative public-private partnership to promote sustainable food in restaurants.¹³



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