

Planetary Health

Menus:

Implementing plant-rich diets for people and the planet

Presented by Elísabet Brynjarsdóttir & Lindi Close



"Indigenous Traditional Knowledge systems have no clear separation between the health of the planet and the health of self or that of the community and ecosystem at large"

(Dr. Nicole Redvers, 2022)

Land Acknowledgement

We cannot fight the climate crisis and truly embody planetary health, which is the pursuit of both the health of our planet and it's people, without Indigenous Knowledge systems and the individuals who possess and share that knowledge, as planetary health is rooted in Indigenous Knowledge.

We have learned through this work that culturally appropriate food can aid in restoring and respecting the relationships that Indigenous peoples have with the land, with ancestors, with current and future generations, and with local environments. The work we continue to pursue in sustainable health care, particularly food systems, needs to be rooted in decolonizing these food systems and advancing the work of reconciliation.



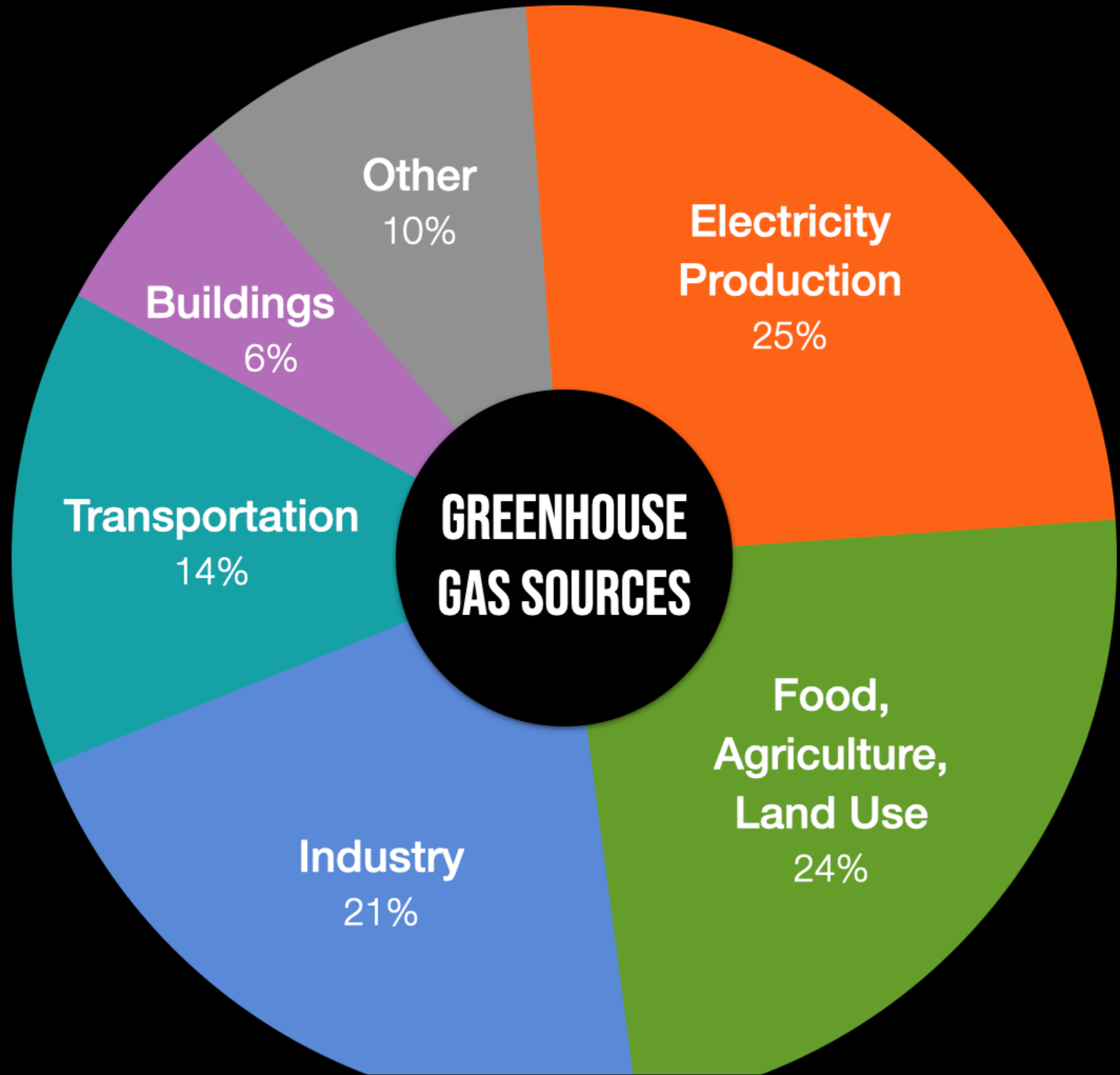
PHOTOGRAPH BY ROBB KENDRICK,
NAT GEO IMAGE COLLECTION

The healthcare industry plays a part

Collectively, we are responsible for:

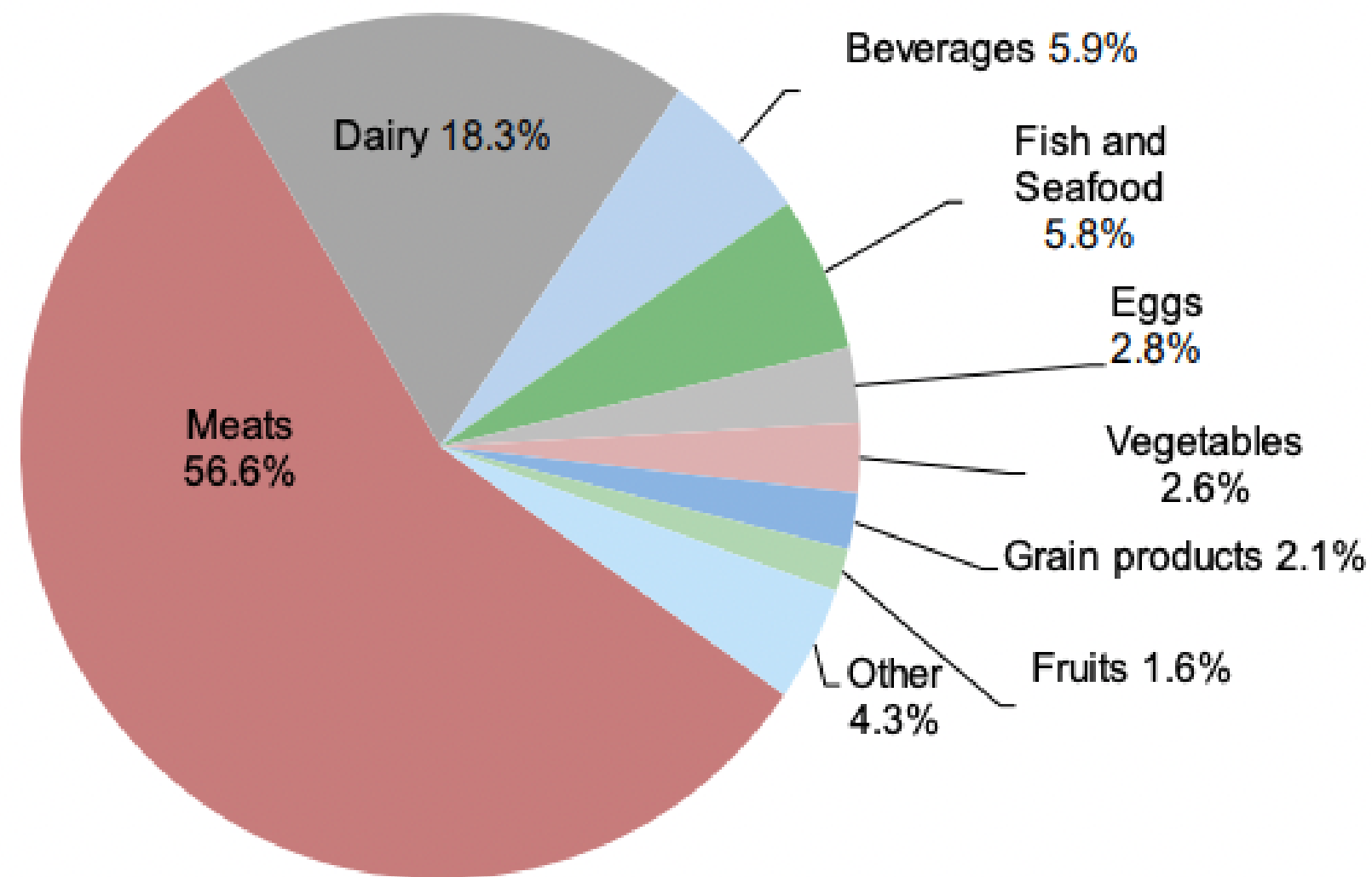
- 4.4% of global emissions of GHG
- 71% of those emissions stem from our **supply chain**

In Canada, the healthcare system alone produces 4.6% of annual GHG emissions

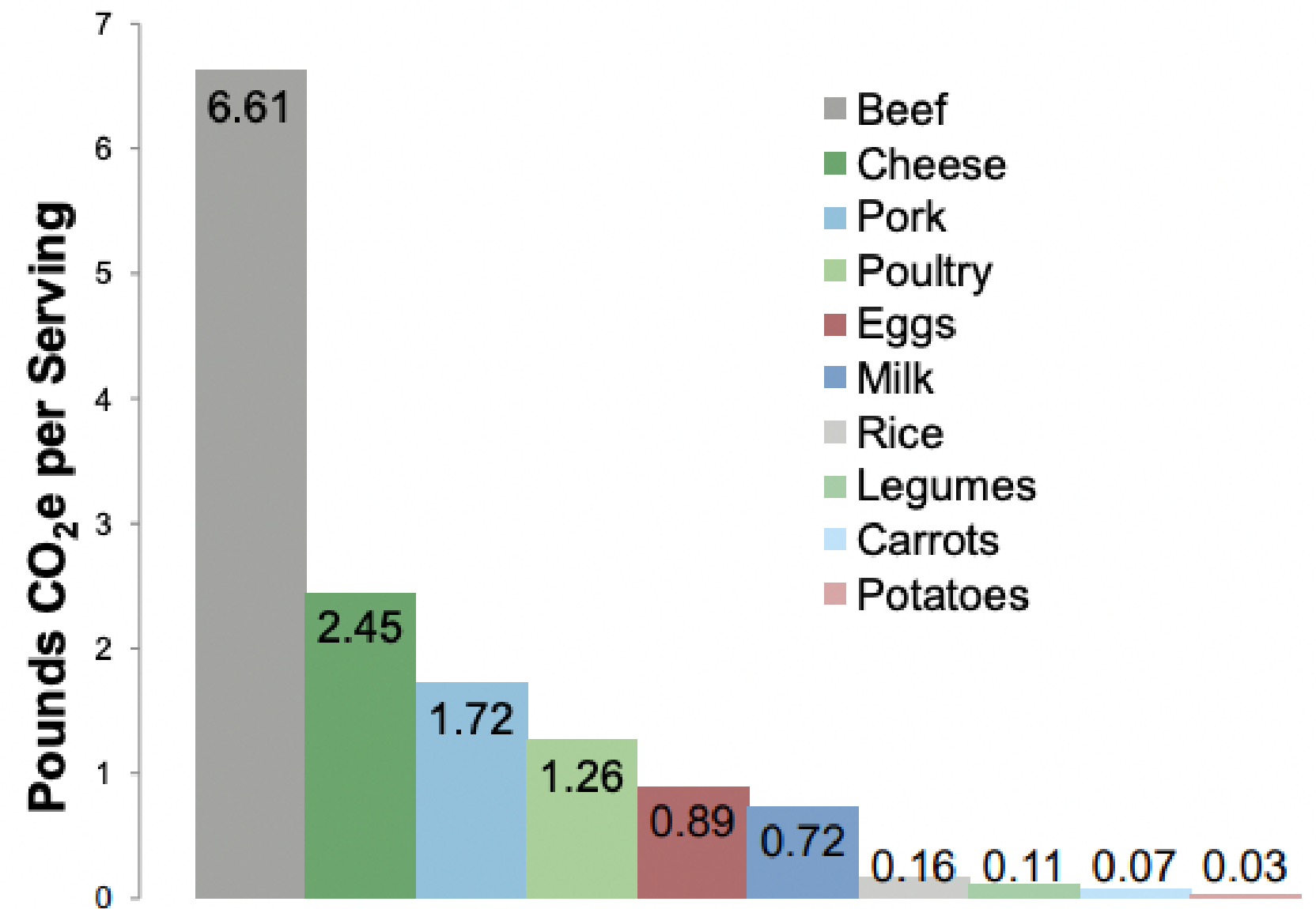


GHG contribution by food

Greenhouse Gases Contribution by Food Type in Average Diet³



Pounds of CO₂e per Serving¹³
(4 oz. meat, 1/2 c. asparagus & carrots, 8 oz. liquids)

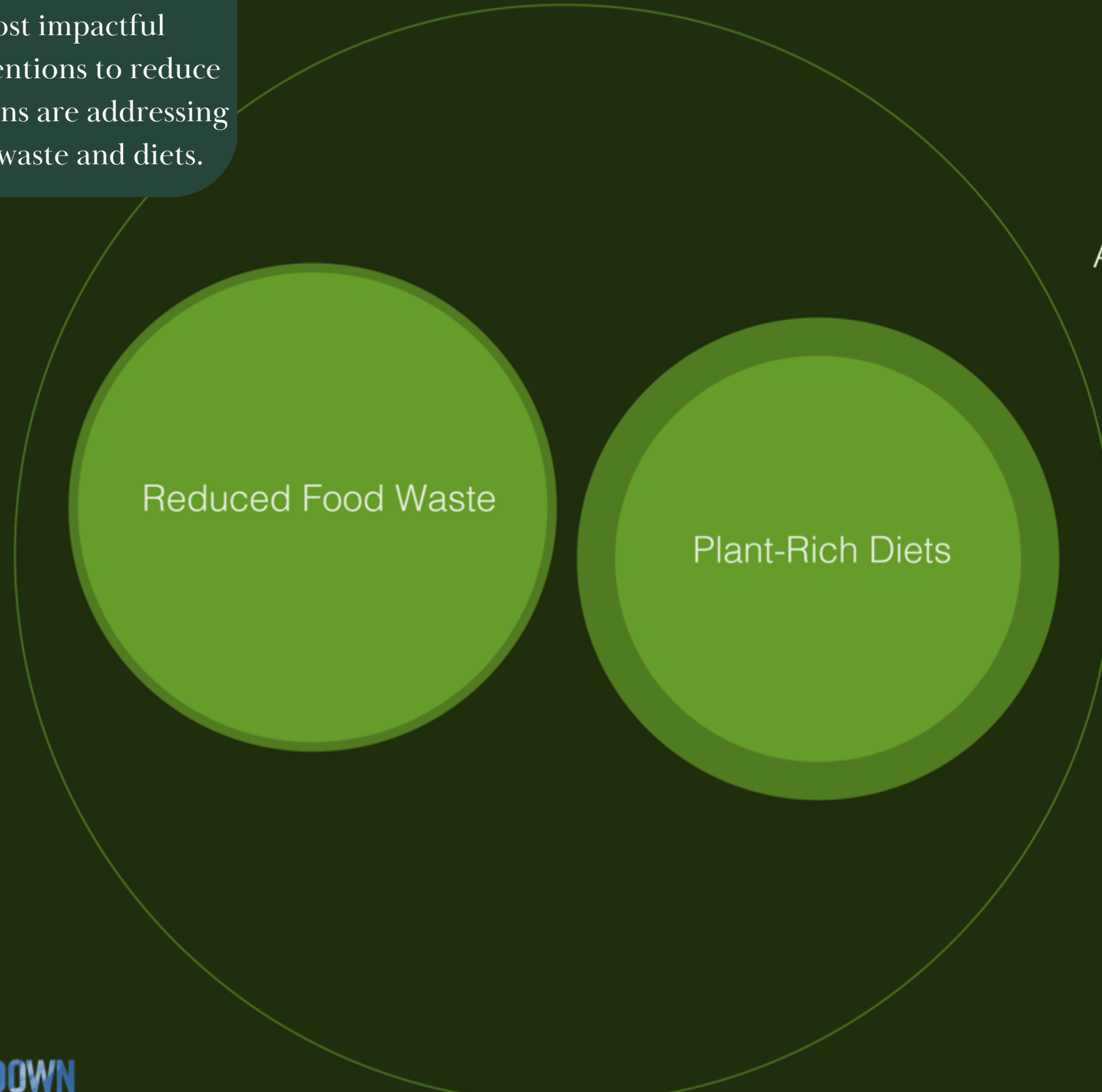


https://css.umich.edu/sites/default/files/carbon%20footprint_css09-05_e2021.pdf

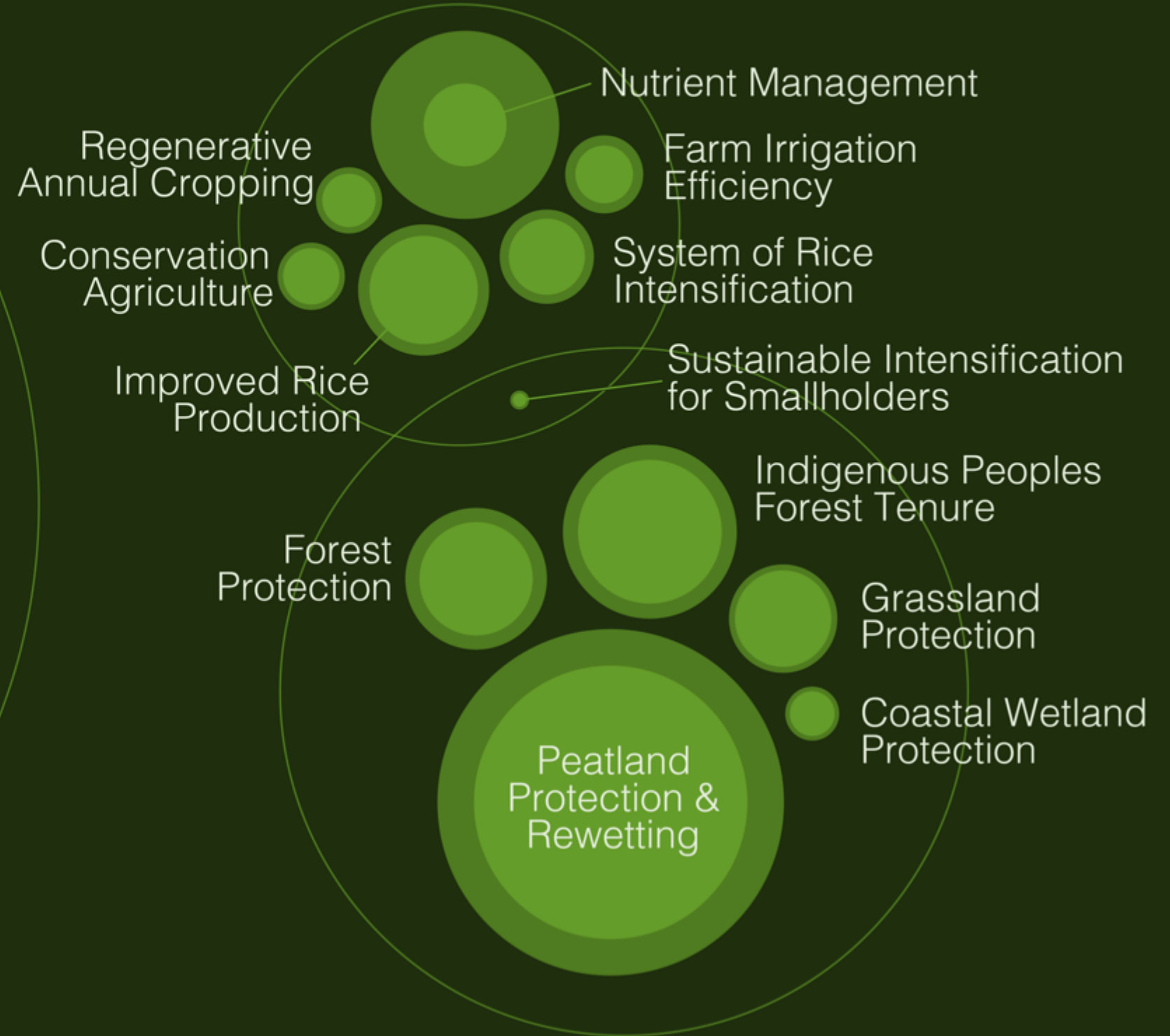
FOOD, AGRICULTURE, LAND USE SOLUTIONS

This graphic demonstrates that the most impactful interventions to reduce emissions are addressing food waste and diets.

ADDRESS WASTE & DIETS



SHIFT AGRICULTURE PRACTICES



PROTECT ECOSYSTEMS

Planetary Health Menu

- Healthcare not only plays a part in climate change, it will also play a huge part in dealing with the consequences of a changing climate and the impact on our population.
- Human diets have measurable impact on the environment. The global food system contributes to over 30% of global greenhouse gas emissions. Inefficiencies within the system are a significant source of waste: one third of food produced globally — approximately, 1.3 billion tons — is wasted every year. Our individual and collective food choices can directly improve planetary health.
- Health care facilities can use their significant purchasing power and reputation to advance climate leadership and bring to life Canada's Food Guide, including serving less meat, sourcing more sustainable meat, and incorporating plant-forward options.
- The modelling of planetary health diets by health care facilities, the optimal sustainable diet for people and planet, will contribute to population dietary shifts which can generate co-benefits from reduced risk of disease, health care costs and reduced greenhouse gas emissions.

Three ways to eat for wellness and planetary health:

- 1) Incorporate more plant-based foods into our diets
- 2) Reduce food waste
- 3) Eat local and in season

Traditional Indigenous Food

"Culturally sensitive menus can rebuild relationships, rebuild from trauma"

- Health care institutions need to recognize:
 - the importance of culturally relevant foods within the context of colonialism and reconciliation
 - the link between traditional Indigenous foods and Indigenous health



Traditional Indigenous Food

"Food is a pathway to reconciliation"

3 Ways to Integrate Indigenous Perspectives into Healthcare Food Systems:

1. Engage with Indigenous Elders and Knowledge Keepers when designing menus
2. Navigate barriers to wild game with policy development/reform
3. Educate healthcare professionals about Indigenous food, reconciliation, and healthcare



Yellowhead Institute

Data Collection Methods



Survey

A voluntary survey was sent to the food service sectors of hospitals and long-term care homes.



Literature review

At the request of our partners with Nourish, we completed a literature review of existing food waste practices and predominant practices around the globe.



Interviews

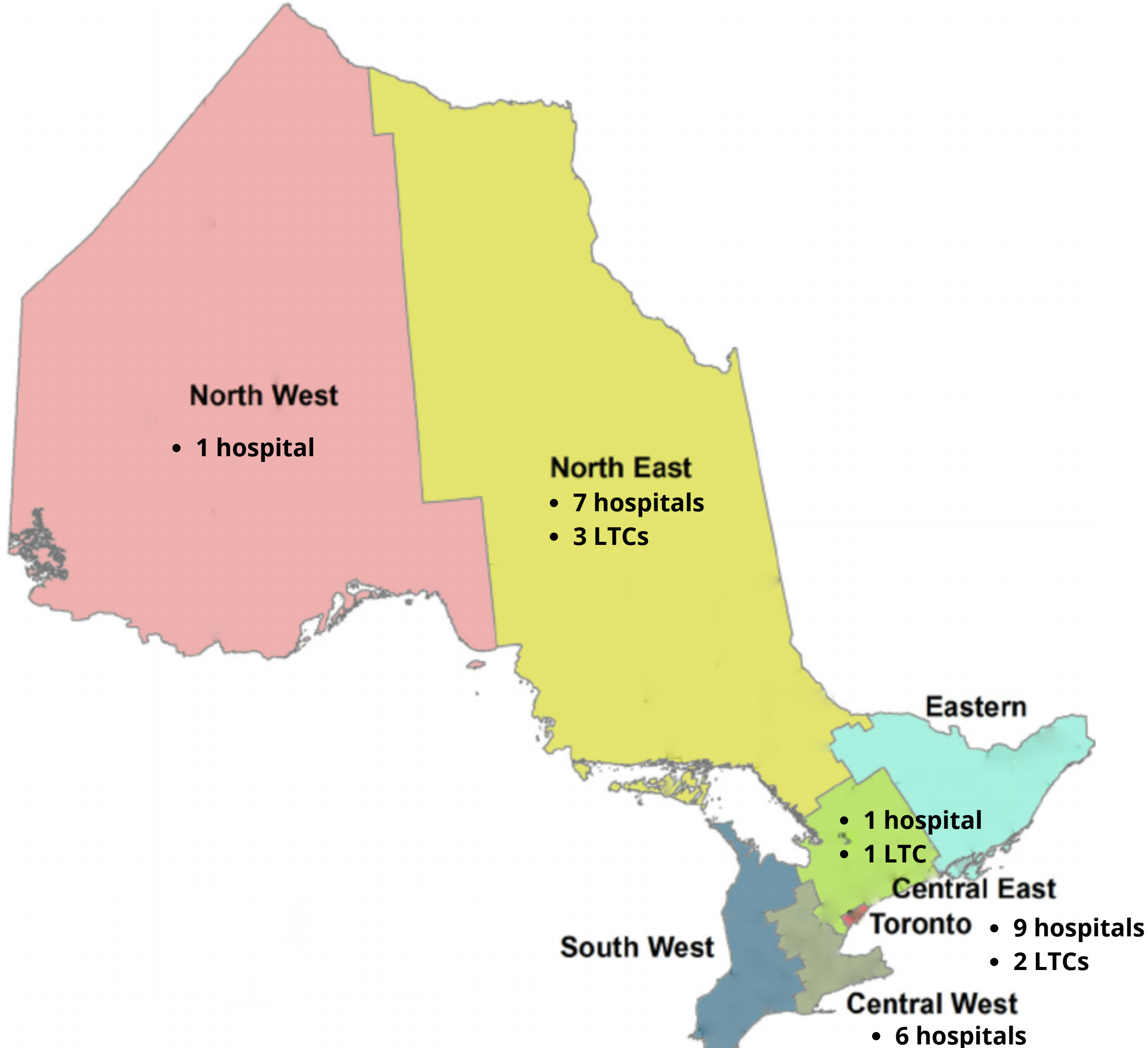
We interviewed a food service coordinator who has successfully transformed the menu of one Ontario hospital and another who was trying to make a change but faced various barriers.



Survey Results

Results - demographics

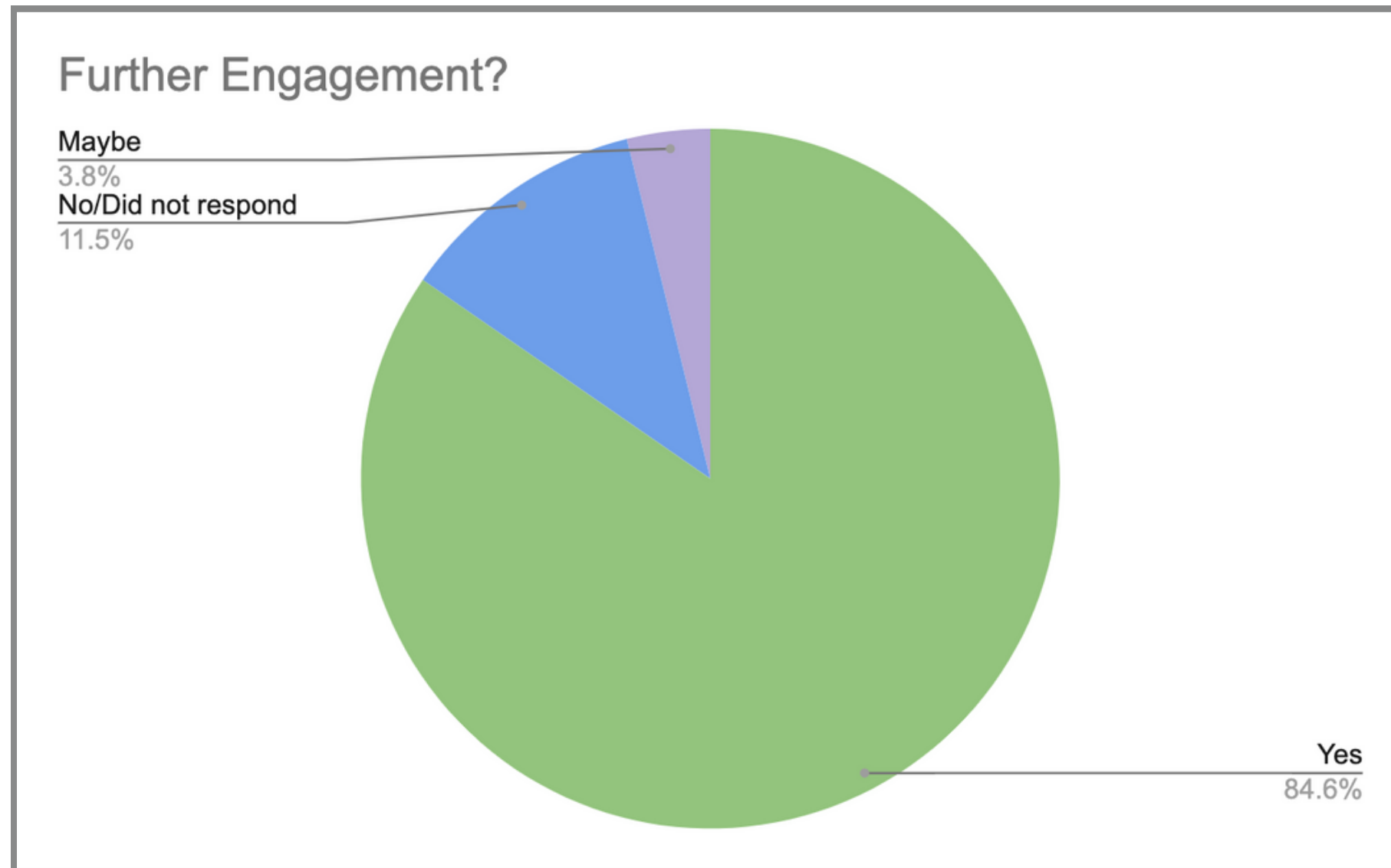
- 205 contacts received the survey
- Total respondents (who replied)
 - 24 hospitals
 - 13 LTC homes
- Geographical spread
 - North West Region = 1
 - North East Region = 10
 - Central East = 2
 - Toronto Region = 11
 - Central West Region = 13
 - South West Region = 0
 - Eastern Region = 0
- Those who answered cater to over 9,500 beds
 - 2,500 beds in LTC homes
 - 7,000 beds in hospitals



Results

Overview

96% of respondents agreed that their organization's food service could contribute to patient and planetary health



Barriers:

- Geographic/remote location
- Pandemic-related issues, workplace culture, current HR crisis taking top priority within organizations
- Uptake in LTC vs Acute care

Following the survey, 85% wanted to engage further on the topic

Results

Alignment with the updated Canada's Food Guide

Examples of Changes:

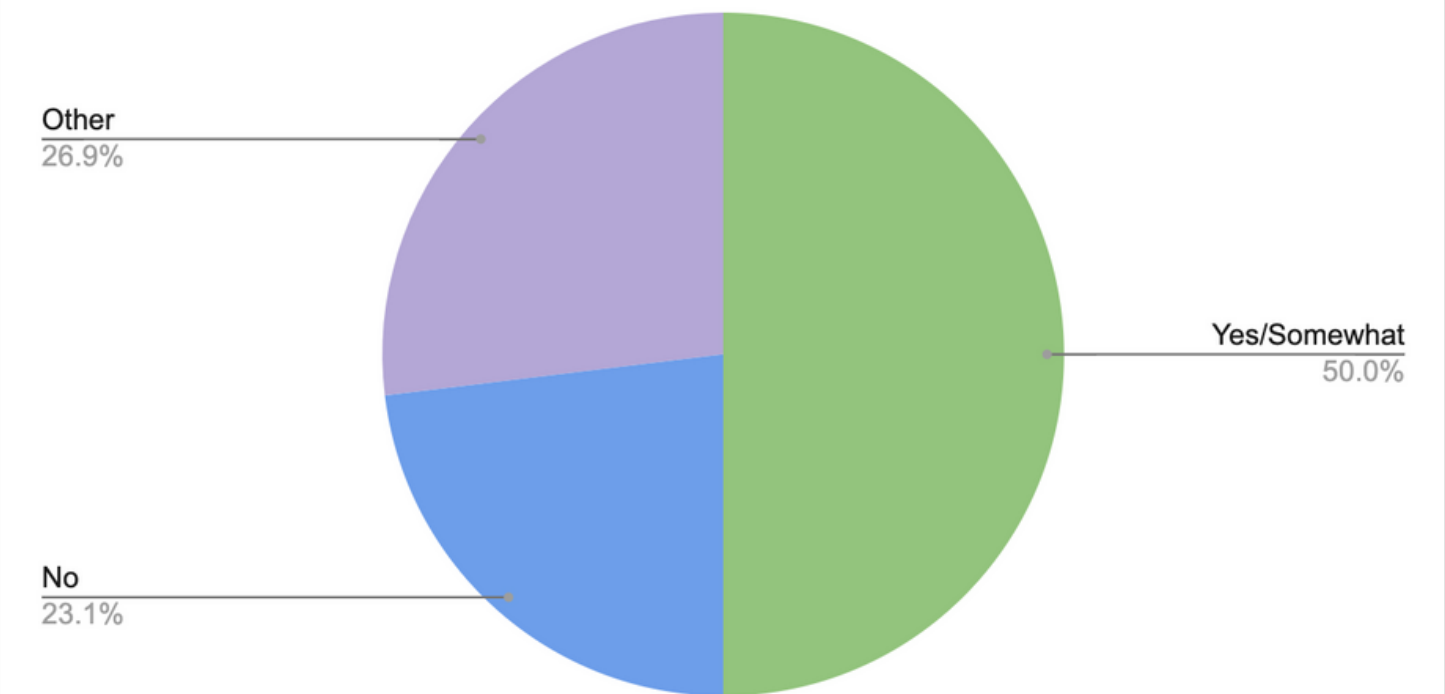
Adjusting produce portions, offering fruit at all meals, purchasing seasonal produce

Increased vegetarian options, (plus beans, legumes & whole grains) with fewer red meat options

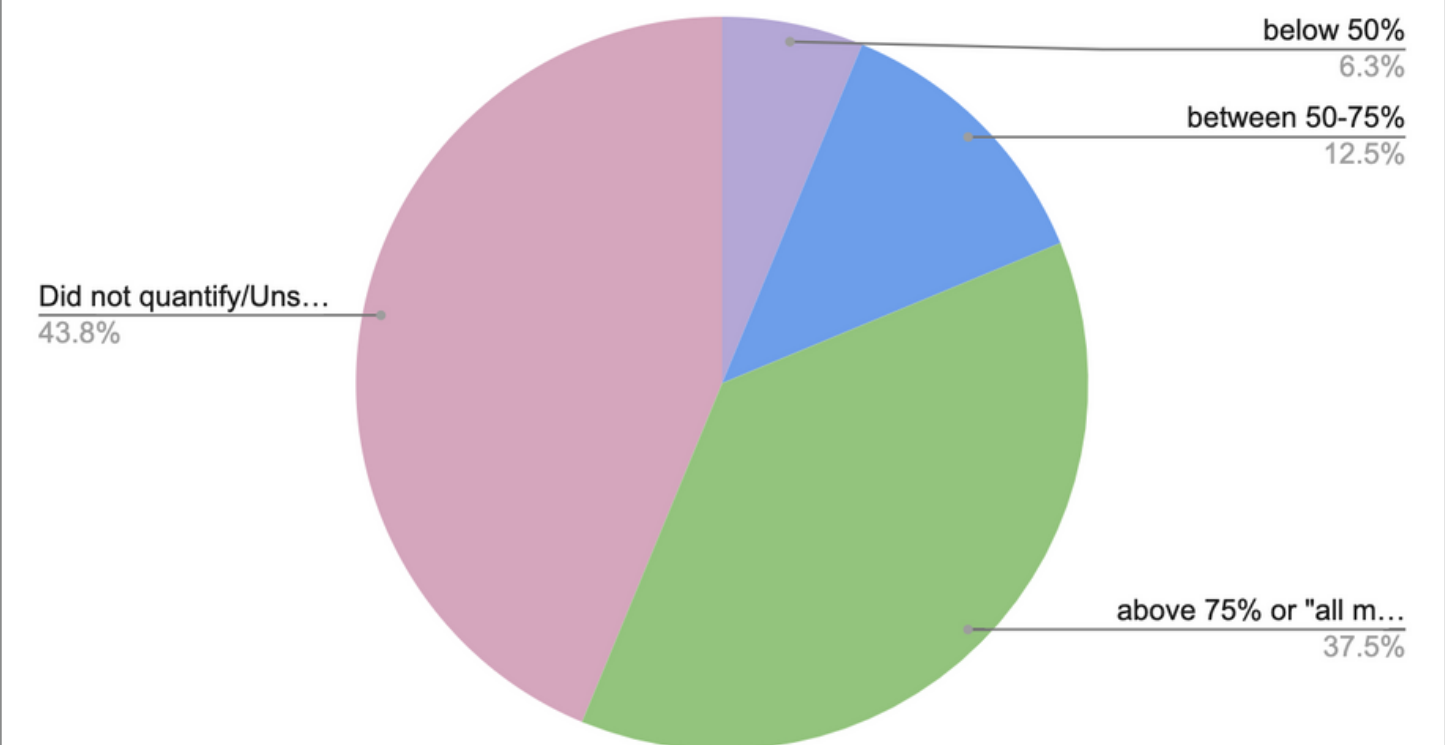
Eliminating milk and juice as automatic choices

Encouraging eating meals together

Has your facility adjusted dietary practices to align with the updated Canada's Food Guide?

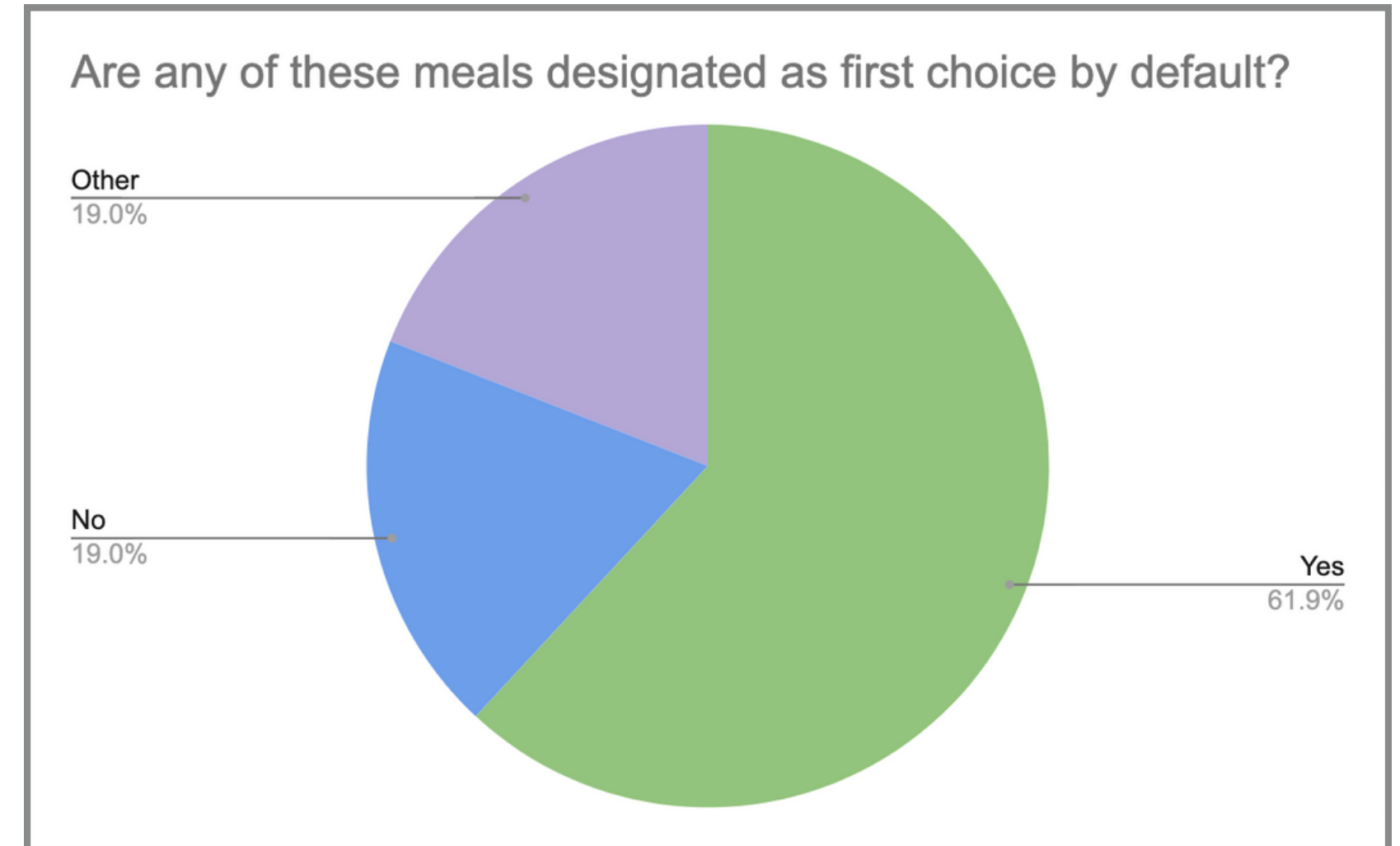
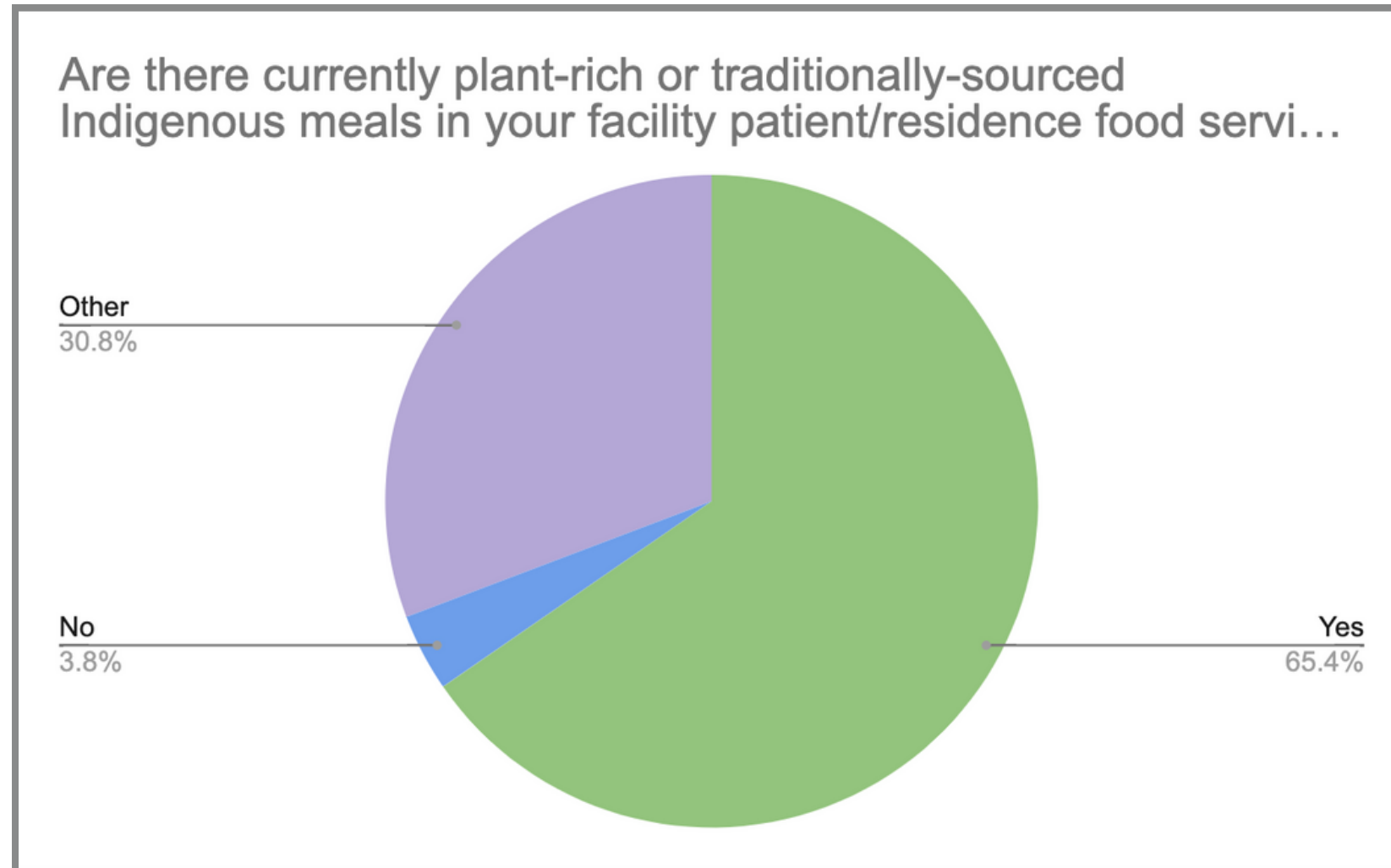


If "Yes" what % of meals meet the CFG recommendations?



Results

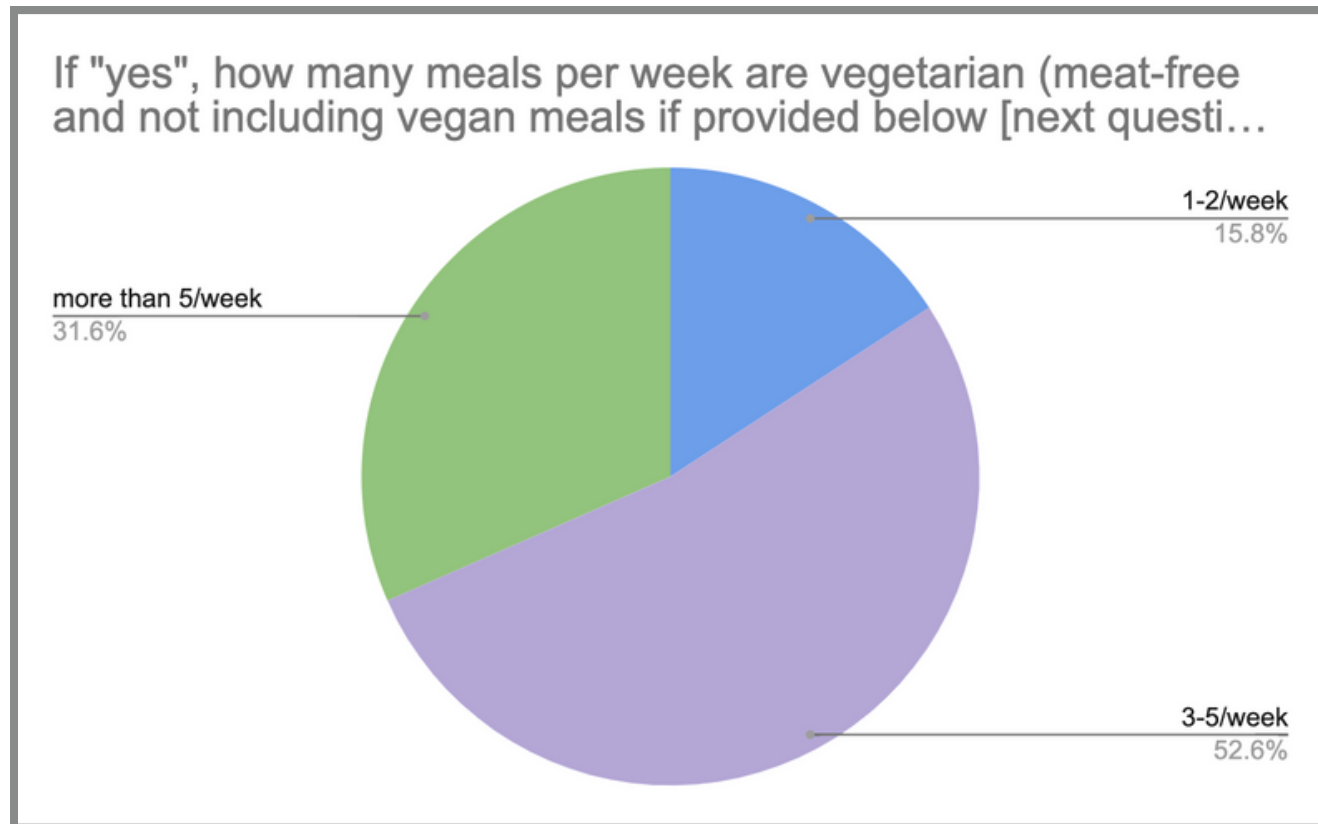
Plant-Based Menu Options



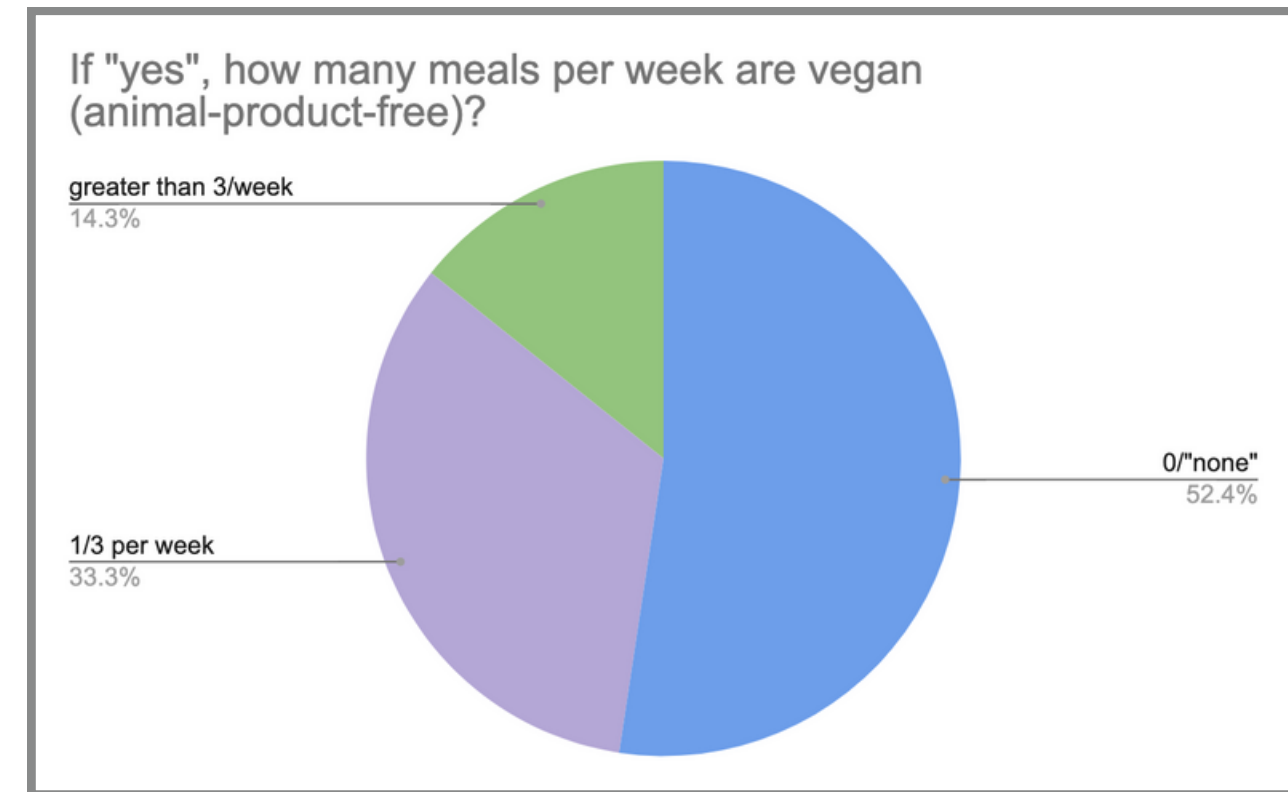
Results

Plant-Based Menu Options

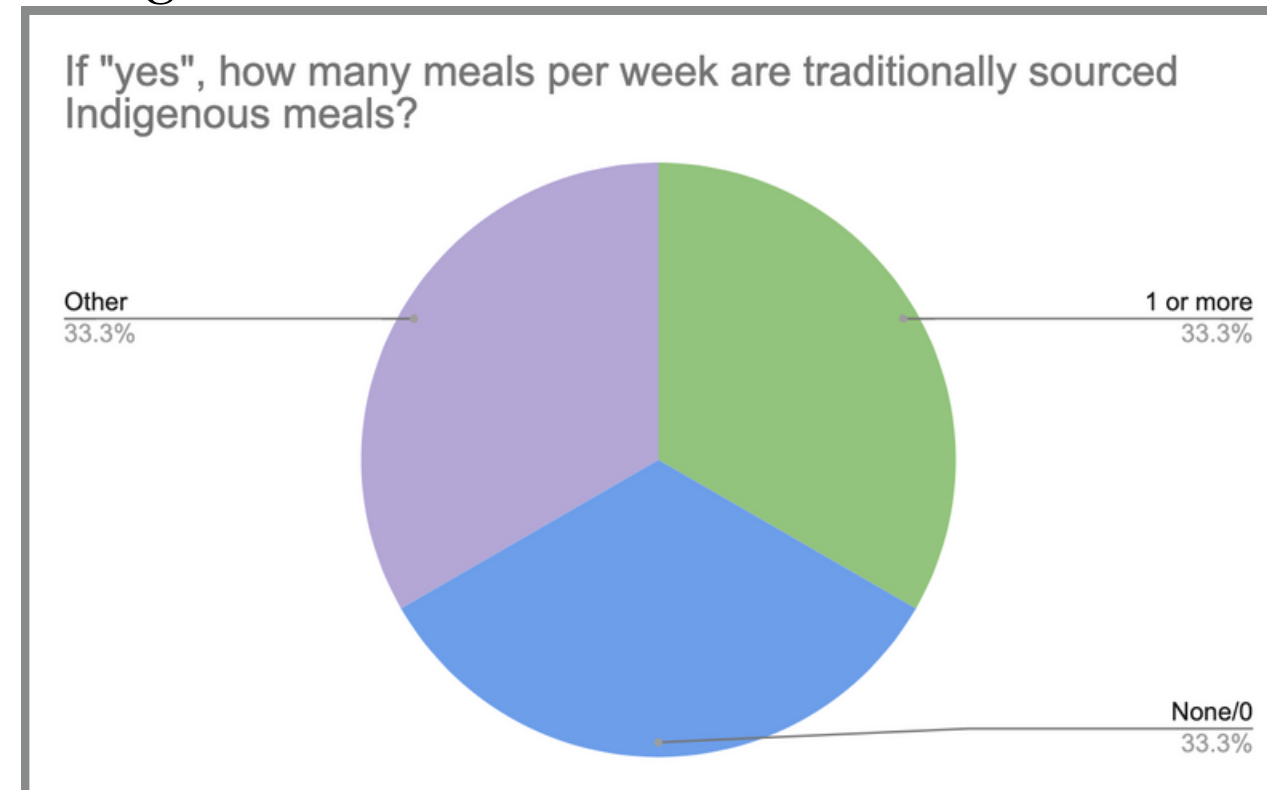
Vegetarian



Vegan



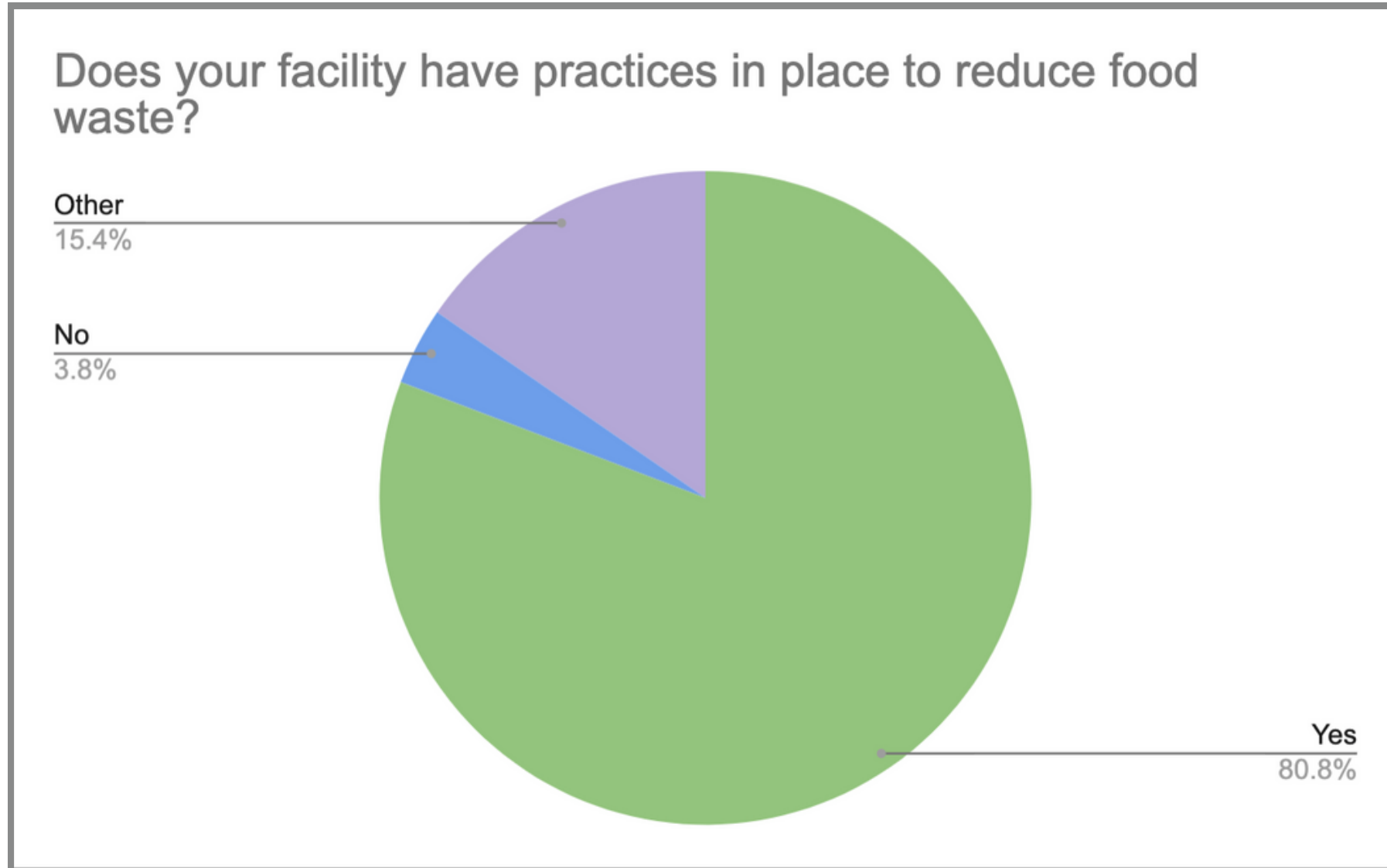
Indigenous



- Further engagement is needed; respondents were inquisitive and curious to learn more

Results

Food Waste Practices



Examples of Practices:

Switching to room service models

Waste Audits, food forecasting/popularity index to anticipate uptake of food options

Composting, dehydrating, freezing unserved food

Cold plated/retherm tray service model or warming ovens

Separating waste streams

"Food Management Fundamentals" program

Literature review

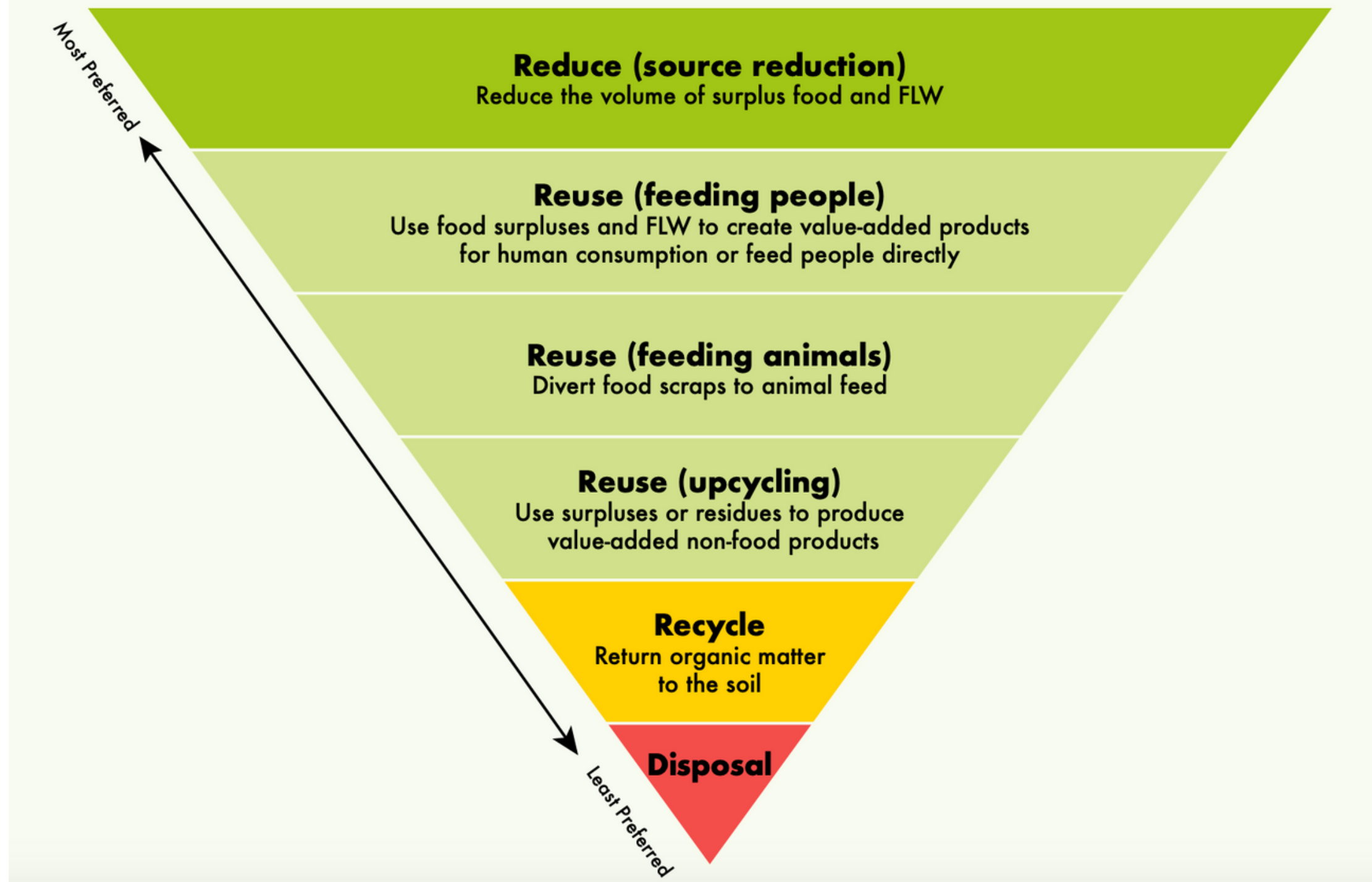
What are the current food waste management practices in Canadian Healthcare and around the world?



NOURISH

- **Most Effective Solution:** Foodservice models that decrease waste **PRE-CONSUMPTION** (ex: room service)
- **Strategies provided:**
 - patient choice
 - reduced time between ordering and eating
- **Important:** raise awareness of measuring and monitoring food waste to promote action
- **More research is needed for post-consumption waste management**

Figure 4-1: 4R-D Waste Hierarchy



RECYC-QUÉBEC (2022)

- Avoid waste in the first place (evidence-based strategies)
- Simultaneously divert waste from landfill using the most preferred strategies where possible.
- Regulations and legislations are key barriers which must be overcome before reusing food within a hospital is possible.



Actionable Steps & Resources

Ready to make change?

3 steps towards embracing plant-forward menu options at your organization:

01

Engagement

Find the other passionate people who want to help. Identify folks such as **dietitians, foodservice coordinators, procurement specialists**, and even **frontline staff** who value the connection between food, patient health outcomes, and climate change.

02

Start Small

Where are there opportunities for simple changes that have impact? What is the low-hanging fruit? (Ex: phasing out single use items for dishware, or not automatically adding condiments to a tray)
Is more education needed?

03

Seek Feedback

Collaborate with key partners; what is the patient feedback of the small changes? What is the staff feedback? Are these changes scalable for widespread implementation? Whether or not it's a success, what lessons were learned?

There has never been a better opportunity for change than right now!

Resources

[Health Care Without Harm: Plant-Based Food Guidelines for Healthcare](#)

[Health Care Without Harm: Global Roadmap for Healthcare Decarbonization](#)

[World Resources Institute Cool Food Pledge](#)

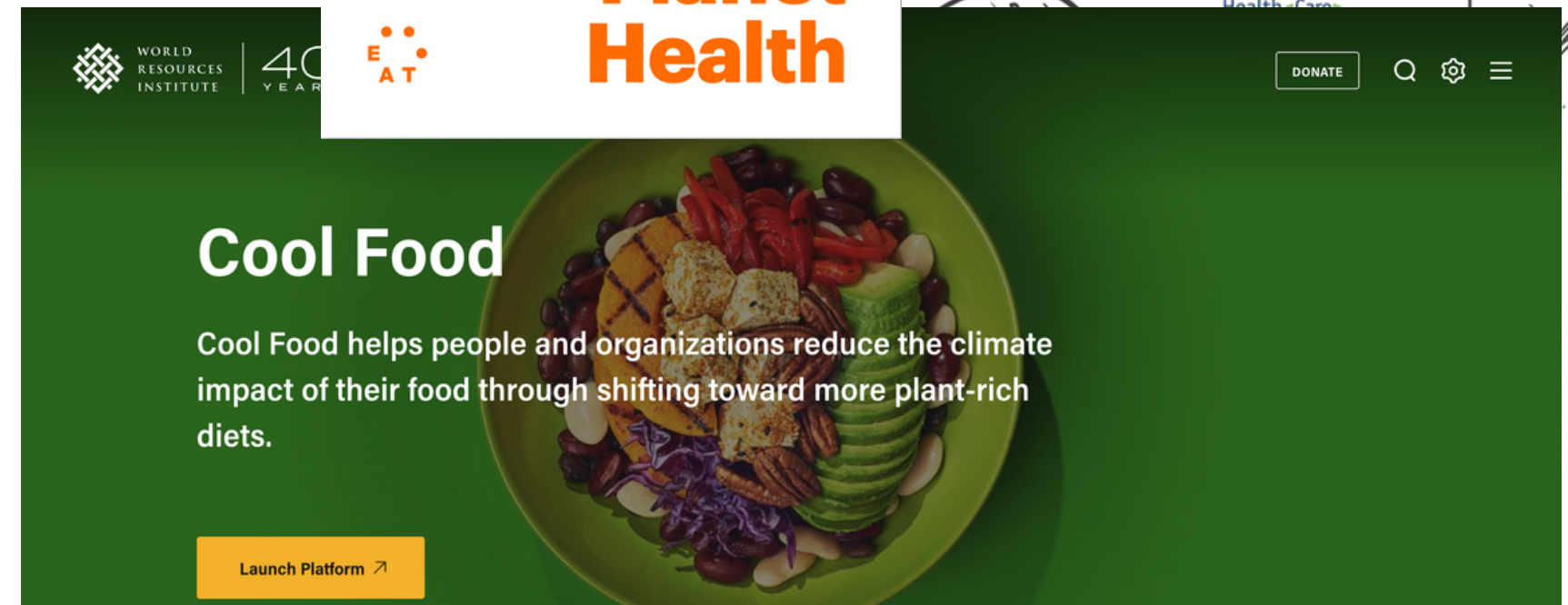
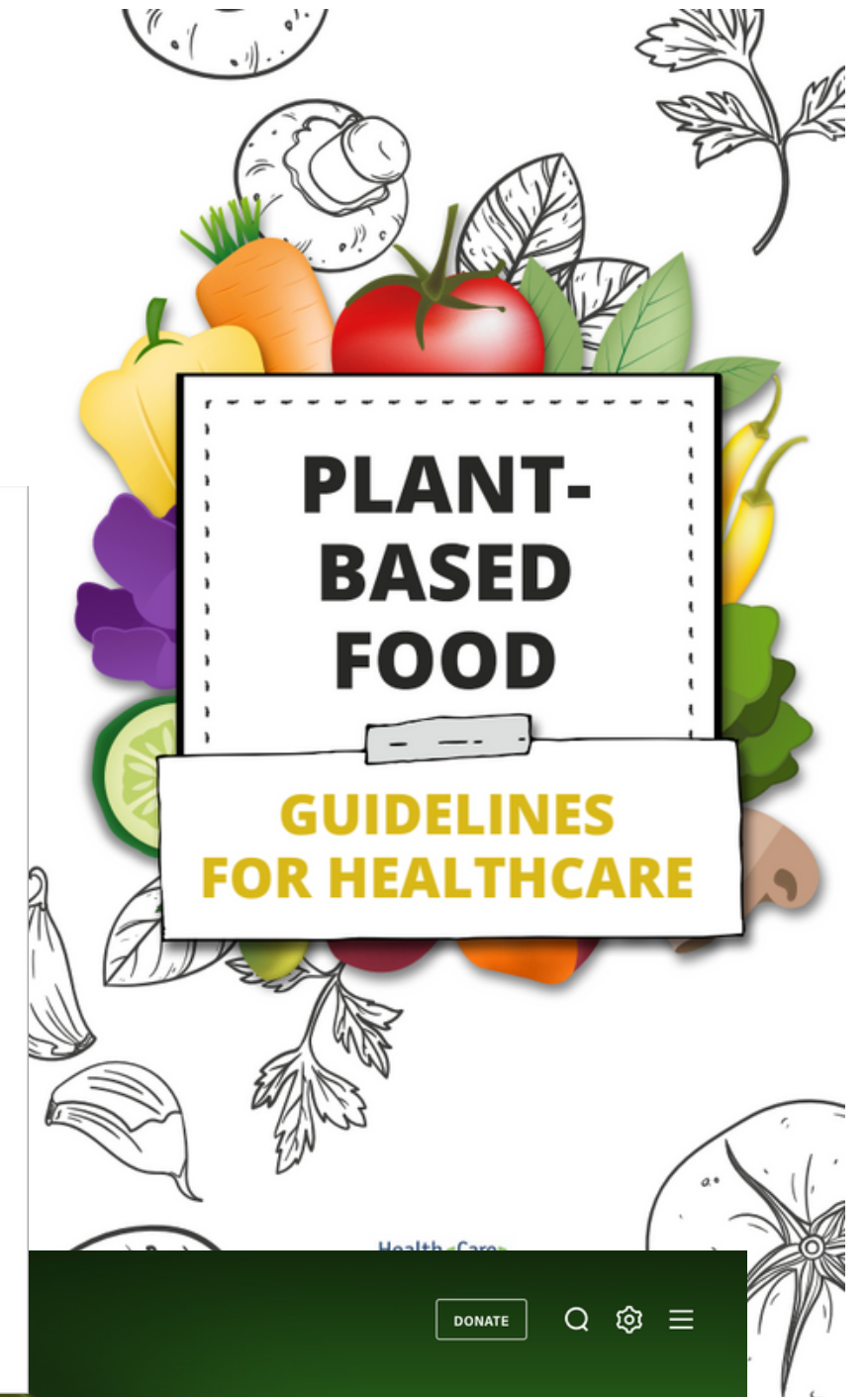
[Creation of an Inpatient Plant-Based Program](#)

[PEACH Health Ontario](#)

[Nourish Leadership: Food Is Our Medicine](#)

[Nourish Leadership: Planetary Health Menus](#)

[Summary of the Commission Food in The Anthropocene: the EAT-Lancet Commission on Healthy Diets From Sustainable Food Systems.](#)



References

- Carino, S., Porter, J., Malekpour, S., & Collins, J. (2020). Environmental sustainability of hospital foodservices across the food supply chain: A Systematic review. *Journal of the Academy of Nutrition and Dietetics*, 120(5), 825-873. <https://doi.org/10.1016/j.jand.2020.01.001>
- CASCADES Canada. (2022, May 27). *Patient and planetary health: Lessons from Indigenous Knowledge systems*. [Video]. Youtube.
- Cook, N., Goodwin, D., Porter, J., & Collins, J. (2022). Food and food-related waste management strategies in hospital food services: A systematic review. *Nutrition & Dietetics*, <https://doi.org/10.1111/1747-0080.12768>
- David Suzuki Foundation. (2022). Greenhouse gases. <https://david Suzuki.org/what-you-can-do/greenhouse-gases/>
- Greenfield, M., Lapalme, H., Reynolds, J. (2022). Nourish innovation workshop package. Nourish Leadership.
- Karliner, J., Slotterback, S., Boyd, R., Ashby, B., Steele, K., & Wang, J. (2020). Health care's climate footprint: the health sector contribution and opportunities for action. *European Journal of Public Health*, 30(5). <https://doi.org/10.1093/eurpub/ckaa165.843>
- Nourish Leadership (2022). *Food is our medicine: Overview*. <https://www.nourishleadership.ca/fiom-overview>
- Nourish Leadership. (2022). *Nourish Leadership: Meet Marianne Katusin*. <https://www.nourishleadership.ca/marianne-katusin>
- Penner, S., Longboat, S., Kevany, K. (2019). *Indigenous food sovereignty in Canada: Policy paper 2019*.
- Poole, J. (2022, November 3). *NYC's public hospitals prioritize plant-based meals as science points to improved health outcomes*. <https://www.foodingredientsfirst.com/news/nycs-public-hospitals-prioritize-plant-based-meals-as-science-points-to-improved-health-outcomes.html>
- Sergeant, M., Webster, R., Varangu, L., Rao, A., Kandasamy, S., Rampton, M., Mathur, N., Hategan, A. (2022). Identifying opportunities for greenhouse gas reductions and cost savings in hospitals: A knowledge translation tree. *Healthcare Quarterly*, 25(3). 18-24. doi:10.12927/hcq.2022.26946
- St. George's University Hospital. (2022, April 7). *Taking the carbon out of hospital menus*. <https://www.stgeorges.nhs.uk/newsitem/taking-the-carbon-out-of-hospital-menus/>
- Whiting, K. (2019, January 17). *Why we all need to go on the 'planetary health diet' to save the world*. <https://www.weforum.org/agenda/2019/01/why-we-all-need-to-go-on-the-planetary-health-diet-to-save-the-world/>
- World Health Organization. (2021, October 30). *Climate change and health*. <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

Working Group & Collaborators

- Myles Sergeant is a family physician who has worked with vulnerable populations over the past 25 years. Myles is the executive director of the Canadian Coalition for Green Health Care and the co-founder of PEACH, the charity Trees for Hamilton (www.treesforhamilton.ca) and the not-for-profit Shelter Health Network (www.shelterhealthnetwork.ca).
- Linda Varangu led the Canadian Coalition for Green Healthcare as a founding Executive Director for 6 years and has been a pillar in environmental stewardship since the 1980's, helping to build coalitions, networks, social enterprises, and not-for-profits with an environmental purpose and currently holds the role of Senior Advisor, Climate Change with the Canadian Coalition for Green Healthcare.
- Wendy Smith has worked in the institutional food service industry for over 25 years and is currently a Contract Specialist with the Mohawk Medbuy team and a member of the Canadian Food Policy Advisory Council.
- Marriane Katusin is the Director of Support Services at Halton Healthcare and was the project lead for Halton Healthcare's award winning "Good for you...Locally Grown" project, recognized by the Greenbelt Fund for putting locally grown foods on hospital menus.
- Keri Howell is a registered dietician working in community health with Six Nations of the Grand River.
- Hayley Lapalme is the Co-Director of Nourish Leadership. Hayley designed and led Nourish's 2016-2019 national leadership program and previously started My Sustainable Canada's mentorship program on public procurement.
- Steve Crawford is the VP of Sales and Marketing for Downey Farms, Cohn Farms and Fancy Pak and has built teams that have worked closely with the Ontario Greenbelt and OMFRA to produce locally sourced food solutions.
- Lindi Close worked on the frontlines as a NICU nurse for six years until recently completing a master's degree in Health Leadership and Policy at UBC and is a collaborator with PEACH and Nourish in their food-based sustainability solutions.
- Elisabet Brynjarsdottir is an Icelandic nurse who just recently finished her graduate degree, Master of Health Leadership and Policy, at UBC. She works within the field of climate and health as an Environmental and Health Officer in Iceland, teaches at the School of Nursing at the University of Iceland and works as a research assistant at Simon Fraser University.