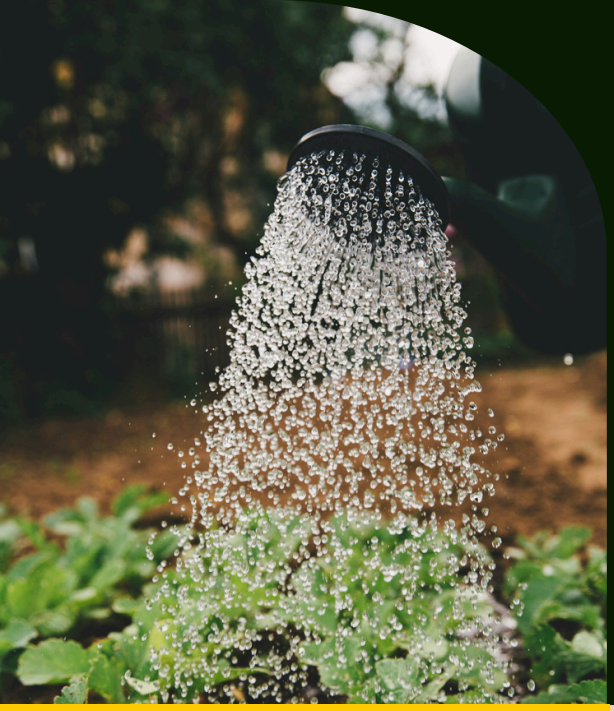


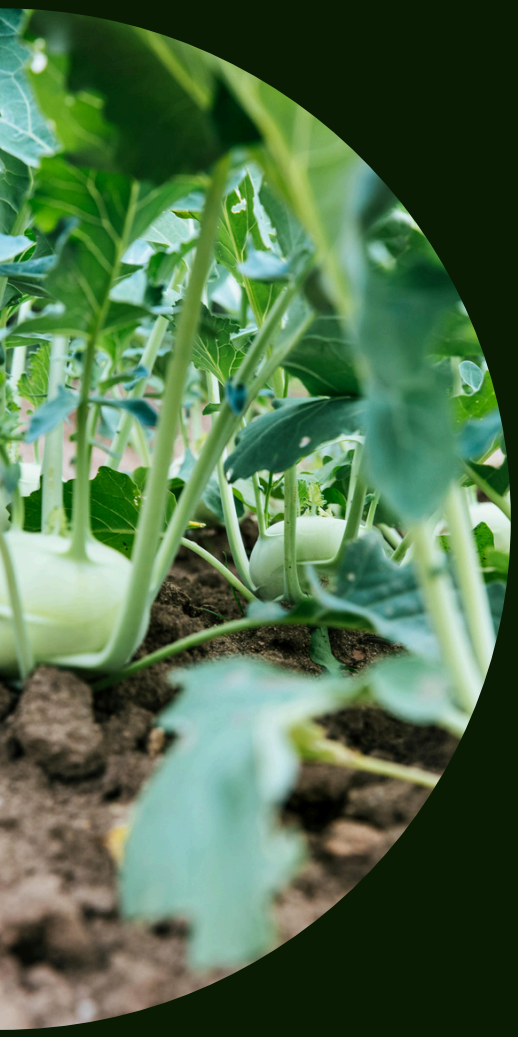
Taking a Bite out of Emissions

A policy brief on climate action through food by Canadian health care

May 2025

NourishLeadership.ca

Planetary Health
A Nourish Program



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I. Framing the issue/opportunity

Climate change is the biggest global health threat of the 21st century

Globally we are witnessing the profound impact of climate change on our ecosystems and human health, with extreme weather events such as flooding, bigger and hotter wildfires, and droughts. The direct effects of climate change include increased vector-borne diseases and death tolls associated with heat waves, as well as climate change's indirect effects on oceans and food production. Across Turtle Island, many Indigenous communities are experiencing significant changes in their access to traditional lands and waters for hunting, fishing, and gathering foods. From community clinics to hospital ERs, health care professionals see the daily impact of climate change on both patients' physical and mental health, especially among the most vulnerable who are of advanced age, living with chronic conditions, or of low socioeconomic status. And they are adding their voice to those calling for action. Many Indigenous communities have long advocated for more responsible interactions with our planet to restore ecological balance. These voices can lead the way; as Dr. Redvers puts it:

> "Although an understanding of the health risks to communities from climate change, the identification of climate vulnerabilities, and the monitoring of health indicators in response to climate change are incredibly important, it must be balanced with dialogues that uplift Indigenous community strengths and solutions, and that are rooted within Indigenous worldviews."

The health care sector is one of the largest emitters globally

Paradoxically, the health care sector is a significant contributor to global emissions. **"If the global health care sector was a country, it would be the world's fifth largest emitter on the planet"** – that's equal to 201 million gas-powered vehicles driving around the Earth's circumference. Looking more closely, 71% of emissions occur from the health care supply chain, including the production, transport, and disposal of pharmaceuticals, chemicals, food, medical devices, and instruments2. The reinforcing dynamic between climate change and the burden on the health system illustrates the inextricable link between human and planetary health. **The responsibility of the health sector to "do no harm" is more important than ever.**

Food is the single strongest lever for planetary health

The global EAT-Lancet report identifies that **"food is the single strongest lever to optimize human health and environmental sustainability on Earth."** A landslide of research and action on food, dietary patterns, and health outcomes outlines needed shifts to planetary health diets, which double the consumption of fruits, vegetables, and plant-based proteins, and decrease the consumption of added sugars and red meat by at least fifty percent. The EAT-Lancet reports that the time to act is now: **"the data are both sufficient and strong enough to warrant immediate action. Delaying action will only increase the likelihood of serious, even disastrous, consequences."** If we shift globally to planetary health diets, it is predicted that 11 million premature adult deaths could be prevented, at the same time encouraging a sustainable food system within planetary boundaries. This, in turn, will be a key strategy to reduce the overall demand for health services, addressing the social determinants of health impacts on human and ecological health.

A $4 billion opportunity hiding in the hospital basement

To meet the moment for action on climate to meet global emission reduction targets, health care institutions can step up as anchor institutions for sustainability in their communities. The Lancet's 2023 Policy brief for Canada urges hospitals to lead by example: **"facilities can create markets for local, climate-resilient food production. Furthermore, these food programs can promote healthy, sustainable diets for those most in need of nutritional support".** Canadian health care institutions spend $4 billion on food services annually. However, health care food services are often seen as ancillary and largely disconnected from patient care outcomes or planetary impacts. Correspondingly, despite the best efforts of dietitians and food service staff, much of the patient tray is left uneaten and thrown out, representing an enormous amount of food waste and contributing to patient malnourishment.

Food waste is an inefficiency that neither health care nor the planet can afford

National research has found that patients who **"are malnourished and consume 50% or less of food on their meal trays in hospitals to have longer length of stay and increased risk of mortality"**. The estimated cost to the Canadian health system is an estimated $1.5-2.1 billion annually in extended stays. Addressing malnutrition, alongside shifts to planetary health menus and reducing food waste adds up to a significant opportunity for health care climate action with thoughtful investment in changing the food it sources and serves. Aligning sustainably sourced, culturally-relevant planetary health menus is a powerful lever to better meet patient needs, more impactfully allocate health care dollars, and reduce carbon emissions.

Health care purchasing can drive shifts in agricultural production

Public institutions have a tremendous buying power that can influence trends in the food system. Procurement evaluations focused only on the lowest cost will continue to trigger a race to the bottom for the cheapest food. But strategically taking a values-based approach to measuring what matters – reducing carbon emissions, sourcing sustainably produced foods, and fair labour practices – can enable public buyers to be influencers for more resilient food systems.

The following section highlights some of the most promising solutions that are emerging across the country to use food to **enhance the patient food experience and patient health by health care investment in culturally appropriate, low-carbon sourcing practices**.

II. Emergent solutions

In 2021, Canada signed onto the COP26 Health Programme mandate to improve the sustainability of its health care sector and to reduce its carbon footprint. At COP28's World Climate Action Summit in 2023, Nourish's mission to harness health care institutions' purchasing power and influence for climate action was showcased as one of 14 case studies demonstrating how transforming food systems can combat the climate crisis.

Nourish's suite of tools, resources, and innovations holds promise to be the key to health care food being used to make a significant impact on the climate emergency. Food continues to show up as 'low-hanging fruit' in the fight to reduce emissions. In an extensive carbon mapping exercise, CISSS de Laval discovered **a surprising 11% of the hospital network's emissions were food-related** - over 7,000 tCO2eq daily. Not surprisingly, red meat accounted for one-third of this climate impact, while only representing 3% of total food served. Their study showed that red meat reduction is the most promising lever to decarbonize food in health care, and is also in line with Canada's Food Guide's recommendations for a healthy diet.

Planetary health menu strategies are an important way to reduce carbon emissions and food waste, by shifting towards plant-forward, sustainably sourced, culturally mindful menus. Measuring emissions from food service and upstream health innovation is critically needed as part of progress toward low-carbon, resilient health systems.

The Coolfood Pledge to support low carbon menus across the sector

Nourish is equipping health care leaders to take bold action through a Planetary Health Menus program launched in 2023 that includes tools and support for health care institutions to act now. Institutions can signal their commitment and scaffold their improvement journey by signing the Coolfood Pledge, a growing movement of organizations across the globe ready to track their reduction in food-related greenhouse gas emissions. The pledge includes access to a greenhouse gas calculator to track progress year over year to meet 2030 targets of 25% reduced emissions. Coolfood is already affecting 2.1 billion meals per year with new partners signing on regularly.

Bold leadership in health care can have an outsize impact on healthy eating by creating healthier food environments for health care workforce, patients, and visitors and by influencing healthier choices beyond hospital walls.

A low-carbon menu typically includes more plant-forward options and less meat and dairy. In New York City, Health + Hospitals has successfully made plant-based meals the default option at eleven hospitals, with non-plant-based alternatives available by request and as required. The first iteration of this program was rolled out in March 2022 and currently boasts a 95% patient satisfaction rate.

In Canada, Vancouver Coastal Health is a leader in planetary health formalizing it as a priority strategic direction for the entire organization and appointing Dr. Andrea MacNeill, as the first Medical Director of Planetary Health in Canada in 2021. Their team is focused on developing a host of innovations including a planetary health education module for all staff, an overnight food program providing healthy and sustainable options to residents, and a sustainable food fair highlighting plant-based options on cafeteria and patient menus. By phasing out red meat and ensuring that plant-forward menu items are included in each meal, greenhouse gas emissions were significantly reduced.

Shifts to sustainable diets will support health care institutions in their commitment to climate goals, for example, the Academic Health Institutions' Declaration of Planetary Health, aiming for net zero emissions healthcare by 2040.

°coolfood
FOR DELICIOUS CLIMATE ACTION

Join the Coolfood Pledge and Nourish's Community of Practice today.

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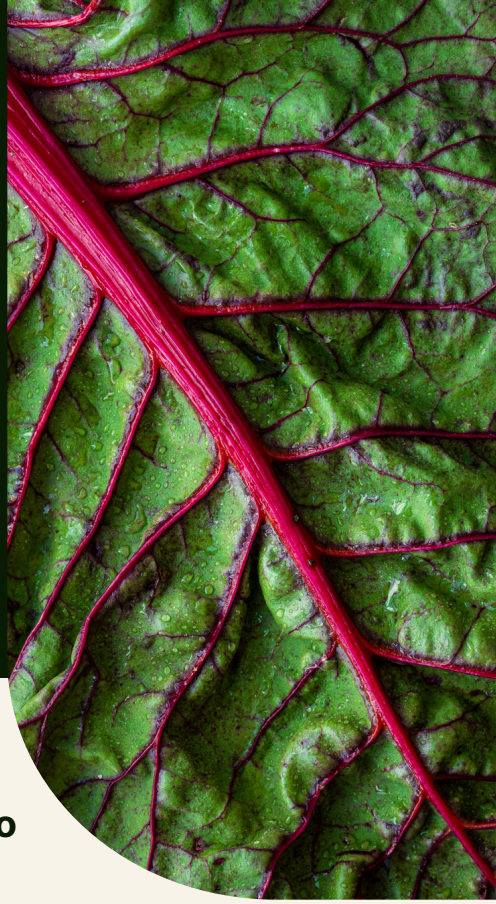


Values-based procurement that accelerates shifts to sustainable food production

Shifting to sustainable purchasing practices is essential in the movement to food systems that support better health for all people. American healthcare provider and insurer Kaiser Permanante has made commitments to 100% sustainable food by 2025. They are working to achieve this goal through innovations such as the Anchors in Resilient Communities initiative that commits to addressing the social determinants of health through leveraging anchor institution purchasing and community assets. Through coordinated action, they have also pooled the purchasing power of other institutional food sector buyers to target the development of a cost-competitive hormone and antibiotic-free chicken. Their efforts shifted the market and brought down the price for all consumers, individual and institutional, to compete with conventionally produced chicken.

In Ontario, Mohawk Medbuy (formerly MEALsource) adjusted its bid proposal evaluation when it realized their procurement process favoured incumbents and reinforced the unsustainable practices of dominant food service providers. They expanded their evaluation criteria beyond cost to weight additional values-aligned criteria, which resulted in a winning bid from a sustainable farmer who was a new entrant to the market.

In 2023 Nourish released a Values-Based Procurement Primer to support health care institutions to take up values-based procurement practices. This promising pathway finds opportunity in the Request for Proposal (RFP) process, as well as further upstream, in the goals, processes, and relationships that scaffold food procurement decision-making to weight sustainability and equity criteria in addition to price. This resource was downloaded over 100 times in its first six months of offer and was rated as valuable or very valuable by 100% of survey respondents. A subsequent Implementation Guide (2024) and Guide to Low-Carbon Food Procurement (2025) have since been released.

Food services that increase patient experience and reduce food waste

Pediatric hospital CHU Sainte-Justine is celebrated in Quebec and across Canada for its innovative food services. In 2016, they timed a big facility renovation with the launch of a new room service program called Délipapilles! Where patients choose what they want to eat and when. Remarkable gains in patient satisfaction (from 50% to 99%) and decreases in food waste (from 45% to 5%) were seen. And due to their timing and careful planning, the transition was cost-neutral. Other health organizations can look for windows of opportunity provided by the renegotiation of food service management contracts, facility retrofits, and new builds for increasing the capacity for food service operations that can fully deliver on sustainability.

Other hospitals in the third Nourish Cohort (2023-25) focused on experimenting with different methods of increasing patients' choices, including the Royal Columbian Hospital from Vancouver and St. Joseph's Health Care from London. Offering choices to patients provides a more dignified experience, improves patient satisfaction, and reduces tray waste, leading ultimately to a significant climate impact.

Onsite gardens for patient wellness

Gardening projects are proliferating across Canadian health facilities, including at St. Joseph's Health Care in London, Black Creek Community Health Centre in Toronto, The Alex Community Health and Food Centre in Calgary, and at Grove Park Home in Barrie, a long-term care facility whose residents also keep bees at an onsite apiary.

These efforts permit hyperlocal sourcing and also act as a powerful entry point for an organization to educate and engage staff, patients, and residents about food, health, and sustainability. Other garden projects include commitments to reconciliation, such as in the Saskatchewan Health Authority, where a Truth and Reconciliation Garden was developed with Indigenous partners as a new way for staff and community to rebuild relationships with Indigenous knowledge, one another, and the land.

Food prescribing

Food security is a key social determinant of health, and household food insecurity impacts health and health costs across several streams of care: prescription drugs, home care, inpatient costs, physician services, and emergency services. Overall, health care costs are 121% higher for those living with severe food insecurity. Currently, there is a wide field of experimentation by health care organizations across Canada and the US with different food prescribing models. Food prescribing provides direct food support for patient populations to improve access, and support healthy diets for positive health outcomes. Early pilots show promising results for improving patients' food environments, increasing healthy food consumption, and strengthening food security. These models vary with different approaches for screening, prescription pathways, food sourcing, delivery, and impact metrics.

Investments made in upstream health initiatives such as food prescribing could be a powerful leverage point to support reducing the demand for health services and support the sector's needed transition to more low-carbon, resilient health care for communities.

III. Key opportunities for moving forward

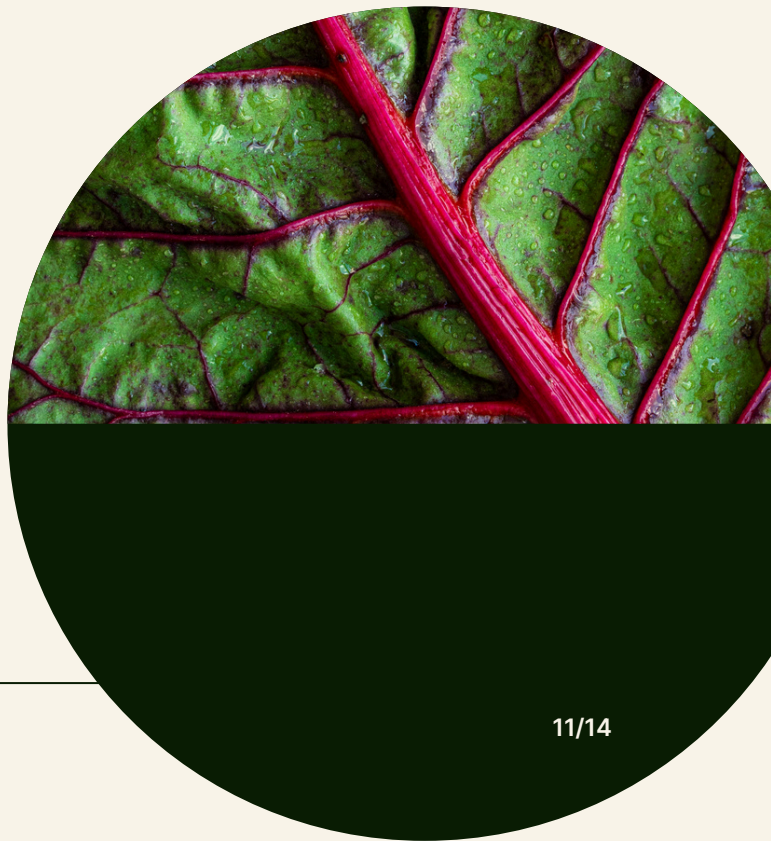
To reduce food-related greenhouse gas emissions, health care organizations can **switch to plant-forward menus** and **reduce food waste**. Offering patient choice through **room service models** can simultaneously support these goals.

Plant forward menu changes can help free up financial resources for **more sustainable purchasing** ("less meat, better meat" approaches); but depending on the facility, significant resources may be required for kitchen equipment and design upgrades. With the aging infrastructure of Canadian health care building an opportunity to invest in **retrofitting / designing new facilities** with capacity on-site scratch cooking and room service models, creating win-win's for patients and the planet.

Health care can draw inspiration from other sectors' sustainability improvements, promoting their environmental, social, and governance progress to stakeholders. The food services teams at Vancouver Coastal Health have successfully harnessed the momentum of their health authority's **integration of sustainability as part of their strategic plan**. This is a powerful way for health care organization leaders to take action now.

Food is personal and aiming to meet diverse patients' needs is complex. However, a staggering 87% of surveyed Canadians, spanning various demographics, acknowledge the urgency of the need for sustainable diets. Hospitals can harness Canadians' interest in climate action by changing to planetary health menus and **communicating about the positive shifts** to planetary health menus as gains, not personal losses.

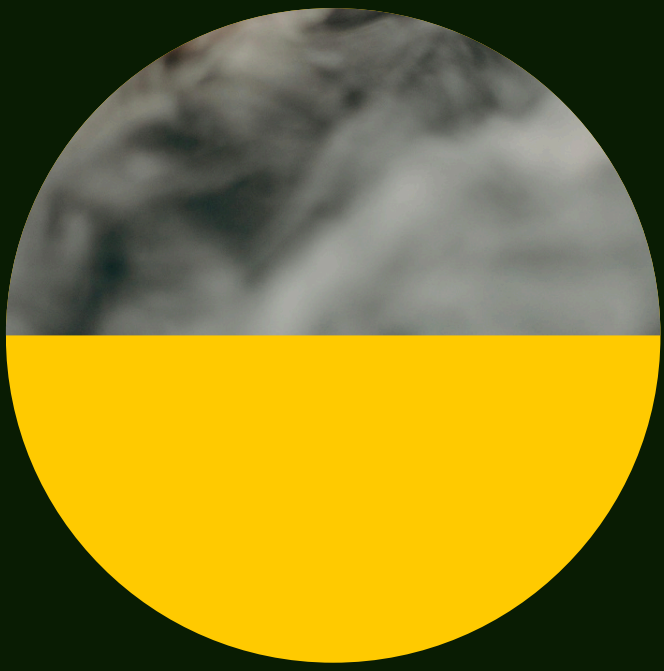
Values-based procurement is a new way of thinking about purchasing decisions, going beyond looking only at lowest cost. Tools, education, technical support, and enabling policies will ensure that this important pathway to sustainability and equity is successful, and that the $4 billion+ health care food services budget is leveraged for planetary health.



Policy innovation is needed to break down silos and integrate strategies for health, agriculture, and climate that support the Lancet's Calls to Action in the 2023 Policy Brief for Canada:

+	Integrate emissions data in nutrition labeling nationwide.
+	Create policies, processes, and programs that support organic, sustainable food production.
+	Invest in a voluntary government–industry food loss and waste agreement to reduce emissions and financial losses from edible food waste.
+	Encourage hospitals to sign onto the Cool Food Pledge.
+	Integrate planetary health diet recommendations in cafeteria and food programs at health care and educational facilities.
+	Increase nutrition support programs for low-income households with a focus on plant-forward and minimally processed foods.
+	Support Indigenous food sovereignty, and offset the costs of food collection, production, and distribution in remote communities. Increase access to traditional foods.

IV. Additional resources



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