



SUSTAINABLE HEALTH CARE FOOD SYSTEM

BUSINESS CASE AND IMPLEMENTATION GUIDE

2024
EDITION



HEALTH
SCIENCES



The Canadian Coalition
for Green Health Care
Coalition canadienne pour
un système de santé écologique



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This is a living document which will be revised as this field evolves. We welcome your comments and suggestions (contact: parascf@gmail.com).

We would like to acknowledge that the work we do takes place on Turtle Island, also known as Canada, on the lands that have been cared for for thousands of years by Indigenous communities.

We cannot fight the climate crisis and truly embody planetary health, 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 mindful food and a sustainable system for sourcing and preparing that 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.

TABLE OF CONTENTS

Introduction: Sustainable Food Services in Health Care	1
Problem Statement	3
1.0 Drivers for Change	
1.1 Cost Savings	8
1.2 Updates to Public Procurement Policy Legislation	10
1.3 Patient Health, Satisfaction, and Recovery	12
1.4 Happier and Healthier Staff	15
1.5 The Current Climate Crisis	16
2.0 Strategic Fit	18
3.0 Cost-Benefit Overview	23
3.1 Associated Costs and Benefits by Pillar	24
Implementation Guide	29
4.0 Rationale for Implementation Strategy	30
5.0 Change Management Approach	31
6.0 Stepped Approach to Implementation	32
6.1 Schedule for Key Implementation Components	33
6.1.1 First Steps	34
6.1.2 Quick Wins	35
6.1.3 Mid-Implementation	37
6.1.4 Long-Term Changes	41
6.2 Implementation and Capacity Considerations	43

TABLE OF CONTENTS

7.0 Key Partner Management and Communication Plan	44
8.0 Long Term Maintenance	48
9.0 Case Studies	49
9.1 Vancouver General Hospital Planetary Health Menu	50
9.2 New York Health + Hospitals	51
9.3 Sustainability and Eliminating Food Waste at UC San Diego Health Hospital	52
9.4 Food Waste Reduction and Sustainable Menu at CHU Ste. Justine and Halton Health	53
9.5 Halton Healthcare “Good for You... Locally Grown” Project	54
9.6 Ross Memorial Hospital Local Food Procurement	55

INTRODUCTION: SUSTAINABLE FOOD SERVICES IN HEALTH CARE

The health care sector stands at a critical juncture in the fight against climate change, to remain within planetary boundaries, and for sustainable food systems. As integral components of both patient care and institutional operations, food services within health care facilities contribute significantly to environmental impact. Long supply chains, reliance on single-use plastics, limited menu options, and ultra-processed foods exacerbate the sector's carbon footprint.

As 'anchor institutions,' health care facilities have a unique opportunity to lead by example: influencing supply chains, policies, and community practices. By highly valuing food and food services, they can tackle climate change while improving patient care.

A common misconception is that sustainable initiatives are costly with minimal benefits. In reality, sustainable food practices reduce emissions, enhance patient and community outcomes, and generate sizeable cost savings.

This Business Case and Implementation Guide outline **why health care facilities need to prioritize the transformation of their food services** and **how they can implement a sustainable food service model** through:

- Embracing food as medicine
- Reducing food waste
- Implementing plant-forward menus, and
- Shifting to values-based procurement for food

These actions present a clear path toward both improved patient care and environmental sustainability.

BUSINESS CASE



PROBLEM STATEMENT

Health care's contribution to climate change requires immediate action. Food services contribute to health care's carbon footprint and directly impact patient care. Prevailing food services practices across Canada, including reliance on extensive supply chains, utilization of single-use plastics, restricted menu options, the proliferation of ultra-processed foods, and procurement from suppliers lacking transparency in farming practices, collectively contribute to its environmental impact.

Health care facilities are 'anchor institutions' with significant purchasing power, real estate, employment, and reputational credibility to influence the community, supply chains, and government with their actions and policies(1). Their thoughtful action can build planetary health and wealth in the communities; but business as usual practices are pushing us beyond livable planetary boundaries.

"There is a need for health care leadership to better understand how important, impactful, and practical changes in food services can be."



The implementation of transformative measures within food services has multifaceted challenges. Food services are directly interconnected with patient care and service provision. There is a false belief that integrating sustainability initiatives into these services is financially burdensome and yields marginal benefits to the overall quality of patient care and operational efficiency of health care facilities. This is far from the truth and there is a need for health care leadership to understand better how important, impactful, and practical changes in food services can be.

There is a prime opportunity within the health care sector to introduce sustainable innovations into food services. Mitigating health care-related emissions, enhancing patient-centered care, and streamlining service delivery processes are all outcomes of integrating sustainability into food services resulting in a win-win scenario - a healthier environment with improved patient outcomes.

In addition, specific sustainable food production practices can also contribute to climate-resilience. See [*Climate Resilient Practices: Typology and guiding material for climate risk screening*](#) for examples of climate resilient agricultural practices.



OUR PROPOSED SOLUTION

Implementing a **sustainable food service model** within healthcare facilities (ie. Hospitals, long-term care) represents an opportunity to assess and greatly improve service delivery processes and align facility-wide operations with Canada's goals to achieve net-zero emissions by 2050. This proposed model focuses on **four main pillars** (referred to as 'the pillars' throughout the document):

EMBRACING FOOD AS MEDICINE:

'Food as medicine (FAM) refers to the use of food-based nutritional interventions to treat or prevent disease. FAM has been shown to enhance patient nutrition, reduce food insecurity, improve health outcomes, and promote health equity. This approach also helps lower healthcare costs by decreasing the risk of hospitalization and shortening hospital stays when admissions occur (2, 3).

FOOD WASTE REDUCTION

Food that is produced but not eaten ends up in landfills and creates methane, a powerful greenhouse gas (GHG). Emissions throughout the entire supply chain are also wasted to produce unconsumed food. Providing menu options and ordering methods that better suit patient preferences, streamlining operations, and other practices to limit food waste can lead to cost savings and a reduction in GHG emissions (4).

IMPLEMENTING PLANT-FORWARD MENUS:

Hospitals can reduce their reliance on meat-focused meals, and instead shift to offering meals that include whole grains, nuts, seeds, legumes, fruits, and plant-based proteins, with few or no animal products. Prioritizing plant-forward* options can result in menu items that are cheaper to produce, reduce emissions throughout the supply chain, and educate patients on nutritious food choices. They have also been found to improve patient satisfaction with their meals (5). Making plant-forward the default menu option but keeping some meat-based items allows food services to accommodate specific dietary requirements or cultural practices that may necessitate non-plant-based options.

**See [Glossary](#) for definition of Plant-Forward*

SHIFTING TO VALUES-BASED PROCUREMENT (VBP) OF FOOD:

Within food services, the values of environmentally conscious farming practices, local supply chains, and ethical sourcing should be integrated into procurement practices to improve food quality and build resiliency in food services. Healthcare facilities have large orders with suppliers, thus their influence can have ripple effects across farming and food processing practices. Additionally, Canadian policies, such as [Bill S2-11 to prevent forced or child labour](#), demand increased transparency within supply chains. Paying attention to how food is sourced and produced may alleviate future difficulties in adhering to these new policies (6).

1.0 DRIVERS FOR CHANGE

This section identifies the key factors necessitating healthcare food services transformation. It outlines the internal and external pressures, market trends, and strategic goals that drive the need for this initiative, ensuring alignment with an organization's long-term vision, objectives, and overall dedication to ever-improving patient care.



1.1 COST SAVINGS

Health Care Executives continually juggle diverse and competing priorities related to staff retention, climate targets, Truth and Reconciliation Calls to Action, ESGs, and more. Budgetary constraints only heighten these issues. Menu improvements can be a pathway to [greater value creation and cost savings](#) that do not hinder other priorities.

With the rising cost of meat, patient entrées featuring plant-based proteins can lower costs (7). Plant-based protein entrées are typically 10–20 per cent cheaper than meat based options (8,9).

Canadian health care spends more than \$4 billion on food services annually (10).

Considering that approximately 54 per cent of food served is wasted, and food represents an estimated 10–15 per cent of overall waste within a hospital, the financial opportunity is obvious (4,11).

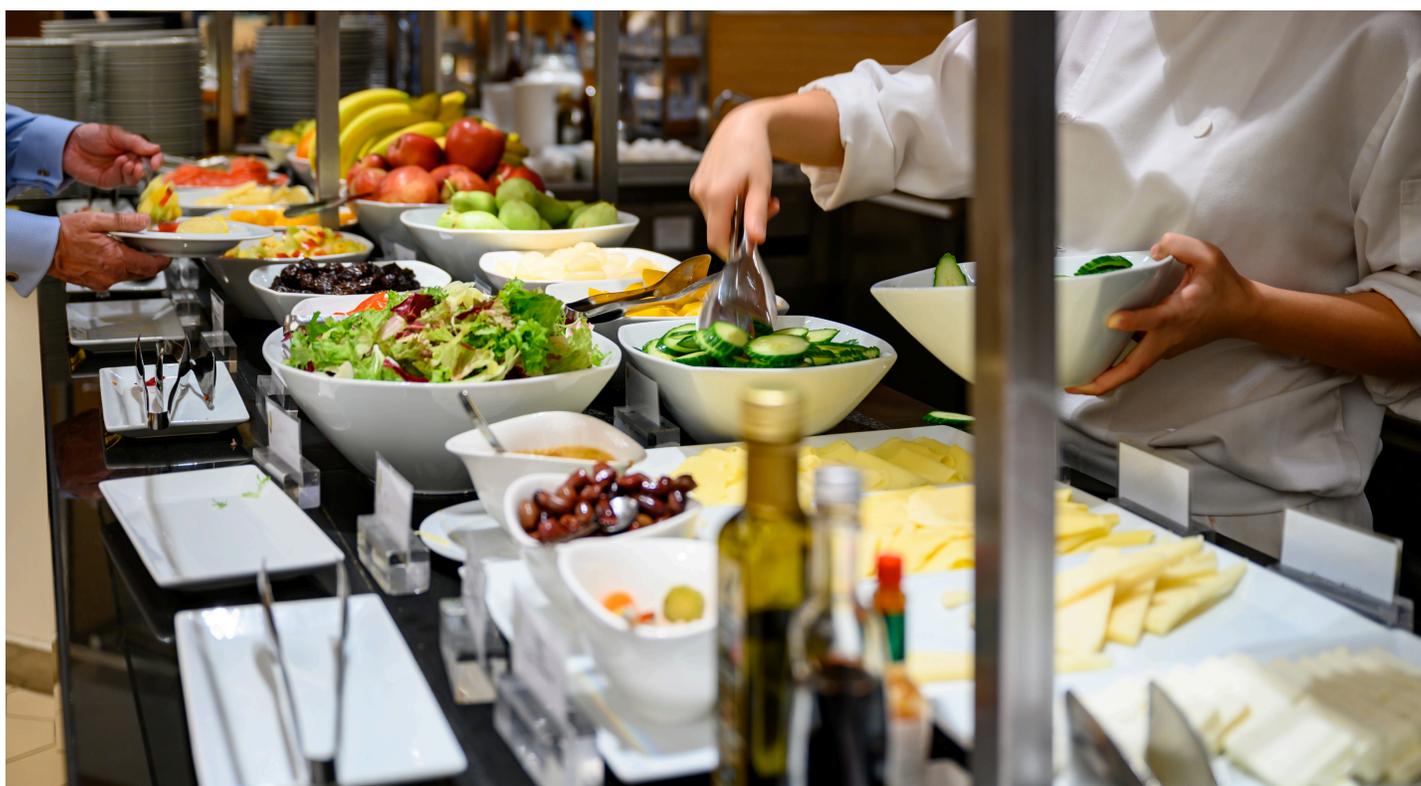
NYC Health + Hospitals implemented a plant-based menu by default for their network of 11 hospitals. During a three-month pilot, over half of patients chose plant-based meals. The switch resulted in \$500,000 (USD) of cost savings (8,9).

Further, reducing food waste can save spending on waste management contracts, and potentially mitigate staffing costs if waste reduction measures address internal service inefficiencies (4).



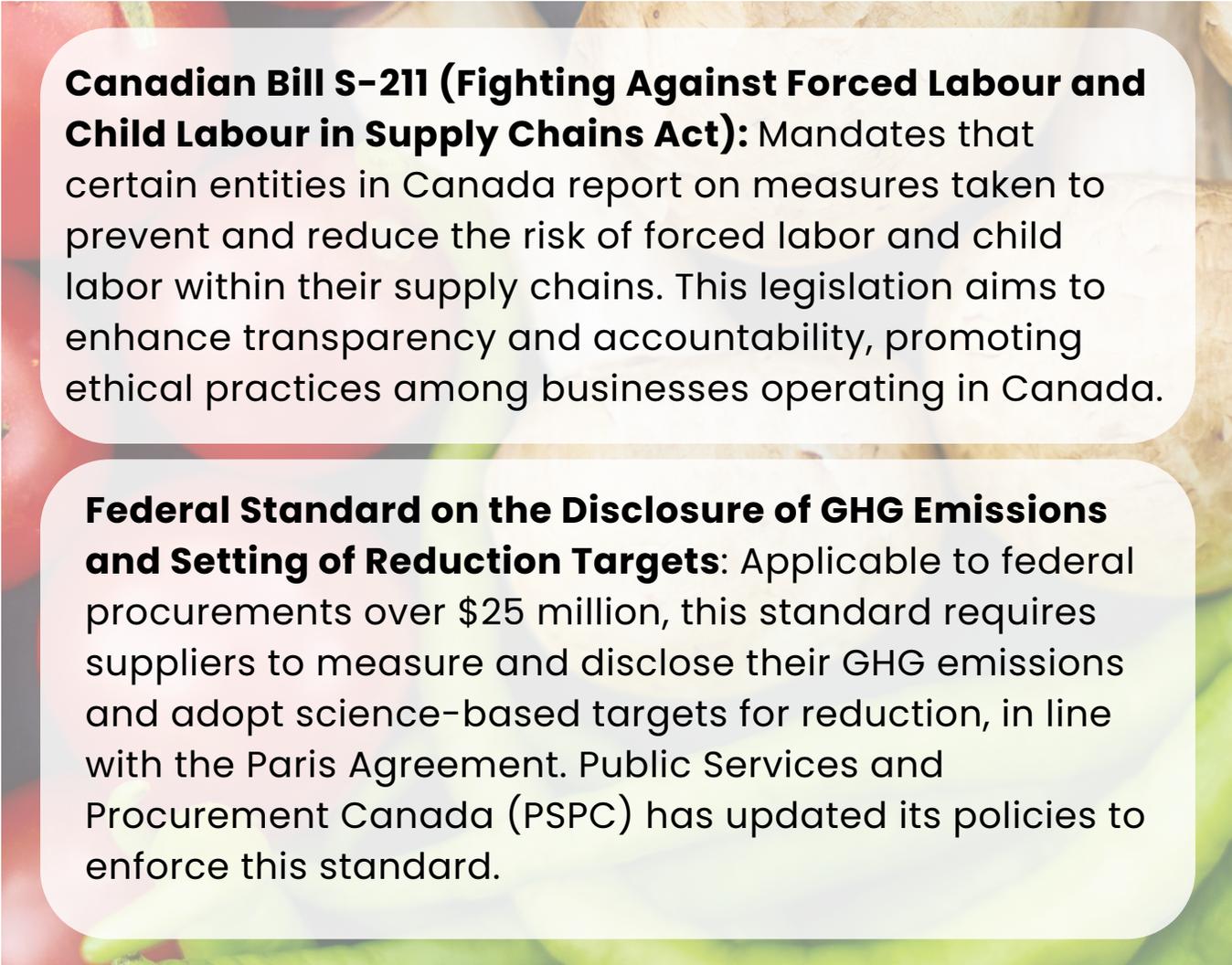
Focusing on food [waste](#) reduction initiatives can also lead to **less food needing to be ordered and has been associated with hospitals cutting their food purchase budget by up to six per cent** (12,13). Furthermore, customer satisfaction scores are not negatively impacted when switching to plant-forward menus and patients have positive responses to local food highlighted on the menu (14,15) (see [Glossary](#) for our definition of 'Local Food'). The same is true for [room service models](#), which reduce waste, costs, and boost patient satisfaction.

For example, patients who ate the NYC Health + Hospital's plant-based menu reported a 95 per cent satisfaction rate (9). This may lead to less food waste per tray as patients are happy with what is served.



1.2 UPDATES TO PUBLIC PROCUREMENT POLICY LEGISLATION

Federal and Provincial procurement policies are beginning to emphasize regional supply chains and increase transparency within supplier operations. As governments increasingly focus on climate change, Canadian public and private sectors will be required to report on more aspects of their supply chains and emissions. Several pieces of legislation and guidelines are indicative of this trend:



Canadian Bill S-211 (Fighting Against Forced Labour and Child Labour in Supply Chains Act): Mandates that certain entities in Canada report on measures taken to prevent and reduce the risk of forced labor and child labor within their supply chains. This legislation aims to enhance transparency and accountability, promoting ethical practices among businesses operating in Canada.

Federal Standard on the Disclosure of GHG Emissions and Setting of Reduction Targets: Applicable to federal procurements over \$25 million, this standard requires suppliers to measure and disclose their GHG emissions and adopt science-based targets for reduction, in line with the Paris Agreement. Public Services and Procurement Canada (PSPC) has updated its policies to enforce this standard.

Figure 1: Federal Procurement Policies

Building Ontario Businesses Initiative Act (BOBIA):

Mandates public sector entities to prefer Ontario businesses in procurements under specific thresholds, aiming to direct \$3 billion to local businesses by 2026

New Brunswick First Procurement Strategy: Encourages local sourcing for government contracts, aiming to enhance local business participation while complying with trade agreements

PEI Procurement of Goods Act: Promotes local procurement to support the economy, emphasizing sourcing from local suppliers, especially in critical sectors like agriculture

BC Social Procurement Initiative (BCSPI): Advocates for local procurement, focusing on social, economic, and environmental benefits, though it does not set mandatory local purchase quotas

Quebec Bill 12: Enables public bodies to prioritize local procurement, allowing them to grant a 10% premium for Quebec-sourced goods and services

Yukon Procurement Policy: Encourages local procurement by prioritizing support for local businesses while maintaining fairness and transparency in the procurement process

Saskatchewan Procurement Strategy: Promotes local suppliers and encourages collaboration with local businesses to enhance their participation in government contracts

Newfoundland and Labrador Local Procurement

Framework: Encourages government departments to consider local suppliers in their purchasing decisions

Figure 2: Sample of Provincial and Territorial Procurement Policies

1.3 PATIENT HEALTH, SATISFACTION, AND RECOVERY

Currently, food is seen as ancillary to care, leading to menus being planned primarily based on cost and convenience. Re-imagining food service offerings as holding the potential to improve patient and community health can lead to strengthening nutritional status within and outside of hospital walls. The future of food in health care relocates food to the therapeutic budget, where it's full impact on patient health and recovery can be better achieved.

Poor nutrition and food access is a major contributor to illness, rising health care costs, hospital re-admissions, and reduced productivity, primarily due to diet-related chronic diseases and undernutrition. These burdens disproportionately affect lower-income, less educated, and ethnic minority groups, who are more likely to experience poor diets, hunger, and related diseases, further contributing to health disparities (16).

A Harvard study found that individuals who most closely adhered to the Planetary Health Diets had a 30 per cent lower risk of premature death with a 29 per cent reduction in greenhouse gas emissions, illustrating the co-benefits of personal and planetary health (17).

Research indicates that malnutrition is common among hospital patients. A recent study in the Journal of Clinical Nutrition found that patients who became increasingly malnourished during their hospital stay tended to have longer hospitalizations (18).

Emerging research indicates that FAM intervention delivery in health care might be associated with improved health outcomes and reduced healthcare usage and costs (19).

Patients often leave meals unfinished, increasing their risk of malnutrition. It has been found that patients prefer fresh, local, flavourful food, which can enhance mealtime satisfaction and boost intake. Meals containing local ingredients can make patients feel good about their meals and contribute to a positive mealtime experience to increase food intake (20).



Food as Medicine interventions seek to treat or prevent disease using the power of food, typically addressing food security and health equity concerns in tandem.

A Tufts University study found that providing meals tailored to the medical needs of patients with diet-related health issues could yield the following outcomes:

- Prevent approximately 6 million hospitalizations annually.
- Generate a net cost savings of \$13.6 billion (USD) over one year.
- Achieve a cumulative savings of \$185 billion (USD) over a decade.
- Avert 292,000 cardiovascular events.

The study demonstrates that prioritizing a healthy diet in healthcare facilities can significantly reduce hospitalizations and care costs (16,21).

A further concern with siloing food from clinical considerations is related to sourcing animal products, especially from large-scale operations. Animal agriculture is a leading driver of antimicrobial resistance (AMR), which decreases the efficacy of antibiotics and which the WHO has identified as one of the top ten global public health threats (22).

Patients have been found to follow nutritional recommendations from their hospital stay post-discharge (23). A focus on plant-forward, healthy, whole-food options in a patient's hospital meals could lead to improved long-term diet choices for patients and their families.

Recognizing Food as Medicine and reorganizing it within clinical budgets is a fundamental transformation that will protect the time, energy, and specialization required to treat food not as a commodity ancillary to care, but essential to patient and planetary health. When food service teams are perpetually asked to do more with less and to take on scope-creeping portfolios with laundry and parking, it does not get the care and attention needed, impacting both the bottom line and patient well-being in the present, and into the future.

Each meal served to a patient is an opportunity to educate patients and their families on food choices and how these choices can impact their overall health.

1.4 HAPPIER AND HEALTHIER STAFF

Healthful foods play a crucial role for health care workers and facility staff who are often exposed to low-choice or poor food environments, stressful conditions, including shift work and extended hours, with limited opportunities to nourish themselves. These conditions make them particularly susceptible to unhealthy lifestyles. Therefore, efforts by hospital food services to increase the availability of fresh, less-processed, whole foods **would support physician, nurse, and other staff well-being. Such initiatives reinforce a 'culture of health,' which is vital in today's workplace** particularly as high rates of burnout impact health care professionals and given the prevalence of staffing shortages (24).

A 2013 study investigated the impacts of a plant-based diet at 10 sites of the GEICO corporation (a major US insurance company with about 27 000 employees nationally at the time of the study). The researchers found that the low-fat, plant-based diet intervention significantly reduced body weight and waist circumference, and improved depression, anxiety, and productivity of staff (25). These findings highlight the potential benefits of incorporating plant-forward initiatives in health care settings, improving staff wellness, and optimizing organization outcomes.



1.5 THE CURRENT CLIMATE CRISIS

There is scientific consensus that our planet is experiencing pressures that put human life at risk. Drought, floods, wildfires, biodiversity loss, and frequent natural disasters are a near and present reality, with the threat becoming more critical every year. The healthcare system is an active contributor to this crisis, contributing an estimated five per cent of global GHG emissions (26).

There is an urgent need for healthcare executives to rise to the challenge and implement bold and immediate strategies to reduce emissions.

Food represents a significant proportion of an individual's, and by extension, the health system's, environmental impact (about one-third) and is, therefore, an opportunity to make significant change. Our current global food system leads to environmental degradation and transgression of planetary health boundaries, with 14 per cent of GHGs coming from farmed animals (27,28). Meat and other animal-based products take up a disproportionate amount of space on our plates and menus with North Americans consuming almost 6.5 times the recommended amount of red meat (29).

The EAT-Lancet Commission stresses the need for a dietary model that emphasizes a predominantly plant-based diet to achieve both human and environmental health. The report's findings reinforce the necessity of transforming our food system to meet the dietary needs of a growing global population while minimizing environmental impact (29). Addressing our reliance on animal products has significant potential, reducing land use by 76 per cent and emissions by 49 per cent (30).

Studies have demonstrated that switching to plant-based meals are needed to support meeting our current climate targets as foods associated with the highest GHG emissions include beef, lamb, mutton, and dairy (5, 31). Eating a plant-rich diet and reducing food waste were identified as the top two most promising global warming solutions by Project Drawdown (22).

Roughly one-third of all food produced worldwide is wasted, meaning the energy and resources that go into producing, processing, packaging, and transporting it are also wasted (32). Decomposing food waste produces methane, a strong greenhouse gas that contributes to global warming. **In Canada alone, organic waste in landfills contributes to four per cent of total GHG emissions** (33). Addressing excessive food waste has been cited as a means to meet United Nations Sustainable Development Goal 12, which seeks to “ensure sustainable consumption and production patterns” and would align health care facilities with the National Zero Waste Council’s goal of reducing both food loss and waste by 50 per cent by 2030 (26, 30).

It is estimated that hospitals produce over 29lbs of waste per patient per day, including food and medical waste. Addressing waste from food services is an important component in reducing this enormous waste production, leading to more sustainable operations, cost savings, and improved overall efficiency for health care facilities (13).

“Food is the single strongest lever to optimize human health and environmental sustainability on Earth.”

-EAT-Lancet Report (29)

2.0 STRATEGIC FIT

The landscape of health care delivery is changing and sustainable updates to food services can lead to reduced costs, improved patient wellbeing, and reduced emissions. As governmental reporting requirements continue to evolve and health care facilities begin to integrate sustainability goals in their strategic plans, **using the Four Pillars of this sustainable food service model will ensure hospitals operate at optimal standards for environmental and corporate social responsibility.**

Menus offering plant-forward items that are less processed and sourced from local suppliers provide opportunities to educate patients, staff, and visitors on healthy meal choices. It also ensures patients and staff are fed balanced and appetizing meals while in health care settings. This can lead to improved long-term patient outcomes and more informed dietary choices when patients are in their own homes and communities.

Professional medical organizations are embracing the concept of “Food as Medicine” and practitioners are following suit. The following health care organizations promote plant-forward menus: [American Medical Association](#), [Dietitians of Canada](#), [American Society of Preventative Cardiology](#), [Harvard T H Chan School of Public Health](#), [Diabetes Canada](#), [World Cancer Research Fund](#), [Academy of Nutrition and Dietetics](#), [American Heart Association](#), and [American College of Lifestyle Medicine](#).

There are also numerous healthcare worker-led organizations, such as the Physicians Committee for Responsible Medicine, Physicians Association for Nutrition, Plant-Based Health Professionals UK, CAPE - Canadian Association of Physicians for the Environment, Physicians Association for Nutrition, as well as other sustainability focused organizations, such as Greener by Default, The UK Health Alliance on Climate Change, Plant-Based Canada, and Nourish, dedicated to improving patient health through sustainable changes to food services.

Pressure from larger associations and grassroots organizations represents a shift in the medical landscape.

Substantial change is needed to meet the growing demand, and evolving scientific evidence, to align food services with sustainability. Additionally, as facilities begin or continue to report on emission production, food services can be highlighted as an area where mitigation efforts are front and center. NYC Health + Hospitals saw an estimated **36 per cent reduction in carbon emissions from all meals** served compared to the prior year when the program was not fully implemented (30).

This transformation will also positively impact other organizational priorities, including brand performance, human resources benefits, and revenue boosts. This is broken down in the following incentives:



Revenue



Fostering
leadership



Human
Resources



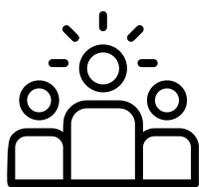
Opportunities
for
Innovation



Brands
and
Communication



Revenue: Throughout the country, patient outcomes are tied to hospital funding (35). This is true both for public-sector dollars and philanthropic contributions. Improving patient health outcomes and patient satisfaction through improved food service could support the growth of increased revenue for hospitals in the short and long term.



Fostering Leadership: Food services and procurement policies impact many areas of a healthcare facility and patient care, meaning they impact many different areas of staffing.

There is an opportunity to identify emerging leaders within various departments and foster their leadership skills along with the implementation of new food service practices (1). This work coincides with professional development and can be an incentive for staff looking to integrate sustainability into roles that may not typically focus on environmental or planetary health.



Human Resources: Various studies have demonstrated the link between socially conscious initiatives and talent retention, especially among millennials (36). Enhanced Corporate Social Responsibility efforts are tied to employees feeling their psychological needs are met, making them more satisfied in their roles, and less likely to leave (37). As a result, this transition supports the hospital in retaining top talent.



Opportunities for Innovation: As health care treatments and technologies evolve, food services have an opportunity to further enhance patient care with new innovations. Food services involve several steps from establishing distributors to cooking/ordering ready-to-serve service to cleaning to education to home care.

New innovations can, and should be, introduced to all of these areas and should represent the community that the facility cares for. As concepts like “food as medicine” (FAM)/ “food is medicine” (FIM) and plant-forward menus are becoming more popular and studied within health care, leadership has an opportunity to make their facilities industry leaders within Canadian and international health systems.



Brands and Communications: Redesigning the hospital’s menu to align with sustainable practices could be accompanied by a brand boost, including media spotlights, social media campaigns, new partnerships, and the creation of new marketing materials. Themes might include a culture of innovation, community partnerships, local impact, and commitment to patient-centered care.

Additionally, health care organizations that adhere to holistic care approaches would be viewed as more credible and authentic if they take this approach to their menus. Lifestyle medicine is garnering more media and public attention, and more and more patients are seeking information on lifestyle-related issues. These trends should be capitalized on with new and improved menu offerings that highlight healthy and plant-forward items (24).

Examples of communication initiatives around sustainable health systems and plant-forward menu options:

- UC Davis Health received coverage from ABC News for being the first hospital in the country to be named to the “Good Food 100” list recognizing healthy, sustainable food.
- Vancouver General Hospital was highlighted by CBC and many other Canadian news outlets during their plant-based pilot project.
- NYC Health + Hospitals has had countless and ongoing media spotlights on their new approach to hospital food.



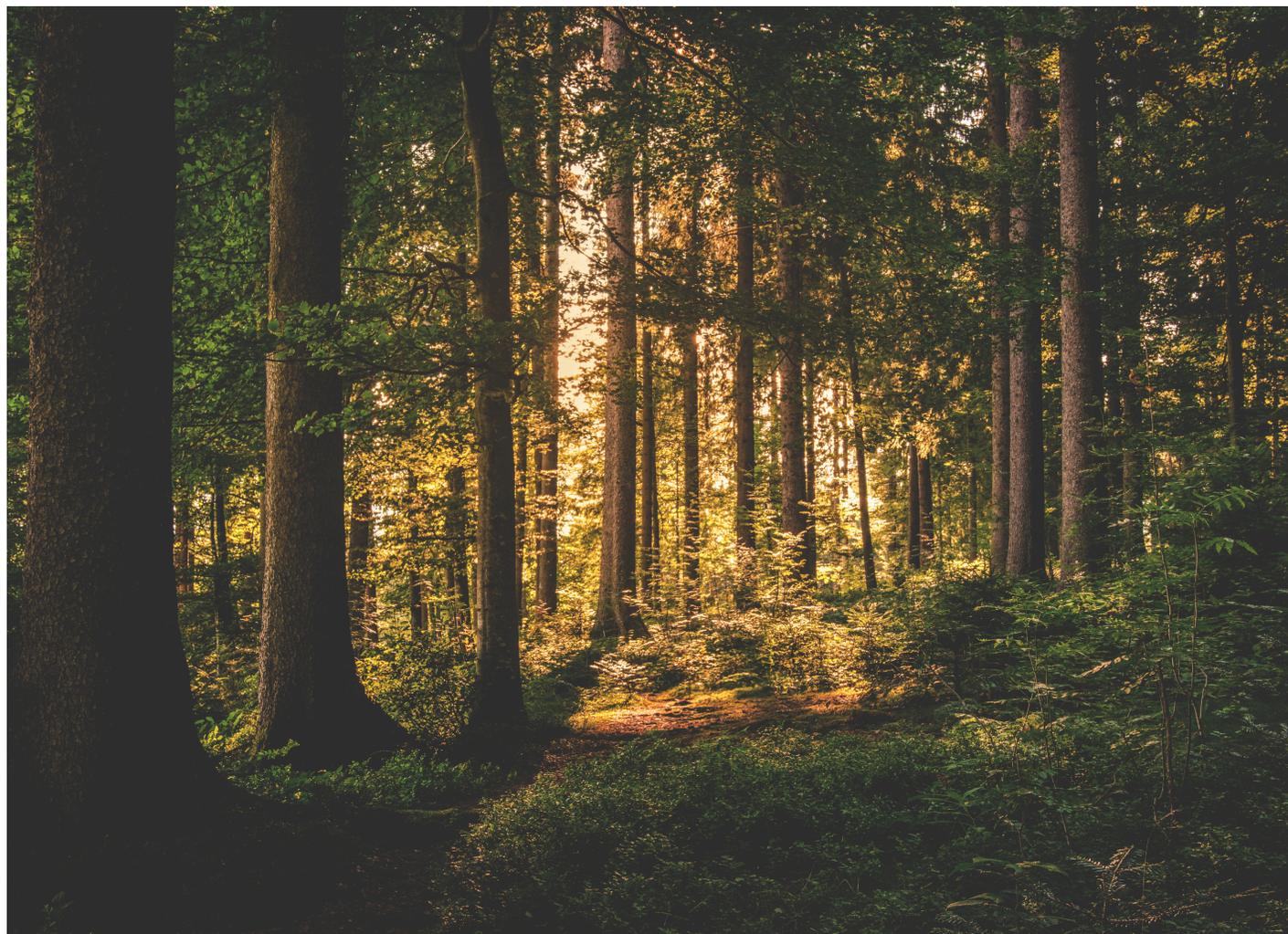
“We’ve long used the phrase ‘food is medicine’ and we’re finding that this is true not only for patients but for our planet as well. Providing tasty, nutritious meals, which is critical to recovery from illness and injury, also presents a significant opportunity to decrease our environmental footprint by focusing on lower-impact ingredients.”

**-Dr. Annie Lalande,
PhD Candidate and Surgical Resident
Vancouver General Hospital**

3.0 COST-BENEFIT OVERVIEW

One of the most important aspects of shifting health care operations is the associated costs and benefits. While health care facilities and operations are not homogeneous throughout Canada, there are commonalities that can be assessed when looking at food services within a Canadian health care context.

Introducing a sustainable food service model comes with inherent costs, such as training staff on new processes and introducing new equipment/storage systems. However, as the analysis below lays out, **the benefits outweigh the costs across all four pillars.**



3.1 ASSOCIATED COSTS AND BENEFITS BY PILLAR

EMBRACING FOOD AS MEDICINE:

COSTS

- Staff time associated with dietitians and other specialists informing the new menu, introducing new items to patients, and working with patient care teams to ensure nutritional needs and accessibility requirements are being met while updates to menus and service are made
- Communication and benefit-dissemination campaigns to explain changes and highlight Food as Medicine concepts to patients and staff

BENEFITS

- Research suggests that integrating FAM interventions can reduce length of hospital and LTC stays and readmissions by addressing patients' nutritional needs and helping to manage chronic conditions like diabetes, hypertension, and heart disease (19,38)
- Malnutrition affects 34 per cent of hospital patients in Canada, leading to longer stays and up to 34 per cent higher hospital costs. Food as Medicine initiatives can shorten stays and reduce health care costs (39)
- UK researchers have found reducing meat consumption could save the National Health Service £1.2 billion annually if meat intake was reduced to two to three times a week (5)
- In Canada, poor diets are associated with \$13.8B yearly in health care spending, and inadequate vegetables and fruit intake costs Canadian society \$3.3B yearly in direct and indirect health care costs (40)





FOOD WASTE REDUCTION

COSTS

- Conducting food loss and waste quantification (“inventories”) in order to identify how much and where food is being lost and wasted, prioritize hotspots, and monitor progress over time (41,42)
- Purchasing or leasing on-site equipment to quantify food loss and waste (41)
- Training staff on food loss and waste reduction practices (41)
- Changing packaging to extend shelf-life (41)
- Changing date labeling on packaging (41)
- Pursuing other staff and technology investments to reduce food loss and waste (41)

BENEFITS

- Avoid the costs of buying food (as ingredients or directly for sale) that previously had been lost or wasted without being served (41)
- Increase the share of food purchased or prepared that is served to patients (41)
- Introducing new product lines made from food that otherwise would have been lost or wasted (41)
- Reducing food waste management costs (including labor) (41)
- In a UK study of 1200 business sites, 99% of those that invested in food waste reduction saw positive returns with the median company site realizing a £14 return for every £1 spent (41)
- Realizing other modes of reducing input costs or increasing output (41)

IMPLEMENTING PLANT-FORWARD MENUS:

COSTS

- Purchasing equipment as part of material flow process redesigns or improved storage (41)
- Changing food storage, handling, and manufacturing processes (41)
- Training staff or hiring new staff to support menu rollout and associated patient and staff education

BENEFITS

- A three-month pilot of plant-based lunch specials offered as the default option across 11 NYC Health + Hospitals locations saw \$500k in savings (USD). After integrating plant-based in their general menu, \$0.59 was saved per plant-based meal served (5,8,41)
- Dishes featuring plant protein are estimated to be 10 - 20 per cent cheaper to produce per meal than a meat-based equivalent. A US-based institution found Meatless Monday's can save more than \$100k (USD) in one year by using soya protein instead of beef (5)
- A Scottish University that made its menu 1/3 plant-based saw a savings of about 15 per cent on their overall budget and had increased customer satisfaction (5)
- After introducing new plant-based items to their dining hall menu, a UK University saw a 12 per cent increase in sales compared to the same sales period the previous year, while maintaining overall profits (5)
- A recent YouGov survey of 2,000 adults revealed that around 1/3 of consumers are willing to pay a price premium for products that have social and environmental responsibility credentials (5)



SHIFTING TO A VALUES-BASED PROCUREMENT (VBP) OF FOOD:

COSTS

- May require shifting suppliers, adding an additional up-front cost
- May require additional human resources to have the expertise to manage the creation of meals with seasonal ingredients
- May result in increased ongoing costs resulting from higher-cost products
- Training staff and stakeholders as well as updating policies based on VBP takes time and there are associated human resources costs (43)
- Long-term staff buy-in is important for the continued success of VBP policies and could require new hires or a portion of current hires' time (44)
- Health care facilities may still be in a 'stabilizing' mode after COVID-19 leaving limited room or funds for changes and innovation (43)
- Funding models do not currently focus on value-based policies and payment models, making shifting internal policies in this direction potentially costly (43)



SHIFTING TO A VALUES-BASED PROCUREMENT (VBP) OF FOOD:

BENEFITS

- VBP policies can increase the proportion of procurement dollars that go to local, sustainable farms to build value-chains that are more regenerative and advance sustainability goals like farmworker justice, and animal welfare (5)
- Across four years of analysis, The Greenbelt Foundation found that between \$7-\$13 (CND) are returned to the local economy for every \$1 spent on local food (45)
- Procurement policies may be under review post-COVID-19 and it may be more cost-effective to evaluate supply chain and upgrade contracts at this time (43)
- Using local supply chains supports greater biodiversity in the food system and increases the nutrition and flavour of food as food does not need to ripen on the truck, providing increased value for purchases (44, 46)
- Supporting local supply chains bolsters local economies and can lead to job creation (44, 47)
- Local supply chains can reduce the impact of international supply chains and cost hikes associated with limited supply and 'panic buying' (47)



IMPLEMENTATION GUIDE



4.0 RATIONALE FOR THIS IMPLEMENTATION STRATEGY

The implementation steps detailed in this document provide practical steps in creating sustainable food services within healthcare facilities. Since healthcare facilities throughout Canada differ in size, communities served, funding, and access to supporting services, this guide aims to establish a template that can be customized to fit into various settings.

The focus of the implementation strategy is to facilitate a culture shift. The approaches listed are not meant to simply instruct on menu changes, they are designed to assist healthcare leaders in aligning their workforce with sustainability goals and practical actions.



5.0 CHANGE MANAGEMENT APPROACH

Implementing a new food services model in health care settings involves significant changes that can impact various stakeholders, including staff, patients, and external partners. A thoughtful and well-planned change management approach is essential for success and staff buy-in. By planning and managing the change process, the transition to a new food services model can be seamless and ordered, reducing disruptions to daily operations and maintaining quality care.

It is important to include distributors and manufacturers in change management plans. Their buy-in and shifts in their operations are needed. Several change management strategies are commonly used in health care to facilitate effective transitions and could be relied upon to support the introduction of a sustainable food service model.

If available, connect with your change management office, organizational development office, project management office, or quality team to assist with this.



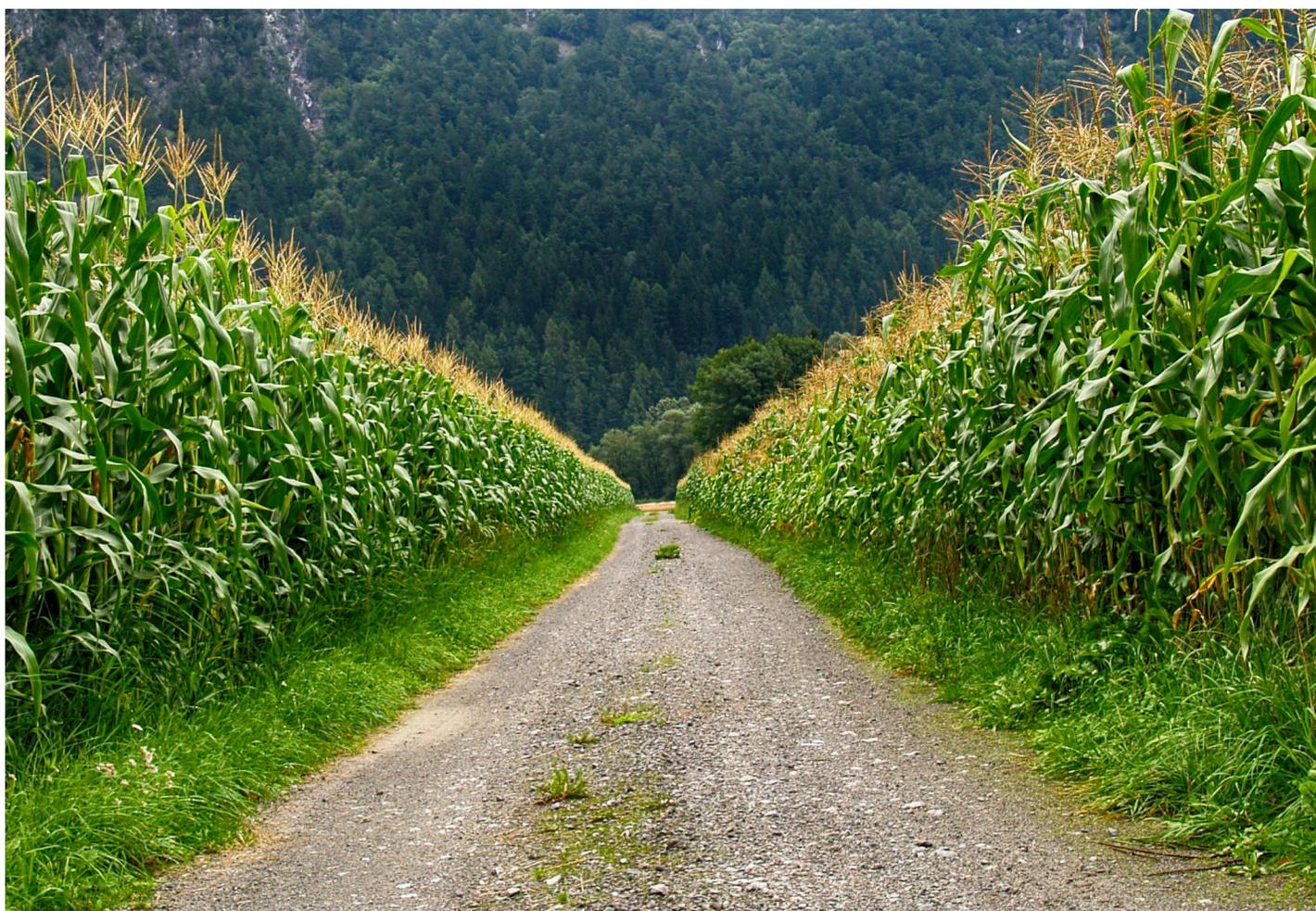
See [Appendix A](#) for change management models often used in health care

6.0 STEPPED APPROACH TO IMPLEMENTATION

This section identifies the two components that make up the approach to implementation.

- First: Scheduling of key components for implementation must be considered, including preliminary steps, quick wins, mid-implementation steps, and long-term changes.
- Second: Implementation and capacity considerations must be examined when making these changes.

The following pages will provide you with the tools to facilitate a smooth sustainable food system implementation with the four pillars at the core.



6.1 SCHEDULE FOR KEY IMPLEMENTATION COMPONENTS

Shifting food services within a healthcare facility requires careful planning and collaboration among various departments and external stakeholders, such as distributors. One of the main barriers cited for implementing sustainable food service practices is the perceived complexity (48). Thus, the **implementation steps below are designed to ease the transition by outlining a step-by-step approach that benefits patients, patients' families, staff, and decision-makers.**

Please note that these steps are **flexible guidelines** meant to assist in planning and should be adapted to fit the unique needs of each facility.



6.1.1 FIRST STEPS

The initial phase focuses on establishing a baseline and setting a solid foundation for the changes. Key components include measuring performance and implementing quick wins to gain momentum (15). **Use this checklist to get started:**

Measure Baseline Performance

Define a long-term data tracking plan, in addition to assigning staff and practices to monitor key performance indicators such as food spending, food waste, percentage of locally sourced items, food-related GHG emissions, and patient and staff satisfaction scores.

Define a Change Management Plan and Team of Champions

Identify change champions or peer leaders within the staff pool who will help drive the transition. Having a committed individual/team is a critical component to implementing sustainable food services (1).

Implement “Quick Win” Tactics (listed on the next page)

Begin with actions that immediately enhance environmental performance. For example, meet emerging legal obligations, such as the BOBI for Ontario health care facilities, to integrate Environmental, Social, and Governance (ESG) values into evaluations, securing a minimum of 25 points in the procurement evaluation process.

Join the Movement

Engage with other health care facilities doing similar work to share learnings, join member organizations to access the latest research/implementation techniques (1).

Meet Emerging Legal Obligations

Consider required changes to procurement and reporting as an opportunity to integrate a sustainable food model. For example, in working to comply with BOBI legislation in Ontario as well as Bill S-211 federally, aligning food services with the pillars offers an opportunity to review your values around ESG and include questions for evaluation in these areas taking advantage of the mandatory 25 points to meet your goals.

6.1.2 QUICK WINS

Some changes can be **implemented quickly** to improve the health and environmental impact of menu offerings. Here are a few examples divided into the pillars:

EMBRACING FOOD AS MEDICINE:

- Determine items on the menu that are highly processed and remove/replace them
- Begin incorporating nutrition experts on staff into meal planning and investigate the feasibility of medically tailored meals (*see [Glossary](#) for definition of medically tailored meals*)
- Include food and nutrition staff in care planning
- Transition to protected meal times (no medications or treatments while food is being served)
- Begin a cross-stakeholder conversation to explore moving food to the therapeutic budget

FOOD WASTE REDUCTION

- Remove unnecessary single-use plastic such as straws
- Increase the proportion of hot food items, as cold items are more likely to be wasted (49)
- Serve on smaller plates where appropriate (50)
- Only send condiments (i.e., sugar, milk, ketchup) if ordered



IMPLEMENTING PLANT-FORWARD MENUS:

- Determine the 10 least selected meat-based meals by patients, then either eliminate these items or replace the meat with a plant-based item. For example, chili con carne becomes three-bean chili
- Replace all meat in soup with beans/lentils, tofu, tempeh, or another plant-based protein
- Integrate meatless days into weekly menu offerings, or, even better, keep meat to one day a week, such as the idea of Beef Days, or one meal a day
- Sign up for campaigns, such as [Nourish's Coolfood Pledge](#), or plan menu items off of annual events, such as Veganuary.
- Get creative with naming conventions. Instead of using labels like vegetarian, vegan, or meatless, try naming plant-based items more implicitly like "Spicy Black Bean Burger" rather than the standard "Vegetarian Burger"

SHIFTING TO VALUES-BASED PROCUREMENT (VBP) OF FOOD:

- Choose vendors with the intention to ensure they meet needs for sustainability, care of the workforce, and community benefits
- Use point of sale prompts such as "meal of the day" which could be local, plant-forward, and/or low-waste
- Prioritize local farms for seasonal produce (off-contract fresh fruits and vegetables)
- Download [Nourish's Value-Based Procurement Primer](#) to start learning about how to effectively integrate planetary menu practices into procurement practices
- Decide on your organizational sustainability priorities and weight them in your evaluation matrix



6.1.3 MID-IMPLEMENTATION STEPS

During this phase, the **focus is on expanding plant-based options and transitioning procurement practices**. Key components include menu changes, procurement adjustments, and staff efficiency improvements. Here are a few examples:

EMBRACING FOOD AS MEDICINE:

- Train workforce, including practitioners, on the importance of healthy meal options so that they can advocate for menu changes with their patients
- Take Nourish's self-directed Food is Our Medicine learning journey to learn about Indigenous perspectives on food as fundamental to culture and well-being.
- Tailor food visual components to medical needs; eg. for patients with Alzheimer's use dinnerware that contrasts with the colour of the food and use larger plates (51)
- Use innovative methods for integrating food into care launched, such as produce prescriptions and medically tailored groceries, as a preventative strategy for upstream health (52) (see Glossary for the definition of *Produce Prescription and Medically Tailored Groceries*)
- Eliminate processed meats (eg. burger patties, fresh sausages, cooked ham, salami, bacon, luncheon meats) from menus as they are known carcinogens and can increase cardiovascular disease, diabetes, and mortality (see Glossary for the definition of *Processed Meat*) (53, 54)

FOOD WASTE REDUCTION:

- Work with in-house nutrition experts and marketing team to launch an educational campaign that raises awareness of food waste (49, 50)
- Use active intelligent packaging, such as ethylene absorbing packaging inserts, to prolong product freshness and slow down the spoilage of perishable fruits and meat (50)
- Evaluate food preparation processes to reduce excess food being prepared (49)
- Switch to spoken meal ordering systems (i.e., nutritional assistants visiting patients to discuss menu options) rather than a paper system (49)
- Carry out a tray audit to identify foods patients do not like and remove those items
- Prioritize reusable small wares (plates, bowls, etc..) when serving food to patients and staff; work with distributors and manufacturers to reduce packaging
- Work with charities that redistribute unused food such as Second Harvest
- Buy another complement of dishes and only wash dishes twice a day, rather than after every meal to better utilize staff time and redirect staff to processing fruits and vegetables
- Implement an ordered supplement audit, ensuring Dietitians review the need for supplements (e.g. Ensure) weekly
- Send edible food overages are to a local non-profit (e.g. soup kitchen, food rescue, food bank), and send non-edibles to a contracted organics-recycling operation

IMPLEMENTING PLANT-FORWARD MENUS:

- Shift the majority (51+ percent) of patient and staff menu items to 100 per cent plant-based with high nutritional standards
- Remove one meat-based item from the menus every quarter
- Prioritize diverse, culturally appropriate plant-forward menu items that represent the make up of your community
- Remove the milk course as mandatory, sending it only to those who order it; or consider replacing cow's milk with soymilk for benefits in blood lipids, blood pressure, and inflammation in adults with a mix of health statuses (55)
- Review plant-forward options with an on-site cafeteria
- Review catering policy for meetings and conferences to include sustainability elements

SHIFTING TO VALUES-BASED PROCUREMENT (VBP) OF FOOD:

- Transition procurement away from international vendors; RFP wording updated to reflect prioritizing VBP (eg. asking for cost comparisons between local and international ingredients)
- Use direct shipments for food orders (50)
- Meet with produce suppliers to express desire for engagement with local and environmentally responsible growers when responding to produce requirements
- Update procurement documentation language to reflect mission and ensure you are evaluating what you are asking for
- Support onsite access to local food (ie., market of local farms, vegetable garden) to improve patient knowledge of locally sourced food options

6.1.4 LONG-TERM CHANGES

The final phase involves **establishing a complete sustainable food services model that promotes health**. Key components include plant-based menu dominance, local supply chains, and innovative service models.

EMBRACING FOOD AS MEDICINE:

- Launch a facility-wide educational campaign to explain changes to the menu and its health impacts; this could be accompanied by unique offerings such as teaching kitchens where patients can learn how to make the meals they are served (56)
- Incorporate 'food at the centre of healing' into facility design by placing the kitchen in a central, visible location within the hospital

FOOD WASTE REDUCTION

- Build a full production kitchen, if not already available, to move all production in-house
- Utilize a room service ordering model as an operational standard or within specific wards depending on patient needs and practical food delivery options; this approach has been shown to reduce waste from 30-17 per cent (49)
- Remove single-use plastic from food services
- Send food overages that are not edible to an on-site composting system to feed into an on-site patient food garden
- Integrate a room service meal ordering system into patients' entertainment system, allowing for visuals of menu items and leading to patients choosing items they are more likely to eat



IMPLEMENTING PLANT-FORWARD MENUS:



- Make plant-based menu items the default menu items and as 80 per cent or more of the menu offerings; ensure animal-based items are still an option for patient choice and cultural considerations
- Ensure all food within hospital walls follows this philosophy including retail cafeteria, and food for meetings and conferences

SHIFTING TO VALUES-BASED PROCUREMENT (VBP) OF FOOD:



- Incorporate local supply chains and addition of VBP wording to the RFR process for all food services contracts
- Support suppliers in altering operations that reflect sustainable changes made by healthcare facilities
- Make compost or community-focused solutions such as sending food waste to local farms for compost available (50)
- Create vegetable and herb gardens onsite; harvest used in menu options
- Ensure that your new VBP processes engrained in policy and not solely the efforts of a 'project champion'
- Celebrate suppliers meeting new VBP standards by sharing with patients, families, and peers
- Make sure procurement practice/documents are evergreen: make time regularly to review and revise

6.2 IMPLEMENTATION AND CAPACITY CONSIDERATIONS

The following lists implementation and capacity related items to consider when shifting to a sustainable food system.

Contracting and Procurement: Health care facilities should consider when procurement policies are going to be revised and incorporate these changes into that already planned revision. This should also include processes for obtaining new contracts and potentially updating the RFP process/policy wording.

Supply Chains: When transitioning to local vendors, health care facilities should ensure that local supply chains are resilient to avoid disruptions by conducting regular risk assessments, maintaining open lines of communication with suppliers, and establishing long-term partnerships to maintain a steady supply of goods. Vendors should be vetted for sustainability practices and transparency should be sought out regarding product sourcing and ethical production practices.

Transitioning to Reusable Items: Health care facilities should ensure that the necessary infrastructure to wash/sanitize reusable items such as cups, plates, and cutlery is in place. Train staff on new protocols for handling and washing reusable items. Collaborate with vendors to minimize packaging.

Meatless Menu Days: Gradually introduce meatless days to allow for patient adaptation; at first, consider limiting meat to one meal per day to ease the transition process. Monitor nutritional intake to ensure balanced diets. Be mindful of cultural preferences and dietary restrictions.

Onsite Access to Local Food: Recruit volunteers or staff to help with gardening and maintenance of green spaces such as local farms or vegetable gardens. Preferably involve patients in the process where applicable to improve patient knowledge of locally sourced food options and their importance.

Room Service Model of Ordering: Health care facilities should ensure that accommodations are put in place for patients who may not have the capacity to put in their own orders. Kitchen inventory should also be managed effectively to avoid waste.

Revised Hospital Menus: Health care facilities should ensure that patient satisfaction is not compromised when replacing meat-based menu items with plant-based ones (e.g. due to taste/texture of plant-based alternatives), ensure that potential allergens in plant-based alternatives (e.g. soy) are accounted for, and ensure that menu diversity is not compromised (e.g. by collaborating with members of different cultural communities to ensure that a variety of cultural preferences continue to be represented). In the long term, implement feedback mechanisms to gauge patient satisfaction.

7.0 KEY PARTNER MANAGEMENT & COMMUNICATION PLAN

Changes to food services cannot occur in a silo, there are many partnerships needed to facilitate success. The following lays out the key partners that will require engagement, from both facility leadership and the staff leads/project champions. This includes both internal and external partners.

Hospital Administration

- **Role:** Provide leadership, allocate resources, and support policy changes
- **Involvement:** Approve budget allocations for new initiatives, endorse sustainability goals, and ensure alignment with overall hospital strategy

Suppliers, Manufacturers, and Distributors

- **Role:** Alter production practices, product lines, and supply chains to meet the new demands
- **Involvement:** Product availability to adhere to the four pillars may be challenging at first; direct engagement, education, and, potentially, bulk order with neighbouring facilities will be needed

Nutrition and Dietetics Team

- **Role:** Ensure that menu changes meet nutritional standards and cater to patient dietary needs
- **Involvement:** Develop and review plant-based recipes, monitor patient health outcomes, and provide education on the benefits of plant-forward diets





Food Service Managers and Staff

- **Role:** Oversee daily food production and service, implement new menu items, and maintain quality control
- **Involvement:** Train staff on new recipes and cooking techniques, manage the procurement of ingredients, and ensure smooth operation of food services

Procurement and Supply Chain Managers

- **Role:** Source ingredients and supplies, manage vendor relationships, and ensure supply chain efficiency
- **Involvement:** Transition to local and sustainable suppliers, negotiate contracts, and monitor supply chain performance

Local Farmers and Food Producers

- **Role:** Provide fresh, locally sourced ingredients
- **Involvement:** Establish supply agreements, participate in farm-to-hospital programs, and collaborate on sustainability initiatives

Patients and Patient Advocates

- **Role:** Provide feedback on menu items and advocate for patient preferences and needs
- **Involvement:** Participate in surveys and focus groups, provide testimonials, and engage in educational programs about plant-based diets



Environmental and Sustainability Officers

- **Role:** Oversee sustainability initiatives and ensure compliance with environmental regulations
- **Involvement:** Develop and monitor sustainability goals, implement waste reduction strategies, and report on environmental impact

Food Safety and Quality Assurance Teams

- **Role:** Ensure that all food items meet safety and quality standards
- **Involvement:** Conduct regular inspections, train staff on food safety protocols, and manage quality control processes

Finance and Budgeting Teams

- **Role:** Manage financial planning and budgeting for food services
- **Involvement:** Allocate funds for new initiatives, conduct cost-benefit analyses, and monitor financial performance

Marketing, Communications, and Public Relations Teams

- **Role:** Promote new menu items and educate patients and staff about changes
- **Involvement:** Develop marketing materials, manage internal and external communications, and organize promotional events

Healthcare Providers (Doctors, Nurses, Dietitians)

- **Role:** Support patient dietary plans, educate patients on the health benefits of plant-based diets, and monitor patient health outcomes
- **Involvement:** Advocate for dietary changes, provide patient counseling and integrate food-based health interventions into care plans

Charity Organizations (e.g. Second Harvest)

- **Role:** Redistribute unused food to those in need
- **Involvement:** Establish partnerships for food donations, coordinate logistics for food collection, and ensure compliance with safety regulations

Community Organizations and Advocacy Groups

- **Role:** Advocate for healthy and sustainable food practices
- **Involvement:** Support community engagement initiatives, provide education on the benefits of local and plant-based foods, and collaborate on public health campaigns



8.0 LONG TERM MAINTENANCE

For a sustainable food service system to be effective in the long term, healthcare facilities should have some or all of the following processes established:

Annual Reporting and Data Collection

Collecting data across areas of operation where changes have been made will identify implementation barriers and facilitators. Tracking all associated costs (e.g., staff time, equipment upgrades, training, food) will allow for an accurate and site-specific cost-benefit analysis. ESG metrics can also be useful for internal communications and to demonstrate innovations to leadership. Additionally, a more detailed GHG emissions and energy usage analysis helps view the complete impact of sustainable food services in your facility. The [Coolfood Pledge](#) can assist with GHG tracking.

Staff Dedicated to Furthering the Mission of Sustainable Food Services

Hospitals that have focused on implementing sustainable practices into their food services have found it helpful to have dietitians explain meal options to patients and address questions about menu changes. This approach can also be used to ease the transition for staff. Facility Managers and operations staff can also champion energy efficiency changes. Tracking energy usage and emissions reduction over time can be a strong motivator for continuous improvements.

Ongoing Communications with Suppliers to Increase Local, Plant-based, and Whole Food Options

A challenge with switching to plant-based menu items is the limited options from suppliers, leading to limited menu options or mostly processed items such as only soy nuggets and burgers. Local sourcing is also typically not prioritized. Clear communication with suppliers about desired menu items can influence their ordering practices. As more health care facilities demand sustainable options, suppliers will adjust to meet this demand (57). [Information on engaging suppliers and sample letters can be found here.](#)

9.0 CASE STUDIES

Hospitals within Canada and internationally are starting to see the value and importance of shifting their food services to more sustainable practices. Some examples of institutions that are having success are featured in the subsequent pages.



9.1 VANCOUVER GENERAL HOSPITAL PLANETARY HEALTH MENU

Vancouver Coastal Health (VCH) introduced more than 20 new delicious, nutritious, more culturally diverse, and more environmentally sustainable menu items as part of a planetary health menu pilot project at Vancouver General Hospital. The menu served dishes that were vegetarian/vegan but some included lower carbon proteins such as fish – for example, one of the new dishes included steelhead trout.

The Planetary Health Menu Pilot project was led by Dr. Annie Lalonde, a surgical resident and PhD student in Resources, Environment, and Sustainability at the University of British Columbia (UBC), and Tiffany Chiang, Director of Food Service Transformation and Strategic Projects at VCH. They brought together food services staff, dietitians, clinicians, and planetary health experts to work alongside Chef Ned Bell, a sustainable food champion, in developing the menu items. The project demonstrated a 43% reduction in greenhouse gas emissions.

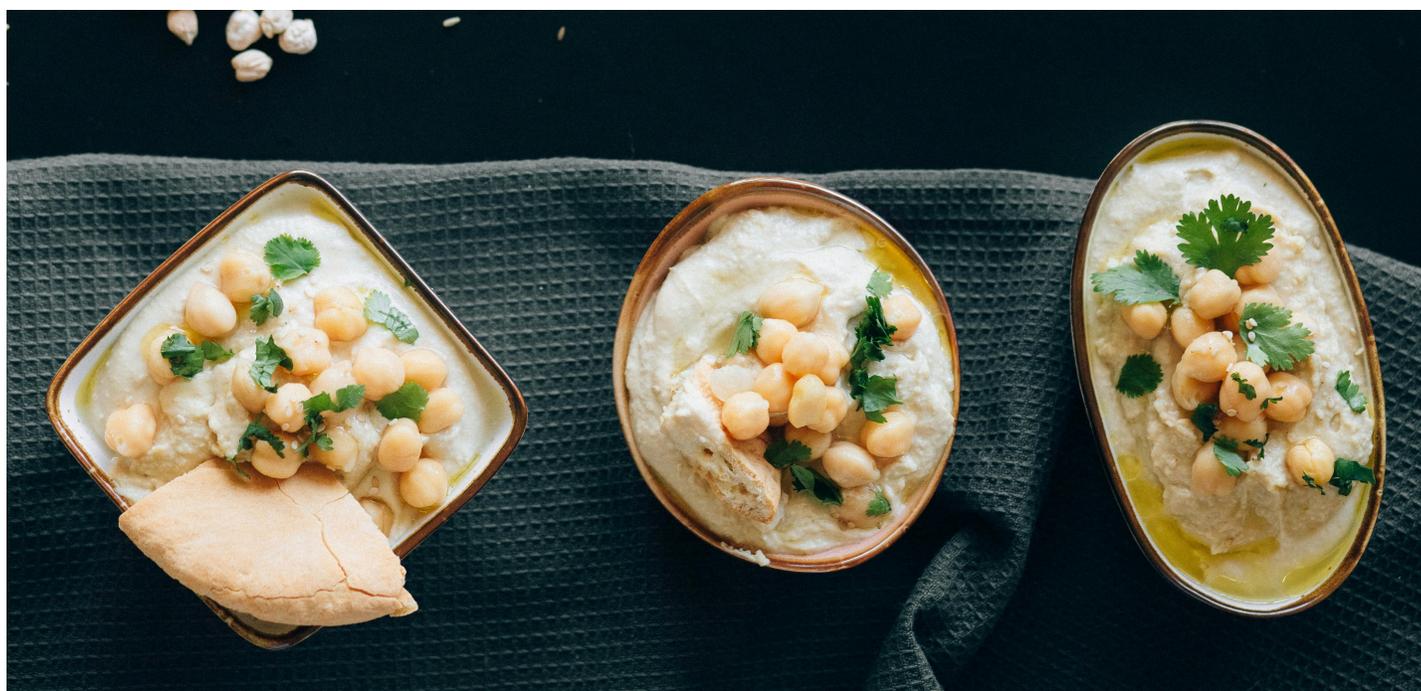


VCH Planetary Health Menu Item: Chickpea Currey with Cashews and Mango Chutney

9.2 NEW YORK HEALTH + HOSPITALS

This network of healthcare facilities serves a culturally diverse plant-based menu. As of March 2024, they have served over 1.2M plant-based meals. All meals are made from scratch at the health system's Culinary Center in Brooklyn, shortening supply chains and supporting local talents and the economy.

They started with Meatless Mondays in 2019 and achieved a 95 per cent patient satisfaction rate. Then they transitioned to plant-based as the primary dinner option in 2023. NYC Health + Hospitals' 140 Food Service Associates meet with patients to educate them about the benefits of a plant-based diet and encourage them to choose the new meals as part of their healing and recovery plan of care. The same person records the patient's meal selection on an iPad, delivers the tray to them, asks how they're enjoying the food, and can replace the patient's meal upon request. The Food Service Associate assists patients until they are discharged from the hospital. After integrating plant-based in their general menu, \$0.59 USD was saved per plant-based meal served (5,8,41)



9.3 SUSTAINABILITY AND ELIMINATING FOOD WASTE AT UC SAN DIEGO HEALTH HOSPITAL

This hospital views food as part of the healing process and strives to offer fresh, health options to their patients, staff, and visitors. Their menus focus on locally sourced, seasonal, fresh-made, plant-based, antibiotic-free, and sustainable dishes. Dietitians are on hand to explain meal options to patients as well. Any edible, fresh food left over (prior to service) is donated to local organizations to help individuals in need. Food scraps (e.g. broccoli stems) are sent to a local farm for animal feed.

UC San Diego Health also proactively addresses climate change by looking at how the hospital system procures its food. In this work, they have joined the health care Without Harm CoolFood Pledge (see Glossary for more info), implemented clean energy sources and sustainable operations practices, and the UN's health care Climate Challenge, Race to Zero. They also have sustainable procurement policies in place. With this work, they have eliminated 26,000 pounds of waste, sourced 50 per cent of energy from renewables, and reduced 25 per cent of their GHG emissions from anesthetic gas use.



9.4 FOOD WASTE REDUCTION AND SUSTAINABLE MENU AT CHU SAINTE-JUSTINE AND HALTON HEALTH

In 2012 CHU Sainte-Justine was seeing food waste costs up to \$90,000/year (CND) due to patients not eating what was served. To address this they introduced a Room Service in 2016 titled Délipapilles! Since the launch, hospital staff have seen patient satisfaction scores increase from 50 per cent in 2012 to 99 per cent in 2019, and a decrease in food waste from 25 per cent in 2012 to five per cent in 2019. Additionally, by engaging with a new supplier that was able to better accommodate the room service model, costs per meal were reduced from \$8 to \$6.20.

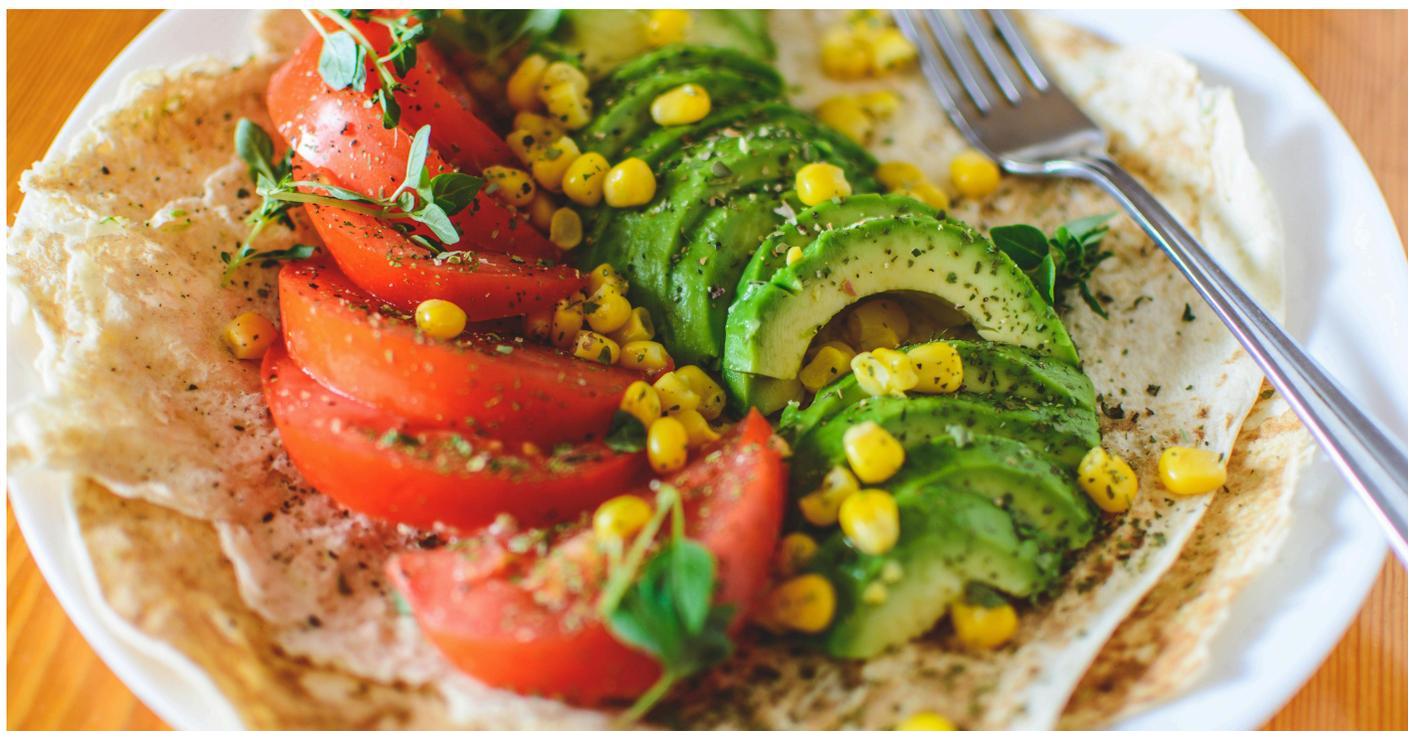
Staff have also noted they are more satisfied with their work and motivated to engage in sustainable procurement projects. Now, they have turned their attention to making their food services more climate-friendly by procuring and serving more local, organic, and sustainable menu items.



9.5 HALTON HEALTHCARE “GOOD FOR YOU... LOCALLY GROWN” PROJECT

Halton Health care’s “Good For You... Locally Grown” project has boosted local food procurement from five per cent to 35 per cent. The Food Service team, serving over 700,000 inpatient meals annually, collaborates with Gordon Food Service to develop recipes using local ingredients. Patient satisfaction surveys revealed an average of 95.5 per cent patient satisfaction with local food offerings.

This initiative has not only enhanced sustainability but also reduced food waste. Halton Health care’s “Local Food Procurement Statement” guides their continued commitment to integrating more local items into their menus, supported by ongoing collaboration and innovation. They have been able to sustain their menus through ongoing value chain collaboration, recipe development, and innovation.



9.6 ROSS MEMORIAL HOSPITAL LOCAL FOOD PROCUREMENT

As of 2012 when this project was completed, Ross Memorial Hospital (RMH) was a 175-bed community hospital located in Lindsay, Ontario, serving more than 80,000 local residents and seasonal visitors. One of the unique characteristics of RMH was that the Nutrition Services Department cooks meals in-house.

RMH was awarded a grant from the Broader Public Sector Investment Fund to be a pilot site for a local food project. Through a menu audit, they determined that only 20 per cent of their menu was locally sourced. They selected five non-local menu items and began switching the ingredients to local offerings.

As a result, RMH decreased its carbon footprint by cutting the distance food must travel from field to plate. At the same time, the team has reinvested its public food dollars into Ontario's agricultural economy. The annual value of the five new local foods being served at RMH was estimated to be \$20,000 (CND).



GLOSSARY

Coolfood Pledge: ([link to pledge page](#)) Globally-recognized commitment to reducing food-related GHGs by 25 by 2030 using research-backed methods of nudging eating behaviours to be more climate-friendly. Membership includes access to the Coolfood (carbon) calculator, and can be initiated through [Nourish Leadership](#).

Local Food: The government of Canada defines local food as food that is produced in the province or territory in which it is sold, or food sold across provincial borders within 50 km of the originating province or territory ([Government of Canada, 2013](#))

Plant-Forward: The Culinary Institute of America (CIA) and the Harvard T.H. Chan School of Public Health define plant-forward as, “A style of cooking and eating that emphasizes and celebrates, but is not limited to, foods from plant sources—fruits and vegetables (produce), whole grains, legumes (pulses), nuts and seeds, plant oils, and herbs and spices—and reflects evidence-based principles of health and sustainability. Alternative phrases, which all carry their own specific definitions but are often used interchangeably, are **plant-based, animal-free, or climate-friendly**.

Medically Tailored Meals: ([link to related article](#)) Fully prepared, nutritionally tailored healthy meals for individuals living with advanced and costly diet-sensitive conditions, such as diabetes, heart failure, end-stage kidney disease, HIV infection, and cancer. Medically tailored meal programs within home settings, rather than hospitals are often designed to treat individuals with lower income, food insecurity, and/or limitations in instrumental activities of daily living (IADLs) that make it difficult to prepare healthy meals.

Produce Prescriptions: ([link to related article](#)) Produce prescriptions for fruits and vegetables are a way to support the nutritional needs of patients with food insecurity in a health care setting. health care professionals write produce prescriptions for patients. Patients can use the prescriptions either in the health care setting or in their community.

Medically Tailored Groceries: ([link to related article](#)) Include a selection of groceries curated by a Registered Dietitian/Licensed Nutritionist as part of a treatment plan for certain medical diseases and prescribed by a physician. Groceries in these programs are often free or subsidized.

Processed Meat: ([link to related articles](#)) Represent an array of products that have undergone additional treatment from the fresh meat form to the point of consumption. Processing might include curing with other ingredients added, addition of salt or other flavor or preservative mixtures, etc. Processed meats can be divided into fresh processed meat (e.g. ground beef), and cured and smoked processed meat.

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APPENDIX A –

EXAMPLES AND SUMMARY OF CHANGE MANAGEMENT APPROACHES (LINKS INCLUDED)

Kotter's Eight-Step Change Model

1. Create Urgency: Build a case for change and highlight the need for immediate action.
2. Form a Guiding Coalition: Assemble a group with enough power to lead the change.
3. Develop a Vision and Strategy: Clarify how the future will differ from the past.
4. Communicate the Vision: Share the vision and strategy with all stakeholders.
5. Empower Employees: Remove obstacles and enable constructive feedback.
6. Generate Short-Term Wins: Plan for and celebrate quick, visible successes.
7. Sustain Acceleration: Use increased credibility to change systems, structures, and policies.
8. Anchor the Changes: Reinforce the change by connecting it to the organization's success.

ADKAR Model

1. Awareness: Ensure everyone understands why change is needed.
2. Desire: Foster a desire to participate in and support the change.
3. Knowledge: Provide information and training about how to change.
4. Ability: Ensure that people have the skills and behaviors required for change.
5. Reinforcement: Sustain the change by reinforcing behaviors and outcomes.

Lewin's Change Management Model

1. Unfreeze: Prepare the organization to accept that change is necessary.
2. Change: Execute the changes needed for the new model.
3. Refreeze: Establish stability once the changes are in place.

Bridges' Transition Model

1. Ending, Losing, and Letting Go: Acknowledge and address the emotional responses to change.
2. The Neutral Zone: Support staff during the uncertain phase of the transition.
3. The New Beginning: Help people develop a new identity and sense of purpose.

McKinsey 7-S Model

1. Strategy: Define the plan for the new model.
2. Structure: Align organizational structure with the change.
3. Systems: Update processes and systems to support the new model.
4. Shared Values: Ensure organizational values support the change.
5. Style: Adapt leadership styles to drive the change.
6. Staff: Manage staff roles and responsibilities.
7. Skills: Develop the necessary skills to support the change.

ProSci Change Management Model

1. Focuses on integrating individual change management with organizational change management to ensure project success. It emphasizes the importance of managing the people's side of change.

Contributions

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All authors agree on the content presented in the final product.

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