

# **Sustainable and Healthy Food Plan**

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2020-2030 | VERSION 2 (UPDATED IN 2022)



**DALHOUSIE**  
UNIVERSITY



# Acknowledgements

Prepared by the Office of Sustainability with Food Services, Ancillary Services, and with feedback from students, faculty, staff, government, non-profit organizations, and published information. Between 2019 and 2022, focus groups, surveys, reporting frameworks, literature and plan reviews, and a new University Strategic Plan provided revised content for the plan. These processes engaged over 1,000 people on and off campus.

## Land Acknowledgment

Dalhousie sits on the unceded territory of the Mi'kmaq people and recognizes the interconnectedness of all our relationships—to the environment and to each other—for generations to come.

We recognize that African Nova Scotians are a distinct people whose histories, legacies and contributions have enriched that part of Mi'kma'ki known as Nova Scotia for over 400 years.



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This document provides a planning framework for delivering campus food in a more sustainable and healthy manner. The document supports and adheres to the vision and principles identified in the Dalhousie University Operations Sustainability Plan and is primarily focused on, but not limited to food procurement, preparation, kitchen operation, and end-use.

Dalhousie recognizes and reports on the UN Sustainable Development Goals through reporting frameworks. This plan addresses Goal 2 Zero Hunger, Goal 3 Good Health and Well-Being, Goal 6 Clean Water and Sanitation, Goal 12 Responsible Consumption and Production, Goal 13 Climate Action, Goal 14 Life Below Water, Goal 15 Life on Land, and connects to each of the other 9 goals.



## Executive Summary

Vendors in contractual relationships with the University or Student Union deliver much of the campus food services. Levied student societies provide meals, run a food bank, gardens, and farm market. A number of sustainability initiatives have been implemented in the last decade and further actions are under development.

Key goals from literature and campus engagement include reducing pollution, including greenhouse gases, food waste and habitat loss, supporting workers and animal rights, and creating affordable, flexible, and healthy food options. Information for the framework was gathered through stakeholder focus groups, meetings, surveys, and literature reviews.

Key strategies include transition to more plant-based options, supporting ethical and sustainable purchasing, reducing energy, water, and waste, building awareness and creating a cultural of healthy and sustainable eating.

Dalhousie University recognizes the significance of food sustainability and health to its overall sustainability goals and strives to nourish a culture of sustainable and healthy eating. Dalhousie University participates in university rating systems where sustainable and healthy food indicators are tracked and reported on.

*Food services staff*





# 1.0 Current Context

## 1.1 Food Services on Campus

Dalhousie has three campuses within the Halifax Peninsula and one in Bible Hill, Nova Scotia (Agricultural Campus [AC]). The university has a campus population of over 21,000 students and more than 7,000 faculty and staff.

In Halifax, Aramark operates catering, food outlets, vending, and food services for the four residence dining halls. Halifax campus franchises feature brands such as Subway, Starbucks, Tim Hortons, and Second Cup. Catering at the Halifax campuses is not exclusive to Aramark. The Dalhousie Student Union manages food services (Chartwells) in the Student Union Building (SUB). Franchises like Pete's ToGo and Tim Hortons are featured at the SUB. Chartwells is the sole food service provider at the Agricultural Campus, including dining halls, vending, exclusive rights for catering, and building food outlet options. Currently, franchises across all the campuses require procurement of products that meet franchise standards that may differ from campus-controlled purchases.

University-contracted Food Services has been working with its food providers and suppliers, departments such as the Office of Sustainability, and student-run organizations to develop and implement sustainable policies and programs. The university participates in the Sustainability Tracking Assessment Rating System (STARS) for universities and colleges as well as Sustainable Development Goals reporting. As part of the STARS program Dalhousie tracks and reports publicly on plant-based offerings and local, third-party, and community-based food purchase percentages. As well, reporting includes other aspects of food and dining services such as animal-welfare programs, ethical purchasing, meal menu offerings, and educational programs. Newer versions of the reporting frameworks for assessments like STARS tend to be more stringent.

Based on dollar value, roughly 33% of all food purchases (franchises, vending, catering, and dining halls) for the 2019-2020 calendar year are considered plant-based and 6% are third party-certified (e.g., Fair Trade). There are higher



percentages of local food purchases among certain commodities like produce, and between different food services such as dining halls versus retail. For example, in-season, local-produce percentages can be over 80% of all produce purchases and local percentages are higher in dining halls than retail.

On-campus student groups have been actively taking action on food sustainability. The Loaded Ladle is a registered levied Dalhousie Student Union society that aims to provide affordable, diverse, fresh, and healthy food to as many people as possible. The Dalhousie Student Union runs a food bank and local market and food box program on the Halifax campus. Halifax campus gardens run by the Dalhousie Urban Gardens Society provide food and plants for pollinators. At the Agricultural campus, a one-acre Chef's Garden provides a place for teaching and local food production. Food grown in these gardens is provided to on-campus dining and/or the local community.

## 1.2 Literature Review Summary

Institutional sustainable food policies, projects, and related literature were examined to find key concepts surrounding sustainable and healthy foods. A summary of some key findings is provided below.

A rapidly changing climate along with increasing human population is creating climate and habitat impacts that are felt differently across the globe. Increases in temperatures are associated with heat stress, water shortages, and an increase in vector-borne disease which in turn affects food production, human health, and well-being.<sup>1</sup> Food procurement is embedded in a complicated web of supply chains, often masking poor working and environmental conditions. In response there are several strategies to help with accountability and change, including codes and standards. Some evidence suggests that there are some benefits from these approaches; however, workers' rights still may not benefit without additional strategies such as social and civil movements.<sup>2</sup>

To reduce pollution, including greenhouse gases and habitat loss, and to support workers and animal rights, several strategies have been identified in the literature:

- ▶ Move towards plant-based diets, water and energy efficiency measures in production, and reduce nitrogen and phosphorus in food production to reduce impacts on the environment.<sup>3</sup> More nutritious products are often more environmentally sustainable with many plant-based options scoring high on these metrics.<sup>4</sup>
- ▶ Purchasing local food can generate ecological, social, and nutritional benefits and some may have a shorter supply chain for monitoring.<sup>5, 6, 7, 8, 9</sup> Some research also identifies that “local” is not necessarily the most sustainable in all cases as it may depend on other production variables that may have a larger impact.<sup>10, 11</sup>
- ▶ Certifications are not a panacea, but they can help to drive change to support consumers' interest in the ethical treatment of people and animals, fair trade products and sustainably captured seafood.<sup>12, 13, 14, 15, 16</sup>
- ▶ Considerations for supporting healthy food choices include items such as plant-forward menus; eliminating trans-fat; reducing saturated fat, sodium, and sugars; controlling portion size; and consuming less meat.<sup>17, 18, 19, 20, 21</sup>
- ▶ Food waste and packaging (like single-use plastic) are issues that impact economic and ecological indicators. There are a range of approaches to reduce food waste and loss such as buying bulk and using reusable packaging.<sup>22, 23, 24</sup>

All levels of government, private, and non-profit organizations are involved in food issues. Recently the provincial government launched a goal under the *Environmental Goals and Climate Change Reduction Act (2022)* to “develop a Provincial food strategy for enhanced awareness of, improved access to and increased production of local food to achieve 20% consumption of local food by 2030”.<sup>25</sup> University sustainability reporting frameworks like the Sustainable Tracking Assessment Rating System (STARS) and the Impact Rankings focus on short supply chain procurement, sustainable sources that support animal and human welfare, and ecological health through certifications, plant-based procurement, reducing food waste and energy, and education.

*Plant-based food*



## 1.3 Public Engagement

The Office of Sustainability conducts an annual sustainability survey. Specific questions regarding food options and services were asked in 2015 and 2020. Between both surveys approximately 3,000 campus members provided comments. In addition, student and multi-stakeholder focus groups were also run in 2015 and 2020. Some key themes, highlighted in order of mention, are outlined below.

- ▶ Food affordability, access, freshness. Students also discussed food security and issues of cost and convenience as impediments to sustainability.
- ▶ Food and packaging waste. The widespread use of plastic disposables on campus through food services (e.g., cups, bottled water) is noted. Food waste is a concern environmentally as well given affordability, poverty, and access issues.

**Ethical Purchasing.** Investing in companies with environmental, social, and good governance records for goods and services on campus (e.g., fair trade coffee, local food). Animal welfare issues are important to many.

Local food was rated high importance, with organic rated of medium importance. Buying local supports local producers and vendors, and the rural economy in Nova Scotia. Local food travels less from the farm to the table and tends to be fresher; sometimes organic food is seen as conflicting with affordability.

As a result of key findings from the literature review, meetings, focus groups, and survey data, a Sustainable and Healthy Food Plan was developed to guide decision-making.



### Recommended strategies

- ▶ The university should make healthy choices more affordable.
- ▶ Modifying eating habits by using social events, celebrations, and education to foster an appreciation of the cultural diversity of food and people. An example includes offering cooking classes that teach basic cooking techniques as a solution for off-campus students to have affordable nutritious meals.
- ▶ Provide more plant-based, vegetarian, and vegan options.
- ▶ Diversify options for those who have special dietary needs.
- ▶ Approach the campus population through nutrition counselling and social media to promote healthy eating.
- ▶ Use food to get people together and build the value of sustainable and healthy food.
- ▶ Educate the campus population on the process of diverting waste, and the importance of waste diversion and reduction.
- ▶ Donate left-over food to people in need whenever possible.
- ▶ Reduce non-recyclable waste.
- ▶ Increasing healthy food options in snack areas and vending.
- ▶ Actively promote eating more diverse produce and higher quality proteins (e.g., fish and beans). Support eating more types of local foods (e.g., kale and a variety of local fish).
- ▶ Focusing research on local development opportunities that support local eating like community storage and supportive supply chains.
- ▶ Keeping abreast of scientific findings related to sustainable and healthy foods to make reasoned decisions.

## 2.0 Plan Development and Management Timeline

Several new programs, pilots, reports, and initiatives have been developed over the last decade (Figure 1). At the Halifax dining halls, several awareness programs are offered, including seasonal menus and sourcing food from local farmers, growers, and distributors. As part of the educational programming the food services team meets with local farmers who are also invited to meet the Dalhousie community at the dining halls.

Figure 1. Timeline information.

2008–2009	2010–2011	2012–2013	2014–2015	2016–2017	2018–2019	2020–2021
<ul style="list-style-type: none"> <li>▶ Trays removed in dining to save water and waste</li> <li>▶ On campus Chef's garden at the AC in existence, some food goes to dining halls and community</li> <li>▶ Purchasing items in bulk, 100% post-consumer paper products</li> </ul>	<ul style="list-style-type: none"> <li>▶ Local farm programs expanded</li> <li>▶ Programs to reduce food waste in cooking launched</li> <li>▶ Adding more seasonal menus</li> </ul>	<ul style="list-style-type: none"> <li>▶ Major auditing and upgrades to ENERGY STAR equipment started</li> <li>▶ DSU food related student societies like Loaded Ladle, Urban Gardens, Farm Market start up and or expand</li> <li>▶ Adding variable speed drives on fans, and adding low-flow water devices in kitchens</li> </ul>	<ul style="list-style-type: none"> <li>▶ Offering fair trade products (coffee, tea and chocolate)</li> <li>▶ Purchasing more whole foods for preparation eliminating trans-fats, and on site preparation</li> <li>▶ MSC certification for Dalhousie Halifax dining halls</li> </ul>	<ul style="list-style-type: none"> <li>▶ Updated and additional educational signage and posters</li> <li>▶ Sustainable and Healthy Food Plan launched</li> <li>▶ Guidelines for organics and disposable reduction</li> </ul>	<ul style="list-style-type: none"> <li>▶ New local food items secured from berries to bakery</li> <li>▶ Launch of a reusable mug pilot program</li> <li>▶ More waste education training, reducing napkins in dining hall</li> </ul>	<ul style="list-style-type: none"> <li>▶ Expansion of plant forward options throughout food services</li> <li>▶ Energy efficient upgrades to kitchen ventilation</li> <li>▶ Revising Food Plan and priorities</li> </ul>
<p><b>ONGOING</b> Education programs connecting local farms, Dietician advice and support, menu changes supporting plant forward and healthy eating, ongoing assessment of purchases and programs in meeting targets</p>						



Other programs include trayless dining, offering fair trade products (coffee, tea, chocolate), eliminating trans fats, and purchasing more whole foods for preparation on site. The Halifax dining halls are MSC certified, and partnerships are being made with local fishers. Dining halls offer plant-forward options at each meal and cultural menu items. Food products for retail that meet certain fat, sodium, fiber, caloric, vegetable, and dietary standards are marked. In vending, a fair-trade chocolate option is provided and snacks such as baked chips and granola bars are offered along with regular chocolate and snack options. Halifax Food Services has an onsite Registered Dietitian that manages local farm, food safety, health promotion programs, free private nutrition consults, group presentations, dining room tours, and menu reviews.

At the AC, several awareness programs are offered including regular dining promotions based on seasonal locally-produced items and vegetarian/vegan diet. Trayless dining is offered along with fair trade products (coffee, tea, chocolate). The on-campus Chef's Garden, provides an opportunity for students to work on curriculum and research objectives while producing food for campus dining halls.

Major energy, waste, and water efficiency upgrades were undertaken in all campus kitchens.



## 3.0 Vision, Principles, and Scope

### Vision

Dalhousie University aims to provide campus foods and services that encourage healthy eating, support local food systems, are environmentally, socially, and ethically responsible, and celebrate learning through events and educational programs.

### Principles

#### ***Social, Personal and Ethical Responsibility***

Transitioning to ethically sound sources, fulfilling the university's social responsibility through its food provision and operation, encouraging individuals to take responsibility of assuring their health and nutritional status.

#### ***Education***

Achieving greater awareness by nurturing a culture of sustainable food and healthy eating.

#### ***Ecological Responsibility***

Minimizing negative ecological effects associated with food procurement, use, and operations.

#### ***Local Economics and Agriculture Support***

Working with current food providers and suppliers to source short supply chain, local, and sustainable options.

#### ***Well-being, Nutrition and Food Safety***

Reviewing and improving the nutritional values of the food products served by changing or adjusting the ingredients or the practices. Promoting healthy options and healthy eating habits, ensuring that foods served on campus meet the latest principles and regulations of food safety, promoting concepts of food security.

### Scope

The framework applies to all aspects of sustainable and healthy food on campus. Currently it is focused on but not limited to the following components:

#### ***Procurement***

Procurement encompasses not only food purchasing, but also cleaning products, packaging, and other commercial products used in food services.

#### ***Preparation***

In this context, preparation is not limited to cooking. It also includes cuisine selection, ingredients selection, and food arrangement.

#### ***Operation***

Operation consists of two components: kitchen operation with a focus on water and energy use and campus food production.

#### ***End use***

End use refers to the management of food and food- or kitchen-related waste.



## 4.0 Goals, Actions and Targets

To meet the university's sustainable and healthy food plan vision key goals, objectives, actions, and targets have been re-confirmed and expanded based on recent literature reviews, campus surveys, focus groups, and meetings (Table 2).

Table 1: Goals, Actions and Targets

GOALS	ACTIONS	TARGETS
<p><b>Purchasing Goal 1</b> Transition to more plant-based climate friendly offerings</p>	<ul style="list-style-type: none"> <li>▶ Increases in environmental and ethical plant-based dairy and meat alternatives in catering, residence meals.</li> <li>▶ Offer affordable options that are entirely plant-based.</li> <li>▶ Promote plant-based options in programs and services.</li> <li>▶ Explore and support partnerships with local producers using energy-efficient farming systems.</li> </ul>	<ul style="list-style-type: none"> <li>▶ 50% or more of food offerings plant based by 2030. Measure by weight, plate and/or \$ to compare differences.</li> <li>▶ New programs and initiatives.</li> </ul>
<p><b>Purchasing Goal 2</b> Increase sustainably and ethically sourced products</p>	<ul style="list-style-type: none"> <li>▶ Increase local, community-based, and third-party certified purchases that meet sustainable and ethical standards striving to meet goals in all commodities from sustainable seafood to humane standards for cage free eggs (e.g., Fair Trade, Ocean Wise, Organic, SPCA Certified).</li> </ul>	<ul style="list-style-type: none"> <li>▶ % of purchase increase.</li> </ul>
<p><b>Purchasing Goal 3</b> Reduce packaging and switch to greener packaging</p>	<ul style="list-style-type: none"> <li>▶ Replace one-time-use packaging with reusable products, where possible.</li> <li>▶ Reduce to eliminate problematic packaging (e.g., certain plastics).</li> <li>▶ Bulk purchasing for non-perishable food items.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Increase reusable and/or environmental-friendly packaging.</li> </ul>
<p><b>Preparation Goal 1</b> Maximize nutritional benefits of meals</p>	<ul style="list-style-type: none"> <li>▶ Reduce sodium, sugar, and saturated fats in dining hall meal, retail, vending and catering offerings.</li> <li>▶ Increase fibre and produce.</li> <li>▶ Provide educational information in retail and dining halls.</li> <li>▶ Continue not to use trans-fat cooking oils.</li> <li>▶ Switch to healthier cooking methods.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Report on programs, products, and cooking methods that have reduced sodium, sugar, saturated fats and increased fibre.</li> <li>▶ Introduce new innovative healthy selections.</li> </ul>



GOALS	ACTIONS	TARGETS
<b>Preparation Goal 2</b> Support healthy eating and dietary diversity	<ul style="list-style-type: none"> <li>▶ Adjust portion sizes and offerings according to Canada’s Food Guide.</li> <li>▶ Review offerings and portion sizes in catering to prevent over ordering and waste.</li> <li>▶ Identify and offer healthy affordable food offering(s) in retail.</li> <li>▶ Support healthy eating by providing more meal choices for special dietary needs.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Adjust offerings and portion sizes in catering.</li> <li>▶ Report on healthy affordable food offering(s).</li> <li>▶ Diversify meal options for people with special dietary needs.</li> <li>▶ Increase plant-based meals year over year.</li> </ul>
<b>Operation Goal 1</b> Increase energy and water efficiency	<ul style="list-style-type: none"> <li>▶ Re-Audit kitchens and dining halls for energy and water efficiencies.</li> <li>▶ Maintain efficient ENERGY STAR kitchen equipment/appliances.</li> <li>▶ Commission upgraded ventilation (proper hoods, variable speed drives, balanced, etc.)</li> <li>▶ High efficiency motors and insulation in walk-in fridges and freezers.</li> <li>▶ Maintain energy efficient lighting.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Increase amount of ENERGY STAR compliant equipment.</li> <li>▶ Ventilation system upgrades in all kitchens.</li> <li>▶ Maintain the Dept. of Health standards for food safety.</li> </ul>
<b>Operation Goal 2</b> Promote campus gardens	<ul style="list-style-type: none"> <li>▶ Support edible landscaping in approximate locations on Dalhousie Campuses.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use campus garden products in on-campus food services when possible.</li> <li>▶ Explore new campus gardening opportunities in approximate locations.</li> </ul>
<b>Operation Goal 3</b> Build capacity and raise awareness	<ul style="list-style-type: none"> <li>▶ Support student applied research.</li> <li>▶ Support student-run groups and encourage communications.</li> <li>▶ Host educational events focusing on healthy, sustainable, and affordable recipes and cultural exchange such as highlighting Mi’kmaq food and culture in partnership with or by the community.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Strengthen communication and raise awareness of sustainable food and healthy eating on campus.</li> <li>▶ Use food as a form of celebration to bring people together and build values of sustainability.</li> </ul>
<b>End Use Goal 1</b> Review the food waste management practices, and engage food services employees and customers to reduce waste	<ul style="list-style-type: none"> <li>▶ Employee training to reduce avoidable food waste and follow university waste guidelines.</li> <li>▶ Retail and catering at the table/counter education.</li> <li>▶ Awareness program of waste management requirements for on and off caterers.</li> <li>▶ Offer less disposables in retail and catering, towards eliminating plastic waste.</li> <li>▶ Launch a campaign detailing the importance and implications of food loss, and how individuals can take responsibility to reduce it.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Reduce waste contamination in the waste stream in kitchen operations, catering, and retail locations.</li> <li>▶ Identify materials that no longer go to the waste stream through product avoidance and reduction.</li> <li>▶ Education campaigns.</li> </ul>
<b>End Use Goal 2</b> Divert food waste and reduce avoidable waste	<ul style="list-style-type: none"> <li>▶ Donate foods (that can be donated based on food safety standards) to local NGOs/on campus organizations.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Food diverted.</li> </ul>

## 5.0 Roles and Responsibilities

Dalhousie University Ancillary Services and Food Services have overall responsibility for the implementation of university food services on Dalhousie campuses. Other food groups on campus may choose to use the framework as a guidance tool. The Dalhousie Office of Sustainability provides advice on sustainability issues and assists in tracking information and measuring progress.

## 6.0 Implementation and Evaluation

The Dalhousie University Sustainability Plan outlines “Sustainable food offerings” as one of its indicators. Every year the university releases a public report that identifies progress made. Dalhousie is a participant in the Sustainability Tracking Assessment Rating System (STARS). Every three years the university publicly reports under STARS.

Food and dining services are a part of these assessment processes. Credits that are tracked are available on the STARS site. Each year, Food Services provides indicator tracking information to Ancillary Services and the Office of Sustainability as a way of measuring progress related to defined targets. The achievement of targets may fluctuate depending on the availability of products in the marketplace.

*DSU Food Market*



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