Dalhousie University

Sustainable and Healthy Food Framework
2016
The following framework provides direction for the pursuit of sustainable and healthy food goals on campus. The achievement of goals may fluctuate depending on the availability of products in the marketplace. Having a clear framework can help support market development through purchasing programs.
INTRODUCTION

Dalhousie Office of Sustainability and Dalhousie Food Services (contracted by Ancillary Services) have prepared the Sustainable and Healthy Food Framework. Information for the framework was gathered through stakeholder focus groups, meetings, surveys, and literature reviews. Dalhousie University recognizes the significance of food sustainability and health to the overall sustainability development on campus 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. Jasmine Chen, MREM student, worked on the development of this report with the Director of the Office of Sustainability. Funding support was provided by the Department of Health and Wellness through Thrive! A plan for a healthier Nova Scotia.

1.0 PURPOSE

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

2.0 CONTEXT

2.1 Current Situation

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 18,500 students and more than 6,600 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, Second Cup, and Extreme Pita. Catering at the Halifax campus is not exclusive to Aramark. Chartwells is the sole food service provider at the Agricultural Campus including dining halls, vending, exclusive rights for catering, and building food outlet options.

The Dalhousie Student Union manages food services (Chartwells) in the Student Union Building (SUB) and the Grad House. Franchises like Pete’s TOGO and Tim Hortons are featured at the SUB. A separate board operates food services the University Club. Currently, franchises across campuses require procurement of products that meet franchises standards that may differ from campus-controlled purchases.

Dalhousie University Halifax Food Services has been working with its food providers and suppliers, departments such as 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 part of the STARS program Dalhousie tracks and reports publicly on local, third-party, and community-based food purchases percentages and reports on other aspects of food and dining services such as animal welfare programs, meal menu offerings, and educational programs. With programs like STARS, newer versions of the reporting frameworks tend to be more stringent. Comparing previous year’s ratings with current ratings may need to reflect a change in criteria and success factors.
On average 25% of all food purchases (franchises, vending, catering, and dining halls) based on the 2014-2015 calendar year are from local (defined as Maritimes), third-party certified (ex. Marine Stewardship Council, Organic, Fair Trade), and community-based organizations (defined as organizations under 500 employees). There are higher percentages of local food purchases based on certain commodities like produce and between different food services such as dining halls versus retail. In season, local produce percentages can be over 80% of all produce purchases. Local percentages are higher in dining halls and if not combined with community-based requirements. It is important to distinguish the scope of targets as reporting frameworks can vary on how they report success indicators.

At the Halifax dining halls, a number of awareness programs are offered, including seasonal menus and sourcing food from local farmers, growers and distributors. As part of the Farm to Table program the food services team meets with local farmers who are also invited to meet the Dalhousie community at the dining halls.

Other programs include tray-less dining; offering fair trade products (coffee, tea, chocolate); eliminating trans-fats, and purchasing more whole foods for preparation on site. A new sustainable seafood purchasing program is underway at the Halifax dining halls. The Halifax halls are MSC certified and partnerships are being made with local fishers. Dining halls offer a complete hot vegan/vegetarian menu item at each meal. Halifax Foods Services new program, Get the Good Stuff, labels food products for retail that meet certain fat, sodium, fiber, caloric, vegetable and dietary standards. Aramark designed the program to create an easily identifiable healthy choices labelling program for campus customers. In the dining halls, diners are provided with sustainable and healthy food options which are labelled and promoted. 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. Piloting of fresh fruit and milk products in vending has been trialed. During some initial test trials, sales were down and more items expired.

Halifax Food Services has an onsite Registered Dietitian that manages Farm to Table, food safety, and health promotion programs and offers free private nutrition consults, group presentations, dining room tours, and menu reviews.

At the AC campus, a number of awareness programs are offered including regular dining promotions based on seasonal locally produced items and vegetarian/vegan diet. Tray-less dining is offered along with fair trade products (coffee, tea, chocolate). In the fall, produce from the one acre on-campus Chef’s garden are incorporated into the menu. In 2015, produce from the Chef’s garden was also used at the Halifax campuses. The Chef’s Garden provides an opportunity for students to work on curriculum and research objectives while producing food for campus dining halls.

On-campus student groups have been actively taking actions 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. They offer free lunch three times a week in the Dalhousie Student Union Building. Some of the produce from the Loaded Ladle comes from a local urban (Common Roots) farm. Your Environment, Sustainability and Society Student Society (YESSSSS) initiated the weekly farmers market in Student Union Building. The Dalhousie Student Union runs a food bank on the Halifax campus. Campus gardens in both Halifax and Truro aim to bring people together and provide educational opportunities surrounding sustainable food systems.
2.2 Literature Review Summary

Institutional sustainable food policies and projects were selected and examined. Some of the key concepts referred to in the literature include support for local and sustainable foods, reducing food packaging and waste, and supporting healthy eating practices.

Literature findings suggest that:

- purchasing local food generates ecological, social and nutritional benefits (Pirog et al., 2001; Feenstra et al., 2003; Morris and Buller, 2003; Ikerd, 2005; Xuereb, 2005; Barrett n.d., MacLeod and Scott, 2007; Brown and Miller, 2008; Darby et al., 2008);
- there is growing interest in supporting sustainable food such as humanely raised meat, fair trade products and sustainably captured seafood (Dayton et al., 1995; Primavera, 2006; Ayer and Tyedmers, 2009; Pluhar, E. B., 2010; Humaneitarian n.d.; World Fair Trade Organization, 2013; McGrath, Pelletier and Tyedmers, 2015);
- it is important to set targets that support healthy food choices such as eliminating trans-fat (Remig et al.,2010), reducing saturated fat, sodium and sugars, controlling portion size, and consuming less meat (Rolls et al., 2002; Lea, 2005; Sodium Working Group Health Canada, 2010; Brown, 2011; Welsh et al., 2011; Health Canada, 2012; Basu et al., 2013; Tuso et al. 2013)

Over 130 curricular courses touch on aspects of sustainable food systems and agriculture. Several faculty members and students are involved in food, health, and sustainability research internationally and locally (Figure 1).

Community lectures and presentation on food topics are offered on an on-going basis. The President’s Advisory Council on Sustainability has a food-subcommittee that meets quarterly to discuss related food issues on campus.

Figure 1. Dalhousie students testing plots at the Agricultural campus.
• food waste and packaging are all 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 (Marsh and Bugusu 2007; Lipinsk et al., 2013; US EPA, 2013).

2.3 Survey Summary
Each year the Office of Sustainability conducts an annual sustainability survey. The 2014-2015, survey received comments from over 1500 responses from the campus community including students, faculty and staff. As part of this survey, participants were asked to rate “How important is the following criteria to you regarding food operations at Dalhousie?”

The criteria listed were organic food, local sources, animal welfare, freshness, energy and water efficiency, and reduction of food waste from 1 (not important) to 5 (very important) [Figure 2].

“Food freshness” was rated by 94% of respondents as four or above. Similarly, “reduction of food waste”, “energy and water kitchen efficiency”, “local sources”, “eco-footprint”, “animal welfare” also holds great importance to participants. The results suggested that “local sources” seems to hold more importance compared to “organic food”. Eighty-one percent of the respondents reported “local sources” as four or above; while for “organic food” the opinions are more evenly distributed: 56% reported three or less, while only 17% reported five.

At the end of the rating question, survey participants were asked for general comments. Four pages of comments were provided representing 171 comments. Analysis of the comments showed that the most frequently appearing themes are:

Affordability
• Price is a major obstacle in accessing sustainable and healthy food;
• The university should make healthy choices more affordable; and
• Offering cooking classes teaching basic cooking techniques could be a solution for off-campus students to have affordable nutritious meals.
Diversifying Dining Choices
• Provide more vegetarian and vegan options offerings; and
• Diversify options for those have special dietary needs.

Education
• A lot of people do not know exactly what “healthy foods” really are:
  • 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; and
  • Educate the campus population on the process of diverting waste, and the importance of waste diversion and reduction.

Local and Organic
• Buying local supports local producers and vendors, and rural economy in Nova Scotia;
• Local food travels less from the farm to the table and tends to be fresher; and
• Organic food can be higher in price and beyond students’ budget.

Waste
• Donate left-over to people in need;
• Explore on-campus composting on-site at the Agricultural Campus:
  • Reduce waste by making soup stock out of left-over or perishable produce; and
  • Reduce non-recyclable waste.

Other comments touched on issues such as animal welfare, food justice and security, corporatization of food systems, and campus gardening. All comments were counted and are represented in a Word Cloud where the themes mentioned more often are larger in size (Figure 3).

Figure 3: Survey participant comments on food issues. Word size reflects theme mentions. The larger the word size, the more number of mentions.

These comments identify people’s values and perceptions of food services on campus. Existing programs are highlighted in the Table section of this report.
2.4 Focus Group and Meeting Summaries

Focus groups and meetings were conducted to capture stakeholders’ opinion on the draft sustainable and healthy food framework.

Two focus groups were held in Halifax and in Bible Hill in August 2015 representing 10 participants from Dalhousie food services, faculty and staff and representatives from other institutions/NGOs. Each group was asked a standard set of questions regarding keys challenges and opportunities for sustainable and healthy food on campus and important elements to be included in the framework (Appendix A).

A number of themes raised in Focus Group A were in line with comments outlined in the sustainability survey including the importance of supporting local and traceable food, enhancing educational efforts and showcasing healthy options, supporting fair wages and programs like fair trade, diversifying meal options, consideration of animal welfare issues, and emphasizing waste reduction. In addition, the group highlighted the importance of food safety, food security, and clarity around support for GMOs or not.

In Focus Group B, participants identified affordability and accessibility as two of the major barriers that hinder food sustainability movement on campus. Access to food and food systems is impacted by global and regional trends in production and processing. The group discussed the possibilities of expanding campus gardening at the Agricultural Campus, where large-scale food production can possibility happen and may return some of the food to food services in both Bible Hill and Halifax. The group agreed that healthy eating is a vital part of maintaining a healthy lifestyle, and nutrition education and controlling portion sizes both play critical parts in health.

Participants in both focus groups and through interviews and meetings made specific suggestions including:

- increasing healthy food options in snack areas and vending;
- actively promoting eating more diverse produce and higher quality proteins (ex. fish and beans). This supports eating more types of local foods (ex. kale and variety of local fish);
- focusing research on local development opportunities that support local eating like community storage and supportive supply chains;
- modifying eating habits by using social events, celebration and education to foster appreciation of the cultural diversity of food and people; and
- keeping abreast of scientific findings related to sustainable and healthy foods to make reasoned decisions. For example, some raised the topic of genetically modified foods as a negative action that impacts the ecology by the introduction of invasive species and hinders the economic well-being of farmers being tied to the purchase of GMO seeds or impacting their non-gmo fields. Others highlighted that GMOs were approved by health and environment authorities and can increase food production. The introduction of the first GMO animal for food consumption (genetically modified salmon), is being actively lobbied against for fear of disruption to natural species and ecosystems.

As a result of key findings from the literature review, meetings, focus group and survey data a Sustainable and Healthy Food Framework has been developed to guide decision making. The rest of the report focuses on the framework elements.
3.0 VISION, PRINCIPLES AND SCOPE

Vision
Dalhousie University aims to provide campus foods and services that encourage healthy eating, supports local food systems, is environmentally and socially responsible, and celebrates 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 use and operations.

Local Economics and Agriculture Support: working with current food providers and suppliers to source local when possible, and developing new connections with local producers and vendors.

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 management of food and food - or kitchen-related waste.

Commodities:
Food commodities are divided into following categories: produce, meat (beef and pork) and poultry, dairy, eggs, seafood, grains and staples, other groceries. Foods in each commodity group share similar characteristics for the purpose of developing procurement strategies. The categories are line with the four food groups in Canada’s Food Guide: “Vegetables and Fruit” to “produce”; “Milk and Alternative” to “dairy”; “Meat and Alternative” to “meat and poultry” and “eggs”; “Grain Products” to “grains and staples”.

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### 4.0 GOALS, ACTIONS AND TARGETS

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<thead>
<tr>
<th>Goals</th>
<th>Actions</th>
<th>What Has Been Done</th>
<th>Targets</th>
<th>Measurements (targets for 2018 next STARS report)</th>
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</table>
| **Purchasing Goal 1**  
Transition to more local sources                                           | Produce                                                                | Develop relationships with local producers, vendors and community gardens         | Increase local produce all year round                                  | Aim for a 40 - 60% local and/or community-based all year target |
|                                                                      |                                                                         | Explore and support partnerships with local producers using energy-efficient farming systems such as greenhouses for off-season | These goals may help to support provincial food security and food affordability goals | Report on produce with seasonal % as well as annual % |
|                                                                      |                                                                         | Work with franchises on local sourcing                                            |                                                                        |                                               |
|                                                                      |                                                                         | % ranges by season: 25%-80%                                                       |                                                                        |                                               |
|                                                                      |                                                                         | Main suppliers/ distributors: Keddy Brothers and Sysco                          |                                                                        |                                               |
|                                                                      |                                                                         | Chef’s Garden at the AC campus provides produce to the AC (HFX if avail)       |                                                                        |                                               |
|                                                                      |                                                                         | Relationships developed with local farms including farm visits                 |                                                                        |                                               |
| **Purchasing Goal 2**  
Support networking and collaboration between Nova Scotia universities | Meat (Beef, Pork) and Poultry | Explore options for purchasing provincially inspected meats                       | Increase local and community-based purchases of meats and poultry     | Increase local and/or community-based raised meats |
<p>|                                                                      |                                                                         | Explore relationship with local poultry suppliers                             |                                                                        | Increase local and/or community-based raised poultry (from 2013-2014 baseline) |
|                                                                      |                                                                         | Explore local supply of prepared meat products                                 |                                                                        |                                               |
|                                                                      | Dairy                                                                  | Identify opportunity for more local dairy product purchases (cheese, ice cream) | Increase local and community-based dairy products                      | Increase 5% of local and/or community-based dairy products based on previous year (from 2013-2014 baseline) |
|                                                                      | Eggs                                                                   | Maintain local purchases of eggs                                                | Pursue increasing local egg purchases                                 | Increase local egg purchases                  |
|                                                                      | Seafood                                                                | Continue partnership with local community supported fisheries                 | Increase local, community-based, third-party certified seafood % purchases from previous year | Increase 5% of local and/or community-based seafood |
|                                                                      |                                                                         | Diversify local seafood offerings to use underutilized ecologically harvested species | Try serving new local wild caught species and low impact aquaculture (from 2013-2014 baseline) |                                               |
|                                                                      |                                                                         | Explore support for local land-based low impact energy and water efficient aquaculture |                                          |                                               |
|                                                                      | Grains and Staples                                                     | Explore relationships with local bakeries, grain producers, and/or bake on-site | Increase local grains and bakery purchases                            | Develop new partnerships with local and community-based grain producers and bakeries (from 2013-2014 baseline) |
|                                                                      |                                                                         | Some breads are locally made                                                    |                                                                        |                                               |
|                                                                      |                                                                         | Have existing relationships with local bakeries                                |                                                                        |                                               |
|                                                                      |                                                                         | Bake some goods on campus                                                       |                                                                        |                                               |</p>
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<tr>
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<tbody>
<tr>
<td><strong>Purchasing Goal 3</strong> Increase sustainably sourced products</td>
<td>Other groceries</td>
<td>Explore relationships with local food manufacturers and vendors</td>
<td></td>
<td>Increase local grocery purchases (oil, spice, canned food, etc.)</td>
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<td></td>
<td>Meat (Beef, Pork) and Poultry</td>
<td>Explore partnerships with meat suppliers who rear animals with described animal welfare standards Explore relationships with poultry suppliers who rear animals with higher animal welfare standards</td>
<td>Letters have been sent to suppliers to see if animal welfare certification programs are being pursued. Responses received suggest there are no formal programs being promoted currently in the region</td>
<td>Increase meat and poultry that are raised humanely on previous year</td>
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<td></td>
<td>Eggs</td>
<td>Explore partnerships with ethical egg suppliers</td>
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<td>Increase ethical egg purchases</td>
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<tr>
<td></td>
<td>Dairy</td>
<td>Explore partnerships with ethical dairy suppliers</td>
<td></td>
<td>Increase ethical dairy purchases</td>
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<td></td>
<td>Produce and Grains</td>
<td>Research local organic opportunities Discuss GMO science and implications at food sub-committee</td>
<td>Initial list was circulated of organic providers</td>
<td>Support produce and grains vendors practicing sustainable agricultural methods</td>
</tr>
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<td></td>
<td>Seafood</td>
<td>Research and explore relationships with land-based local low impact energy and water efficient aquaculture Support Marine Stewardship Council (MSC) &amp; (ASC) Certified seafood Discuss merits of banning GMO salmon</td>
<td>Four Halifax dining halls are MSC Certified Partnership with local fishers Sustainable seafood purchasing sheet developed for food services</td>
<td>Increase purchases of sustainably produced fish</td>
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<td></td>
<td>Fair Trade</td>
<td>Support fair trade offerings in franchised locations Identify opportunities to increase fair trade product range</td>
<td>Dalhousie dining halls and catering offer all fair trade coffee and tea Fair trade chocolate offered at vending machines and retail locations</td>
<td>Increase fair trade coffee and tea in franchised locations</td>
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<td><strong>Purchasing Goal 4</strong> &lt;br&gt;Reduce packaging and switch to greener packaging</td>
<td>Replace one-time-use packaging with reusable products &lt;br&gt;Use environmental-friendly packaging &lt;br&gt;Bulk purchasing for non-perishable food items</td>
<td>Bulk purchase of commodities like produce for processing at dining halls. &lt;br&gt;100% post-consumer content for food services napkins</td>
<td>Increase reusable and/or environmental-friendly packaging</td>
<td>Increase reusable and/or environmental-friendly packaging in retail and catering offerings (from 2013-2014 baseline)</td>
</tr>
<tr>
<td><strong>Preparation Goal 1</strong> &lt;br&gt;Maximize nutritional benefits of meals</td>
<td>Reduce sodium, sugar, and saturated fats in dining hall meal, retail, vending and catering offerings &lt;br&gt;Increase fiber and produce &lt;br&gt;Provide educational information in retail and dining halls &lt;br&gt;Continue not to use trans-fat cooking oils &lt;br&gt;Switch to healthier cooking methods</td>
<td>Work is on-going to reduce the amounts of sodium, sugar, and saturated fats and increase fiber in meals &lt;br&gt;Halifax Food Services (Aramark) recently launched the Good Stuff program at the Halifax campuses and are working with the suppliers to reduce sodium in many products. For an example bread &lt;br&gt;Making soups and entree from scratch. Using low sodium, gluten free soup stock &lt;br&gt;A large majority of recipes use healthier fat (vegetable oil) &lt;br&gt;Providing a low percentage of fried offerings</td>
<td>Reduce salt content in offerings to be in-line with the Canadian Sodium Reduction Strategy &lt;br&gt;Reduce saturated fat in offerings by switching to more lean meat/low-fat dairy, or replacing butter with vegetable oils &lt;br&gt;Offer food and beverages low in sugar</td>
<td>Report on programs, products, and cooking methods that have reduced sodium, sugar, saturated fats and increased fiber and produce since the baseline of 2014-2015 &lt;br&gt;Introduce new innovative healthy selections</td>
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<tr>
<td><strong>Preparation Goal 2</strong></td>
<td>Adjust portion sizes and offerings according to Canada’s Food Guide</td>
<td>Offer meals for special diet needs</td>
<td>Adjust offerings and portion sizes</td>
<td>Adjust offerings and portion sizes in catering</td>
</tr>
<tr>
<td>Support healthy eating and</td>
<td>Review offerings and portion sizes in catering to prevent over ordering</td>
<td>Offer vegetarian and vegan options</td>
<td>Review meals for special dietary needs</td>
<td>Report on healthy affordable food offering(s)</td>
</tr>
<tr>
<td>dietary diversity</td>
<td>and waste</td>
<td>Offer no gluten ingredients, vegan, and vegetarian menu options throughout dining</td>
<td>Increase vegetarian and vegan options</td>
<td>Diversify meal options for people with special</td>
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<td></td>
<td>Identify and offer healthy affordable food offering(s) in retail</td>
<td>hall</td>
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<td>dietary needs</td>
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<td></td>
<td>Support healthy eating by providing more meal choices for special</td>
<td>Dietary fridge offers milk alternatives, gluten free bread, separate condiments,</td>
<td>Increase vegetarian and vegan meals on previous year</td>
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<tr>
<td></td>
<td>dietary needs</td>
<td>Separate toaster to available for gluten free bread</td>
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<td>Through private consults, accommodations are organized for allergies, chronic</td>
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<td></td>
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<td>diseases, etc.</td>
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<tr>
<td><strong>Operation Goal 1</strong></td>
<td>Audit kitchens and dining halls for energy and water efficiencies</td>
<td>Completed audits of all eight kitchens on campus</td>
<td>Increase number of ENERGY STAR compliant equipment</td>
<td>Confirm appliances/equipment that are ENERGY STAR</td>
</tr>
<tr>
<td>Increase energy and water</td>
<td>Switch to more efficient ENERGY STAR kitchen equipment/appliances</td>
<td>Major upgrades to appliances</td>
<td>Ventilation system upgrades in all kitchens</td>
<td>Confirm all ventilation system and motor upgrades (by 2018)</td>
</tr>
<tr>
<td>efficiency</td>
<td>Add low-flow rinse heads</td>
<td>Co-hosted full day workshop for community and Dal</td>
<td>Maintain the Dept. of Health standards for food safety</td>
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<td>Upgrade ventilation (proper hoods, variable speed drives, balanced, etc.)</td>
<td>Upgraded rinse heads and lighting</td>
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<td>High efficiency motors and insulation in walk in fridges and freezers</td>
<td>Changes to ventilation system made in five of eight kitchens</td>
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<td>Energy efficient lighting</td>
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<td><strong>Operation Goal 2</strong></td>
<td>Explore edible landscaping in approximate locations on Dalhousie</td>
<td>Halifax campuses: student-led Dalhousie Community Garden</td>
<td>Use campus garden products in on-campus food services when possible</td>
<td>Confirm amount of garden product used</td>
</tr>
<tr>
<td>Promote campus gardens</td>
<td>Campuses</td>
<td>AC: Chef’s Garden, Agricultural Campus</td>
<td>Explore new campus gardening opportunities in approximate locations</td>
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<td></td>
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<td>Community Garden</td>
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| **Operation Goal 3**  
Build capacity and raise awareness | Support student applied research  
Support student-run groups and encourage communications  
Host educational events focusing on healthy, sustainable and affordable recipes | Student applied research in many classes  
Student-run groups: The Campus Food Strategy Group (CFSG); The Loaded Ladle; The Dalhousie Student Union Sustainability Office (DSUSO); Engineers Without Borders (EWB); Your Environment, Sustainability and Society Student Society (YESSSSS), DSU Food Bank  
Cooking classes in Halifax dining halls | Strengthen communication and raise awareness of sustainable food and healthy eating on campus  
Use food as a form of celebration to bring people together and build values of sustainability | Report on efforts in STARS report  
Create a question(s) in annual sustainability survey that measures awareness of initiatives |
| **End Use Goal 1**  
Review the food waste management practices, and engage food services employees and customers to reduce waste | Employee training to reduce avoidable food waste and follow university waste guidelines  
Retail and catering at the table/counter education  
Awareness program of waste management requirements for on and off caterers  
Offer less packaging  
Launch a campaign detailing the importance and implications of food loss, and how individual can take responsibility to reduce it  
Donate foods (that can be donated based on food safety standards) to local NGOs/on campus organizations | Composting: food waste is diverted through composting streams  
Recycling: metal, plastic, glass, cardboard, and fryer oil are separated and recycled in place  
Dining halls are tray-less | Reduce waste contamination and avoidable waste  
Education campaign  
Change the training of employees to reduce avoidable food waste | Reduce waste contamination in the waste stream in kitchen operations, catering, and retail locations  
Identify materials that no longer go to the waste stream through product avoidance and reduction |
5.0 ROLES AND RESPONSIBILITIES

Dalhousie University Ancillary Services and food services has 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 EVALUATION

The food sub-committee of President’s Advisory committee meets quarterly to review progress and offer recommendations. The Dalhousie University Sustainability Plan outlines “Sustainable food offerings” as one of its indicators. Every three years 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 publically 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.
7.0 REFERENCES


APPENDIX A: FOCUS GROUP QUESTIONS

- When you hear the words sustainable and healthy food, what are the important concepts that come to mind?
- What are key challenges in providing sustainable and healthy foods?
- What new opportunities might there be in providing sustainable and healthy foods?
- Would you have suggestions for modifying the draft vision and key principles or do they cover the key elements?
- Would you have suggestions for modifying the draft goals and actions or do they cover the key elements? Is there any other food commodities you would like to see to be included?
- Would you have suggestions for modifying the draft targets and measurement plans?