

**LFS 450: Final Project Report for the  
Farm-to-Healthcare Project**

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## **Executive Summary**

A farm-to-healthcare partnership effectively brings in food from local farmers and producers to hospitals and/or healthcare institutions. Currently, there are no such partnerships in Vancouver. However, through the help of our primary stakeholder Shannon Lambie, UBC Farm Communications Coordinator, we aspire to develop this partnership in the UBC community by May 2015 with a three-year pilot project focusing on farm-to-healthcare at the UBC Hospital. The partnership that will be established through this project is between the UBC Farm and Sodexo. Sodexo is a company contracted by the Vancouver Coastal Health Authority to provide food services, that purchases the majority of food from a company called Gordon Food Services (GFS) (Personal Communication: Moubarak, February 19, 2014). GFS is a U.S.-based distribution company and the B.C. branch is Sodexo's primary food supplier in the Lower Mainland.

In regards to the specific activities of this project, we primarily created a literature assessment, which was conducted using distinct methodologies. Face-to-face interviews were also conducted with valuable informants such as Shannon Lambie, Cristel Moubarak and Brent Mansfield to gain in-depth and qualitative information. The interviews specifically conducted with Shannon Lambie provided us with the foundational knowledge needed to commence this project. Not only did Shannon state her goals and expectations for this project, but she also provided our group with key academic publications and resources related to farm-to-healthcare.

We divided our team of seven into two groups, with one group researching the Sodexo perspective, while the other focusing on the UBC perspective. Within these sub-

groups, we synthesized our findings into categories: benefits, risks/challenges, and strategies for moving forward. The UBC perspective used key words, including, “farm-to-institution” (FTI), “farm-to-school” and “food sustainability.” The Sodexo team used search engines to conduct literature research, consisting of keywords such as “local food,” “farm-to-healthcare,” “farm-to-cafeteria,” “food safety,” “Sodexo,” and “GFS.” We combined this literature research with the information that we received from our interviewees to successfully analyze, interpret, and relate the key issues and findings of our project, which future LFS 450 classes can build upon.

In regards to findings and outcomes, through our meeting with our interviewees, it was determined that a number of steps are needed to occur in order to create a successful partnership between the UBC Farm and Sodexo at the UBC Hospital (Personal Communication: Moubarak, February 19, 2014; Mansfield, March 12, 2014). There are currently many barriers of success, including concerns over food safety and cost, which are two primary areas our group addressed. Moreover, foods service companies such as Sodexo require thorough third-party certification such as HACCP (Hazard Analysis and Critical Control Points) or Canada GAP certification.

In terms of specific recommendations, we have concluded five primary strategies for the UBC Farm and Sodexo to follow. These include, first ensuring that Shannon gains internal buy-in from the UBC Farm staff by ensuring that all farm workers are aware of the benefits of this unique opportunity. Secondly, Sodexo needs to increase local food purchasing by January 2015 through the help of the UBC farm establishing purchasing guidelines. Next, the UBC Farm needs to become a compliant brand through GFS. A “Learning Lab” will be formed, which will involve all stakeholders and begin in

September 2014 to gain commitment to process. Lastly, we recommend that the UBC Farm creates and presents a produce supply proposal for Sodexo's approval. This proposal can be created through the help of future LFS 450 groups, who can provide additional research on detailed logistical barriers and strategies prevalent in this partnership.

## **Introduction**

Sustainable food production is an increasingly popular movement in our society. For institutions like the University of British Columbia (UBC), the benefits of sustainable food production are significant, as there are a number of opportunities for UBC to be innovative and act as a leader in this field. Establishing a farm-to-healthcare partnership is a concept that can have a positive impact on the UBC food system, but also stands to provide even greater benefits to communities across the province and beyond. As a research centre, the UBC Farm has the opportunity to forge the path to build a farm-to-healthcare program that would not otherwise be available. As will be discussed in this report, there are a number of obstacles that must be managed before an effective farm-to-healthcare program is made possible; however, once these obstacles are overcome, this farm-to-healthcare pilot project has the potential to act as a model that other institutions can follow on a local, national and global level.

The intent of this report is to examine the possibility of a farm-to-healthcare pilot project implemented at UBC in conjunction with the UBC Hospital. This report is the first step in a long process; thus, our goal is to examine this potential partnership thoroughly through a formal literary review of the topic. Through this, we will begin to dissect the issues and understand stakeholder perspectives.

We consciously organized our group to tackle two perspectives on this project. Specifically, we assessed the perspective of the UBC Farm and their associated challenges. This is largely based on a review of literature that similar organizations have endeavoured to achieve effective farm-to-healthcare projects. We also looked at the perspective of Sodexo, the UBC Hospital's food service provider in hopes of better

understanding the main concerns they may have when incorporating locally grown food into the meals they offer to vulnerable patients.

Overall, there is no doubt that our group members value this initiative, as our group is very optimistic about the idea of achieving a farm-to-healthcare program at UBC. This outlook clearly guided the tone of our research and recommendations moving forward. Although this project has many milestones to achieve, our group believes in the concept of sustainable farming practices, providing healthy food to those in need and the importance of establishing this partnership. With team members who have backgrounds in both agriculture and clinical dietetics, we have found it relatively straightforward to arrive at common ground for this project.

## **Methodology**

The farm-to-healthcare's literature assessment was conducted using distinct methodologies. We conducted an interview with our stakeholder, Shannon Lambie on February 5, 2014, which provided us with the foundational knowledge to commence this project. The interview questions can be found in **Appendix A**. Not only did Shannon state her goals and expectations for this project, but she also provided our group with key academic publications and resources related to this project. With this information, we were able to successfully analyze, interpret, and relate the key findings from these articles to our project.

In order to be efficient with both time management to ensure the utmost success of this project, we divided our team of seven into two groups, one group researching the Sodexo perspective, while the other focused on the UBC perspective. Within these sub-

groups, we synthesized our findings into categories: benefits, risks, and suggestions. The UBC perspective used key words, including, 'farm-to-institution' (FTI), 'farm-to-school' and 'food sustainability.' The Sodexo team used search engines to conduct literature research and used key words such as 'local food', 'farm to health care', 'farm to cafeteria', 'food safety', 'Sodexo', and 'GFS.' By using this methodology, we were able to clearly display common themes throughout the articles as well as to make concise points from both perspectives.

Shannon Lambie set up a face-to-face interview between our group and Cristel Moubarak, which took place on February 19, 2014 at 12:00pm at the UBC Hospital cafeteria. Cristel is a dietetic intern who was in her food service rotation at UBCH during the beginning of our project and was working under the supervision of Tiffany Yeung, registered dietitian and a Sodexo District Manager. In this meeting, our team asked important questions regarding the possibility of the UBC Farm supplying hospital patient food services with local produce. A detailed list of interview questions can be found in **Appendix B.**

Up until this point, Cristel spearheaded the farm-to-healthcare project. As she was finalizing her food services rotation with Sodexo, she passed the baton to our group to continue researching the barriers and benefits to building a partnership between the UBC Farm and Sodexo, however she is still informed on this project.

Following our meeting with Cristel and Shannon in February, we continued to further assess key barriers to develop our knowledge of this potential partnership. To do this, Erin Sine attempted to set up a secondary face-to-face interview with Cristel. However, due to conflicting schedules, the interview was cancelled, and instead, Brent

Mansfield was identified as a valuable resource as per Cristel's recommendation. A face-to-face meeting was arranged between our group and Brent, the UBC Food System Project Coordinator on March 19, 2014 at 3:00pm in room 260 of the MacMillan building at UBC. During this meeting, our group established a greater understanding of our role in food system development on a broader level; moreover, we also gained further knowledge of the advancement of the farm-to-healthcare project. The set of interview questions can be found in **Appendix C**.

Through face-to-face interviews with valuable informants such as Shannon Lambie, Cristel Moubarak and Brent Mansfield, we were able to gain in-depth and qualitative information. Face-to-face interactions provided us with instant feedback, which we used to focus our group conversations on the topic at hand. New directions stemmed from a semi-structured set of interview questions, and although they are sometimes hard to coordinate, face-to-face interviews offered an environment to gain explanatory and descriptive research that a survey or other means of gathering information would not be able to provide.

### **Findings and Outcomes**

In our meetings with Cristel and Brent, it was determined that a number of steps need to occur to create a successful partnership between the UBC Farm and Sodexo at the UBC Hospital (Personal Communication: Moubarak, February 19, 2014; Mansfield, March 12, 2014, 2014). There are currently many barriers of success, and food safety and cost were two that were prioritized for our group to address.



To investigate the current status of food safety, there is a need to assess licensing and regulation requirements that the UBC Farm must adhere to in order to establish this partnership. Through meeting with Shannon Lambie, we came to the understanding that the UBC Farm is currently operating under the BC Good Agricultural Practices Guide (BCGAP) and being audited by an Environmental Health Officer (EHO) annually (Personal Communication: Lambie, March 19, 2014). While BCGAP is a comprehensive produce food safety program, it is more considered as a guideline and not mandatory from a regulatory standpoint. From a commercial standpoint, purchasing requirements and approved vendor programs may require a particular grower or packer to have a formal, documented Canada Good Agricultural Practices (CGAP) program in place (Schneider et al., 2011). The Farm understands these needs and is currently working to obtain certification for CGAP, which complies with HACCP regulations and is benchmarked to and officially recognized by the Global Food Safety Initiative (GFSI) (Canada GAP, 2014). Gathering the required documentation for the CGAP program will take place over the duration of one year, commencing in May 2014 and it is expected to be audited and certified at the earliest by May of 2015 (Personal Communication: Lambie, March 19, 2014). Once certification is obtained, the Farm will overcome Sodexo's concerns of food safety and liability and will thus be able to achieve further progress in establishing a partnership.

Although there are many barriers of success in a farm-to-healthcare partnership, there are some examples of similar farm-to-healthcare programs that do not involve the food service department in a healthcare facility. Our team has found three current examples of initiatives in Vancouver that have been able to provide patients with fresh

local produce: a Pocket market at BC Children's Hospital, a community kitchen program through CARMA (Community and Residents Mentor Association) at George Pearson Centre and the therapeutic garden club at George Pearson Centre, a long-term care facility for people living with disabilities. A description of these programs can be found in **Appendix H**.

## **Discussion**

### **UBC PERSPECTIVE:**

#### *Challenges:*

In regards to the UBC perspective, some of the main challenges that arose revolved around product supply and distribution methods. Specifically with location of local farms, along with the seasonality of locally produced food, the supply availability has a much smaller time frame. Additionally food service operation, budgeting, purchasing and administrative support are other major obstacles (Ng et al., 2010). More specifically, local farmers have particular problems with supply, as they are often not large enough to sustain required quantities that institutions require. Food service providers also have lower production costs that are much more competitive. This is a significant barrier that the UBC Farm will have to overcome by educating Sodexo of the importance and advantages of this partnership.

Similarly, inefficient ordering and payment is often a reason for resistance (Ng et al., 2010). To expand, when institutions such as universities fail to provide resources, they often encounter access fees and other hurdles (Ng et al., 2010). To overcome this, government agencies and community organizations can provide technical support

between food service operators and local farmers, which will help those involved to find reliable sources of local products along with building appropriate facilities to store and process these food products.

***Benefits:***

It is important to consider the psychological aspect of food consumption, as eating attractive food is a primary component when making food decisions. In this regard, consumers are often more attracted to food that is appealing. This includes: quality, taste, appearance and freshness. Having this philosophy of implementing more attractive and fresh food choices in a healthcare institution, such as the UBC Hospital, can allow consumers to truly enjoy their meals while receiving the nourishment they require.

Additionally, this project has the potential to educate various individual and community members about the importance of local food production. Since education is such a broad topic, it can be channeled to focus on specific groups such as students, farmers, the community and institutions. As there are no similar farm-to-healthcare partnerships currently in Vancouver, we have researched similar programs that we can use to promote this partnership. For example, a popular form of education is a farm-to-school program (FTS) where students are provided and encouraged to participate in experiential learning opportunities. These activities may include constructing a school garden, volunteering at a local farm and culinary education (Bonstrom, 2010). By providing these opportunities, students are able to have access to hands-on learning and fully engage in the knowledge presented. In addition, they will leave the program with the ability to share what they have learned with other members in their community.

Among post-secondary institutions, it has been suggested that students should be educated on the importance of local, seasonal and organic foods in order to build community food security (McCullum, Desjardins, Kraak, Ladipo, & Costello, 2005). In addition, increased awareness on the importance of sustainability can be achieved through an integrated and interconnected approach to education. Overall, we feel that promoting sustainable development among students allows for an important paradigm shift to occur, which adds insight and value to the students' learning. We feel that this concept can be applied to this project, as the UBC Farm can educate the remaining stakeholders about the benefits and importance of this partnership.

#### **SODEXO PERSPECTIVE:**

##### ***Challenges:***

Food safety is an important issue in general but especially for medical institutions given that their patients are more vulnerable than the general population (Kulick, 2005). Especially for facilities that serve an elderly or vulnerable population, issues beside cost must be considered when making food service decisions. Extra care needs to be taken to assure that suppliers meet local and federal safety requirements and that their facilities are inspected (Kulick, 2005).

Through comprehensive literature research, we found that the common challenges in regards to food safety faced by institutions include four main factors: contract and policy barriers, traceability and reporting transparency of products, physical limitations, and the complexity of the interplay of various factors combined (NOFA Vermont, 2013).

From a commercial standpoint, purchasing requirements and approved vendor programs of large institutions may require that a particular grower or packer have a formal, documented third party certification, such as produce liability insurance, GAPs, and HACCP, or even additional requirements on top of official certifications in place to demonstrate that they are overtly committed to food safety (Schneider et al, 2011). Unless hospitals purchase certified items (through catalogs and ordering systems) directly from farmers and producers or suppliers, most hospitals will find it extremely difficult to purchase foods that are local, sustainable, and formally certified (Institute for Agriculture and Trade Policy [IATP], 2013).

Third-party certification provides the highest degree of confidence that standards have been met. Risk Management Practices such as HACCP and CANADA GAP aid in establishing compliance, increases transparency in tracking and reporting of products, and encompasses factors such as farm and production practices, worker health and hygiene, and packaging and tool cleanliness (Buck, 2011). Farm and production practices evaluate production site water quality, contaminants and waste management, and pre-delivery crop storage facilities. Worker health and hygiene focuses on associated training protocols and facilities, while packaging and tool cleanliness evaluates packaging frequency, tool sanitation, and packaging location (IATP, 2013).

Physical limitations of food safety consider the capacity of a facility to handle products, specifically in terms of storage, processing, distribution, and cooking. All of these aforementioned concerns contribute to the complexity surrounding food safety issues, from the limited availability of locally sustainable products, delivery frequency, to related menu changes in patient meal planning (NOFA Vermont, 2012)

***Benefits:***

Sodexo can benefit from receiving locally farmed goods from the UBC Farm in many ways. A few of these benefits include local sourcing, decreased waste, shorter travel distance and building a community partnership (Sodexo, 2013). Sodexo has included many initiatives they have taken or hope to take on their public webpage. Many of their initiatives promote local sourcing, sustainability and reduced waste, which the UBC Farm can better help Sodexo to achieve (Sodexo, 2013). Sodexo has been recognized as a global sustainability leader within the market sector and in 2013 was awarded as one of Canada's Greenest employers for the third year in a row (Sodexo, 2013). This is largely a result of Sodexo's efforts in focussing on energy management and local sourcing along with fostering environmental awareness (Sodexo, 2013).

In terms of the environment, Sodexo hopes to increase reusable container and cutlery use to decrease waste (Sodexo, 2013). By sourcing through the UBC Farm, Sodexo can decrease the amount of waste accumulated through packaging. Sodexo has also developed a sustainable sourcing policy, which outlines agricultural practices that are aligned with their menu items and recipes (Sodexo, 2013). Moreover, a supply chain code of conduct is used by Sodexo to increase their use of environmentally and ethically sound products (Sodexo, 2013). They do this by using a multi-criteria assessment approach which selects suppliers based on quality, traceability, safety, hygiene as well as considering economic, social and environmental factors (Sodexo, 2013).

Decreasing the carbon footprint is also a major focus of Sodexo's and implementing energy consumption reduction measures is of high priority (Sodexo, 2013). Sodexo and the WWF have implemented a roadmap that plans to reduce the

scope of three emissions (Sodexo, 2013). Sourcing through UBC Farm would contribute to decreasing Sodexo's carbon footprint by decreasing travel distance (Sodexo, 2013). Also, the need for processing of fruits and vegetables would no longer be required, as the produce would be prepared fresh (Sodexo, 2013).

Sodexo believes in sourcing food that is local, sustainable and seasonal. Sodexo defines local as being within the same region, produced, processed, and distributed close to home, and minimized travel (Sodexo, 2013). Seasonality is also an important aspect to Sodexo, as they believe that seasonal foods should be fresh or stored in natural conditions for only a short period of time (Sodexo, 2013). However, the current vegetable and fruits that are being used are mainly processed in some way; therefore, the UBC Farm can contribute greatly to locality, sustainability and seasonality (Sodexo, 2013). Finally, the Better Tomorrow Plan, which was adopted in 2009 helps guide the company to sustainable business practices in day-to-day operations (Sodexo, 2013). Referring to **Appendix D**, the Better Tomorrow Plan as a continuous improvement approach and identifies what Sodexo does and who Sodexo engages (Sodexo, 2013). In terms of this project, the UBC Farm would play the role of supplier, institution, and client in terms of who Sodexo is engaging (Sodexo, 2013). By purchasing from the UBC Farm, Sodexo can better accomplish the initiatives and goals that they have set for themselves.

### **Stakeholder Recommendations**

In our meeting with Cristel and Brent, it was determined that a number of steps are necessary to create a successful partnership between the UBC Farm and Sodexo at the

UBC Hospital. A visual representation of these steps can be found in **Appendix E**. From our conversations, the following steps need to be taken:

1. Ensure that all UBC Farm staff are aware of the benefits of creating a farm-to-healthcare partnership
2. Increase amount of local foods purchased by Sodexo from GFS
3. UBC Farm to become a compliant brand through GFS
4. Development of a 'Learning Lab' involving all stakeholders
5. UBC Farm to create and present produce supply proposal for Sodexo's approval

These recommendations are tailored to a three-year time span, which this section will expand on. By sticking to this timeline, the foundation of this partnership will hopefully be grounded enough for the UBC Farm to be able to bring food into the hospital by May 2015. However, there is a need for all stakeholders to understand that this is a long-term process (Barlett, 2011). As Shannon at the UBC Farm has emphasized to us, this project has a three-year length; however, this partnership may take longer to establish, which the UBC Farm needs to recognize. Moreover, continued research and evaluation is necessary to ensure optimal outcomes are achieved and to better understand the best practices of bringing local food procurement into institutions such as the hospital (Harris et al., 2012). This is important as research can be used to facilitate communication between the hospital and local farmers (Smith et al., 2013).



## **1. Ensure that all UBC Farm staff are aware of the benefits of a farm-to-healthcare partnership**

The organization 'Farm to Cafeteria' conducted a National Farm to Cafeteria Survey, which examined public agencies (schools, universities and colleges and healthcare facilities) on their local food practices. According to the survey, access to a reliable source of local food, support from senior management and dedicated staff are key factors in promoting and maintaining a focus to offer patients local food (McKenna and Suchorolski, 2013). These factors will be essential in maintaining progress of this pilot project, and it is recommended that all stakeholders are committed and driven to provide patients with local food. Therefore, since the UBC Farm is the primary stakeholder who is spearheading this partnership, it is important for all UBC Farm staff to fully understand the benefits of a farm-to-healthcare partnership. Thus, it is important for Shannon to first gain internal buy-in from the UBC farm staff from March-May 2014. Here, it is necessary to motivate local growers in the benefits of selling their produce to the UBC hospital (Personal Communication: Lambie, March 19, 2014). Once this internal agreement within the UBC Farm is made, the farm can begin to emphasize the benefits to Sodexo of integrating food justice and sustainability into food services offered at the hospital (Barlett, 2011).

### ***Recommendation:***

It is recommended that Shannon first gain internal buy-in from the UBC farm staff from March-May 2014. Here, Shannon can emphasize to UBC Farm staff of the benefits of this project while also stressing the fact that a farm-to-healthcare partnership

is a new and innovative form of collaboration which the UBC Farm has an opportunity to be part of.

## **2. Increase amount of local foods purchased by Sodexo from GFS**

Sodexo purchases the majority of their food from a company called Gordon Food Services (GFS) (Personal Communication: Moubarak, February 19, 2014). GFS is a U.S.A. based distribution company and the B.C. branch is Sodexo's primary food supplier in the Lower Mainland. Through this partnership, a major goal is to increase the amount of local food that Sodexo purchases.

According to the Farm to Cafeteria 2013 survey, of fifty-nine healthcare facilities in the National Farm to Cafeteria Survey, 66% provide local food, 48% provide educational activities on consuming local food, 14% have a policy that supports use of local food, and 15% have a contract that addresses local food use (McKenna and Suchorolski, 2013). Moreover, 71% of health care facilities obtain local food from distributors such as GFS or Sysco, 27% get local foods from farmers, 25% get local foods from on-site sources, 23% get local foods from grocery stores, 6% get local foods from grower coops, and 4% get local foods from community greenhouses and gardens (McKenna and Suchorolski, 2013). In 76% of health care facilities in the survey, local food was incorporated in patient food services, 56% in cafeteria, and 54% in catering services (McKenna and Suchorolski, 2013). Only 10% of health facilities stated that they wanted local foods in patient food services, 8% in cafeteria and only 4% in catering services (McKenna and Suchorolski, 2013). Only 14% and 15% of healthcare facilities have a policy or contract addressing local food usage respectively (McKenna and

Suchorolski, 2013). Key benefits and barriers of local food incorporation noted are described in **Appendix F**.

In 2012, Katherine Power, Sodexo's vice president of communications stated that Sodexo purchases 21.6% of its products from British Columbia (Kimmitt, 2012b). British Columbia suppliers that Power indicated include Island Farms Dairy, Monte Cristo Bakery, Delicatessen Omnisky Kosher and Van Houtte Coffee (Kimmitt, 2012b). Sodexo uses its purchasing power to purchase seafood from sustainable fisheries and in 2011, Sodexo removed all red-listed seafood species from their menus (Kimmitt, 2012b)

Sodexo also coordinated with the World Wildlife Fund to create a sustainable seafood purchasing policy, which exemplifies the organization's commitment to sourcing sustainable food for their clients (Kimmitt, 2012b). As the UBC Farm is a local supplier, Sodexo will need to state their commitment to increase purchase of local produce to ensure a mutually positive relationship between the UBC Farm and Sodexo at the UBC Hospital.

***Recommendation:***

*It is recommended that Sodexo increase local purchasing by January 2015 to ensure their commitment to the farm-to-healthcare pilot project and express their corporate responsibility. To promote this, we recommend for the UBC Farm to establish purchasing guidelines that include the goals, benefits and opportunities that UBC aims to take advantage of in order to better promote local food production (Harris et al., 2012). Creating these guidelines is part of a process that recognizes that institutions, such as the GFS, have large purchasing power; moreover, they can provide a framework to allow Sodexo to indeed ensure that it increases local purchasing by January 2015.*

### **3. UBC Farm to become a compliant brand through GFS**

In 2012, Director of Corporate Citizenship at Sodexo, Chris Roberts stated that food safety is Sodexo's top priority (Kimmitt, 2012a). Research conducted by Farm to Cafeteria in their 2013 national survey concluded that 36% reported the high cost of local foods was the primary barrier to using local foods, and 32% suggested that food safety was the primary barrier (McKenna and Suchorolski, 2013). Although this research concluded that the high cost was the primary barrier to using local foods, currently Sodexo identifies food safety as their primary concern for partnering with the UBC Farm (Kimmitt, 2012a; McKenna and Suchorolski, 2013).

In order for the UBC Farm to become a compliant brand with GFS and Sodexo, the Farm is required to be government inspected by an EHO and its processing facilities to meet HACCP guidelines to ensure preproduction liability (Kimmitt, 2012a). The UBC Farm is currently working under BC GAP (British Columbia Good Agricultural Practice), and their production area is audited by an EHO annually at the cost of \$500 per year (Personal Communication: Lambie, March 19, 2014).

Although the UBC Farm is currently working under BC GAP, the UBC Farm growing areas are not currently being audited by an EHO, and BC GAP guidelines are not currently recognized as HACCP (Personal Communication: Lambie, March 19, 2014). However, Canada GAP is a HACCP based program, and the UBC Farm is beginning the process to improve documentation and process standards to bridge the gaps to meet Canada GAP (Personal Communication: Lambie, March 19, 2014).

Starting in May 2014, the UBC Farm will commence a documentation phase, documenting Canada GAP guidelines for one year (Personal Communication: Lambie,

March 19, 2014). After the documentation phase, May 2015 is the earliest date that the UBC Farm would be able to supply Sodexo with their local produce (Personal Communication: Lambie, March 19, 2014). Once the UBC Farm meets Canada GAP standards and after the documentation phase and EHO audit, the UBC Farm will have the ability to become a supplier of Sodexo through GFS.

***Recommendation:***

*It is recommended that in May 2014, the UBC Farm commence a year-long documentation of growing practices to meet Canada GAP standards, be audited by an EHO in May 2015 and attain Canada GAP certification by May 2015.*

**4. Development of a ‘Learning Lab’ involving all stakeholders**

A ‘Learning Lab’ involving all stakeholders including the UBC Farm, Sodexo, Vancouver Coastal Health, BISS (Business Initiatives and Support Services), Farm to School Vancouver and GFS will be created to ensure a commitment to process is maintained. Information sessions and meetings on various topics will be formulated, and the Learning lab will commence in the Fall of 2014 at the earliest, which is dependent on external funding, mainly from the Vancouver City grant, as well as a the J.W. McConnell Family Foundation grant, being applied to in April 2014 (Personal Communication: Lambie, 2014; Mansfield, March 12, 2014, 2014).

The J.W. McConnell Family Foundation (2014) grant for the Institutional Food Program will provide funding for staffing of a facilitator, meeting costs, marketing expenses, and the cost of performing the pilot project at the UBC Hospital, with Sodexo (The J.W. McConnell Family Foundation, 2014; Mansfield, 2014).

***Recommendation:***

*It is recommended that, dependent on funding through the Vancouver City and the J.W. McConnell Family Foundation grants, the UBC Food Systems Project Coordinator aid the UBC Farm in developing a Learning Lab, staffed with a facilitator to gain commitment from all stakeholders to develop the farm to health care pilot project by September 2014.*

**5. UBC Farm to create and present produce supply proposal for Sodexo's approval**

In order for the UBC Farm to officially become a supplier of Sodexo, after becoming a compliant supplier through GFS, the UBC Farm will need to write a proposal to Sodexo (Personal Communication: Moubarak, February 19, 2014). In this proposal, the UBC Farm will outline steps they have taken to ensure food safety and pre-production liability, as well as address concerns surrounding product cost, supply guarantee, seasonality of supply, food quality, menu accommodation and products offered, among others. A set of questions to address is in **Appendix G**. They will also provide a compelling argument for the benefits this partnership and why Sodexo at the UBC Hospital should choose to incorporate local food from the UBC Farm in their patient food services.

The final step in building a successful partnership between the UBC Farm and Sodexo at the UBC Hospital is for Sodexo to approve the submitted proposal. Negotiations of terms should be expected, and the UBC Farm should be willing to adjust their plan of action. The earliest selling date is May 2015, and the UBC Farm and Sodexo should make an agreement prior to this date to prevent delay of progress.

***Recommendation:***

*It is recommended that the Land and Food System 450 Farm to Health Care project group in September 2014 conduct research on additional barriers over and above food safety concerns already addressed, to enable the UBC Farm to build a successful proposal to Sodexo.*

**Systemic Change of the Food System**

After a partnership is built between Sodexo and the UBC Farm, support will be needed to help more farmers to become compliant through GFS. This will enable local food to be supplied to hospitals and other institutions from multiple sources. To further enable the ease of supply of local food to institutions, the creation of a ‘Food Hub’ or collective food coalition is warranted. A coalition of farmers will decrease costs of product, and will ensure supply is sold at a fair price. Creating a ‘Food Hub’ will also allow for local foods to be supplied to other facilities as well as the broad Vancouver Coastal Health and Providence Health Care authorities. A SMART recommendation is not available for this recommendation as the time requirement cannot be known to complete such a massive overhaul of the food system, and a coalition of farmers involves many external stakeholders.

To further solidify the partnership between food services and local food suppliers as well as guarantee local purchasing, policies from VCH and Providence Health Care (PHC) around incorporation of local foods in patient food services should be created. It would be beneficial to incorporate local food use in contracts between health authorities and food service providers. Gavin Wilson, VCHA director of public affairs stated that the

health authority does not require access to Sodexo's purchasing information, as this requirement is not part of the contract (Kimmitt, 2012b). If the health authority were to exert their power on the issue of local food use in patient food services, food service providers such as Sodexo would be forced to accommodate these evolutionary requirements.

### **Scenario Evaluation**

As we are only in year one of a three-year pilot program, we were given specific guidelines regarding what activities we would pursue with this project this semester. These included conducting our literature review and interviewing stakeholders. These activities are more analytical, which were logical and effective to come up with the findings for the first year of this project.

However, future LFS 450 classes will pursue different activities and use different methods throughout their endeavors with this project over the next two years. Specific endeavors that we recommend future LFS classes to partake in include incorporating a 'farm stand' within the hospital. The farm stand would provide fruits and vegetables from UBC Farm along with marketing information to the patients, families of the patients, and employees on what Farm-to-healthcare entails. We also recommend for next year's LFS 450 team to conduct further research on additional barriers including an in depth cost analysis and other barriers described in **Appendix G**. This can be used to ensure a very comprehensive and detailed analysis regarding the benefits, challenges and strategies regarding how to effectively establish this partnership between the UBC Farm and hospital.



In regards to recommendations for the LFS 450 teaching team, we feel that it would be more effective if future LFS 450 students are also provided with a stakeholder to contact from Sodexo, as we did experience challenges in retrieving information. This made it difficult at times to formulate realistic recommendations in establishing an effective partnership for both sides without having a substantial amount of input from Sodexo's perspective. Although the UBC Farm can still be the primary stakeholder for this project, it would be effective and beneficial to have a secondary contact from Sodexo.

As well, when the Learning Lab is formed, we recommend a representative from the current LFS 450 group be present in meetings to encourage sharing of information and more efficient dissemination of information as we felt we were always getting information second hand, and consolidation of others' primary data.

## **Reflections**

### ***Hayley Pipher***

I enjoyed being part of this experiential learning project, as I feel that students can learn so much through first-hand encounters. I feel that this learning method is often underutilized in formal educational settings; thus, I was pleased to have the opportunity to take part in an experiential learning experience with this course. It was also interesting to discover the dynamics of what it takes to establish an effective farm-to-health care partnership, including assessing the potential benefits and challenges of forming such a partnership. However, since we are only in stage one of a three-year pilot project, I was disappointed that we did not get the opportunity to become more involved and immersed in the community throughout this project.

***Ashley Sousa***

Overall, the farm-to-healthcare project for me has been a very enjoyable experience. The project allowed me to utilize my past LFS courses and gave me a feeling of closure to the three part LFS series. Working with the stakeholders from both UBC farm and Sodexo was a pleasure and allowed us to get a good grasp on what both sides are looking to achieve for the future. This project would not have gone as well as it did if it was not for the members of my group. It was great to have group members from different backgrounds (Dietetics, FNH, Business, etc.) as it allowed us to approach the project from different angles. However, one shortcoming we encountered was being at only stage one of a three stage process and not being able to really take this project off the ground. I am very interested in seeing what future LFS groups achieve in the Farm to Health care project and am very happy to have been a part of it.

***Erika Picardo***

Creating the primary foundation for this multi-tiered project was quite enjoyable. Overall, I feel this project was successful for our group as we were able to effectively communicate with our stakeholder, analyze key academic publications for our literature review, and approached this project with understanding both the UBC and Sodexo perspectives. In addition, I felt taking part in an experiential-based learning project not only added value to what I was learning, but also enriched the experience. One aspect I was disappointed with was the inability to have a fully hands-on experience, as this project was heavily literature-dense. I feel our group would have benefited from a visit to the UBC Farm and detailed meetings with Sodexo in order to fully grasp their outcomes/expectations from this project.

***Samantha Saddler***

I found our Farm-to-Health care project a great liaison between my aspirations of my future career in the healthcare setting and contributing to patient care during my current schooling. Learning to implement a Farm-to-Healthcare program that is challenging yet also beneficial to both local food producers and healthcare institutions. Since we were the primary stage of a long-term program, we did not experience the immediate effects of our work this term which was disappointing, but I think we have helped contribute to a substantial and credible project that I can see being a successful program once it is in place.

***Nic Paoella***

Having had no previous experience in Land and Food Systems courses, I was concerned that it would be difficult to provide meaningful assistance to our community partner as part of the Farm-to-Healthcare team. To my surprise, this project had a lot to do with organizational structures and logistics which is an area I was familiar with. I thoroughly enjoyed the meetings with our community partner and saw that their intentions although ambitious can lead to a really positive change in the UBC food system.

***Amy Wong***

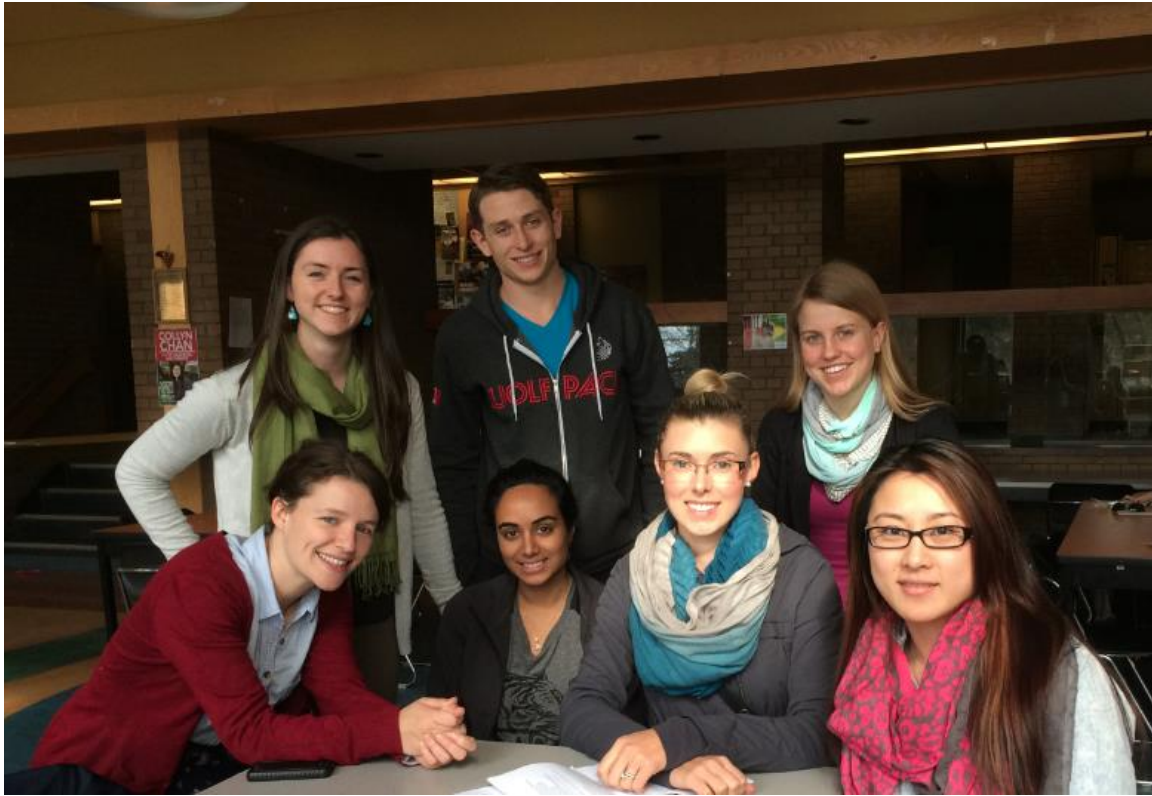
Being able to participate in such a meaningful project with a hardworking and diligent team was truly a great experience. As a Nutritional Sciences major, my role is to promote and educate the public on healthy eating, and my passion is to focus on medical nutrition therapy. By working on this project, I opened my eyes to the many players that influence this field, such as logistics and management, cost analysis, pre-harvest production, and buyers and suppliers to name a few. Through the process of completing

this project I came to understand that teamwork and cooperation of all players from all disciplinary fields is critical in the success of medicinal nutritional therapy and even maintaining good health.

***Erin Sine***

Being a part of the Farm to Health Care Team has been an inspirational journey of change. It is one of my primary goals in my career to connect people with food, and through my career choice as a dietitian, like Cristel Moubarak, I will be heavily focused on patients and advocating for their health. This project will be very influential in directing the next steps of my career, and I will not forget Shannon's eagerness to build a partnership with a healthcare institution to provide vulnerable patients with healthy and local food. However, this project did not come without challenges such as the lack of information sharing by Sodexo, despite my current employment status as a Food Service Supervisor at one of their contracted sites. Gaining transparency from a corporate giant is difficult and daunting, and it is important to have resilience, perseverance and determination to keep pushing for positive change.

## Media Release



Through an initiative established by the UBC Farm, our group aspired to reach beyond food service outlets to create a farm-to-healthcare partnership on campus. Our goal was to understand the challenges and benefits of developing a partnership between the UBC Farm and Sodexo at the UBC Hospital, then to identify recommendations to foster a successful relationship. A dual approach was used for our research project to gain greater insight into the operations and mindsets behind both Sodexo and the UBC Farm. Through this approach, we developed an informed understanding of the various outlooks and desires entering into this partnership.

Upon completion of our research, we were able to provide a framework that will eventually foster the integration of local foods from the UBC Farm into the UBC healthcare system. As we are currently in the pilot year of a three-year project, our

literature review and initial findings will provide the foundation that will promote a long-term partnership. We valued the opportunity to affirm a positive contribution to the community while empowering ourselves as field professionals throughout these endeavors.

## Appendices

### Appendix A: Interview Questions for Shannon Lambie: February 5, 2014

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paolella, Ashley Sousa,

Samantha Saddler

Group 6

April 4, 2014

LFS 450, UBC Food System Project

The following is a set of interview questions our team gathered for our initial meeting with Shannon Lambie that address group concerns and scope of the project. The interview took place in Agora Cafe in the MacMillan Building at UBC.

- What are your objectives?
  - Are you interested in meeting with Food Services at the Hospital or have you already? Or somewhere smaller scale? Have you thought about becoming a partner with Tapestry?
  - Does the UBC Farm compost using the in vessel or other means?
  - Do you use the compost to grow food?
  - What scope are you hoping for? 1 day event, weekly meal, monthly meal, cafeteria only, full scale pt meals? 1-2 products available to the kitchen?
  - UBC Food Services has partnered with other chains on campus such as Starbucks and Whitespot to increase sustainability. What type of partnership do you expect to have with the hospital?
  - Do you wish us to compile literature on local procurement in health care or provide more tangible outcomes such as an event?

## **Appendix B: Interview Questions for Cristel Moubarak: February 19, 2014**

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paoletta, Ashley Sousa,

Samantha Saddler

Group 6

April 4, 2014

LFS 450, UBC Food System Project

The following is a set of interview questions our team gathered for our meeting with Cristel Moubarak and Shannon Lambie at the UBC Hospital cafeteria. Our conversation stemmed from these simple questions, and conversation expanded on the overarching perspective of Sodexo on attaining a new supplier.

- What is your role in this project?
- What research have you done already with Sodexo?
- What steps do you recommend us to take to further our project?



## **Appendix C: Interview Questions for Brent Mansfield March 19, 2014**

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paolella, Ashley Sousa,

Samantha Saddler

Group 6

April 4, 2014

LFS 450, UBC Food System Project

The following is a set of interview questions our team gathered for our meeting with Brent Mansfield, UBCFSP Coordinator, at the MacMillan Building at UBC, room 260.

This meeting was to gather updated information on the project and solidify our understanding of our role as a group.

- Is our group making a significant difference in this project? It seems as though it is moving forward without our aid.
- What is the broad goal of our group in this project?
- Have there been any developments in the project since we met with Cristel Moubarak in February?

## Appendix D: Sodexo's Better Tomorrow Plan

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paoletta, Ashley Sousa,

Samantha Saddler

Group 6

April 4, 2014

LFS 450, UBC Food System Project

The Better Tomorrow Plan is a visual representation of Sodexo's guidelines for organizational planning and development, and is based on key concepts stakeholders and shareholders have identified as important (Sodexo, 2014).



## Appendix E: Roadmap to Build Partnership Between the UBC Farm and Sodexo

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paolella, Ashley Sousa,

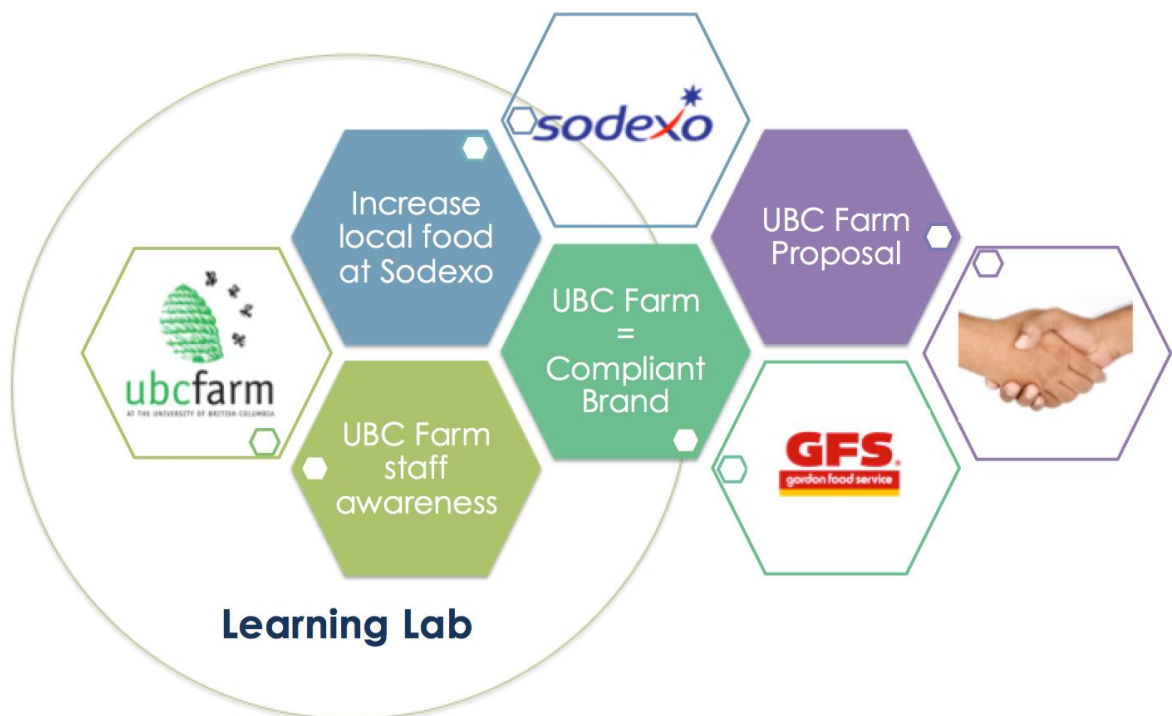
Samantha Saddler

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April 4, 2014

LFS 450, UBC Food System Project

A number of steps are necessary to build a successful partnership between the UBC Farm and Sodexo, and this diagram outlines the immediate and broad steps that need to take place before the UBC Farm can provide produce to Sodexo and the UBC Hospital. A Word document of this infographic is also available to develop through Erin Sine.



## **Appendix F: Key Benefits and Barriers of Local Food Incorporation**

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paolella, Ashley Sousa,

Samantha Saddler

Group 6

April 4, 2014

LFS 450, UBC Food System Project

Below is a table outlining key benefits and barriers to incorporating local food into health care food services from the National Farm to Cafeteria Survey. The results are based on 59 participating health care facilities across Canada, and include many of the barriers addressed by Sodexo in our primary research. (Atkinson et al, 2013)

## BENEFITS

18. What were the most significant benefits experienced, if any, as a result of your healthcare facility's activities around local food? (Please select up to 3 from the list below)

Response	%
Improved quality, freshness, taste, or nutrition of healthcare facility food	32%
New or strengthened partnerships between health-care facilities, farmers, and others	20%
Enhanced public perception of the healthcare facility	20%
Stimulation of the local economy and increased markets for farmers or other local food producers	19%
Increased environmental sustainability	12%
Improved health of patients or staff	10%
Improved patient and staff knowledge and skills about local food	8%
Improved staff morale	7%

24% reported "not sure", 7% reported "no benefits" (Total n= 59)

Other benefits reported:

- Empowerment of residents
- Farm community and residents enjoy having the farm fresh products
- Increased patient satisfaction
- Increased sense of community

## BARRIERS

19. What were the most significant barriers experienced, if any, to offering local food at your healthcare facility? (Please select up to 3 from the list below)

Response	%
High cost of local food	36%
Food safety/liability concerns	32%
Existing contracts limit or prevent using local food	29%
Difficulties with sourcing local food	27%
Difficulties with delivery of local food	20%
Lack of policies that address local food	17%
Limited demand for local food	12%
Limited staffing and volunteers	8%
Limited support from healthcare facility senior management	8%
Limited facilities and equipment	5%
Poor quality of local food	2%
Increased effort, skills and time required to prepare local food	2%

12% reported "not sure", 5% reported "no barriers" (Total n=59)

Other barriers reported:

- Contracts with suppliers
- Financial resources
- Food inspection requirements
- Food services are large scale - unable to meet demands of operation
- Health authority policy
- High labor cost due to preparation
- Minister of Health states which facilities food needs to be purchased from
- Need source that is always available in x quantities
- Time it takes to implement changes

## **Appendix G: Other Barriers to Building a Successful Partnership between the UBC**

### **Farm and Sodexo**

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paolella, Ashley Sousa,

Samantha Saddler

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- Seasonality of supply
  - What will be available in each season?
- Guarantee of supply
  - Will there be enough food?
  - How can you guarantee that there will be any food?
  - Do you offer substitutions?
  - Do you currently have a policy for other customers?
- Food quality
  - UBC Farm produce is less durable than commercially grown and treated produce
  - Chance of farm produce going bad before using it
  - Ensure kitchen inventory is adequate and excess is not wasted
  - Order produce 2x per week
- Menu accommodation
  - 14 day of 28 day cycle year round

- Increased time and effort needed to prepare and cook fresh vegetables – may lead to staff resistant to change
- Would Sodexo need to create new menu items to accommodate UBC Farm produce or would it be able to fit into current menus?
- Ability to modify texture of vegetable- need for patients with swallowing difficulties (dysphagia) or dentition problems.
  - Ie. Can it be dental soft, chopped, minced, pureed?

## **Appendix H: Examples of Local Initiatives**

Erin Sine, Hayley Pipher, Erika Picardo, Amy Wong, Nic Paolella, Ashley Sousa,

Samantha Saddler

Group 6

April 4, 2014

LFS 450, UBC Food System Project

Three examples of local programs that utilize local food in a healthcare environment are described below.

### **Therapeutic Garden Club and Able Community Kitchen**

The grounds of the George Pearson Centre, a healthcare facility of Vancouver Coastal Health, which focuses on the long-term care of residents living with disabilities, is the central location of an organization called Farmers on 57th, that runs multiple community programs. These include a Community Supported Agriculture (CSA) for over 30 families from their market garden, Growing Eden, a program that teaches families living on low income how to grow their own food and how to cook with it, a “Grow Your Own Food” course for community members and a seasonal weekly therapeutic garden club for George Pearson Centre residents (Personal Communication: Sine, March 31, 2014). The market garden also provides produce to a monthly Able Community Kitchen for people living with disabilities in the community, located in George Pearson Centre and run by an organization called CARMA (Personal Communication: Sine, March 31, 2014). Through the therapeutic garden club, a partnership has developed between the



Vancouver Coastal Health Recreation Department staff at George Pearson Centre, the British Columbia Coalition of People with Disabilities (BCCPD) and Farmers on 57th, in an effort to create a healing and dignifying environment for residents, where volunteers help residents grow their own food and flowers from seed. In 2012, with a realization that not all residents were physically able to enjoy their harvest due to dysphagia, the passionate co-founders Aimee Taylor and Jennifer Rashleigh as well as additional volunteer support, implemented a juicing program that was coined 'Let's get Juiced' (Personal Communication: Sine, March 31, 2014). Through this program, residents harvest their produce, and a juice or smoothie is made on site with supplemental fruit and organic yogurt. As there are many residents who are unable to consume thin fluids due to medical swallowing difficulties, the juice is individualized, and altered to accommodate dysphagia diets, allergies and medical nutrition therapy contraindications under supervision by the Recreation staff (Personal Communication: Sine, March 31, 2014). This program provides residents who are able to orally consume beverages the means to enjoy their harvest, and provides nutrition and psychosocial benefits to participating residents that are supplemental to the current institutionalized food service program (Personal Communication: Sine, March 31, 2014).

In the Able Community Kitchen through the BCCPD's CARMA, residents of George Pearson Centre and community members with and without disabilities gather together on a monthly basis to create and share a meal (Personal Communication: Sine, March 31, 2014). During the growing season, both the market garden and the therapeutic garden provide fresh produce to the community kitchen, and residents and community members living with disabilities have the opportunity to participate in the planning,

preparation and cooking of a nourishing meal. This is a program that recognizes that fresh local food holds tremendous value, and supports people living with disabilities in harnessing the benefits of the produce grown through the Farmers on 57th organization ((Personal Communication: Sine, March 31, 2014).

The Vancouver Coastal Health grounds that Farmers on 57th currently resides will be redeveloped under the Pearson Dogwood Redevelopment project. Farmers on 57th founder, Jennifer Rashleigh has been involved with the community public consultation, and is driven to ensure there will be a sustainable food system incorporated into the plans of the innovative community, including the continuation of Farmers on 57th (Personal Communication: Sine, March 31, 2014).

### **BC Children’s Hospital Pocket Market**

The BC Children’s Hospital annual Pocket Market was implemented into the hospital facility to provide both patients and staff members the opportunity to purchase locally-grown food and produce. The goal of this event is to promote a sustainable food system within the local community as well as encourage consumers to select seasonal produce directly from local farmers (Personal Communication: Picardo, April 1, 2014). In addition, workshops related to health and wellness are conducted during these events to provide further knowledge and resources to customers. Some of these workshops include: “benefits of eating locally grown food” and “how to create food composting bins” (Personal Communication: Picardo, April 1, 2014).

## **Acknowledgements**

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*Shannon Lambie, Communications Coordinator, UBC Farm*

*Brent Mansfield, UBC Food System Project Coordinator*

*Cristel Moubarak, UBC Dietetics Major Intern*

*Tiffany Yeung, RD, District Manager at Sodexo*

*Jennifer Rashleigh, Farmers on 57th Co-founder*

*Aimee Taylor, PhD, Farmers on 57th Co-founder*

## Bibliography

- Atkinson, R.A., McKenna, M.L., Bays, J., Lahey, D., Wylie-Toal, B., and Vrins, M. (2013). Canadian school, campuses, and health care facilities speak up. *Farm to Cafeteria Canada*. Retrieved from <http://www.farmtocafeteriacanada.ca/wp-content/uploads/2013/10/Report-Local-Foods-Canadian-schools-campus-and-health-care-facilities-speak-up-2013.pdf>
- Barlett, P. F. (2011). Campus sustainable food projects: Critique and engagement. *American Anthropologist*, 113, 101-115.
- Bostrom M. (2005). Digesting public opinion: a meta-analysis of attitudes toward food, health and farms. *Frameworks Institute*, 1, 1-34.
- Brandt, K., and Molgaard, J. P. (2001). Organic agriculture: Does it enhance or reduce the nutritional value of plant foods? *Journal of Science of Food and Agriculture*, 81, 924-931.
- Buck, M. (2011). A guide to developing a sustainable food purchasing policy. *Food Alliance*. Retrieved from: <http://www.sustainablefoodpolicy.org>
- Canada Gap (2014). *Overview of Canada GAP*. Retrieved from <http://www.canadagap.ca/canadagap-program/overview/>
- Harris, D., Lott, M., Lakins, V., Bowden, B., and Kimmons, J. (2012). Farm to institution: Creating access to healthy local and regional foods. *American Society of Nutrition*, 3, 343-349.
- Institute for Agriculture and Trade Policy (2013). *Online resources for hospitals interested in connecting to sustainable farmers, producers*. Retrieved from: [http://www.iatp.org/files/2013\\_12\\_11\\_Toolkit07\\_OnlineResourcesHospitals.pdf](http://www.iatp.org/files/2013_12_11_Toolkit07_OnlineResourcesHospitals.pdf)
- Kimmet, C. (2012a, October 19). Furtive steps to better hospital dining. *Tyee Solutions Society*. Retrieved from <http://thetyee.ca/News/2012/10/19/Better-Hospital-Dining/>
- Kimmet, C. (2012b, October 18). Why can't we know what's in grandma's hospital meal? *Tyee Solutions Society*. Retrieved from <http://thetyee.ca/News/2012/10/18/Hospital-Meals/>
- Kulick M. (2005). Healthy food, healthy hospitals, healthy communities: Stories of health care leaders bringing fresher, healthier food choices to their patients, staff and communities. *The Institute for Agriculture and Trade Policy*. Retrieved from: [http://noharm.org/lib/downloads/food/Healthy\\_Food\\_Hosp\\_Comm.pdf](http://noharm.org/lib/downloads/food/Healthy_Food_Hosp_Comm.pdf)

- McCullum, C., Desjardins, E., Kraak V. I., Ladipo P., and Costello, H. (2005). Evidence-based strategies to build community food security. *Journal of American Dietetic Association*, 105, 278-83.
- McKenna, M., and Suchorolski. (2013). Farm to cafeteria: Results from the national farm to cafeteria survey. *DigIn! Webinar Series*. Retrieved from <http://www.flickr.com/photos/sustainontario/sets/72157632630277873/>
- NOFA Vermont (2012). *Scaling up Vermont's Local Food Production, Distribution, and Marketing*. Retrieved from: <http://nofavt.org/market-organic-food/farm-institution/report>
- Ng, S., Bednar, C. L., and Longley, C. (2010). Challenges, benefits, and strategies of implementing a farm-to-cafeteria program in college and university foodservice operations. *Journal of foodservice Management & Education*, 4, 22-27.
- Onozaka Y, McFadden, G. (2010). Local food consumers: how motivations and perceptions translate to buying behavior. *Choices*, 25, 1-6.
- Schneider, R. G., Schneider, K. R., and Douglas, L. A. (2011). Food Safety on the Farm – An Overview of Good Agricultural Practices. *Institute of Food and Agricultural Sciences Extension*, 6, 1-3.
- Smith, B. J., Kaiser, H. M., and Gomez, M. I. (2013). Identifying factors influencing a hospital's decision to adopt a farm-to-hospital program. *Agricultural and Resource Economics*, 1, 1-23.
- Sodexo Canada. (2014). *Sustainable Development*. Retrieved from <http://ca.sodexo.com/caen/corporate-responsibility/corporate-responsibility-home.aspx>
- The J.W. McConnell Family Foundation. (2014). *Institutional food program*. Retrieved from <http://www.mcconnellfoundation.ca/en/programs/sustainable-foodsystems/institutional-food-program>