

**“Grown in Your Backyard”: Linking Bernoulli’s Bagels to the UBC Farm in an Effort to  
Localize the Food System**

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Farm in an Effort to Localize the Food  
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## **1 Abstract**

The University of British Columbia (UBC) campus offers a diverse variety of food options through the various food outlets overseen by the Alma Mater Society (AMS) and UBC food services. Much of the food provided by campus retailers has traveled a great distance, which is associated with negative environmental and social impacts. This project aims to improve the sustainability of the UBC food system. In order to accomplish this task, an increase in local and seasonal foods needs to be incorporated into campus menus.

As a group working on scenario three, our goal was to incorporate UBC Farm produce into UBC food service outlets, specifically the menu items at Bernoulli's Bagels. Our group also investigated methods of marketing these new options to the public through both educational and promotional materials. Based on a literature review, interviews with stakeholders and informed opinions we concluded that incorporating produce from the UBC Farm into existing items (i.e. cream cheese) and marketing those as niche products would accomplish our goals. Our niche is providing quality products with extreme value, which are novel because they are so locally sourced. The use of a UBC Farm label coupled with educational material and promotional events hosted in partnership with key groups will generate broad-based support for our initiative.

## **2 Introduction**

Globalization in the 20<sup>th</sup> and 21<sup>st</sup> centuries has largely been characterized by a widening global marketplace and export-oriented industrialization. As a result, there has been a significant shift away from traditional subsistence farming lifestyles towards cash-crop oriented agriculture largely designed for export. This trend can be seen to negatively

impact food system sustainability globally and is a development requiring urgent attention. In 2005, an estimated \$2.4 billion in food products were exported from British Columbia alone, while the total Farm and food imports were estimated to be roughly \$3.3 billion (BCMAL, 2006). This dependence on external distant resources closely resembles the purchasing habits of a typical local business or family, and is a telling example of the lack of sustainability apparent in the Canadian and global food system.

Agriculture has played a significant role in the development of the UBC campus, with the first Farm being established on campus in the early 1900s (UBC Farm, n.d.). This Farm encompassed its present day location, as well as northern and main-campus areas. To accommodate increasing student enrollment, agricultural lands were shifted to mid-campus in the 1950s, where they remained until the mid-1970s when development again forced a move to the southern end of campus (UBC Farm, n.d.).

At present the UBC Farm is a twenty-four hectare area which serves teaching and research as well as community Farming purposes. This Farm is valuable not only from a research perspective but is also an example of working Farmland within the city of Vancouver (Quayle, Masselink, & Brunetti, 2000). The goal of the UBC Farm is the retention and re-creation of both Farm and forest lands within the campus of the University of British Columbia, and its development into “an internationally significant center for sustainable agriculture, forestry and food systems” (UBC, n.d.).

The continued existence of the UBC Farm has been under debate for some time (UBC Farm, n.d.) and the continual growth of student population within the university is accompanied by parallel demands for space. Further, these concerns are compounded by the current UBC budget deficit. Twenty-two of the Farm’s twenty-four hectares are

currently protected from development by a future academic/reserve status until 2012 (UBC Farm, n.d. and Quayle et al., 2000). After this time development could begin if the site is deemed no longer necessary for academic use (UBC Farm, n.d.). Considering the relevant implications for food security, there are a number of reasons why we should work to prevent the demise of the UBC Farm, and a number of ways which this can be achieved. Quayle et al. (2000) emphasized the need for the Farm to demonstrate cost-recovery and strong student and community involvement. If the academic and financial sustainability of the Farm is not established before the end of this protection period, the Farm will likely be forced to succumb to commercial development pressures. For this reason, establishing a partnership between Bernoulli's Bagels (BB) and the UBC Farm will help incorporate the Farm as an integral part of the campus as well as integrate a higher degree of locality into the UBC food system, thereby showing it's worth.

### **3 Problem Definition**

The University of British Columbia Food Systems Project (UBCFSP) was developed in 2001 with the goal of achieving a more sustainable food system on campus (Richer, 2006). This project is collaborative, aiming to assess the sustainability of the UBC food system and can be viewed as a model to be applied to the larger global food system. In past years, students have examined the weaknesses in our food system due to the increased separation of people and their food sources. This year, our task was to increase local and seasonal food into the campus food system through the incorporation of Farm produce into menu items at Bernoulli's Bagels.

As a result of globalization of the food system, products are traveling ever greater distances and requiring larger amounts of energy (Lang & Heasman, 2004). Consumers

are increasingly disconnected from their food and developing nations are being exploited (Lieblein, Francis, & Torjusen, 2001; Halweil, 2002). Furthermore, internationally sourced foods can be seen to have negative effects on social sustainability as local cuisine is often displaced along with local crop varieties and agricultural practices (Halweil, 2002). Locally produced food is more environmentally sustainable due to the decreased distance traveled and associated lower fossil fuel costs. Local food also allows for a higher degree of contact between producers and consumers through such practices as Farmer's markets (Halweil, 2002; Lang & Heasman, 2004). This is particularly relevant given the projected expansion of the UBC community.

Our specific task for scenario three involved incorporating produce from the Farm into menu items at BB. The factors of importance which govern the sourcing of UBC food include volume, quality, seasonality, and price as well as the production limitations of the UBC Farm. Another component of our scenario was to develop accompanying promotional and educational materials for the products being incorporated into the menu at BB.

#### **4 Vision Statement and Value Assumptions**

The ways in which we interpret the meaning of sustainability are dependent upon our underlying values. This applies to the UBC food system as well as our everyday lives. Our group members originate from a variety of backgrounds and cultures, thus bringing a multitude of different perspectives. We believe that the diversity in our group allowed for a more holistic approach to the issues associated with this project, increasing the value of our vision and recommendations. Our desire to increase the sustainability of the UBC food system is founded on a weak anthropocentric paradigm. This value system

is defined by the placement of a higher value on the well-being of humankind, while considering that our continued survival is dependent on the maintenance of a healthy ecosystem (O'Neill, 1997). Apart from our group's vision it was also important to consider the philosophy of BB. Although concerned with profits, BB maintains a strong commitment to "fresh wholesome, quality ingredients." They are concerned with sustainability, practicing composting, recycling, and attempting to source locally whenever possible, as well as offering incentives for the use of reusable containers.

Seven "guiding principles" were developed by the UBCFSP partners with a vision of a sustainable campus food system in mind. Overall our group agreed that these seven principles are an excellent framework for our collective vision of a more sustainable campus food system. Re-localization of the UBC food system allows for many benefits, including a re-connection between producer and consumer, increased awareness of the advantages of supporting local agriculture, and a greater general sense of community (Halweil, 2002). Benefits of local food include: increased freshness and associated nutrition, a decrease in fossil fuel use with the associated environmental implications, and supporting the local economy, with its associated social benefits (Halweil, 2002). All of these benefits are in line with the seven guiding principles laid out for this food systems project.

## **5 Methodology**

Upon receiving our task, we reviewed previous reports relating to our scenario to gain an overall understanding of what had been accomplished to date. Group 13's paper from UBCFSP 2006 provided a model for implementing local food into UBC campus food service outlets. This gave us insight on successful strategies used and challenges



faced when addressing a similar scenario at a different location. Group three from UBCFSP 2006 developed a seasonal menu with recipes for BB, however they neglected to contact BB directly and did not test their recipes on customers. From our knowledge of community based action research, we worked to build relationships with all stakeholders to gain support for our project. With the "Look, Think, Act" steps in mind, we sought out the BB menu along with the UBC Farm produce availability list to see what menu items and ingredients we had to work with. In order to further understand the workings of BB, we interviewed the manager and asked a list of questions regarding popularity of items, production processes and her expectations towards her partnership to the project. The results of the interview directed us to the AMS Food and Beverage manager in charge of purchasing and procurement. With this information, we turned to Sprouts for an alternative option for UBC Farm produce distribution.

To determine consumer demand, we reviewed the SEED'S report, "Homegrown," and proceeded to conduct an informal survey to BB customers. We discussed the possibility of substituting UBC Farm produce for preexisting ingredients or whether to create an entirely new UBC Farm item for BB. With the information we gathered, our group determined that the most appropriate approach would be creating flavoured cream cheese incorporating UBC Farm produce. We developed and prepared three recipes for flavoured cream cheese using seven ingredients from our list of UBC Farm produce, specifically ones that had the potential for growth (A. Frye, personal communication, March 14, 2007). We call these Berry-licious, Garlic and Herb Medley and Squashed. Recipes can be found in Appendix 4.

The following day, we prepared the bagels with our three cream cheese options and sampled them outside of BB. During the taste testing we questioned participants on their opinions and willingness to buy the cream cheese. During the taste testing we spoke with the AMS Vice President of Administration who supported our project and was willing to promote it to the senior administrator.

The next phase of our project focused on marketing. We contacted Aron Bjornson, the marketing manager of Capers to inquire about how to effectively market our product. We also reviewed other campus initiatives such as Sustainable SFU, which inspired the development of our “Fresh Sheet” (See Appendix 3). Other specific tools for marketing that we developed include: a UBC Farm logo sticker<sup>1</sup> and a poster of UBC Farm's location in relation to BB. The sticker was modeled after the UBC Farm logo but incorporates BB and the slogan, "Grown in your backyard," and "Eat fresh, eat local, eat Bernoulli's" (See Appendix 1). The Local Food Directory poster draws from the familiar format of shopping mall directories and includes the location of both BB and the UBC Farm, as well as a comparison of the distance food travels from the Farm versus a typical provider (See Appendix 2). Lastly, we determined the quantity, cost, and availability of the produce used to develop our cream cheese. To formulate the recipes, we determined proportions needed for the standard size of cream cheese used by BB (See Appendix 4). Using the prices provided by representatives of the UBC Farm, we determined the respective costs of preparing one batch of cream cheese (See Appendix 5). In addition we researched the availability and advanced notice needed by the Farm for planting and harvesting the required ingredients.

## **6 Findings**

Given the popularity of bagels and cream cheese we decided to develop flavoured cream cheese that incorporates UBC Farm produce. The manager expressed support for seasonal nature of this idea. We determined that desirability exists, but more work is needed in terms of feasibility. For instance, our consultation with the AMS food and beverage purchaser revealed that the substitution of UBC Farm eggs (an option we considered) would increase their food costs by approximately \$18,000.

Another option was to use Sprouts as a distributor of UBC Farm produce. This seemed like a valid option since Sprouts already receives shipments of produce weekly throughout the fall for sale and orders could easily be centralized as requested by the UBC Farm. We discovered however, that Sprouts receives minimal produce from the Farm as they are committed to other suppliers. Discussions with Mark and Amy from the Farm revealed their interest in expanding direct sales to campus outlets. However they are faced with numerous challenges including limited and unpredictable supply, competitive pricing and being unable to meet present demands. Mark did however indicate that selling herbs to the AMS would "fill a niche that had yet to be filled" as well as create demand for a less purchased product (M. Bomford, personal communication, March 14, 2007). The Farm is also very proactive about increasing connections with UBC campus versus other more profitable ventures, recognizing the potential to increase social value through campus-Farm relationships.

During our taste-test, we surveyed approximately 30 participants and determined desirability for our flavoured cream cheese. The results showed 85%, 100%, and 90% willingness to buy our Berry-licious, Garlic and Herb Medley and Squashed cream

cheese, respectively (See Appendix 6). In addition, to determine the willingness to buy our product, we collected comments regarding the taste and areas for improvement. A study conducted by students from the Sauder School of Business as part of the SEEDS<sup>2</sup> project found that 71 per cent of UBC students interviewed supported the idea of incorporating more locally-produced food into campus food outlets (Aikins et al. 2004). The challenge is overcoming barriers such as price-sensitivity and a lack of appreciation for the multiple kinds of value that local food provides (Aikins et al. 2004). Some of the strategies outlined by Aikins et al. (2004) include launching an educational-marketing campaign to increase awareness about local food and in doing so affect consumer behaviour; as well as cross-subsidizing menu prices.

Our interview with Aron Bjornson allowed us to gauge the potential effectiveness of these suggestions. When asked about whether he believed the Sauder students' approach would be effective, he provided the following insights: when it comes to marketing food on the basis of increased awareness, there exist four "gateways" for successfully reaching your customer. These include concern for your children, allergies, illness and aging. Generally speaking, most undergraduate students do not fit into any of these categories. According to Bjornson (2007) an effective alternative would be to market on the basis of "taste", a sense of novelty (hence "Grown in Your Backyard") and extreme value. The importance of marketing the "extreme value" of local food reinforces his opinion that cross-subsidizing the cost of the food is counter-productive. The local food movement is trying to teach people that local food is better and so deserves priority where food purchase decisions are made. To paraphrase Bjornson (2007) as he cited the case of Starbucks: people do not complain about paying extra for their Starbucks coffee-

they pay more because they believe they are getting "more", even if it is just coffee.

Bjornson provided a good "second opinion" for how to approach marketing local food at UBC. His advice, along with findings provided by Aikins et al. (2007) and our own investigation, justify our choice of marketing strategies.

## **7 Discussion**

### **7.1 Validation for our project**

There are many positive and highly beneficial outcomes that will be achieved if our project is taken through to the final stage of implementation. These outcomes include social, economic, and environmental benefits that we feel are significant in validating our project.

#### ***Social Benefits***

One of the main goals of our project is to increase public awareness (especially on the UBC campus) about the benefits of eating locally. Though currently focused on promoting local food available at BB, our long-term goal is an overall increase in local food consumption from a variety of retailers, both campus and city-wide. As part of raising awareness, it is important to communicate the superior flavour, freshness and hence superior nutritional value, of locally produced food as these benefits serve as the rationale for gaining greater support. The result would be a higher demand for BB's products, as well as a greater social consciousness surrounding food in general. From that consciousness also stems stronger ties to the people producing that food and an enhanced sense of community, as each food item brings with it faces and a story. In this case the story is about UBC Farm. Our marketing campaign therefore aims to promote products sold at BB, while more importantly encouraging greater on-campus interest in the UBC

Farm as an important food and educational resource. Spreading the word about the Farm would help further valuable campus connections such as the pursuit of directed studies projects or incorporating the Farm into class curriculums. Ultimately, we hope to raise an awareness and appreciation of the Farm such that the university can realize its value and be enthusiastic about preserving it.

### ***Economic Benefits***

The proposed partnership between the UBC Farm and BB presents an opportunity for enhanced economic viability for both parties. Firstly, the direct-Bernoulli's-to-Farm purchasing operation means that there are no "extra fees" associated with middle-men, and therefore no need to raise prices on either end to compensate. In this situation, the Farm gets a fair price for their goods which is likely higher than they would receive from a middleman, while Bernoulli's likely pays a lower price and receives a much fresher product. Further, the proximity of the Farm to Bernoulli's eliminates expensive shipping and storage costs. Direct purchasing between BB and the UBC Farm also enhances the local (UBC) economy as a result of the multiplier effect. When money is spent in a community, the effects of that spending are multiplied as "each purchase you make triggers purchases by others" (Shuman, 2006, p.41). Furthermore, "[t]he more times a dollar circulates without leaving that area, the more income, wealth, and jobs it generates" (Shuman, 2006, p.41). A local food system necessarily facilitates this kind of economic vitality by keeping spending within the local economy. A partnership between a local food producer and a local food provider can therefore benefit the local community in ways that sourcing from an external or foreign company would not allow.

### ***Environmental Benefits***

It is the environmental benefits to be gained from this partnership however, that are one of the principal driving forces behind this project. Primarily, decreased “food miles” associated with the geographic proximity of the UBC Farm and BB would increase the sustainability of the UBC food system. Decreasing fossil fuel use and greenhouse gas emissions reduces climate change impacts, which so intensely and adversely affect our global food system. It has become clear that unmitigated climate change has and will continue to have devastating effects on the Earth’s ecosystem, including losses in biodiversity and the inability for the Earth to support the current population. Further, through supporting UBC Farm produce, we also know that we are supporting sustainable growing methods which do not involve health and ecosystem-damaging chemical fertilizers and pesticides, and less fossil-fuel intensive means of production.

### **7.2 Challenges**

At present there is an excess in demand for UBC Farm produce. The Saturday Markets, running from early June till mid October are quite successful and are the main source of income for the Farm (A. Frye, personal communication, March 14, 2007). Consequently the UBC Farm may not be able to handle the increased demand resulting from incorporating Farm produce into AMS Food Service outlets. The Farm backed out of a contract which would have introduced their produce into the menu of Pie R<sup>2</sup> because they were not confident they could consistently supply their produce (G. Wright, personal communication, March 14, 2007). Unforeseen events led to a decrease in production, and an event like this could happen once again. The Farm is said to be increasing

production by 15 percent (M. Bomford, personal communication, March 14, 2007), however this may not be enough to cover the increase demand needs of a vendor like BB.

Labour is also an issue at the Farm, and a further increase in demand would exasperate the shortage. In response to these challenges, our group proposes several ideas to make the Farm-AMS relationship more viable. The idea of community supported agriculture was one suggestion for helping the Farm with supply problems. This system works through pre-paying for orders of produce, so that the Farm would have income to use during the growing season, when it is most needed. The Farm would then deliver the produce as it becomes available. The AMS however, is not interested with this kind of situation and their regulations do not allow for prepaying for products (N. Gregory, personal communication, March 15, 2007). Our group also suggested preserving Farm produce so that BB could utilize Farm produce throughout the year, potentially solving the seasonality problem of the Farm. To address the Farm's labour shortage, a possible solution would be to create an opportunity during which AGSC 100 students could apply their community service volunteer hours. Additional benefits would be the early exposure and increased awareness of the UBC Farm and an appreciation of local produce for first year students. This would foster a sense of community as well as understanding the process from "Farm to fork". The next option was to approach Sprouts regarding combining orders from UBC Farm as well as storage availability. We discovered however, that this would create additional work for both Sprouts and the AMS food distributors. If Sprouts and BB were to build a partnership, this would create another intermediate in the food distribution system leading to further barriers for both parties. Given that UBC Farm cannot compete with quantity, selection or prices of wholesalers



currently supplying produce to the AMS food outlets, further investigation into the delivery and distribution of UBC Farm, as well as other locally-sourced produce, is needed.

We took the recommendation of Group 3 from UBCFSP 2006 to perform a taste test to determine the salability of our product and proceeded to test our three cream cheese recipes with BB customers. Group 3 was only able to test their recipes amongst themselves, a relatively small sample size, whereas Group 13 tested their pizzas with customers of Pie R<sup>2</sup> with favourable results. Our results revealed that there currently is a market for our cream cheese creations. Customer acceptance is an essential step in the introduction of a new product into a food service operation to help ensure the success and long-term viability of the product.

## **8 Recommendations**

To address many of the supply-side issues discussed, we recommend slowly incorporating UBC Farm produce into AMS food outlets, beginning with ingredients for flavoured cream cheese. Our recipes would use produce whose demand is yet to be exhausted, particularly herbs, thus reducing pressure on the Farm to increase its production capacity. Distribution remains to be solved, however, and we recommend that appropriate solutions be researched by future AGSC 450 groups. As for demand-side issues, the following is a "Roll-Out Strategy" for marketing our product idea and local food in general to students at UBC, after which we provide some suggestions for future marketing endeavors.

## **8.1 Roll-Out Strategy to Market Local Food**

In order to encourage students to prioritize buying locally-produced food, we propose a marketing strategy that 1) communicates the high quality of the food itself and 2) illustrates the multiple benefits associated with buying locally-produced food. UBC Farm produce is closer to BB, making it not only fresher but also less exposed to potentially harmful compounds, such as carbon emissions, having spent less time in transit. Given that delivery distance is greatly reduced, UBC Farm produce spends more time maturing in the field, enhancing the taste and flavour. This information must be made explicit to BB's current and potential customers. Hosting a promotional event in partnership with certain groups at UBC, such as the Student Wellness Centre and the Campus Sustainability Office, during the first 2 weeks of school, provides an ideal opportunity. We recommend having a table outside of BB, where a nutritionist is available to answer questions about the health benefits of local food, along with representatives from other partner groups to address issues of sustainability. Adding fun elements such as a mascot, for example "Bernoulli the Bagel", who would distribute UBC Farm cream cheese and bagel samples and/or attract passers-by to spin the "Local Food Trivia" wheel (another suggested fun element to include). The latter would engage students in an entertaining way, while relating the local food and its benefits and raising awareness about the fact that BB offers food fresh from "[our] backyard".

Other recommended tools to promote UBC Farm-sourced food available at BB, include an informational flyer that we call the "Fresh Sheet", large posters that emphasize the proximity and thus, the novelty of food sourced from the UBC Farm; a label to identify items with UBC Farm-sourced ingredients ("Grown in Your Backyard") and

stickers of this label that can be distributed. The Fresh Sheet would provide clear and succinctly presented information about the benefits of local food, for example enhanced nutrition and taste, as well as contributing to community vitality and a stronger local economy. Meanwhile the posters would tell more about the source itself: UBC Farm, and illustrate the direct and close connection between what the customer has just bought from BB and the field in which their food's ingredients have been grown. In essence, these are meant to be eye-catching, yet educational and have the ability to reel the reader into learning more about local food. The label and sticker would offer further support by identifying locally-sourced ingredients, as well as promoting BB's provision of and support for local food. The table below (**Figure 1**) summarizes how these elements would contribute to achieving the goals and objectives of the Roll-Out Strategy as a whole. Sample materials are also available in the Appendices section of this report.

Summary of goals, objectives and recommended actions of Roll-Out Strategy to market local food sold by Bernoulli's Bagels:		
Goals	Objectives	Actions
Obtain support from various UBC groups to market local food initiatives.	§ Form partnerships with key groups (UBC Farm, AMS Food and Beverage Services, Student Wellness Centre, Sustainability Office, Faculty of Land and Food Systems)	<ul style="list-style-type: none"> <li>§ Meet with potential partners</li> <li>§ Negotiate terms of partnership through central task force</li> <li>§ Organize for promo event to take place outside of Bernoulli's during first 2 weeks of school</li> </ul>
Promote the multiple benefits of buying local food, particularly amongst students	§ Use educational materials and promotional events to increase awareness about the benefits of local food	<ul style="list-style-type: none"> <li>§ Create flyer (see sample "Fresh Sheet" in Appendices section) that includes benefits of local food- place at point-of-purchase location, in residences, other high traffic areas such as SUB bathroom stalls, as well as create web version</li> <li>§ Host promotional event outside Bernoulli's during first 2 weeks of school</li> <li>§ Create sticker of "Grown in Your Backyard" label to hand out at promotional events in general (See sample in Appendices section)- would include website that takes viewer to web version of "Fresh Sheet"</li> </ul>
Promote the novelty of buying food sourced from the UBC Farm, particularly amongst students	§ Increase student awareness of the source of their local food (UBC Farm)	<ul style="list-style-type: none"> <li>§ Create poster that tells which foods that can be bought are sourced from the UBC Farm</li> <li>§ Include information about avg. travel distance from UBC Farm vs. "normal" sources</li> <li>§ Place in key locations such as near Bernoulli's, in Residences, etc.</li> <li>§ Put "Grown in Your Own Backyard" label next to Bernoulli's menu items with UBC Farm ingredients</li> </ul>

**Figure 1. Roll-Out Strategy**

## **8.2 Future Recommendations for Marketing**

In addition to the suggestions made above, our group recommends:

1. Extending the scope of partnerships to include more groups, such as Imagine UBC, the UBC Bookstore, or Responsible Consumption Week organizers;
2. Producing inserts that would be sent out to students with any Land and Food Systems Faculty-related mail, which would briefly inform of the benefits of local food and where it can be purchased at UBC;
3. Adding the "Grown in Your Backyard" logo to the Imagine FirstWeek clipboards and/or Responsible Consumption Week reusable mugs (the latter of which would also briefly inform of the benefits of local food and where it can be purchased at UBC);
4. Creating a page to be included in the AMS agenda that also tells about the benefits of local food and where it can be purchased and-
5. Hosting a promotional event in conjunction with FarmAde, where representatives from the UBC Farm would be in the SUB the day of, or prior to FarmAde, to tell students about the use of their produce at AMS food outlets, such as Bernoulli's Bagels; more information about the benefits of local food, and information about UBC Farm itself.

## **8.3. Implementation Strategy**

The strength of our report lies in our findings and recommendations pertaining to increasing demand for our cream cheese products. We do have some suggestions for making our idea a reality, however. To begin with, BB and UBC Farm would agree to the terms of their partnership. This includes price of goods provided by the UBC Farm, in

addition to time, place and means of delivery. A draft contract was designed by directed studies student, Jessica Fuller, and serves as a good template for initiating a formal agreement. The table below (**Figure 2**) outlines when orders for different ingredients need to be placed and approximately how much of each will be required. It is important to note that this only a rough outline of steps to be undertaken and considerably more time is needed to ensure the feasibility of getting UBC Farm produce to BB and into UBC students' hands. We recommend that UBC Farm and BB begin meeting as soon as possible to discuss details of delivery and pricing, should they be interested in our product idea as the starting point for their partnership.

Information Overview for Placing Orders (See Appendix 5 for more details about costing)			
<b>Ingredients</b> (for each cream cheese)	<b>Amount</b> (per 1.5 kg of cream cheese)	<b>Cost</b> (\$)	<b>Place Order By:</b> (for Sept 2007 use, as per information provided by Gavin Wright from the UBC Farm)
Berry-licious			
Mixed berries	2.5 pint	3.00	Blackberries available in abundance, however not clear what ordering requirements are
Herb Medley			
Garlic cloves	0.12 lb	10.00	1 year advance notice required for ensured custom ordering; otherwise check for availability during August
Dill, fresh	0.09 lb	2.00	Late Spring 2007
Basil, fresh	0.07 lb	2.00	Late Spring 2007
Chives, fresh	0.08 lb	2.00	Info not provided
Squashed			
Butternut squash	3.3 lb	2.00	April 2007, follow up required during August.
Rosemary, fresh	0.4 lb	1.50	Anytime
Carrots	0.0084 kg	20.00	June 2007

**Figure 2. Ordering Overview**

## **9 Conclusion**

While it will be challenging to incorporate UBC Farm produce into BB's menu, it is still possible. Furthermore the many benefits described earlier make this a partnership worth pursuing. Our findings revealed that the largest barriers hindering implementation are lack of adequate supply of certain ingredients from the Farm, increased cost of produce, and lack of public knowledge of the benefits of local foods. To facilitate future large scale transitioning to a more local menu, we have developed a number of marketing tools that will help to raise consumer awareness of the benefits of local sourcing. Through the creation of partnerships we hope that these benefits will be widely promoted and the UBCFSP will gain even more support. Our recipes and marketing strategy provide a starting point for increasing the use of local food at UBC, as we strive to create a model for change both on campus as well as in larger food systems.

## References:

- British Columbia Ministry of Agriculture and Lands. (2006). *Fast Stats: Agriculture, Aquaculture and Food*. Retrieved April 6, 2007, from [http://www.agf.gov.bc.ca/stats/faststats/FastStats\\_2006.pdf](http://www.agf.gov.bc.ca/stats/faststats/FastStats_2006.pdf)
- Group 3. *UBC Food System Project V: Education, Awareness and Re-Localization of the UBC Food System*. AGSC 450 LFC III, Fall 2006. Retrieved January 30, 2007, from [http://www.webct.ubc.ca/SCRIPT/agsc\\_450/scripts/serve\\_home](http://www.webct.ubc.ca/SCRIPT/agsc_450/scripts/serve_home)
- Group 13. *UBC Food System Project V: Awareness and Re-Localization of the UBC Food System*. AGSC 450 LFC III, Fall 2006. Retrieved January 30, 2007, from [http://www.webct.ubc.ca/SCRIPT/agsc\\_450/scripts/serve\\_home](http://www.webct.ubc.ca/SCRIPT/agsc_450/scripts/serve_home)
- Halweil, B. (2002). *Homegrown: The Case for Local Food in a Global Market*. Worldwatch paper 163. Worldwatch Institute.
- Lang, T. & Heasman, M. (2004). *Food Wars: The Global Battle for Mouths, Minds and Markets*. London: Earthscan.
- Lieblein, B., Francis, C.H. & Torjusen, H. (2001). Future interconnections among ecological Farmers, processors, marketers, and consumers in Hedmark Country, Norway: Crating Shared Vision. *Human Ecology Review*, 8 (1), 60-70.
- O'Neill, O. (1997). Environmental Values, Anthropocentrism and Speciesism. *Environmental Values*, 6, 127-142.
- Quayle, M., Masselink, D., & Brunetti, A. (2000). *Re-inventing the UBC Farm: Urban Agriculture and Forestry on the Point Grey Campus*. Retrieved April 6, 2007, from <http://www.landfood.ubc.ca/ubcFarm/documents/reinvent.pdf>
- Richer, L. (2006). *The UBC Food System Project (UBCFSP): Summary Report 2006*. Retrieved January 30, 2007, from [http://www.webct.ubc.ca/SCRIPT/agsc\\_450/scripts/serve\\_home](http://www.webct.ubc.ca/SCRIPT/agsc_450/scripts/serve_home)
- Schuman, M. (2006). *The Small-Mart Revolution: How local businesses are beating the global competition*. San Francisco, Berrett-Koehler Publishers, Inc.
- UBC Farm. (n.d.). *The Centre for Sustainable Food Systems at UBC Farm*. Retrieved April 6, 2007, from <http://www.landfood.ubc.ca/ubcFarm/>



Appendices-

Appendix 1: Sample Logo



Appendix 2: Sample Poster



Distance food travels from UBC Farm to Bernoulli's Bagels: < 2 km

Distance food travels from a typical provider to Bernoulli's Bagels: > 1000 km

**Eat Fresh. Eat Local. Eat Bernoulli's.\***

\*In partnership with the UBC Farm.

## Appendix 3: “Fresh Sheet”



# FRESH SHEET FRESH SHEET

**Newsflash:** Bernoulli's Bagels uses ingredients fresh from UBC Farm!

At Bernoulli's Bagels, we have a strong commitment to **fresh**, wholesome, **quality ingredients**, friendly service, competitive pricing and **sustainability**.

This is why we have partnered with **UBC Farm** to incorporate fresh, local, and sustainable ingredients into our menu. Look for the “Grown In Your Backyard. UBC Farm” Logo on our menu to try these new items!



### Other Sustainability Initiatives at Bernoulli's Bagels

We compost much of our vegetable waste, recycle all of our waste paper and cardboard and try to source our products locally wherever possible. We understand the necessity of providing take-out containers, but please remember that we offer discount incentives when you bring your own mug or reusable containers or bowl.

We hope you enjoy your Bernoulli experience. We believe in our product and stand by our commitment to customer satisfaction. If you have any questions, comments or concerns, please feel free to contact us at

[bo@bernoullis.com](mailto:bo@bernoullis.com)

### Why Eat Local?

#### *It's good for You –*

food grown close to home gets to us faster, is fresher, tastes better, and generally has higher nutritional content.

#### *It's good for the Community–*

by purchasing food with ingredients from the UBC Farm, you are supporting YOUR local farmer and the UBC economy.

#### *It's good for the Environment –*

Your food travels less AND requires less energy for storage as a result.

## Appendix 4: Cream Cheese Recipes

### 1) Berry-licious Cream Cheese

Yield: ~2L

Prep time: 5 min

Portion Size: 2 Tbsp (30mL)

# of Servings: 67

Step #	Ingredients	Amount (g/mL)	Amount Other	Method
1	Philadelphia cream cheese	1.5kg	1.5L	
	Mixed berries, fresh or frozen	1kg	2lbs 6 cups	Thaw berries.
2				Combine ingredients together. Mix thoroughly.

### 2) Garlic and Herb Medley Cream Cheese

Yield: ~1.5L

Prep time: 15 min

Portion Size: 2 Tbsp (30mL)

# of Servings: 50

Step #	Ingredients	Amount (g/mL)	Amount Other	Method
	Philadelphia cream cheese	1.5kg	1.5L	
1	Garlic cloves	54g	0.12lbs 6 Tbsp	Mince garlic.
2	Dill, fresh	40g	0.09lbs 12Tbsp	Chop.
3	Basil, fresh	32g	0.07lbs 12 Tbsp	Chop.
4	Chives, fresh	36g	0.08lbs 12 Tbsp	Chop.
5				Combine ingredients together. Mix thoroughly.

### 3) Squashed Cream Cheese

Yield: ~2L

Prep time: 15 min

Portion Size: 2 Tbsp (30mL)

Cook time: 30 min

# of Servings: 67

Step #	Ingredients	Amount (g/mL)	Amount Other	Method
	Philadelphia cream cheese	1.5kg	1.5L	
1	Butternut squash	1.5kg	3.3lbs 10 cups	Bake whole squash on a tray for 30 minutes, or until soft. Cool. Cut in half and core innards.
2	Carrots	183g	0.4lbs 1.5 cups	Peel. Steam until soft. Chop.
3	Rosemary, fresh	8.4g	0.02lbs 4 Tbsp	Chop.
4				Combine ingredients together. Mix thoroughly.

## Appendix 5: Cream Cheese Cost Analysis

### 1) Berry-licious Cream Cheese

Ingredient	A.P. Units	Cost A.P. (\$)	Amount used	Cost (\$)
Cream cheese	1.5kg	14.23**	1.5 kg	14.23
Mixed berries	1 pint	3.00*	2.5 pints	7.50

**Total Raw Food Cost:** \$ 21.73

**Cost per serving (2 Tbsp):** \$ 0.33

### 2) Garlic and Herb Medley Cream Cheese

Ingredient	A.P. Units	Cost A.P. (\$)	Amount used	Cost (\$)
Cream cheese	1.5kg	14.23**	1.5 kg	14.23
Garlic cloves	/lb	10.00*	0.12lb	1.20
Dill, fresh	/bag	2.00*	0.09lb	0.18
Basil, fresh	/bag	2.00*	0.07lb	0.14
Chives, fresh	/bag	2.00*	0.08lb	0.16

**Total Raw Food Cost:** \$ 15.91

**Cost per serving (2 Tbsp):** \$ 0.32

### 3) Squashed Cream Cheese

Ingredient	A.P. Units	Cost A.P. (\$)	Amount used	Cost (\$)
Cream cheese	1.5kg	14.23**	1.5 kg	14.23
Butternut squash	/lb	2.00*	3.3lb	6.60
Carrots	/lb	1.50*	0.4lb	0.60
Rosemary, fresh	/bag	2.00*	0.02lb	
	/kg	20.00	0.0084kg	0.17

**Total Raw Food Cost:** \$ 21.60

**Cost per serving (2 Tbsp):** \$ 0.32

\*Prices quoted from Amy Frye, Marketing Coordinator at UBC Farm

\*\* Prices quoted from N. Gregory, AMS Purchaser

## Appendix 6: Taste Test Results

### Results for Cream Cheese Taste Testing Question: Would you buy this cream cheese?



1 Permission was obtained from Mark Bomford for use of the UBC Farm logo.

2 Social, Ecological, Economic Development Studies