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Developing a Sustainable Food Outlet for UBC Food Services in the New Beaty Biodiversity Centre

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AGSC 450

UBC Food System Project 2008

SCENARIO 6

Developing a Sustainable Food Outlet for UBC Food Services in the New Beaty Biodiversity Centre



Submitted by Group 11

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Abstract

Adhering to UBC's focus on sustainability, UBC Food Services is developing a model sustainable food outlet in the Beaty Biodiversity Centre, expected to open in 2009-2010. Our task was to develop a business proposal for the new Beaty Café, while accommodating space and equipment limitations. Relevant information was gathered from website and literature reviews as well as through community consultations, focus groups and interviews with external sustainable food outlets and suppliers. Based on our findings, we developed a sample menu that focuses on local, seasonal and organic ingredients and follows Canada's Food Guide recommendations. We have developed a series of promotional and educational tools including posters, brochures, a community bulletin board, grand opening events and stamp cards to promote the Beaty Café and educate consumers on its sustainable initiatives. We would like to encourage consumers to bring their own container, but will offer sustainable serving ware options. Our business proposal includes sustainable lighting and interior finishings. In addition, we have developed recommendations for the AGSC 450 teaching team, future AGSC 450 students, and UBC Food Services.

Introduction

UBC intends to be a leader in sustainability amongst North American universities. It was the first Canadian university to adopt a sustainable development policy (1997) and the first to create a campus sustainability office (1998) (Rojas, Richer, & Wagner, 2007). In 2001, the SEEDS (Social, Ecological, and Economic Development Studies) program, which was developed by the sustainability office, collaborated with the Faculty of Land and Food Systems (LFS) to create the UBC Food Systems Project (UBCFSP) (Rojas et al., 2007). Studying the UBC Food System presents an opportunity to understand globally relevant issues in the context of our local food system.

The UBCFSP is an integral part of the capstone AGSC 450 course. To date, over 1,000 students have participated in the UBCFSP and the project is currently in its seventh year (Rojas et al., 2007). The UBCFSP has nine key partners: AMS Food and Beverage Department, UBC Food Services (UBCFS), Sage Bistro, UBC Farm, Campus and Community Planning, UBC Waste Management, Sustainability Office, SEEDS and the LFS faculty (Rojas et al., 2007). The Sauder School of Business is the sole collaborator of the UBCFSP.

The UBCFSP employs radial team organization to conduct Community Based Action Research (CBAR). In this model, the hub is the support committee composed of the partners and collaborators of the UBCFSP (Rojas et al., 2007). The axle is administrative centre, including the principal and co-investigators. The hub and axle integrate the knowledge obtained by the satellite research groups, principally the AGSC 450 student groups (Rojas et al., 2007). This methodology was selected for its effective

co-ordination of multidisciplinary research projects and to allow for a holistic systems approach to research.

The principal goals of the UBCFSP are to conduct a UBC food system assessment and implement changes that will improve the sustainability of the UBC Food System.

UBCFSP envisions a sustainable food system to protect and enhance the diversity and quality of the ecosystem and to improve social equity (Rojas et al., 2007).

Description of Scenario 6

We are currently facing a food system crisis characterized by shrinking agricultural land bases, depleting water supplies, excessive food miles, epidemic obesity, diet-related diseases, and climate change due to how we produce, process, distribute, and dispose of food products (Richer, Rojas, & Project Partners, 2008). To solve this crisis, an increasing number of food manufacturers, retailers, and consumers are adopting more sustainable food system practices (Richer et al., 2008). Sustainability is defined as the state of using a resource without depleting or permanently damaging it (Merriam-Webster Online, 2008). In studying a sustainable food system, environmental, economic, and social sustainability must be considered (Rojas et al., 2007). A sustainable food system may adopt ecologically sustainable production of foods, provision of fair wages to growers, and ethical treatment of animals (Richer et al., 2008).

Similar to restaurants, more foodservice sectors at public institutions are incorporating sustainable practices into their operations. At UBC, for example, UBCFS has implemented sustainable initiatives including offering healthier food choices under the Think Food product line, the widespread adoption of fair-trade coffee, a larger selection of

locally-grown, seasonal produce, and discounts for brining your own mug (Richer et al., 2008).

UBCFS is extending their sustainable practices to the opening of a new, sustainable food outlet in the Beaty Biodiversity Centre in 2009-2010. The major challenge facing this project is limited space restricting storage areas and equipment selection. UBCFS has requested AGSC 450 groups to propose ways to overcome space restrictions but still offer a diverse menu. In addition, UBCFS is interested in knowing how to become a model food outlet that demonstrates sustainable water, energy, building, design, food, and waste practices (Richer et al., 2008). Our group's task is to help inform the development of this new food outlet as a model of a sustainable food operation on the UBC campus.

Group Reflections on Vision Statement and Value Assumptions

Our group shares a weak anthropocentric paradigm. Although we place importance on human interests, we recognize the importance of the environment in developing a successful model of sustainability. Through our discussions, we concluded that all of our core values are encompassed in the Seven Guiding Principles of the UBCFSP Vision Statement.

In developing a business plan for the Beaty Café, we have the unique opportunity to apply each of the guiding principles. We hope to offer a selection of locally grown and processed foods from producers in the Greater Vancouver Area. We would like to include as many socially and ecologically conscious producers as possible. All producers will receive fair pay for their products. We aim to reduce waste by encouraging consumers to bring their own containers and remaining waste will be recycled or composted through

UBC Waste Management. The menu will offer diverse, nutritious and seasonal options. At the Beaty Café, we intend to provide information to promote consumer awareness of cultivation, transportation, processing, and nutrition. We hope that the café will bring people together, enhance the UBC community, and provide a catalyst for discussion about sustainability.

Methodology

CBAR is our guiding research methodology. This method is intended to address a specific issue in a specific place or community. CBAR brings together all people who are affected by the issue to define the problem, develop action plans, and apply local knowledge to improve the current situation (Rojas et al., 2007). This method involves both action and research and can be described as a "continuous, iterative learning-action-evaluation and adaptation cycle" (Rojas et al., 2007).

The application of CBAR throughout our research can be identified from several interviews we had with UBCFS. The four groups working on Scenario 6 compiled questions to ask the primary contacts at UBCFS: Andrew Parr, the Director of UBC Food Services; Dorothy Yip, the General Manager of Retail Operation, Purchasing & Project Co-ordination; and Juliana Campbell, the Marketing Coordinator. Our group also interviewed Nick Gallant, the Outreach Coordinator for UBC Waste Management. We contacted several food suppliers and serving ware distributors to obtain product information and price quotes.

To gather community input, our group facilitated two focus groups. The objective of these focus groups was to gather information regarding menu items, effective marketing

strategies, and options for take-out containers. We decided to conduct focus groups, as opposed to using other methods of data collection such as surveys because focus groups provide two-way discussion between the researchers and the community.

We researched other sustainable food outlets in Greater Vancouver Area to gain inspiration for developing a business plan for the Beaty Café. We reviewed the Rocky Mountain Flatbread Co., Terra Breads, Aphrodite's Café, and Café Perugia.

Another method used in our research is literature review. We referred to the AGSC 450 reading package, peer-reviewed journal articles, recommended websites for Scenario 6, and other applicable web resources. We consulted websites and journal articles for definitions and descriptions of several terms, including sustainability, local food, organic food, food miles and green operations.

Findings

Review of Food Outlets

Among the four food outlets that we reviewed, the Rocky Mountain Flatbread Co. seemed to be the most outstanding; they apply the concept of sustainability across the board, from purchasing to waste management. The restaurant has engaged in several sustainable initiatives, outlined in Appendix A, including becoming a member of Green Table and adhering to their targets for energy and carbon reductions, participating in Y2Y Conservation Initiative, and following the Oceanwise Seafood Guidelines.

Terra Breads and Aphrodite's Café emphasize using local and organic ingredients.

Café Perugia and Aphrodite's Café also apply effective waste management. Aphrodite's

Café composts when possible and uses the compost on their farm. At Café Perugia, posters

on all walls encourage people to compost and the waste sorting station for compost, recyclable materials, and garbage is user-friendly. A detailed outline of our findings on these food outlets is found in Appendix B.

We appreciated several of the sustainable practices implemented by these food outlets, including offering a local, seasonal menu, and encouraging customers to bring their own containers and mugs and sort their waste into compost, recycling, and garbage. These ideas offered both a starting point and inspiration to develop a business plan for sustainable operation of the Beaty Café.

Websites

The following ideas for green operations were obtained from the website for the Green Table Network (2007): composting organic waste; recycling paper, plastic, glass, and metal as much as possible; using energy-efficient equipment and lighting; installing water-saving equipment and fixtures; selecting recycled, biodegradable, and non-toxic supplies; and buying local and organic foods.

The Get Local website (2008) emphasizes the importance of local food and explains how local food reduces the use of fossil fuels and thereby, reduces greenhouse gas emissions, which contain a variety of toxic chemicals that contribute to air pollution, acid rain, and global warming. Moreover, consumption of local foods has been shown to be more nutritious compared to foods that have been transported over long distances (Get Local, 2008).

Several options for sustainable serving ware have been found in the Green Guide, such as those made of potato starch, corn, or sugarcane fibre (Green Table Network,

2007). In addition, the Green Guide offered several energy-efficient lighting suggestions including using compact fluorescent and LED lights in place of incandescent bulbs (Green Table Network, 2007).

Community Consultation

Interviews

Andrew Parr and Dorothy Yip provided a layout of the Beaty Café and the proposed business hours, 7:30am-5:00pm on Mondays through Fridays. They informed us of the minimum daily gross revenue of \$800/day. In addition, the Beaty Café will be a deli-style café offering a variety of paninis, sandwiches, and salads made on-site using local, nutritious ingredients. There is no space for a dishwasher, a stove, or an oven; all food will be take-out. A panini grill and a microwave are two appliances that the space can accommodate. Parr and Yip are looking into options for biodegradable containers and serving ware. The main obstacles facing this project are the size of the café and the higher costs associated with sustainable interior finishing, food, and related supplies.

Juliana Campbell described the current UBCFS marketing strategy, which includes print advertisements, such as posters, pamphlets, and stickers, and promotion at campus events. She also noted that limitations to promotion of the Beaty Café will include location, limited signage, and a limited marketing budget. Campbell suggested promotion by free food samples.

Nick Gallant explained that the new composting program (2004) allows for everything composted on campus to be put back into the UBC landscape. The two main challenges of this program are capacity and contamination. Some educational tools used

by UBC Waste Management have been the One Less Cup campaign, the Green Discounts, stickers, and paper-free courses.

Focus Groups

Seven UBC undergraduate students, one student from Regent College, and one UBC staff member participated in our focus groups. Some participants were intrigued by the idea of a seasonal menu but suggested that popular menu items should be offered throughout the year. Other participants said they would support a local, seasonal menu because it would support local agriculture and reflect the seasonality of this region.

Overall, participants agreed that a seasonal menu would make the Beaty Café unique.

Some participants preferred made-to-order food outlets, although they recognized the inconvenience of the associated longer lineups. Others preferred set menus because they either do not usually want to make a decision, they are often in a rush, or generally enjoy novel combinations created by food outlets. A few participants suggested to combine a set-menu with made-to-order and offer a flexible menu.

The participants agreed that the current Green Discounts were not a big enough incentive to bring their own mug or container. Each focus group suggested the idea of having a stamp card that is redeemable for a free lunch once you bring your own container nine times to the Beaty Café. A few participants said they would prefer to support a dishwasher versus biodegradable containers. Participants felt that biodegradable containers still create waste through their production, distribution, and incorrect disposal; overall, they felt that these containers do not promote sustainability. Participants suggested alternatives to biodegradable containers include reusing ceramic serving ware,

selling Tupperware on-site, or allowing customers to keep their dishes in a locker at the café.

In order to promote the Beaty Café, participants suggested putting up posters, offering first-week discounts, giving away free samples, and setting up a promotional booth in the SUB one week before opening. Another idea was to feature a menu item each week during the first few months of operation. One participant suggested that the café offer 100-mile menu options. Most participants want information regarding sustainability to be available, including where the food comes from and where the waste goes. Ideas for displaying this information included pamphlets and posters in the café and in the washroom. Overall, participants felt that they would visit the café more frequently if the employees were UBC students.

UBC Policies

UBCFS is an independent organization and therefore it does not receive funding from the university. It is, thereby, integral that the food outlets operate with positive profit margins. Like UBCFS, "UBC seeks to become a centre for teaching and learning about the skills and actions needed to manage ourselves in a sustainable way" (The UBC Board of Governor, 2005, p. 1). For example, UBC works to reduce waste and conserve resources by developing means to minimize energy and material usage. It also supports educational programs such as the SEEDS program, while seeking to maintain long-term economic viability through effective and responsible management (The UBC Board of Governor, 2005). The primary guideline for approving commercial enterprises on campus, such as self-funded foodservice establishments, is the extent to which they reinforce the

objectives of the university, including sustainable development (The UBC Board of Governors, 1997; The UBC Board of Governors, 2005).

Discussion

Menu Items, Recipes and Nutrition

To make the Beaty Café as sustainable as possible, we propose to use foods that are local, seasonal, and organic when available. By using these foods, we aim to reduce greenhouse gas emissions, support the local community, and promote environmental health. In this project, we consider local food to be food produced in British Columbia. We consider seasonal to reflect the local seasonality of the food, as opposed to imported seasonal foods. According to Bentley & Barker (2005), food that is transported further consumes more fossil fuels, causing increases in greenhouse gas emissions and contributing to global warming. Most food is traded between countries with similar growing climates (Bentley & Barker, 2005); thus, consuming locally produced food supports and encourages more sustainable food procurement. Attention to the seasonality of local foods allows consumers to obtain as much food locally as possible and minimizes fossil fuel use.

For our purposes, we consider organic to be food that is produced in an environmentally sustainable and cyclical manner. Conventional agriculture methods use petroleum to produce and disperse synthetic fertilizer; on the contrary, synthetic fertilizers are eliminated in organic agriculture, which saves significant amounts of fossil fuel (Bentley & Barker, 2005). Organic agriculture regenerates the land preventing erosion and deterioration of soil quality (Pollan, 2006). Organic ingredients from an unfamiliar source

used at the Beaty Café should be certified. However, foods that are produced organically by a familiar, uncertified source, such as the UBC Farm, will not require certification.

Locally and seasonally produced food supports local farmers and the local economy. Organic foods support community by protecting the local land. In spite of countless benefits associated with these foods, their cost and availability are challenges to offering these options at the Beaty Café.

To make the food at the Beaty Café as nutritious as possible, we followed recommendations of the Canada's Food Guide (Health Canada, 2007) in designing a menu. We hope to offer abundant fruit and vegetables, whole grain products, and low-fat dairy and meat products. We wish to limit foods that do not belong to any of Canada's Food Guide groups, such as foods high in fat or sugar. Our sample menu (Appendix C) consists of paninis/sandwiches, salads, snacks, and beverages. Additional items that could be made off-site and transported to the Beaty Café include quiche, soups, and fresh baked goods. These items are not currently listed on the sample menu.

To test the nutritional viability of our sample menu, we created sample recipes for selected menu items (Appendix D) and performed a Nutritional Analysis (Appendix E) using Data Analysis Plus. According to the analysis, our sample recipes were low in saturated fat and sodium, were high in fiber, and provided plenty of fruit and vegetable servings, whole grains, and low-fat meat and dairy products.

In designing our menu, we researched sustainable sources for potential ingredients; we were successful in designing our menu incorporating these sustainable items. To better understand the local growing seasons, we obtained a copy of the UBC Farm Produce Pricing and Availability spreadsheet (Appendix F). This document shows when each

product is available for sale at the UBC Farm. Using information provided on the FarmFolk/CityFolk Society website (2008), we compiled a spreadsheet of seasonally available foods (Appendix G). We propose to obtain as much produce as possible from the UBC Farm. Additional produce can be supplied by Biovia. This company specializes in providing organic food from local sources when available and supplies imported organic food when necessary. The latter service is necessary in executing a consistent menu.

Due to aforementioned space limitations, the Beaty Café is limited to using luncheon meats in their paninis. However, luncheon meats typically contain nitrates and/or nitrites, which, according to some studies, are a strong risk-factor for gastric cancer (Palli, 2000). Fortunately, Organic World specializes in BC produced, organic, nitrate/nitrite-free luncheon meats. An Organic World representative supplied us with a list of deli meats that may work well at the café (Appendix H).

Local organic milk and other dairy products needed for our proposed menu are available from Avalon Dairy and Olympic Dairy. To support our proposed menu, we require products from both companies. Organic cheeses will also be available at Organic World in the near future. Terra Breads is our preferred provider for bread ingredients because they are a local company that makes a variety of bread appropriate for making paninis (Appendix B) from organic ingredients (See Appendix I for food supplier contact information).

Promotional and Educational Tools

To meet the Beaty Café objective of promoting local and sustainable food systems, we propose to educate the community about the importance of consuming local foods,

lowering carbon emissions, and reducing our ecological footprint, as well as the importance of seasonality and biodiversity in a local food system. The promotional and educational mediums we plan to employ include a combination of print advertisements, instore promotions, awareness stickers, and grand opening events.

We believe that one of the most effective ways of promoting the Beaty Café will be through campus-wide poster advertisements. This is a cost-effective way to inform the UBC community of the new café. We have developed five catchy promotional slogans (Appendix J) that represent the ideals of the sustainable food outlet. These slogans can be used on posters as well as on pamphlets, stickers, and other print material.

To educate customers of the Beaty Café about sustainability, the importance of local, seasonal food, and the ideas of ecological footprints, food miles, and carbon neutrality, we propose a combination of in-store posters and take-home pamphlets. In addition to in-store posters, we suggest creating a public sustainability bulletin board where community members can post flyers or event notices. Near the bulletin board, we envision a pamphlet rack for the brochures of the Beaty Café and other campus clubs, programs, and initiatives that resonate with the café's goals.

In addition to the UBCFS Green Discounts, we propose to implement a stamp card program exclusive to the Beaty Café. The stamp card would be redeemable for a free menu item once customers bring their own container or mug nine times to the Beaty Café. To encourage people to use their own mug or container, we plan to give away free stickers. Optional slogans we have developed for stickers include: "I bring my own mug" and "I bring my own container".

During the week of the grand opening of the Beaty Café, we propose a series of advertising events. We plan to offer free food samples of select menu items at specific times, throughout the day. To promote the Beaty Café to the students, staff, and faculty in the immediate vicinity, we plan to deliver in-class announcements and first-week flyers. To raise awareness to the general campus community, we plan to operate a promotional booth in the SUB.

Waste Management

UBC currently composts all food materials, including meat and dairy products, paper plates, and napkins at the In-Vessel Composting Facility (UBC Waste Management, 2008b). This facility allows for a controlled, accelerated composting process without leakage of odours or vectors. It contributes to environmental sustainability by decreasing the amount of materials sent to landfills, reducing harmful emissions emitted from UBC's landfill materials, and replacing fertilizers and imported top soil with compost (UBC Waste Management, 2008a). As part of UBCFS, the Beaty Café will participate in the organic waste disposal program.

Properly recycling cans, bottles, and tetra-paks in grey bins will further reduce waste sent to the landfill and contributes to resource conservation. To facilitate the composting procedure, the Beaty Café should have compost bins inside and outside the kitchen facility for workers and consumers, respectively.

The Beaty Café customers should be educated on appropriate waste disposal practices to enhance the effectiveness of the waste management program. Metal cutlery, glass bottles, and waste materials with waxy coating such as pizza boxes and milk cartons

cannot be mixed with composts in order to reduce the potential for hazards to composting workers. Proper waste management may be promoted to the general public through the use of promotional stickers and posters, advertisements in newsletters, participation at sustainability-oriented events, and interaction with the Beaty Café staff.

Serving ware

As there are no plans for a dishwasher at the Beaty Café, 100% of food will be served on disposable serving ware provided by the food outlet or reusable serving ware brought in by customers. Therefore, our emphasis is on finding the most sustainable disposable serving ware possible and finding effective ways to encourage customers to bring their own serving ware (presented in the Promotional and Educational Tools section).

According to Dorothy Yip, many compostable products, including napkins, coffee cups, and plastic containers for cold foods like salads are already in use at UBC. UBC is also currently using environmentally friendly cleaning chemicals on a trial basis. We recommend that these products be used in the new café. Yip emphasized that affordable and compostable versions of cutlery, soup bowls, soup bowl lids and coffee cup lids are products that they have not yet found.

We were able to find samples of each of the products Yip requested through a Vancouver distribution company. Cutlery, soup bowls, and matching lids are available from a San Francisco based company called Trellis Earth, which produces petro-chemical free corn-based plastic ware. Unfortunately, the products are mainly produced form corn grown in China and therefore are not guaranteed to be GMO-free (Trellis Earth, 2007) and

the products are manufactured in China, therefore they travel a significant distance to arrive in Vancouver. Cutlery and coffee cups with lids are available from Tater Ware.

The sample lids do not fit the cups well therefore it would be worth waiting for the improved edition they are currently working on to ensure an acceptable fit before sampling the lids in the UBC composter.

There are many barriers to finding suitable sustainable serving ware including cost, quality, the distance the products travel, the way the raw materials are produced, and whether the compost produced by the products is safe. Therefore, we recommend that the Beaty Café minimize the use of disposables by encouraging customers to bring their own containers, and by handing out disposables only as needed. For example, the cutlery should be kept behind the counter and handed out with meals that require it. Moreover, foods that are going to be consumed at the Beaty Café can be presented on reusable ceramic dishes or handed out with less packaging compared to those taken off-site.

Lighting and Interior Material

Building with sustainable construction materials and practices is gaining momentum and contributes to the UBCFSP vision of the Beaty Café as a model green operation. There are numerous aspects of sustainable lighting and interior finishing that deserve consideration.

Incandescent light (IL) bulbs are commonly used; however they are one of the most energy inefficient methods of lighting. Compact Fluorescent Light (CFL) bulbs are becoming more popular; they use 75 % less energy than IL bulbs and have up to ten times the longevity (EcoSmart, 2007). The purchase price of a CFL bulb is higher than an IL

bulb of the same luminous output; however, this initial price is easily recovered in energy savings and replacement costs (EcoSmart, 2007). Despite the advantages, CFL bulbs contain mercury, which creates complications with disposal procedures and may pose a health risk if broken (EcoSmart, 2007). Alternatively, the incorporation of mercury-free Light Emitted Diode (LED) lights can be employed at the Beaty Café. LED lights provide up to 100,000 hours of light compared to 8,000 hours and 1,000 hours for CFL and IL bulbs, respectively (WSE, 2004). LED bulbs are durable, generate little heat, and reduce the level of wasted light (WSE, 2004). We suggest the above energy efficient lighting options to be implemented in the Beaty Café.

Furniture in the Beaty Café should be certified by the Forest Stewardship Council (FSC), which ensures that products are derived and harvested from sustainably managed forests (FSC, 1996). Materials such as reclaimed stalks of the sorghum plant or recycled wood off-cuts available through Habitat for Humanity Restores could be utilized (EcoSmart, 2007). An option for floors, tables and countertops is Marmoleum, an all-natural material made from linseed oil, wood flour, rosins, and limestone (Simple Green Building Options, 2008). The material possesses natural anti-bacterial and anti-static properties, which prevent the reproduction of many microorganisms and eliminate the need to use hazardous cleaning chemicals, as dusting and damp mopping is sufficient (Farbo, 2008). Another option for countertops and cabinets is stainless steel; it is the top recycled material providing a high strength-to-weight ratio as well as termite and fire resistance (EcoSmart, 2007). Many of these options are available in Canada, which reduces the transportation distance (See Appendix K for Canadian supplier contact information).

Possibilities in Overcoming Spaces

There are two key issues of consideration in overcoming the problem of space limitation (Appendix L). The first issue is the type of foods to be served. The other is the limited storage space. We designed our sample menu to work within the confines of the kitchen and equipment. The Beaty Café will serve paninis made on a compact panini grill. By using luncheon meats, we eliminated the need for careful raw-meat handling. Paninis and sandwiches will be prepared daily and therefore, storage should not be an issue. In addition to the main menu, to-go snacks such as fresh in-season fruits, baked goods, granola, and yogurt can be prepared off-site and transported to the Beaty Café for sale. Another option to expand food preparation and service space is to have an outdoor kiosk or grill when weather permits.

We propose installing space-maximizing cupboards and shelves and using visually attractive ingredients as kitchen decorations. For example, braided dried garlic could be hung from the wall and colourful fresh fruits could be displayed in baskets on the countertop.

Conclusion

UBCFS's vision of a sustainable food outlet, the Beaty Café, can be achieved by incorporating local, nutritious, and seasonal menu despite the space limitations.

Partnerships with local and organic suppliers as well as on campus providers contribute to establishing the proposed menu. Participants in our focus group suggested and supported a stamp card for bringing your own container to the café. There is potential for this to be an effective means of encouraging customers to bring their own container. An on-campus

advertising campaign including brochures, posters, and stickers are possible ways to increase awareness of the Beaty Café and its sustainable initiatives. For customers unable to bring their own container, the Beaty Café should offer sustainable serving ware.

Options for sustainable, energy efficient lighting include CF and LED light bulbs.

Suggested sustainable interior finishings for the Beaty Café include Marmoleum flooring, stainless steel countertops and furniture made from reclaimed wood. We have included a sample menu plan and proposed options for sustainable serving ware. In investigating these issues and the issue of space limitation, with consideration of our following recommendations, the Beaty Café will be a successful green model for UBC and the greater community.

Recommendations:

We have devised the following recommendations.

AGSC 450 Teaching Team

Branching from Scenario 6: "Developing a Sustainable Food Outlet for UBCFS in the New Beaty Biodiversity Center" of AGSC 450 2007-08:

• Develop a scenario for designing and implementing large-scale recipes for menu items to be sold at the Beaty Café. This scenario should require students to complete a more comprehensive study of consumers' likes and dislikes for menu options. It should also include a more detailed description of nutritional value of menu items (e.g. explain the main nutrient values of specific recipes and its benefits to consumers). Students can research more about the feasibility of using local foods including the supplier aspect. With a scenario mainly based on menu

items, the timeline of the course would allow students to conduct a food sampling session. At the session, the investigating students could propose menu items to potential customers in order to determine the level of support, and obtain more input for the menu.

Develop a scenario addressing serving ware. From our research, this topic revealed to be a multi-factorial issue. The scenario should emphasize advantages and disadvantages of disposable and re-usable serving ware. The groups should take into consideration the available distributors and the distance supplies travel from their origin of production, to distribution centres, and finally to the place of their use and disposal. For disposable products, the groups should investigate the energy required to product the products, the products' abilities to withstand heat and prevent spillage, the efficacy of recycling and composting, and the serving ware's compatibility with disposal methods used at UBC waste management. Some biodegradable serving ware tested by the UBCFS failed to compost in a reasonable amount of time. In interviews with serving ware suppliers, it was implied that the compost created from biodegradable serving ware may not be safe. For re-usable products, the amount of water and type of chemicals involved in cleaning should be evaluated to determine the associated environmental implications. This proposed scenario can potentially develop into a business plan for the UBCFS, especially with UBCFS' current difficulties in providing a complete set of sustainable serving ware.

Future AGSC 450 Students

- Conduct promotions for focus groups and recruit participants near the beginning of the project to ensure an adequate turnout of participants (at least two weeks in advance of the focus group date). Also, use past projects and personal experience to develop an efficient and effective focus group. Furthermore, we recommend contacting project partners and other community members early in the term for interviews, since emails, phone calls, and/or setting up appointments may take longer than anticipated.
- Ensure effective communication and co-operation with members of other groups when attempting to share research material and/or assigning specific tasks (e.g. setting up interviews and conducting surveys). We recommend weekly updates with group contact persons, recording the specifics of the meetings and updating individual group findings on WebCT throughout the project.
- Research further into possibilities of overcoming space limitations of the Beaty
 Café. This year's students worked with a tentative floor plan.

UBC Food Services

- Partner up with the LFS Garden once it is operating in conjunction with the UBC
 Farm to purchase local, fresh foods for campus food outlets. This will help to
 support UBC Farm and LFS Garden operations.
- Use innovative and eye-catching names for menu items to attract consumers' attention. For example, "Nitobe Garden Salad" for a Japanese-style fresh salad.
- Create pie charts to inform the public about sustainable principles adopted by the Beaty Café.

- Advertise the benefits of eating at the Beaty Biodiversity Café in terms of environmental sustainability (e.g. prepared using local food ingredients), health, and nutrition through the use of posters, stickers, and pamphlets at various campus food outlets operated by UBCFS. If menu prices tend to be higher than those at other food outlets, explain why (e.g. the added expense of using biodegradable containers) in pamphlets as well.
- Offer stamp cards to consumers as an incentive to promote bring-your-own container and frequent dining at the Beaty Café. A consumer should receive a stamp every time they bring their own container or mug and be awarded a free menu item on bringing their container a 10th time.
- At the Beaty Café opening, promote in lecture theatres and rooms in buildings
 located close to the Beaty Biodiversity Centre and offer food samples near the café
 entrance.
- Hire students as part-time staff to provide opportunities of community building, to promote awareness of the Beaty Café among students, and to assist with their financing for education.
- Establish a community bulletin board at the Beaty Café where customers can view
 postings about events related to sustainability, information about healthy eating,
 and sustainable initiatives. Marmoleum material can be utilized to construct an
 eco-friendly bulletin board (Farbo, 2008).
- Incorporate a public sink into the Beaty Café dining area for washing containers.
 This will encourage customers to bring their own containers, as accessing cleaning facilities currently poses a barrier.

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Appendix A: Restaurant Review: Rocky Mountain Flatbread Co.

The Rocky Mountain Flatbread Co. is certified as **Carbon Positive Restaurant** (by Carbon Planet).

- 1. Green Table Initiative: intended for energy/carbon reduction.
- 2. Purchase renewable energy certificates: forcing local companies to use wind/solar energy.
- 3. Retrofitting Vancouver school so it saves tones of energy each year through Carbon Contribution Fund (carbon tax).

The following table lists the initiatives of the Rocky Mountain Flatbread Co.:

Green Table Projects	Supporting Local Farmers	Rocky Mountain Education Society
Completed: - Composting all food waste and packaging. - Introducing bio-degradable packaging: take home containers and bio-degradable cutlery from potatoes and straws from corn and recycled paper napkins. - Low flush toilets. - Buying sustainable seafood from Ocean Wise. - Using recycled woods in our décor. - Using firewood from waste wood. - Low volatile paints and varnishes. - Buying as much produce locally and organic. - New play area for kids (Van):	Supporting Local Farmers Some of the farms food is purchased from: Organic chicken from Sunworks Farm, Edmonton; Organic meat from Hoven Farm, Edmonton; Organic flour from Anita's Flour, Chilliwack, BC; canned organic tomatoes from Utopia, Ontario; produce in season from Okanagan. Reasons for Local/Organic: - No chemicals/antibiotic residues in food - Humane treatment of animals - Cleaner water and soil	- Crazy fast food cooking classes for kids. - Local heroes program: research and appoint people who have made a difference in the community - Zero waste program: students help turn waste from small businesses into value added products (experimentation) - Students at Lord Tennyson learned about ecological footprint & commitment to reduce GHG emissions & petitioned for recycling facilities at their school (Vancouver)
plastic free – natural play things thanks to Natural Pod		

- Recycled paper	
Still in the works:	
- Low energy lighting.	
- Solar energy.	
- Low water use taps: just awaiting equipment.	

Ocean Wise guideline	Fundraising	Y2Y Conservative Initiative
It is a conservation initiative from the Vancouver Aquarium. Restaurant buys ocean friendly seafood from sources recommended by Vancouver aquarium.	Support local schools and clubs through fundraising. The students get to keep \$3/every pizza they sell.	Rocky Mountains Flatbread Co. supports by dedicating the back of our frozen flatbread pizza boxes to raise awareness of our continental treasure and how we need to work together to protect it.

Appendix B: Restaurant review: Aphrodite's Café, Terra Breads and Café Perugia

Aphrodite's Café	Terra Breads (Kitsilano)	Café Perugia (UBC
(Kitsilano)		Campus)
 Obtain all the produce from Glen Valley Co op farm, which the owner is also apart of Incorporate the seasonality factors of locally & sustainably grown produce into their menu Try to compost whenever possible and bring back the compost to the Glen Valley farm No promotion, the restaurant gains its reputation by word of mouth, which seems to be working 	 Use 100% organic ingredients except for the sea salt, olive oil, and water Deliver 7 day/week and already deliver to Sage Bistro on UBC campus \$100 minimum order for wholesale pricing and free delivery Wholesale prices include: Levaine 20% w/w sourdough bread \$5.48/16 usable slices Multigrain \$6.53/16 slices Sourdough \$5.48/16 slices Whole Wheat \$5.63/16 slices Panini buns (white bread) \$1.20 each 	 Good waste management practices (proven from the visible waste sorting station of Compost, Recycle, & Garbage encouraging customers to do so Visible posters encouraging people to compost & an information poster about the UBC in-vessel composter describing how the compostable materials will be turned into soil for use in the UBC gardens around campus Use the sugarcane-bamboo fibre, biodegradable/compostable containers Huge windows → maximize natural lights (less energy use on providing lights) The napkins are made of 100% recycled materials and are of course compostable

Appendix C: Sample Menu

Local Seasonality code: Year around Sept/Oct Sept/Dec Anytime (except Sept/Oct)

Paninis/Sandwiches

Mediterranean Hummus, feta, cucumbers, tomatoes, lettuce, & onion on whole

wheat bread

Garden Fresh Cheddar cheese, spring mix, sliced shitake mushrooms, grated carrot

and beet, and bean/alfalfa/pea sprouts

Grilled apple Slices of apple, caramelized onion, spinach and brie cheese

<u>Italian</u> Fresh basil, tomato sauce, fresh tomatoes, lettuce, mozzarella cheese

Mexican Bean chili, sliced bell peppers, cheddar cheese

Winter paradise Cooked squash, beets, nitrite free sausage, white cheddar and

parmesan

<u>Fig Bliss</u> Fig jam, apple slices & brie cheese

<u>Apple cinnamon</u> Slices of apple on multigrain bread with a sprinkle of cinnamon

Salads

Spinach Orange
Asian Dream

Spinach, orange wedges and black walnuts with balsamic vinegar Kale tofu and toasted sesame seed salad with sesame dressing

Sprout Salad Pea shoot and garbonzo bean sprout salad

Root Salad Grated beet and carrot with sultanas and rice-wine vinegar

Garden Salad Garden greens with edible flowers and fresh herbs (Oct only) and a

light raspberry vinegarette

To-go snacks

Washed Fruit

Fruit Salad

Veggie & Hummus Tray

Fruit & Nut Bread with Butter

Fresh Fruit, Nut and Granola Cup (Fruit, Granola, Yogurt, Milk/Soymilk & Nuts

Beverages

Coffee

Tea

Happy Planet juices

Smoothies Milk or soy milk, yogurt, ground flax seeds, fruit & other delights

TRY: Apple, cherry & lime

Mixed BC berries

Mixed BC nuts with cardamom, cinnamon & chocolate

Espresso, hazelnut, cinnamon & chocolate

Appendix D: Sample Recipes

Mediterranean Panini

Whole wheat bread 2 slices
Hummus 1/4 c
Crumbled feta cheese 1.5 oz
Cucumber 1/4 c
Tomato 1/4 c
Red onion 1/8 c
Romaine lettuce 1/4 c

Spread one side of each slice of bread with half of the hummus. Layer vegetables and crumbled cheese on one slice of bread. Close the sandwich and grill until lightly toasted.

Spinach, orange and black walnut salad

Orange 1 small
Spinach (washed and dried) 1.5 c
Dried black walnuts 1/4 c
Balsamic vinegar 1 Tbsp

Slice the peel off the orange and slice it into sections that cross its natural sections to yield wedges that are not "individually wrapped" and are easy to eat. Tear spinach into salad-size pieces if needed.

Mix orange wedges, spinach, half of the walnuts and balsamic vinegar in a large bowl. Place in serving container and top with remaining walnuts.

Veggie and hummus tray

Carrot (Washed, pealed and sliced into sticks) 1
Celery (Washed and sliced into sticks) 1 stalk

Broccoli (Washed) 2 small sprigs Cauliflower (Washed) 2 small sprigs

Hummus ½ c

Arrange veggies on tray around hummus.

Apple, cherry, lime smoothy

Flax Seed (ground)	1 Tbsp
Ice	½ C
1% Milk	250 mL
Balkan-style Yogurt	85 g
Apple (cored)	1/2
Cherries (pitted)	8
Lime (peeled)	1/4

Blend all ingredients until smooth.

Appendix E: Sample Nutritional Analysis for Four Menu Items

4	3	2)	1)	Menu Item (Continued)
0.8	1.2	0.7	4.6	Niacin (mg)
0.4	0.7	0.3	0.7	Vitamin B6 (mg)
0	0	1.6	0.7	Vitamin B12 (ug)
136.3	106.6	47.6	148.6	Folate (DFE) (ug)
82.9	44.7	12.6	14.4	Vitamin C (mg)
0	0	2.4	0	Vitamin D (ug)
1371.7 2.1	1208.6	180.1	395.3	Vitamin A (RAE) (ug)
2.1	1.5	0.8	1.7	Vitamin E (mg)
116	102.5	458.2	286	Calcium (mg)
2.3	2.4	2.1	4.5	Iron (mg)
111.5	52.3	93.9	113.6	Magnesium (mg)
651.7	563.9	760.3	523	Potassium (mg)
1.4	1.6	3.5	3.5	Zinc (mg)
36.1	365.8	187	940	Sodium (mg)
ω	2	2	 -	Servings of Vegetables and fruits
0	0	0	ω	Servings of Grain Products
0	0	2	0	Servings of Milk and Alternatives
н	ъ.	0	} 4	Servings of Meat and Alternatives

4) Spinach and orange salad	3) Veggie tray with hummous	2) Apple Cherry Lime Smoothy	1) Mediteranean Panini	Menu Item	Sample Nutritional Analysis for Four Menu Items
275	249.9	284.5	496.1	Energy (kcal)	r Menu
22.1	31.7	39.9	66.1	CHO (g)	Items
18.8	10.8	œ	19.4	Fat (g)	
10	7.7	15.9	17.6	PRO (g)	
<u> </u>	1.4	2.8	7.7	Sat Fat (g)	
4.7	6	1.9	6	Monounsat fat (g)	
11.1	2.7	2.9	4.3	Polyunsat fat (g)	
0	0	17.4	37.4	Cholesterol (mg)	
10.4	2.5	0.7	3.8	Omega-6 (g)	
0.7	0.1	2.2	0.5	Omega-3 (g)	
6.3	7.5	6.4	9.1	Fiber (g)	
0.2	0.2	0.1	0.4	Thiamin (mg)	
0.2	0.2	0.7	0.6	Riboflavin (mg)	

Appendix F: UBC Farm Market Produce Pricing and Availability

Note: The availability of each product ads up to 1.0. Each month is allotted a share of the total based on the percent of the annual product produced that month.

UBC Farm Market Produce Pricing and Availability, 2006

Name	Unit	Average	S	O	N	F	M	May	J	J	A
Eggs	dozen	\$4.99	0.1	0.1	0.1			0.1	0.2	0.2	0.2
	half										
Eggs, half dzn	dozen	\$2.73	0.2	0.1					0.2	0.2	0.4
Hat	Each	\$10.00							0.7	0.3	
T-shirt	Each	\$18.06	0.1	0.2	0.2				0.1	0.1	0.4
Honey	Each	\$6.33	0.7								0.3
Flower, cut stems	Each	\$0.65	0.1						0.2	0.5	0.3
Flower petals	bag	\$2.03	0.2	0.0					0.1	0.4	0.2
Ground cherries	pint	\$3.17	0.5	0.2	0.0						0.2
Beans, French filet	lb	\$7.50									1.0
Garlic braid	Each	\$24.17								0.6	0.4
Smoky fennel	bunch	\$1.83						0.9	0.1		
Broccoli	lb	\$2.90	0.2	0.2	0.1					0.3	0.2
Grapes	lb	\$3.75	0.8	0.2							
Savory	bunch	\$1.08							1.0		
Beets, golden	bunch	\$2.42							1.0		
Currants	pint	\$4.50								1.0	
Salad mix	lb	\$7.56	0.2	0.1				0.1	0.3	0.3	0.2
Carrots, dragon	lb	\$1.25								1.0	
Strawberries	pint	\$3.91							0.7	0.3	
Raspberries	Each	\$2.84								1.0	
Tomatoes	lb	\$2.75	0.4	0.2	0.0						0.3
Beans	lb	\$2.58	0.4							0.2	0.4
Zucchini	lb	\$2.13								1.0	
Scallions	bunch	\$1.02			0.0				0.3	0.6	0.0
Cabbage	lb	\$1.71	0.4	0.2						0.1	0.3
Corn	Each	\$0.65	0.8								0.2
Cauliflower	lb	\$2.85	0.0	0.6						0.3	0.1
Eggplant	lb	\$3.92	0.5	0.1							0.4
Radishes	bunch	\$1.44	0.1	0.2	0.0				0.3	0.2	0.1
Spinach	lb	\$4.94						0.2	0.8		
Peas, snow	lb	\$2.61							0.6	0.4	
Carrots	bunch	\$2.07	0.4	0.2					0.2	0.3	
Apples	lb	\$2.02	0.4	0.2						0.1	0.3
Apricots	lb	\$2.94								0.9	0.1
Blackberries	pint	\$2.94	0.1							0.2	0.7

Blueberries	Each	\$3.69								0.5	0.5
Cherries	lb	\$3.47								1.0	0.0
Melons	lb	\$1.24	0.8	0.2							
Nectarines	lb	\$4.00									1.0
Peaches	lb	\$3.70	0.2							0.4	0.4
Pears	lb	\$1.90	0.7	0.3							
Plums	lb	\$2.31	0.5	0.1						0.1	0.3
Beets	bunch	\$2.25							0.6	0.4	
Fennel	lb	\$2.74	0.2	0.1	0.0					0.5	0.2
Artichoke	lb	\$4.00						0.1	0.5	0.4	
Soybeans	lb	\$3.00	0.7								0.3
Beets	bunch	\$2.25	0.2	0.1					0.1	0.3	0.3
Beets, red tops	bunch	\$2.01							1.0		
Pac Choi	Each	\$1.44	0.1	0.2	0.0				0.5	0.2	
Cabbage, savoy	lb	\$1.31								1.0	
Carrots (bulk)	lb	\$2.07	0.2	0.1	0.0					0.3	0.4
Swiss chard	bunch	\$1.83	0.2	0.1					0.1	0.3	0.2
Cucumber, English	Each	\$2.37	0.4	0.2						0.1	0.3
Cucumber,											
pickling/slicing	Each	\$1.24	0.5	0.1						0.0	0.4
Garlic	lb	\$6.97	0.3	0.1	0.0					0.1	0.4
Garlic scapes	lb	\$3.00							0.7	0.3	
Mustard greens	bunch	\$2.68	0.1	0.0					0.2	0.2	0.4
Greens (misc)		\$2.29		0.0					0.8	0.2	
Microgreens	Tray	\$18.06	0.4	0.1	0.1				0.2	0.1	0.2
Kale	bunch	\$1.50	0.2	0.2	0.1	0.0	0.0		0.1	0.3	0.2
Kohlrabi	Each	\$1.78	0.5	0.2						0.0	0.3
Leeks	bunch	\$2.34	0.7	0.3	0.0						
Lettuce	lb	\$5.31					0.0	0.0	0.8	0.2	
Lettuce head	Each	\$1.80	0.2						0.1	0.2	0.5
Mushrooms	lb	\$4.40							1.0		
Bunching onions	bunch	\$2.12	0.5							0.1	0.4
Onions	lb	\$2.49	0.3	0.7							
Peas	lb	\$2.86		0.1						0.9	0.0
Peas, sugar snap	lb	\$2.63							0.3	0.7	
Pea shoots		\$4.26	0.2	0.6						0.2	
Pepper, green	lb	\$2.81	0.3	0.1						0.2	0.3
Pepper, jalapeno	Each	\$0.37	0.7	0.0	0.0					0.1	0.1
Pepper, ripe	lb	\$3.92	0.6	0.4							
Potatoes, nugget	lb	\$1.98	0.3	0.1					0.1	0.3	0.2
Potatoes, UBC											
Farm	Each	\$2.00								1.0	
Rhubarb	bunch	\$2.06						0.0	0.5	0.1	0.4
Rhubarb,	lb	\$1.75								1.0	

Discovery										
Baby squash	lb	\$1.91	0.4	0.0					0.3	0.3
Summer squash	lb	\$2.04	0.4	0.1					0.1	0.4
Winter squash	lb	\$1.17		0.2	0.8					
Jerusalem artichoke	lb	\$1.98			1.0					
Tomato, cherry	pint	\$3.87	0.1	0.0	0.0				0.2	0.6
Tomatillos	Each	\$1.98	0.4	0.2	0.0					0.4
Turnips	bunch	\$1.45	0.3	0.1				0.1	0.2	0.4
Arugula	lb	\$6.61	0.1	0.0		0.1	0.1	0.2	0.3	0.1
Oregano	bunch	\$1.57					0.5	0.5		
Rosemary	bunch	\$1.08						1.0		
Sage	bunch	\$1.33					0.5	0.5		
Sorrel	bunch	\$1.71	0.3	0.1				0.0	0.3	0.2
Thyme	bunch	\$2.00						1.0		

Appendix G: Chart of Seasonal Availability of locally produced food based on FarmFolk/CityFolk Society website (2008).

Legend:

G= Locally produced in a greenhouse

S= Stored supplies are available at this time

Y= Yes, it is available

MONTH	SEPT	OCT	NOV/DEC	JAN/FEB	MAR/APR	MAY/JUN	JUL	AUG
FOOD								
DAIRY								
Dairy Products	Y	Y	Y	Y	Y	Y	Y	Y
Eggs	Y	Y	Y	Y	Y	Y	Y	Y
FISH								
Herring				Y				
Lingcod	Y	Y			Y	Y	Y	Y
Pacific Halibut	Y	Y	Y		Y	Y	Y	Y
Pacific Sardines	Y	Y						Y
Parcific Cod	Y	Y	Y	Y	Y	Y	Y	Y
Sablefish	Y	Y		Y	Y	Y	Y	Y
Salmon- Chum	Y	Y					Y	Y
Salmon- Coho	Y	Y					Y	Y
Salmon- Pink							Y	Y
Salmon- Sockeye	Y					Y	Y	Y
Tuna- Albacore	Y	Y				Y	Y	Y
FRUIT								
Apples	Y	Y	Y	S	S			Y
Apricots							Y	Y
Blackberries	Y	Y						Y
Blueberries							Y	Y
Cherries						Y	Y	
Cranberries		Y						
Currants							Y	Y
Gooseberries						Y	Y	
Grapes	Y	Y						
Kiwis			Y	Y				
Melons	Y	Y						Y
Nectarines							Y	
Peaches							Y	Y
Pears	Y	Y	Y	Y			Y	Y
Plums	Y							Y

Raspberries	Y						Y	Y
Rhubarb				Y		Y	Y	<u></u>
Salmonberries							Y	
Strawberries						Y	Y	
GRAIN								
Red Fife Wheat	Y	Y	S	S	S	Y	S	Y
			~	~	~			
MEAT								
Beef	Y	Y	Y	Y	Y	Y	Y	Y
Chicken	Y	Y	Y	Y	Y	Y	Y	Y
Lamb							Y	Y
Ostrich	Y	Y	Y	Y	Y	Y	Y	Y
Pork	Y	Y	Y	Y	Y	Y	Y	Y
Turkey	Y	Y	Y	Y	Y	Y	Y	Y
NUTS								·
Buart Nuts	Y	Y						Y
Butter Nuts	Y	Y						Y
Chestnuts	Y	Y						Y
Hazelnuts	Y	Y						Y
Heart Nuts	Y	Y						Y
Oilseeds	Y	S	S	S		Y	S	S
Walnuts	Y	Y						Y
SEAFOOD								
Clams		Y	Y	Y	Y			
Dundeness Crab	Y	Y	Y	Y	Y	Y	Y	Y
Mussels		Y	Y	Y	Y			
Side Stripe Shrimp	Y	Y	Y		Y	Y	Y	Y
Spot prawns	Y	Y	Y		Y	Y	Y	Y
Oysters		Y	Y	Y	Y			
•								
UNKNOWN!								
Cut Flowers	Y					Y	Y	Y
Garlic Scapes						Y		
Honey		S	S	S	S			
Honey (fresh)	Y					Y	Y	Y
Truffles	Y	Y	Y					Y
VEGETABLE								
Artichokes						Y		Y
Asparagus						Y		
Basil	Y					1	Y	Y
Dasii	I					I	1	1

Bean Sprouts	Y					Y	Y	Y
Beets	Y	Y	Y	Y	Y		Y	Y
Broccoli	Y	Y	Y			Y	Y	Y
Brussel Sprouts	Y	Y	Y					
Cabbage	Y	Y	Y	Y	Y		Y	Y
Carrots	Y	Y	Y				Y	Y
Cauliflower	Y	Y	Y			Y	Y	Y
Celery	Y	Y					Y	Y
Chard		Y	Y					_
Chinese Vegetables	Y					Y	Y	Y
Chives	Y					_		
Cilantro	Y	Y					Y	Y
Corn	Y	Y					Y	Y
Cucumbers	Y	_	G		G	Y	Y	Y
Eggplant	Y		G		G	Y	G	Y
Fava Beans						Y	-	
Fresh herbs		Y				Y	Y	Y
Garlic	Y	Y	Y	Y		1	Y	Y
Green Beans	Y	Y	•	1			Y	Y
Green Onions	1	-				Y	Y	-
Kale	Y	Y	Y	Y	Y	1	1	
Leeks	Y	Y		1	1			Y
Lettuce	1	1				Y	Y	Y
Mushrooms						1	1	-
(Chantrelle)	Y	Y	Y					Y
Mushrooms	1	-						-
(Lobster)	Y	Y	Y					Y
Mushrooms (Morel)	1	_	1			Y		-
Mushrooms						1		
(Porcini)						Y		
Mushrooms						1		
(Shittake)	Y	Y	Y	Y	Y	Y	Y	Y
Mustard Greens		_		1	1	Y	1	
Onions (red)	Y					1		
Onions (Yellow)	Y	Y	Y	S	S		Y	Y
Parsnips	Y	Y	Y	Y	Y		-	-
Pea Shoots	•	_	•	•	Y	Y		
Peas	Y				•	Y		
Peppers	Y	Y	G		G	Y	Y	Y
Potatoes	Y	Y	<u> </u>	Y	Y	1	1	Y
Potatoes (new)	1	-	1	1	1	Y	Y	-
Pumpkins	Y	Y				1	1	
Radishes	Y	Y				Y	Y	Y
Salad Greens	1	1				Y	Y	Y
Salad Ofcells					<u> </u>	1 1	1	1

Shallots	Y							Y
Spinach			Y	Y	Y	Y	Y	Y
Sprouts			Y	Y				
String Beans								Y
Summer Squash							Y	Y
Sunflower sprouts	Y				Y	Y	Y	
Swiss Chard	Y						Y	Y
Tomatoes	Y	Y	G		G	Y	Y	Y
Turnips	Y	Y				Y	Y	Y
Winter Squash	Y	Y	Y	Y				
Zucchini	Y						Y	Y

Appendix H: Organic World Specialty Meats Chart

Organic World's Specialty Meats 22268 Dewdney Trunk Road

Please be advised that some of the pricing has changed.

ITEM			
Organic Chicken Deli Items		Organic Beef Deli Items	
Organic Chicken Bites	5.99/pack	Organic Beef Bacon sliced	
Organic Chicken Chorizo	5.99/pack	Organic Beef Bites	5.99/pack
Organic Chicken Garlic Ring		Organic Beef Chorizo	5.99/pack
Organic Chicken Lyoner chub		Organic Beef Corned sliced	
Organic Chicken Lyoner sliced		Organic Beef Garlic Ring	
Organic Chicken Pepperoni chub		Organic Beef Jerky	5.99/pack
Organic Chicken Pepperoni sliced		Organic Beef Pastrami sliced	
Organic Chicken Pepperoni sticks	5.99/pack	Organic Beef Pepperoni Sticks	5.99/pack
Organic Chicken Pizza Salami		Organic Beef Pepperoni Sticks	
whole		Hot	5.99/pack
		Organic Beef Pizza Pepperoni	
Organic Chicken Salami chub		chub	
		Organic Beef Pizza Pepperoni	
Organic Chicken Salami sliced		sliced	
		Organic Beef Roast sliced	
<u>Turkey Deli Items</u>		Organic Beef Salami chub	
Turkey Bites	5.99/pack	Organic Beef Salami sliced	
Turkey Chorizo	5.99/pack		
Turkey Garlic Ring		Buffalo Deli Items	
Turkey Kolbassa, sliced		Buffalo Bacon sliced	
Turkey Lyoner chub		Buffalo Bites	5.99/pack
Turkey Lyoner sliced		Buffalo Chorizo	5.99/pack
Turkey Pepperoni chub		Buffalo Corned sliced	
Turkey Pepperoni Hot sticks	5.99/pack	Buffalo Garlic Ring	
Turkey Pepperoni sliced	5.99/pack	Buffalo Jerky	5.99/pack
Turkey Pepperoni sticks	5.99/pack	Buffalo Pastrami	
Turkey Roast sliced		Buffalo Pepperoni Sticks	5.99/pack
Turkey Salami chub		Buffalo Pepperoni Sticks Hot	5.99/pack
Turkey Salami sliced			

Appendix I: Food Source Contacts

Organic World- Charlotte

UBC Farm – Mark Bomford Biovia Organic Link Ltd. Kennedy's Milk Service (Avalon Dairy distributer) Olympic Dairy- Mike Abey Terra Breads- Beth



Appendix J: Suggested Promotional Slogans

- 1. Reduce your footprint. Eat at the Beaty Café.
- 2. Lower your food miles. Eat at the Beaty Café
- 3. Appreciate the seasons. Eat at the Beaty Café.
- 4. Make healthy choices. Eat at the Beaty Café.
- 5. Take green actions. Eat at the Beaty Café.

Appendix K: Contact Information for Canadian Suppliers of Sustainable Lighting and Interior Material

Forbo Flooring (Marmoleum Supplier)

25 Pollard Street Richmond Hill, ON L4B 1A8

EcoSmart Foundation

Suite 501-402 West Pender Street Vancouver, BC V6B 1T6

WSE Technologies

303 – 47 East Street Saskatoon, SK S7K 5H2

Appendix L: Tentative Beaty Café Floor Plan

