UBC Social Ecological	Economic Develo	pment Studies	(SEEDS) Student Rei	port
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Totem Park Incorporating more and increasing support for BC Local and Seasonal Items into UBC Food Service Residence Cafeterias

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AGSC 450

April 13, 2007

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The UBC Food System Project

Scenario 5B: Totem Park

Incorporating more and increasing support for BC Local and Seasonal Items into UBC Food Service Residence Cafeterias





AGSC 450 University of British Columbia

Submitted on: April 13, 2007

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Abstract

In 2006, UBC Food Services established a value statement to reflect on their interest in increasing sustainable practices in its operations. Totem Park Residence Dining operation, currently faces the sustainability problem of increasing food miles. Therefore, incorporation of more local seasonal foods into Totem Park's cafeteria is one of the most important ways to decrease food miles and work towards sustainability on UBC campus.

Various reviews, researches, and meetings were done to reveal the current situation at Totem Park's cafeteria and the potential methods for incorporating more local seasonal foods. As finding new local suppliers could not be done in the short-term, using as many local seasonal produce as possible provided by current supplier would be the simplest and effective way for achieving the project goal. Based on the Totem's 2006 purchase list of local produce, fall recipes were found, two of which were taste tested at Totem Park Cafeteria while surveys were distributed to receive feedbacks from residents. Survey results were encouraging, with more than 50% support for the two taste-tested recipes. Recommendations were made for the incorporation of these two recipes, and possibly the other highly ranked recipes from survey, into next year's menu. Collaboration with Residence Sustainability Coordinators to promote the benefits of local food should be continued as evidenced by the success of the Open Minds Open Mic local food night. Follow-up surveys should be given out in the fall to evaluate Totem Park residents' reactions towards the implementation of new local recipes into menu.

Introduction

The UBCFSP has been ongoing for the last six years. As food security is a growing concern in the global food system, it is important to focus on a more localized foodshed. In this

project, we are treating the campus community as a microcosm of the global system.

Specifically, our scenario focuses on increasing local food consumption and awareness at Totem Park's Residence Dining Cafeteria which has only been investigated since 2006. Our group felt it was important to gather input from the students who would be directly affected by changes to the cafeteria. We hosted an educational event in the Totem cafeteria to raise awareness and gain a sense of interest from the students. This was followed up by taste-testing two potential seasonal recipes to be implemented in the future and complimentary surveying to gather data. This paper outlines the qualitative and quantitative results in graphical form. Finally a set of recommendations are outlined for UBC Food Services and for future AGSC 450 students.

Problem Definition

There have recently been many sustainability initiatives taken by UBC Food Services. Two examples that are specific to residence dining operations include selling exclusively fair trade and organic coffee and the Way-to-Go program to encourage reusable containers. The challenge our group faced was how to incorporate more seasonal and local products into the Totem Park Residence cafeteria. There are many factors that affect the likelihood of this change occurring. These include student preference and convenience for food providers to try new recipes and re-plan the menu. Other important factors are the stability of locally supplied foods, the feasibility of altering supply contracts, and the possibility of price change if necessary to purchase local ingredients (Charalambous et al, 2006). We hope that by investigating these factors, we can help pave the way towards positive change and contribute to a more sustainable food system at UBC.

The food provided by Totem Park's Residence Cafeteria often travels many miles to get from the farm to the students' plates. This is a concern for global sustainability because potentially unnecessary food travel increases CO₂ emissions which have adverse effects on our environment (Carlsson-Kanyama, 1998). The issue of increased food miles in Totem Park exemplifies the problem of increased food travel facing the global food system. Successfully incorporating more local/seasonal foods into Totem Park's Cafeteria could provide a useful example of how this can be done in other facilities, on UBC campus and beyond. The UBC food system further mimics the global food system in the lack of information provided by the food suppliers on campus. There is no obvious means of identifying where ingredients originate from or furthermore how they were produced (Halweil 2002). It is important to note that students who are consuming food in the Totem cafeteria have no opportunity to actively engage in organic or local food choices.

Vision Statement

The UBCFSP vision statement exists in both an academic and plain language form. The plain language form is as follows:

- 1. Must protect *and* enhance the diversity and the integrity of the natural ecosystem and resources that supports it.
- 2. Relies on local inputs when possible, where inputs and waste are recycled and/or composted locally.
- **3.** Is a secure system that provides food that is affordable, available, accessible, culturally, ethically and nutritionally appropriate, and safe and can adapt to changes.
- **4.** Nourishes the present generation to provide for healthy diets that do not compromise the food security of present or future generations.
- 5. Nurtures feelings of community and promotes enjoyment of food around the food table.
- **6.** Fosters awareness, understanding and personal responsibility within the community of every component from production to disposal.
- 7. Contains a balance of imported and local foods that come from socially and ecologically conscious producers to ensure long-term financial viability.

8. Consumers, food workers and educators are made aware of the reciprocal impacts that the UBC food system and has on surrounding food systems.

When reflecting upon the vision statement the following should be considered. Although the statement provides a well rounded sustainable perspective, some points in the vision statement are more relevant to some scenarios within the UBCFSP than to others. For our scenario, we felt that an emphasis on diversity and localness in food, education and awareness, community, and conscious producers (points 1, 3, 4, 5 and 6) were specifically relevant to the scope of our project. Waste management and fair prices for producers and growers are linked indirectly to our scenario, but we feel that these topics are emphasized more in some of the other UBCFSP scenarios. Our group is encouraged that the vision statement includes a point regarding community, because community is a core value of our faculty, which sets us apart from other faculties at UBC. Further, when comparing the lay man vision statement to the academic version, simplicity was very apparent in the lay man statement. However, we feel that the academic version is more complete, and the choice of words used is simple enough for the public to comprehend. The academic version is therefore the version that our group chose to adopt.

Identification of the Subsystem

UBC Residence Dining comprises 40% of the UBC Food Services revenue (personal communication with Andrew Parr, March 7, 2007). Therefore, changes to our assigned subsystem, Totem Park cafeteria, would have a significant impact on the UBC food system.

Because Totem Park Cafeteria is undergoing renovations this May, this is an excellent opportunity to investigate and suggest changes to the menu as well. Currently, all residents of Totem Park must purchase a meal plan and buy their meals from the cafeteria as they do not have

cooking facilities in their residence. Residents can also use their meal card to buy discounted meals at other UBC Food Service outlets on campus. In the cafeteria, students can choose from an international, traditional or grilled meal, in addition to regular salad and fruit bar items. The meals rotate on a two week schedule, allowing for no seasonality within the menu.

Methodology

We began our project with literature reviews of previous UBCFSP papers applicable to our case scenario. One paper, group 23 in 2006, specifically investigating the Totem Park cafeteria and was reviewed in detail. Furthermore we explored background information on UBC Food Services, AMS Food Services, the UBC Farm, the UBC Sustainability Office, and UBC Waste Management to determine how they relate to our project. Businesses that provide local foods, such as Lumiere, West and Bishop's Restaurants and Sprout's Food Co-op were assessed for recipe and seasonal ingredient examples. A meeting was set up at Totem Park Cafeteria with Jordan Best, the Residence Sustainability Coordinator, to provide us with general information about the current status between the sustainability office and UBC Food Services. From this information we chose to integrate our efforts with those of the sustainability office. The Residence Sustainability Coordinators planned an 'Open Minds Open Mic' local food night for March 29, 2007. From this we decided to taste test local recipes in order to maximize the impact of our project. Our goal was to determine popular local, seasonal recipes that could easily be implemented into next year's menu. In order to achieve this we designed surveys to compliment the taste testing (see Appendix 1). Our group selected surveys as a sampling method because it was an efficient method for receiving input from a large number of individuals.

We decided to research what local produce Totem Park receives from their current suppliers. This would allow us to increase the use of already locally sourced produce. Finding new suppliers would have exceeded the scope of our project as this was a task assigned to a different scenario group. Our seasonal list focused on produce available in BC during September through November inclusive, as this offers the greatest variety of vegetables and fruits to create recipes with. The AGSC 450 teaching team provided us with Totem's 2006 purchasing list from Allied Foods. We reduced the list according to items potentially grown in BC and compared this to a list of local fall fruits and vegetables (see Appendix 2).

Next we arranged a meeting with the Totem's General Manager of Food Services,

Loriann McGowan. She offered to confirm with the suppliers which items on our compiled list

are locally sourced during the specified season. We also discussed the possibility of taste-testing
some of the recipes we would come up with from this list. Loriann agreed that Totem Park could
supply the ingredients and prepare the recipes for taste testing at the end of March. Other topics
we discussed were renovation of the cafeteria, contracts with suppliers, and promotion of local
food awareness and education.

After determining that the foods on our list are indeed locally sourced, we found 10 recipes based on these ingredients (see Appendix 3). We forwarded these recipes to Loriann so she could select the most appropriate recipes to taste-test, and potentially incorporate into the future menu.

Due to communication problems, we were unable to taste-test recipes on March 29th at the 'Open Minds Open Mic' event. We decided to utilize this opportunity as an educational, promotional event instead. Our group made posters advertising the upcoming taste testing and spoke with interested individuals to raise awareness about local food. Some of our group

members prepared samples of local carrot bread and blueberry muffins to generate conversations with the Totem Park residents in the cafeteria. The upcoming taste-testing was announced and students supported the idea of changes to the menu in their cafeteria.

After many efforts of touching base with Loriann the new taste-testing date was set for April 10, 2007. We provided Loriann with all the recipes and she picked 2 for the taste testing event: carrot soup and vegetarian Shepard's pie. The recipes were given to the cafeteria staff, who prepared the food for us. We set up a table in Totem Park with posters indicating the purpose of the taste testing and the importance of eating locally. In order for our group to use the data collected during this event, we needed the participants to know that their responses would be used in our project, and we needed their approval to do so. We had the consent forms (Appendix 5) set out and asked everyone that was going to sample the product and fill out a survey to sign it. We then handed out samples of the food along with surveys (see Appendix 1) for them to fill out and give back. The survey responses were then tallied and converted into charts and graphs for easier understanding of the results. (See Results)

Results

In total, more than a hundred students were surveyed in the Totem Cafeteria. However, only eighty-six people returned the surveys. On average, more than 50% of the students eat in the cafeteria six to seven times a week for dinner, among which greater than 30% eat three to five meals there, and less than 5% visit the cafeteria for dinner (Figure 1).

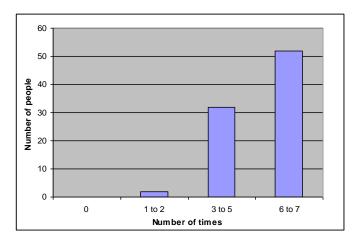


Figure 1. Average number of times students have dinner at Totem cafeteria on a weekly basis

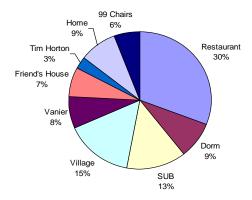


Figure 2. The frequency in percentage that students consume food elsewhere

When the residences were asked where they would dine if not in Totem, Figure 2 shows that 30% put down restaurant as their first choice, followed by 15% at UBC's Village and 13% at the Student Union Building (SUB). Less than 10% chose each of the following locations: Vanier Cafeteria, friend's house, 99 Chairs, home, Tim Horton's, and dormitories (where they purchase their own groceries).

For the taste-tasting, students were asked to give their opinions on the two sample recipes: carrot soup with ginger and vegetarian shepherd's pie. A ranking from 1 to 5 were used as a guideline for judgment. A ranking of 1 = not good; 2 = not so good; 3 = neutral; 4 = good;

and 5 = very good. Over 37% indicated that the carrot soup with ginger was very good and close to 50% gave the same feedback on shepherd's pie (figures 3 and 4).

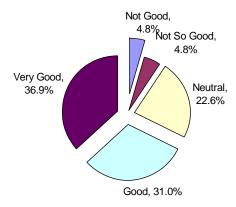


Figure 3. Qualitative comments on carrot ginger soup represented by percentages

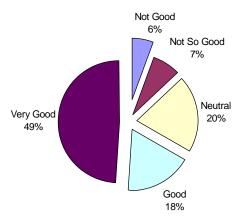


Figure 4. Qualitative Comments on shepherd's pie represented by percentages

Besides the two sampled recipes, students were also informed to comment on six other meals that featured local produce and rank their interest in trying them in the future. The results in Figure 5 illustrate that almost 50% of the students chose Sesame Parmesan Vegetables as their top choice, followed by Potato and Leek Soup with more than 40%, and Vegetable Borscht with slightly lower than 40%.

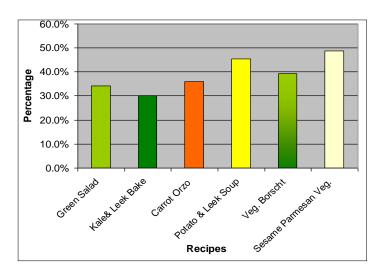


Figure 5. Percentage of people interested in trying each recipe

Discussion

Education about Local Food

In following the model of Community-Based Action Research outlined by Stringer (1999), one of the potential challenges that we identified in regards to public education is that it often focuses solely on the opportunities for individuals to make personal change in their own lives; public education very seldom provides the opportunity for people to learn about the issue by participating in institutional change.

Collaborating with the Residence Sustainability Coordinators on the 'Open Mic Open Minds' local food night worked very well because they are a group of local residents who wanted to create an event which involves action-oriented solutions on a personal and institutional level. The Sustainability Coordinators raised awareness about the importance of choosing local and organic food when it is available, and our role in the event was to provide the opportunity for residents to become active participants in the process of changing the cafeteria menu to include more local, seasonal produce.

Survey of Local Recipes for Fall Season

There were many challenges to avoiding a systematic bias when sampling. The two non-sampling errors of greatest concern to this survey were the possibility of non-response bias and haphazard substitution (Peplow 2006). Although we asked everyone in the cafeteria to complete the survey, a non-response bias was incurred because not everyone agreed to complete the survey and also out of 100 surveys given out, only 86 people returned their surveys. This leads to the question of whether the people who didn't return their surveys would have a very different response than the people who did. This could be improved in the future by having a greater incentive for people to complete the survey, such as a small coupon or prize. A haphazard substitution may have occurred if someone was studying while eating dinner or two people were deep in conversation and therefore we did not want to bother them with a survey. This could be improved in the future by monitoring those students more closely and waiting to approach them at an appropriate time, or when they are leaving.

The survey results indicated that both the Carrot Soup and the Shepherd's Pie were very popular with Totem Park Residents, and should therefore be included in the fall 2007 menu. Furthermore, the top three recipes from the additional list on the survey, Sesame Parmesan Vegetables, Potato Leek Soup, and Vegetable Borscht, should also be introduced in fall 2007. One of these local menu items could be introduced each week on a particular night (ex: Tuesday) so that it becomes a tradition to have a local item featured on a particular night each week. The reason for this is that many restaurants have found 'specials' on certain nights to be an effective marketing strategy, and discussions with students at the cafeteria also indicated this fact. These five student-approved recipes listed above could be rotated so that they are each served twice throughout the fall.

Comments from students (the most common being 'wow' and 'delicious') were very encouraging that these additions to the Totem Park menu were very positive. There were numerous comments on one extreme or the other of the vegetarian versus meat debate. From these discussions, we learned that although it works well to exclude meat from the taste testing recipes so that the survey is more inclusive to the overall population, it would be helpful to include a couple of meat options in the list of recipes on the survey which are not being tested. Many students also expressed interest in having small cards indicating local items in the salad bar. The poster made by Agsc 450 students on "why to eat local" could be displayed next to the salad bar.

Follow-up in Fall 2007

It is necessary to do a follow-up evaluation of the menu changes that are made for fall 2007. A Totem Cafeteria Fall Food Survey 2007 has been included in Appendix 4. This survey can be printed and distributed by Food Service staff quite easily by simply handing them out to students as they pass the cash register or having them piled in a stack next to the local food item each week. Another possible method of distribution can include contacting the Residence Sustainability Coordinators to help distribute the surveys. This follow-up survey can be analyzed by AGSC 450 students in Scenario 5b in spring 2008 to determine how satisfied students are with the menu changes.

Possibilities for the Future

At this point in time, it is not feasible to change from Allied Foods to a different supplier. It would be beneficial, however, for UBC Food Services to become aware of alternative possibilities for local food supply reported by AGSC 450 groups in Scenario 4 so that all of the available information can be included when making future decisions about suppliers.

Recommendations

For UBC Food Services:

- Local Food Integration into Fall Menu: Student-approved recipes should be integrated into Fall menu, with a different recipe featured each week from September to November.
- **Follow-up Surveys** should be given to each student who chooses the local menu item that week to see how satisfied they are with it.
- Local Food Labels should be placed next to local items in salad bar, as well as the
 educational display created by AGSC 450 students and Residence Sustainability
 Coordinators about "why to eat local".
- Evaluation of Alternative Local Food Suppliers reported by other AGSC 450 groups in Scenario 4 "Extending BC Local Food Purchasing on Campus".
- Collaborate with Residence Sustainability Coordinators to provide more local food donations for educational events, such as the Open Minds Open Mic local food night.

For AGSC 450 class 2008:

- Create Recipes for Winter and Spring Menus: A date for taste testing and surveys should be set early with Loriann to ensure that surveys are completed and analyzed following the methodology of AGSC 450 class 2007.
- Analyze Follow-Up Surveys that are given out in the Fall to see how satisfied students are with the menu changes and make recommendations based on the results.
- Contact Residence Sustainability Coordinators to reuse current educational materials (ie. posters and video from 2007 educational event), collaborate on creating more educational materials about local food options (such as a poster on "how to create your own local salad") and provide information about UBC Food Systems Projects at events.

Conclusion

Through the collaboration with stakeholders of the UBCFSP our group was able to successfully carry out the action plan which was devised in February, early on in the term. We feel that our integrated approach in combining change with education was a step in the correct direction as interest and conversations regarding local and seasonal food consumption were sparked that may not have otherwise arisen. We hope that the work done by our group will be implemented in the Totem Cafeteria and serve as a substantial foundation for the work of future AGSC 450 students to come. As our results showed, students are keen to exploit more menu options including seasonal and local foods. We recommend that education should continually compliment the local and seasonal food items as more sustainable food choices, as these can be carried with students beyond their time in Totem Park Residence.

Appendix 1: Taste Testing Survey

Totem Cafeteria Local Food Survey 2007

1) On average, how n 0 1-2	nany times	per we	eek do	you eat d 6-7	linner at	t Totem Caf	eteria?
2) Where do you usua	ally eat din	ner wh	nen not	in Toten	n Cafete —	eria?	
3) Please rate the sam	ple you tri	ed: (1	= not g	ood, 5 =	very go	ood)	
Carrot Soup with Gin -Featuring local carro	-	1 natoes	2	3	4	5	
Shepherd's Pie -Casserole featuring i	1 local potat	2 oes, ap	3 oples, c	4 arrots ar	5 nd kale		
4) How interested wo Please rate from 1-5 (-	-	-			-	
Bright Winter Green S-Featuring local lettu		2 s, beets	3 and pi	4 umpkin s	5 eeds		
Kale and Leek Bake -Featuring local kale	1 and leeks	2	3	4	5		
Carrot Orzo -Featuring local carro	1 ots and ro	2 semary	, 3	4	5		
Potato and Leek Soup -Featuring local pota		2 eeks	3	4	5		
Vegetable Borscht -Stew featuring local	1 beets, carr	2 rots, po	3 otatoes	4 and cabl	5 bage		
Sesame Parmesan Ve -Featuring local carre	-		3 potatoe	4 es	5		

Appendix 2: Local Foods provided by Allied Foods, September through November

- Apples
- Bok choy
- Basil
- Green beans
- Beets
- Blackberries
- Green cabbage
- Carrots

- Chives
- Cilantro
- Cucumber
- Italian parsley
- Green kale
- Leeks
- Parsley
- potatoes
- Pumpkins
- Rosemary
- Sage
- Thyme
- Tomatoes on the vine
- Zucchini

Appendix 3: Recipes using local ingredients

CARROT SOUP WITH GINGER AND LEMON (Makes 4 Servings)

Ingredients:

1/4 cup (1/2 stick) butter

1 1/2 cups chopped onion

1 tablespoon finely chopped peeled fresh ginger

1 1/2 teaspoons minced garlic

1 1/4 pounds medium carrots, peeled, chopped (about 3 cups)

2 tomatoes, seeded, chopped (about 1 1/3 cups)

1 1/2 teaspoons grated lemon peel

3 cups (or more) chicken stock or canned low-salt broth

2 tablespoons fresh lemon juice

4 tablespoons sour cream

1 small carrot, peeled, grated

Directions:

Melt butter in heavy large pot over medium-high heat. Add onion; sauté 4 minutes. Add ginger and garlic; sauté 2 minutes. Add chopped carrots, tomatoes and lemon peel; saute 1 minute. Add 3 cups stock and bring to boil. Reduce heat, cover partially and simmer until carrots are very tender, about 20 minutes. Cool slightly. Puree soup in batches in blender. Return soup to pot. Mix in lemon juice. Season with salt and pepper. (Can be made 1 day ahead. Cover and chill.) Bring soup to simmer, thinning with more stock, if desired. Ladle into bowls. Top each with sour cream and grated carrot.

CARROT ORZO (Makes 4 Servings)

Ingredients:

6 ounces peeled baby carrots (about 1 1/4 cups; from 16-ounce package)

2 tablespoons (1/4 stick) butter

1 cup orzo (rice-shaped pasta; about 8 ounces)

1 1/2 cups water

1 1/4 cups low-salt chicken broth

1 large garlic clove, minced

1/4 cup grated Parmesan cheese

2 tablespoons chives

1 teaspoon minced fresh rosemary

Directions:

Place carrots in processor. Using on/off turns, finely chop carrots. Melt butter in heavy medium saucepan over medium heat. Add orzo and carrots; sauté until orzo is golden, about 5 minutes. Add 1 1/2 cups water, broth, and garlic; cook uncovered over medium heat until all liquid is absorbed, stirring frequently, about 10 minutes. Stir in cheese, green onions, and rosemary. Season to taste with salt and pepper and serve.

SHEPARD'S PIE

<u>Ingredients</u>:

4 potatoes, cooked and mashed with butter and/or milk

1 apple, baked and chopped salt and pepper to taste

½ cup lentils (or ground beef), cooked

½ cup kale shredded

Optional: cooked carrots, peas or other vegetables

1 onion

2-3 cloves garlic

small piece of ginger

cinnamon, cumin, nutmeg, cloves

Directions:

Combine mashed potatoes together with baked and chopped apple. Add salt and pepper to taste. Spread half of potato/apple mixture over bottom of baking pan. Sauté onion, garlic, ginger and spices. Add cooked lentils and shredded kale to the pan after onions are soft. Spread lentil/kale/mixture on top of potatoes in pan, then add remainder of potatoes and apples as top layer in pan. Bake at 350 degrees for 30 min.

KALE LEEK BAKE

Ingredients:

4 eggs

1/2 tsp salt

1/4 tsp pepper

1 1/2 cups stock or water

1 cup yellow cornmeal

2 bunches Kale, chopped

1 lb white portion of leeks, sliced

Optional: 1/4 cup hard cheese, grated

Optional: 2 tbsp parmesan cheese grated for topping

butter or olive oil

Directions:

Beat eggs until light, add salt and pepper. In medium bowl, add liquid gradually to cornmeal, stirring constantly until mixed. Mix in eggs, then greens, leeks and cheese if desired. Pour leek and greens mixture into greased baking pan and top with parmesan cheese and butter or olive oil. Bake at 375 degrees until set and browned on top, about 45 minutes.

VEGETABLE BORSCHT (Makes 12 Servings)

Ingredients:

1 Tbsp vegetable oil

1-1/2 cups onion, finely chopped (1 large)

5 medium beets

1/2 cup carrot, chopped (1 small)

16 cups chicken stock

2 large potatoes

1 medium cabbage head

3 Tbsp sugar

1/3 cup lemon juice, fresh squeezed

1 tsp salt

1/2 tsp ground black pepper

1 clove garlic, minced

1 tsp dillweed, chopped if fresh, more if not

Directions:

Peel and julienne raw beets to yield 4 cups. Peel and cube potatoes to yield 2 1/2 cups. Finely chop cabbage to yield 6 cups. Heat oil in a large skillet over medium-high heat. Add onion and saute until browned, about 5 to 7 minutes. Add beets and carrot. Saute, stirring constantly, for 10 minutes. Remove from heat and set aside. In a large stock pot, bring chicken stock to a boil over high heat. Add potato and cook for 3 minutes. Add cabbage and continue boiling for 5 minutes. Add reserved beet-tomato paste mixture, sugar, lemon juice, salt and black pepper. Reduce heat to a simmer and cook for 15 minutes. Remove from heat. Stir in garlic and dill. Serve hot.

SESAME PARMESAN VEGETABLES:

Ingredients:

4 carrots, 3 peppers or 2 large potatoes quartered and cut into 1/2-inch slices

2 tablespoons olive oil

1/4 teaspoon sesame oil

2 teaspoons sesame seeds

2 tablespoons Parmesan cheese

1/4 teaspoon cayenne pepper

1/2 teaspoon garlic salt

Directions:

Preheat oven to 400 degrees F (200 degrees C). In a large bowl, toss the zucchini with the olive oil, sesame oil, sesame seeds, Parmesan cheese, cayenne pepper, and garlic salt. Spread in a single layer on a baking sheet. Bake 20 minutes in the preheated oven, until lightly browned.

POTATO LEEK SOUP

Ingredients:

1 Tbsp. olive oil

1 cup chopped leeks

2 cups cubed potatoes scrubbed

2 cups water

1 bay leaf

1 Tbsp. Tamari

Fresh ground Pepper

1 cup minced Parsley

Directions:

Saute olive oil, leeks and potatoes in a soup pot, add water, bay leaf, tamari, pepper and parsley. Cover and bring to boil. Turn down the heat and simmer for 30 minutes.

Remove Bay leaf and blend in a blender for creamier soup. Sprinkle with Parmesan. Double the recipe and save some for later. Freezes just fine. Serve with corn bread!

BRIGHT WINTER GREEN SALAD (Makes 2 servings)

Ingredients:

1 head of lettuce

1 large carrot, grated

1 beet, grated

1 handful of pumpkin seeds

½ cup of feta cheese

1tsp dried oregano

1tbsp raspberry vinegar

1tbsp olive oil

Directions: Place lettuce leaves on large salad plate. Top with remaining ingredients.

Appendix 4: Survey for Fall 2007

Totem Cafeteria Fall Food Survey 2007

(to be distributed by Food Services staff as a follow-up to see how satisfied students are with menu changes, and to be analyzed in Spring 2008 by Agsc 450 students in Scenario 5b)

1)	Which local food item did you choose's	

- 2) How would you rate this meal? (1 = not good, 5 = very good)
- 1 2 3 4 5

Appendix 5: Example Consent Form for Surveys

INFORMED CONSENT

I am agreeing to collaborate in the study on The UBC Food System Study conducted by students of the Faculty of Land and Food Systems within their course "Land, Food & Community III (AGSC 450) in collaboration with UBC Food Services, the AMS Food and Beverage Department, UBC Waste Management, Faculty of Land and Food Systems, Centre for Sustainable Food Systems at UBC Farm, the UBC Sustainability Office and its SEEDS Program (Social, economic and ecological development studies).

I have been informed of my right to interrupt any interview or questionnaire linked to this project, at any time that I consider necessary. Also, I have been assured that my answers will remain anonymous unless I provide written permission (below) to the UBC student to disclose my name, working position or any other information revealing my identity in any possible future use of the information I provide.

Date: April 10, 2007

Name of the interviewer: Agsc 450 Group 28

If you have any concern about this study please contact Dr. Alejandro Rojas, Principal Investigator and Course Instructor or

Liska Richer Co-Investigator, and course Sessional Instructor:

Address: Faculty of Land and Food Systems, UBC 2357 Main Mall, Vancouver, B.C. V6T 1Z4

Name (printed clearly)	Signature

References

- All Recipes (2007). Retrieved Feb 10, 2007 from: www.allrecipes.com
- Carlsson-Kanyama (1998). Climate change and dietary choices-how can emsissions of greenhouse gases from food consumption be reduced? *Food Policy*, 23, 277-293.
- Charalambous, A. K., Gillespie, T., Lai, A., Ng, I., Shinozaki, D., Wasswa-Kintu, S., Wierzbicki, J. (2006). The Sustainability of the UBC Food System Collaborative Project: To Grow, to Cook, to Eat in (U)BC. Scenario 2: Incorporating Seasonal BC Food Items into Campus Food Provider Menus. Retrieved March 28, 2007 from: http://www.webct.ubc.ca/SCRIPT/agsc_450/scripts/serve_home
- Halweil, B. (2002). Home Grown: The Case for Local Food in a Global Market. *Worldwatch Paper 163*. Retrieved March 28, 2007 from: http://www.webct.ubc.ca/SCRIPT/agsc_450/scripts/serve_home
- Parr, Andrew. "UBC Food Services" Agricultural Sciences 450, MacMillan Room 166, Vancouver, B.C. Presented Wednesday, March 7, 2006
- Peplow, Stephen. Statistics Lecture 2: AGSC 350 LFC II, Fall 2006.
- Stringer, Ernest T. (1999). Action Research, 2nd Edition. Thousand Oaks, California: Sage Publications, Inc.
- Vision Statement for a Sustainable UBC Food System: *Academic Version*. AGSC 450 LFC III, 2005. Retrieved March 28, 2007 from: http://www.webct.ubc.ca/SCRIPT/agsc_450/scripts/serve_home