

Hungry Nomad Food Truck

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Executive Summary

The food truck industry is catching on across University and College campuses including the University of British Columbia (UBC) all over North America. UBC has integrated this form of food service amongst a variety of other restaurants and cafés; the HNFT Food Truck (HNFT). Not only is it UBC Food Service's goal to develop good tasting, and affordable food for students, but to maintain an overall sustainable system as well. It was our team's objective to discover the long-term goals of the HNFT, assess the current ingredients used, as well as find out the demand for sustainable food production by consumers of the HNFT. This project was carried out by initially interviewing several members of the UBC Food Services and obtaining and assessing the current ingredient list for the HNFT. The project also involved a public survey in which a rating system of the importance of Ocean Wise, local food, organic food, and animal welfare was used. Once the objectives were identified, the food list was obtained and ingredients sourced to producers, and 120 HNFT consumers were surveyed, the results could be interpreted. The results showed that animal welfare was of utmost importance for purchasing behaviour of HNFT consumers, followed by local food production, closely followed by Ocean Wise certification, whereas organic food was the least of consumers concerns. These results coincided closely with the current trends within BC and some within Canada. It was also found that the primary ingredients of the HNFT being pork, beef, and fish, were all sourced from BC, Alberta, and Alaska respectively, and the fish was Ocean Wise certified. There were some ingredients of concern such as condiments, spices, and bread that were not the most sustainably sourced. Recommendations for any potential increases in the level of sustainability of the HNFT have been made and include alternative ingredient suppliers, and ways the HNFT can maximize food output by appealing to consumer's purchasing behaviour.

Introduction

Sustainable resource use, production and consumption are of the utmost importance in the world today. Regardless of the exact definition of “sustainable”, many of which exist, the underlying message is managing, producing, and using resources in a way that promotes their longevity; in doing this we can ensure the availability of these resources for future generations. Many individuals, businesses, regions, and even countries have taken measures to improve their level of sustainability and advocate its importance. The three categories embedded in the concept of sustainability are environmental, social, and economic. All must be considered if any goal centered on sustainability is to be achieved. Increasingly, nations, provinces and cities are incorporating the concept of sustainability into their government mandates, departments, and programs. For example, the Government of Canada passed the Federal Sustainable Development Act in 2008 and implemented a Federal Sustainable Development Strategy, which is updated every three years; the latest Progress Report was released in February 2013 (Environment Canada, 2013). The Province of British Columbia (BC) has a Sustainable Agriculture Management Branch and the City of Vancouver aims to be the Greenest City 2020 (BC Ministry of Agriculture, n.d.; City of Vancouver, 2014). The City of Vancouver has also developed a Vancouver Food Strategy, which addresses social, environmental, economic and health issues (City of Vancouver, 2013). Sustainable initiatives are also being established at educational institutions, i.e. universities. The University of British Columbia (UBC) is taking many steps and actions to increase the sustainability of the campus.

Food production and consumption is central to the issue of sustainability because it applies to everyone and is one of the most destructive forces on the planet. Environmental sustainability addresses goals to reduce the impact of production and consumption practices on natural

ecosystems, social sustainability addresses issues such as fair wages and treatment of farmers and farm workers, and economic sustainability encompasses goals such as ensuring fair and steady prices to both producers and consumers. There are many ways of going about achieving these goals of sustainability; many cities in North America, for example, Vancouver has a growing food truck culture, which has the potential to tackle some of the challenges to sustainability that food-related businesses and establishments currently face. Food trucks offer a greater level of economic sustainability, consumer affordability and are able to target niche markets on a small scale (Johnson 2011; Barker, 2011). Some food truck owners have stated that their success is not solely due to affordable food but because they support farm to table, local, sustainable, and high quality menu items (Barker, 2011). Fresh Local Wild is an example of a food truck in Vancouver that strives for the highest possible level of sustainability; for example instead of running on power generated by diesel fuel they use waste vegetable oil (Fresh Local Wild, n.d.).

UBC Food Services (UBCFS) has recently added a food truck, The HNFT, to their offering of dining experiences in part because they understand the importance of increasing sustainability in the food industry. Given the huge population that frequents or resides on campus, UBCFS has a dominant voice when it comes to procuring food from sources that value environmental, social and economic sustainability. UBCFS has defined a number of sustainability initiatives including but not limited to composting, waste reduction, provision of fair trade, organic, sustainable, healthy options, and working with academia to come up with solutions (UBCFS, n.d.). The projects that have been and are currently being carried out by the Faculty of Land and Food Systems, LFS 450 class, lie within a bigger project known as the UBC Food System Project (UBCFSP). This is an example of UBCFS partnering with academics to tackle current food

system issues. The UBCFSP in collaboration with the Faculty of LFS and the UBC Sustainability Office was created due to the realization that our global, national, regional, and local food systems currently operate in an unsustainable and insecure manner (Rojas, Richer and Wagner, 2007). The vision of the UBCFSP is to establish a sustainable food system that meets present needs without compromising those of the future (UBCFSP, 2014). This will only be achieved by employing a variety of methods; such methods include supporting food production that maintains and promotes ecosystem health and humane treatment of animals, supporting local food production, establishing food security, promoting awareness of and involvement with the food system, addressing social responsibility, minimizing waste, and encouraging the spread of food sovereignty beyond the UBC campus (UBCFSP, 2014). The aim of the UBCFSP is to assess the sustainability of UBC's Vancouver campus, identify any barriers and implement solutions by taking advantage of transitional opportunities (Rojas, Richer and Wagner, 2007).

Objective

Our project involved collaborating with the HNFT Food Truck (HNFT), a recent addition to the variety of food outlets currently run by UBC Food Services. The HNFT is the first University-run food truck in all of Canada which could potentially serve as a trendy but sustainable food service model for other Canadian campuses. The HNFT aims to provide food that is quick and delicious as well as local and sustainable whenever possible; they hope to further expand these goals by providing food that reflects seasonality and cultural diversity. According to Kevin Dueck, the Associate Director of Catering and Restaurants at UBC who oversees the HNFT, it is important that the HNFT serve high quality food to consumers on UBC Campus in an ecologically and economically sustainable way (Feb 5, 2014, Personal

Communication). As Land and Food System students we share similar values; however it is easier for us to overlook the economic aspect of sustainability and focus more on social and environmental aspects. These views influenced the design of our project; it was a challenge to keep economic sustainability as a top priority. One objective of the project was to assess the current menu of the HNFT and suggest ways to increase the offering of local, seasonal and sustainable West Coast menu items. Another objective was to evaluate the purchasing behaviour of customers of the HNFT. By doing this we hoped to get a general idea of the value people placed on various aspects of sustainable food production; these aspects were local and organic production, sustainable fishing practices and animal welfare. Local production is defined by UBCFS and refers to food that is grown, produced, processed or packaged within 150 miles from campus (personal communication, Victoria Wakefield, March 26th, 2014). Organic production refers to food that is produced using Canadian Organic Standards established by the government of Canada and adopted by the Certified Organic Associations of British Columbia [COABC] (Government of Canada, 2011; COABC, n.d.). Seafood with the Ocean Wise certification is guaranteed to be sustainably harvested (Ocean-Wise, n.d.). Animal welfare refers to the humane treatment of animals throughout their lives up to the point of slaughter; various Federal and Provincial Acts address this issue, some of which are discussed below. The primary focus of this project was food procurement; however recommendations have been made in other areas that address the sustainability of the HNFT. These areas include waste disposal, consumer awareness of product availability, and the possibility of expansion (i.e. more food trucks).

Methodology

Literature Review

The literature review was conducted using course documents provided by the LFS450 teaching team related to the UBC food system and its sustainability goals. Web searches were also conducted to gain information on food truck culture and best practices. In order to determine the objectives of this project a literature review was first conducted that analyzed the actual UBC food system, sustainability goals of the UBC food system, and the role of UBC Food System Project in increasing food system sustainability on campus. Primary sources used were the *UBCFSP Vision Statement for a Sustainable UBC Food System* (UBCFSP, 2012), *The UBCFSP summary reports* from 2010 (Baker-French and Richer, 2010), 2011 (Baker-French & Richer, 2011) and 2012 (Baker-French, 2012), and *UBCFSP: Toward Sustainable and Secure Campus Food Systems* (Rojas, Richer, & Wagner, 2007), and *the UBC Sustainable Purchasing Guide* (USM&CSO, 2010).

Our literature review also researched food trucks to get an idea of procurement practices and food models of existing trucks that could serve as a potential model for sustainable procurement at the HNFT. Food truck research also included researching the role of food trucks in urban food systems and their potential to foster sustainable and local food systems. Primary sources used during this literature review included: *Food on Wheels: Mobile Vending Goes Mainstream* (NLC, ND), and *Street food and vibrant urban spaces: lessons from Portland, Oregon* (Newman & Burnett, 2013).

Stakeholder Meeting

An initial meeting was organized with our project stakeholder, Kevin Dueck to discuss what the HNFT food truck would like gain from the project in order to construct an appropriate project plan that would satisfy the trucks primary objectives. This meeting was held in a conference room with our group members and Kevin. Previously prepared questions regarding project goals, methods and general information on the truck were asked to Kevin to gain a better understanding of the project and its goals. Responses were then used as the baseline for our project design.

Food Procurement Analysis

In order to assess the HNFT's menu in terms of its use of local, sustainable, and ethical ingredients, a food procurement analysis was conducted. This analysis involved obtaining an ingredient list for the HNFT from Victoria Wakefield, UBC Food Services Purchasing Manager that listed the suppliers of all the ingredients on the menu. Individual suppliers including Fresh Point, GFS, Albion and Cioffis were then analyzed for their procurement ethics, in terms of what were the most important factors influencing their purchasing decisions. Specific ingredients on the HNFT's menu were also tracked to the source of processing and production (processing company or farm) to gain a better understanding of the farm and production practices in growing/raising and processing the food. Under the circumstances that producers were not able to be located and information was only found to the distributor level, Victoria Wakefield was contacted for further information on the origins of the item. After all menu items were analyzed for their associated production practices we conducted an evaluation of the production techniques, ethics and overall practices to determine if the source adhered to principles of

sustainability, Ocean Wise and animal welfare practices where applicable. For those producers that did not demonstrate practices that adhered to these principles, other producers/sources for the item were searched for to provide suggestions for substitutes that better followed these sustainable production principles. Producers of these items were searched using the internet based on local production and sustainable practices. Viability of the use of these producers within UBC Food Services was then analyzed based on their scale of production and mode of distribution.

Survey

In order to better understand consumer demand for food production factors such as organic, local, Ocean Wise and animal welfare, an anonymous paper survey was given to HNFT customers. We chose to conduct the survey in an anonymous paper survey form as we deemed it most effective in targeting our target population effectively and efficiently, it has a high customer response rate, and a high overall efficiency and yielded direct, immediate results. The survey target population was narrowed to HNFT customers in order to gain an understanding of the consumer values of people who eat at the truck as well as to collect feedback and recommendations from current customers regarding the current menu. The data and results of this survey were intended to provide the HNFT and our project with a vision of consumer wants in order to make viable menu recommendations based on the current consumer demand.

The survey was administered outside of the HNFT food truck to customers waiting in line to receive their order. Customers were approached and asked if they would like to take part in the survey, a brief description of the project was given to customers before the survey was

administered. The survey consisted of five questions, one yes or no, three using a 1 to 5 rating scale measuring low to high importance (1 being lowest and 5 being highest importance) and one short answer question. The complete paper survey can be viewed in (Fig. 1). The survey was conducted over three different days, March 10th, 12th and 14th from 11am to 2pm. This survey time was selected based on the HNFT's prime business hours, when they receive the largest amount of traffic. The survey received a high response rate of 96% and results were collected from 120 people over the three days of surveying.

Results

Survey

Survey results indicate varieties of responses from survey participants with minor trends observed. The total students surveyed (n=120), and cummulated results in terms of individuals can be found in (Fig. 2). The results were then analyzed as percentages, rather than for individuals (Fig. 3). Survey recipients were asked if they had visited the HNFT Food Truck prior to the survey, cummulative results (Fig. 4) indicated 60 percent of surveyed students were returning customers and 40 percent new customers; with a yes to no percentage ratio of 2.46 for March 10th, 0.86 for March 12th, and 1.62 for March 14th. These results indicate that a significantly higher percentage of customers surveyed on March 12th were visiting the HNFT Food Truck for the first time.

Consumers were given questions ranking the importance of various production practices such as Ocean Wise certification, locally sourced food, organic certification and animal welfare practices. The ranking scale ranged from 1 to 5 with 1: very low, 2: low, 3: neutral, 4: moderately important, 5: very important. In survey responses regarding the importance of Ocean

Wise certification (Fig. 5), 8 percent ranked it of very low importance, 10 percent ranked it of low importance, 27 percent responded neutral, 27 ranked it as important, and 29 percent ranked it as very important. For locally sourced food items (Fig. 6), 6 percent of people indicated it was of very low importance, 5 percent ranked it of low importance, 20 percent ranked it as neutral, 40 percent ranked it as important, and 29 percent ranked it as very important. When asked the importance of organic certification in making food purchasing decisions (Fig. 7), 18 percent of respondents ranked it as of very low, 21 percent ranked it of low importance, 23 percent responded neutral, 25 percent said of high importance, and 13 percent responded that it was very important. In terms of importance of animal welfare practices in making food purchasing decisions (Fig. 8), 3 percent responded of very low importance, 10 percent responded of low importance, 18 percent responded neutrally, 27 percent responded important, and 43 percent responded very important.

When all questions were analyzed in conjunction, 20.25% responded with low or very low, 22% of respondents responded neutrally, and 58.25% of respondents responded with high or very high. Locally sourced food and animal welfare practices were the most important factors influencing consumer purchasing decisions with 69% of consumers responding high or very high for local food and 70% of consumers responding high or very high for animal welfare.

The results were then weighed in order of importance (Fig. 9), and having a factor applied to it. Questions that ranked of very low importance received a -3 response factor, questions that ranked as of low importance received a -2 response factor, questions that ranked as neutral a response factor of 1, questions that ranked as important as +2, and questions that ranked as very important a +3 response factor. The weighted order, along with a 10 percent confidence interval (Fig. 10) indicated that organic certification was by far the least important purchasing factor for

survey participants, Ocean Wise certification the next most important, and locally sourced food and animal welfare were ranked of highest importance with almost equal ratings.

Food Procurement

By tracing all menu items to their source of production we were able to gain an idea of the production practices behind each food item in terms of commitment to sustainable practices, animal welfare, Ocean Wise and organic practices. For example, the beef brisket on the HN's menu that is bought by UBC Food Services through the food distributor, Cioffis was traced to the butcher that Cioffis buys from and then the producer of the beef which came from either BC or Alberta.

Firstly, we would suggest the removal of veggie ground round from the menu. Research conducted on the brand Yves who produces the veggie ground found that it is no longer a local company. The production of Yves veggie ground round is based out of Toronto (Yves, 2014). This large distance in transport and associated unsustainable production methods reduces the environmental sustainability of the product. The veggie ground that is usually found in the vegetarian chili could be supplemented with an increase in beans.

The butter that the HNFT uses is sourced from Saputo, a Quebec based company. British Columbia is home to many dairy producers, and we have found the producer Meadow Fresh, based out of Port Coquitlam to be a more environmentally sustainable option (Qualicum Cheese Works, 2013). Meadow Fresh has a small scale, local company that has a mandate to reduce its carbon footprint by reducing packaging and delivering its products to local distributors and restaurants. Additionally, the feta cheese and cheese curds used by the HNFT is also sourced from Saputo in Quebec. The feta could be sourced from Qualicum cheeses in Parksville, BC. The

feta and cheese curds from Little Qualicum cheese works are BCSPCA are certified as 100% animal welfare friendly (Qualicum Cheese Works, 2013). Because animal welfare was a high priority for consumers of the HNFT, purchasing cheese from little Qualicum cheeses would be a good option, and it could be marketed on HNFT's menu. Also, Little Qualicum Cheese Works is a small-scale farm that integrates animals into their field production (Qualicum Cheese Works, 2013). Little Qualicum cheese raises the cows and makes the cheese all on site, this reduces the footprint of the cheese as the milk would typically have to travel to a secondary producer (Qualicum Cheese Works, 2013). The mayonnaise used by the HNFT is purchased from GFS, and is either Hellmann's or Kraft brand. We would suggest that UBC food services purchases mayonnaise from Hellmann's as it is a Canadian company that uses certified free run eggs (Hellman's, 2014). Furthermore, Hellmann's actively works with Canadian producers to meet supply, and doesn't source ingredients outside of Canada (Hellman's, 2014). Another suggestion would be for the chefs of the HNFT to make the mayonnaise from scratch, although, we realize that this may not be a viable option because of time constraints. Finally, we would suggest that the Ciabbata bread be purchased from a local company such as Cobs breads or Terra breads, these companies are close to campus and both local to Vancouver. Buying breads from these local companies would help support local businesses which is seen as a high priority for consumers of the HNFT (Cobs 2014, Terra Breads, 2014). Purchasing from a local company would also decrease the travel distance of the bread.

Discussion

The results indicate the driving forces behind purchasing behaviour of HNFT consumers, in terms of sustainable food. The survey results in comparison to the province of BC seem to be fairly aligned; therefore using other food truck sustainability models throughout Vancouver and BC may serve as a potential model for increasing the sustainability of the HNFT. As mentioned earlier, the measurements of sustainable food production for the purpose of this study include Ocean Wise, locally sourced food, organic food, and animal welfare in terms of meat, dairy, and egg production. Assessment of the current menu food items and ingredients was assessed to determine whether or not UBCFS is meeting the demand of consumers at the HNFT. Ocean Wise certification wasn't necessarily well-known amongst the consumers that were surveyed, but once it was defined to them, it proved to be of importance for consumer purchasing behaviour. Little research has been conducted on the demand for Ocean Wise products in BC and in Canada, but the regulation itself began in Vancouver at the Vancouver Aquarium as an initiative to educate consumers on sustainable seafood production (Ocean Wise, n.d.). The Ocean Wise certification stamp has caught some serious attention across Canada and now has approximately 450 members and 3100 locations across Canada (Ocean Wise, n.d.). Seeing as the HNFT only has 1 menu item (the Fishwich) that is a seafood source, and is already considered Ocean Wise, they are currently meeting this trending demand. If the HNFT or any future food trucks decide to add more seafood features, it may be important to source out Ocean Wise certified suppliers.

Locally sourced food was rated as a fairly important component of food purchasing behaviour, mostly rate at 4 out of 5, 5 being very important. This coincided with BC's purchasing behaviour, Canadian and locally sourced foods were ranked as the number one driving force for

BC consumers. Based on these results, UBCFS seems to be meeting this demand, but the recommendations below show the adjustments that the HNFT or UBCFS as a whole can use as more sustainable food purchasing guide.

Organic food demand was surprisingly low, and in comparison to the rest of BC, seems to be of equal importance, but not as high as local or animal welfare. Organic consumers in BC are highest in the age range of 55-64, whereas age 25-34 was second lowest next to 60+ (Canadian Organic Trade Association [COTA], 2013). UBC's HNFT consumer's ranked organic food production was fairly evenly distributed between 1-4 on a scale of 5. Even though organic food production may be a more sustainable, appealing to the organic market may not be considered a priority for the HNFT food procurement.

Lastly, animal welfare was a very important variable in consumer purchasing behaviour; 42% of the participants rated animal welfare at a 5 – of utmost importance, while this is also very important purchasing behaviour factor amongst BC consumers (Agriculture and Agri-Food Canada, 2011). To maintain and encourage producers to develop best animal production practices, BC currently has some very strict regulations in terms of animal welfare for meat, egg, and dairy production including the Prevention of Animal Cruelty Act, the Milk Industry Act, Hatchery Regulation Act, and the Food Safety Act (Canadian Food Inspection Agency, 2013). Because all of the meat provided to the HNFT is sourced from BC and Alberta producers, Canadian meat regulations for animal welfare will apply. Any further egg, meat, or dairy products that may be integrated as a menu item for the HNFT should be supplied from a local/Canadian source since locality may be an indicator of the level of welfare regulation in place.

Through extensive analysis of the food list it was determined that many of the ingredients used by the HNFT achieve the goals of economic, social and environmental sustainability as they are purchased from local producers and/or retailers. However, we found that a few of the key ingredients used by the HNFT come from less sustainable producers, and thus we have suggested alternative producers to source these ingredients from.

Limitations

Firstly, working within the time constraints of the semester posed a challenge, as it would have been ideal to have the ability to interview consumers of the HNFT over a longer time frame. Restricted by the time frame of the semester and project deadlines, we were only able to conduct interviews for a week. Although our weeklong interviews gave us great insight on consumer demands and recommendations, it would have been ideal to conduct questionnaires for a longer period of time to obtain a larger data set. Additionally, working with an already established menu as well as the economic constraints of UBC Food Services was a challenge, but educational in understanding the reality of balancing both economic and environmental sustainability. Although we could easily find local, small scale, producers with great products, the prices of their products were not a sustainable or viable option for UBC Food Services and the HNFT. Overall, the challenges we were faced with throughout the course of the project taught us the realities of providing both affordable and sustainable food to students.

Group Reflections

Paige's Reflection

Overall, the experience in assessing the sustainability of the HNFT was very rewarding and educational. Because the project had three main components: interviewing stakeholders, food list analysis, and public surveying, I was exposed to a more professional approach to an LFS project. One of the most rewarding portions of this project was the final presentation where stakeholders and community partners were present in the room. Professionalism became a primary component of the project because of this since we were the ones making recommendations in a serious manner to these people; professionalism was one my main intended outcomes of this project and it was achieved. Working with the public and networking with the UBC Food Services team, as well as working within a cohesive project team made this final LFS project experience very valuable for future endeavors.

Rebecca's Reflection

Throughout the Land and Food Systems course series, LFS 250, LFS 350, and LFS 450, I have come to have a deeper appreciation of the underlying factors associated with a sustainable culture. Especially, now, having completed the final course of the series, LFS 450, I found it inspiring that so many small businesses throughout Vancouver have similar goals and values as the ones we learn in class. To see the people more actively seeking and supporting local and organic products motivates me to share this attitude with my surrounding peers.

Jen's Reflection

I found it incredibly rewarding to work so closely with a food-related business that is striving to be as sustainable as they can be. The HNFT embodies many values similar to mine. It was

fascinating to research alternate sources of food and to realize the challenges that UBC Food Services faces in procuring food that is locally and sustainably sourced.

Sarah's Reflection

This project gave me a better understanding of the barriers that exist in achieving sustainable food procurement. For most businesses, the HNFT included, profitability is the most important factor in making purchasing decisions. The HNFT emphasized the importance of providing students with affordable food, they were able to achieve this goal while sourcing generally sustainably. However, increasing the sustainability of some of the products used in their menu was inhibited by economic factors. Another barrier for sustainable procurement is working through a large institution. This presents its own challenges such as fixed distributors and the inability to source directly from the farmer. Working with a food outlet within a large institution enhanced my ability to understand the necessary considerations that should be made when suggesting certain procurement changes. I know now that a thorough understanding of economic constraints, budgets, distribution outlets and scale is essential to initiating menu changes.

Mikaela's Reflection

Working with the HNFT Food Truck and UBC Food Services has been a very rewarding and educational experience. The UBCFSP has allowed me to bring together my knowledge learned in a multitude of courses within LFS and apply them to a real world experience. This project has helped me grow and gain confidence in a professional setting. Moreover, in working with UBC Food Service and the HNFT, I gained a much deeper understanding for how the food system works and how difficult it can be to embody the paradigm of the three-legged stool of

sustainability. Tracing food back to producers and sourcing new, more sustainable producers, made me realize how difficult it can be to mesh together environmental, social and economic sustainability. This process gave me a new appreciation and respect of the work, and forward thinking of UBC food services. I am very thankful for this experience, and believe that the skills and knowledge gained through this project will not be forgotten.

Recommendations

Menu

Based on the results of our survey, these are specific recommendations that could help HNFT meet the food system sustainability goals. During the qualitative analysis component of our research, respondents noticeably sought out vegetarian options, not necessarily salads. Although the HNFT menu does offer vegetarian selections, customers were requesting a permanent item (served daily) for the menu such as a vegetarian sandwich. Another recommendation is regarding the use of seasonal produce that could potentially be utilized in a signature dish that embodies the sustainable paradigm of the HNFT. Primary focus should be on linking our sustainability initiatives to Ocean-Wise, Local, Organic, or animal welfare. We suggest freezing these items such as local blueberries or salmon allowing for year round use as well as increased shelf life. This can give more opportunity for people to understand the importance of local procurement and of local culture within the campus community.

Waste management

An observation worth mentioning is in relations to waste management practices, although this is slightly out of the scope of our objectives of food procurement. There is currently one

green bin for compostable waste available next to the HNFT. Although this promotes customers to participate in composting practices, customers or just people walking by with non-compostable goods were also throwing away their waste in the same green bin. While people are increasingly understanding to compost what they can, having only one compost bin and no general bin available may create a sense of unimportance of the distinction. We advise in including another general bin, with clear visual indicators, for the general public to throw out their non-compostable trash.

Labels

The following recommendations are more general towards the LFS teaching team as well as the UBC food systems project. We have realized that there is a lack of clear labeling signifying which foods are sustainable products. In order to increase awareness and demand around sustainability and local procurement, we consider future projects focusing on more advertising and better marketing strategies could be useful. Most customers are unaware that the HNFT is serving Ocean-Wise, local or organic products, therefore we suggest having clearly visible symbols and/or labeled definitions, such as ones provided in the discussion section. We recommend this type of label creation could potentially be a future LFS project for not only the HNFT but for other sustainability initiative projects within UBC.

More trucks

Finally, we strongly urge the instigation of additional food trucks. There is clearly a high popularity in food trucks currently in Vancouver, as well as within campus. With 60% of customers returning or willing to return to the HNFT, additions of new trucks would presumably

do very well. The new trucks could include new concepts and menu, for instance a breakfast truck that provides free trade coffee or in-season fruit smoothies. If designing a new truck, we would like to offer a source from Small Businesses BC, which is provided in Fig. 11 of the appendix (Small Business BC, 2012).

Scenario Evaluation

After reflecting upon our methods, we have come up with a few modifications that could have been made to our survey. First, we could have included a question to understand the demographic of the customers. With this information, perhaps our recommendations may have been tailored in a different way depending on the clientele, i.e. which faculty most students were from. However, through observations, we noticed that majority of the consumers included a broad range of people from students, professors, staff, to construction workers. Secondly, we could have included more qualitative questions referring to customers' knowledge on sustainable products or specific menu focuses. We noticed patrons in general were unaware of HNFT's sustainability initiatives, and after going through our results now, we could have made additional questions based on the current knowledge of clientele to understand which areas to increase emphasis in. Perhaps we need more emphasis in educating customers on what Ocean Wise certification is or on what is defined as a local product. Lastly, the suggestion of an online survey was in discussion. Participants could have received a small incentive upon completion of the survey. The benefit of an online survey would have been in spreading awareness to a greater number of people more efficiently. Nonetheless, an online survey could be implemented in future data collection.

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Appendix

LFS 450 - Hungry Nomad Food Truck Survey

Date: _____

Introduction Pitch:

We are students in the Faculty of Land and Food Systems working on a project to improve the sustainability of UBC's food system in collaboration with the Hungry Nomad Food Truck

	Yes		No		
1. Have you eaten at the Hungry Nomad Food Truck Before?					1 (low) 5 (high)
	1	2	3	4	5
2. How important is Ocean-wise certification to you?					
3. How important is locally sourced food?					
4. How important is organic food?					
5. How important is animal welfare in your meat/egg/dairy consumption?					

Definitions

1. **local**: grown, raised, processed or produced within 150 miles of campus.

2. **ocean-wise**: limited by-catch, no overfishing and limited ecological damage.

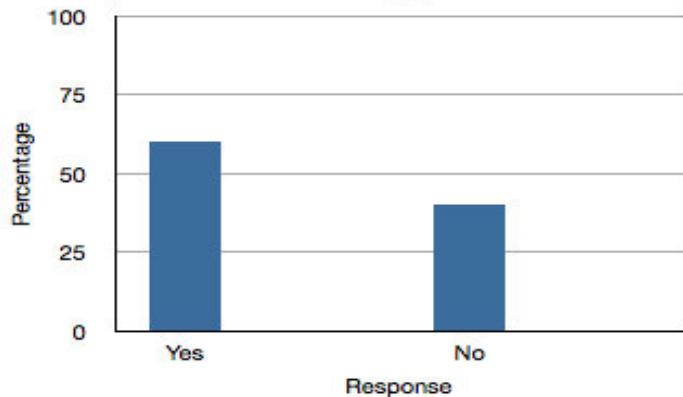
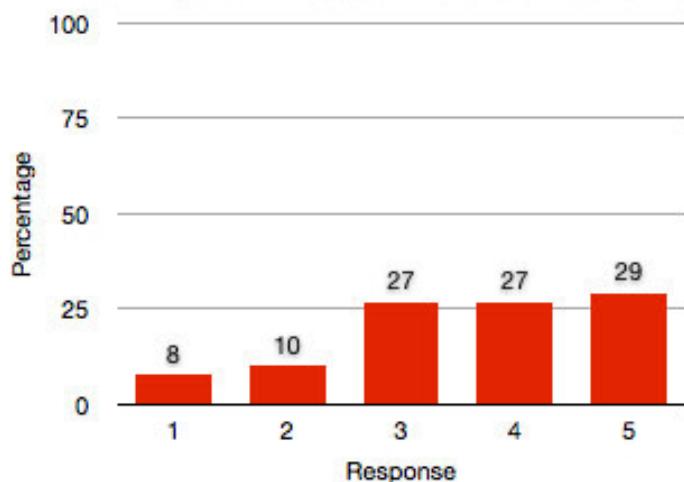
3. **organic**: complies with Certified Organic Associations of BC (COABC) organic standards (no use of agrochemicals, no GMOs, no antibiotics and hormones in meats)

4. **Animal Welfare**: Well being of the animals that produce the food.

Figure 1. Survey Design

LFS 450 - Hungry Nomad Food Truck Survey Results

Dates: March 10, 12, and 14, 2014	Yes	No		
1. Have you eaten at the Hungry Nomad Food Truck Before?	72	48		
Low 1 -> High 5	1	2	3	4
2. How important is Ocean-wise certification to you?	9	12	32	32
3. How important is locally sourced food?	7	6	24	48
4. How important is organic food?	21	25	28	30
5. How important is animal welfare in your meat/egg/dairy consumption?	4	12	21	32
				51

Figure 2 - Cumulative results of the survey (n=120).**1. Have you eaten at the Hungry Nomad Food Truck Before?****Figure 3** - Survey results for customer visits in percentages (n=120).**2. How important is Ocean-wise certification to you?****Figure 4** - Survey results for the importance of ocean wise certification in percentages (n=120).

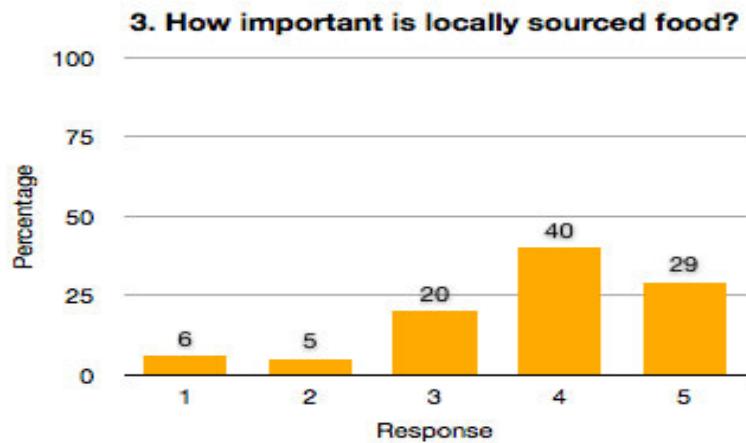


Figure 5 - Survey results for the importance of locally sourced food in percentages (n=120).

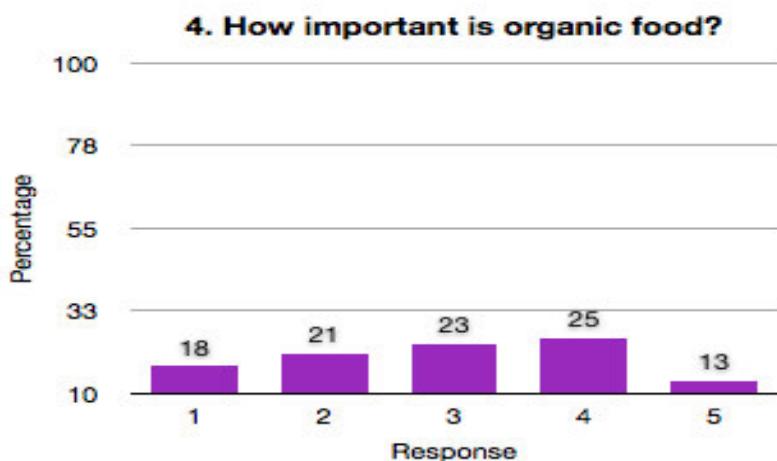


Figure 6 - Survey results for the importance of organic food in percentages (n=120).

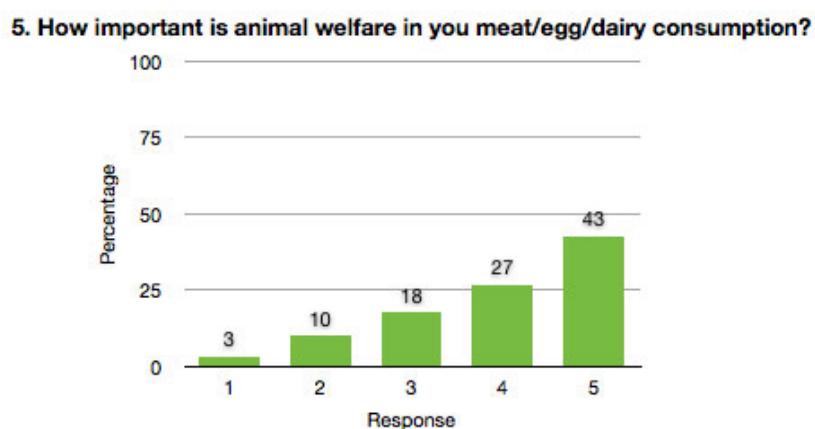


Figure 7 - Survey results for the importance of meat, egg, dairy consumption food in percentages (n=120).

Figure 11. 9 tips for Starting a Food Truck - from Small Business BC

1. Develop a strong brand - equipment, logo, etc should all be cohesive and identifiable.
2. Focus on the little things - decor, menus, uniforms and signs. Make them memorable and exciting.
3. Social media is crucial - it informs customers of location and menu items and it allows for sharing of reviews and interaction with customers.
4. Find an angle - make it unique so that your truck is “one and only”.
5. Don’t treat it like a hobby, treat like a restaurant - manage portion size and food cost effectively.
6. Keep it simple - simple ingredients and easily assembled dishes. This way ingredients can be purchased in larger quantities. Vary dishes by changing one ingredient; for example, burrito with beef OR chicken OR veg (protein changes, everything else remains).
7. Be prepared - plan for malfunctions, which can be more frequent due to the mobile nature of the restaurant. Examples include power failures, gas leaks, or running out of produce.
8. Budget for bad weather - these can result in decreases in foot traffic. Forecast the number of slow days due to weather and include this in the business plan.
9. Think outside the truck - to find other avenues for revenue and advertising. For example, catering, gift cards and merchandise.

MEDIA RELEASE

This project was a collaboration of a group of students from LFS 450 and the HNFT Food Truck. The HNFT strives to provide food that is as quick, delicious, affordable, sustainable, local, culturally appropriate and seasonal as possible. Our objective, as Land and Food Systems students, was to help the HNFT achieve their goals by reviewing their current ingredient sources and surveying customers to determine what drives their purchasing behaviour. We provided some alternative sources for some of the ingredients and discovered that customers placed the greatest value on local menu items. After local, customers valued animal welfare and Ocean Wise certification. What we found interesting was the organic food was of the lowest priority to consumers. Food truck culture is growing in North America, with Vancouver being so exception, so we determined that it would be a great idea for UBC Food Services to offer more food trucks representing a variety of culinary themes.