# Baseline Inventory of the UBC Food System Healthy Food Situation Assessment and Action Plan 

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Healthy Food Situation
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I. Abstract:

Snacks are an integral part of a university student's diet given that schedules do not always allow enough time for students to sit down for a regular meal. This means that the to-go items that are offered at the main campus locations play a key role in determining student health. At the University of British Columbia campus, UBC Food Services is the primary food provider as they run and maintain several central dining locations such as Totem Park Residence Dining Hall, Place Vanier Residence Dining Hall, Ike's Café and the Loop. To assess the healthy snack options on campus from a consumer's perspective, a baseline inventory of all snack items available at the four locations was compiled and a survey of students was administered. Each inventory item was given a categorized as "choose most", "choose sometimes", "choose least", and "not recommended" according to B.C. Food Sales Guidelines and labeling such as whether the snack was gluten-free was recorded. The Loop and Place Vanier had the most items under the 'choose most' category, and therefore, had the healthiest choices. Totem Park and Ike's Cafe showed lower numbers of snack items belonging to the 'choose most' category. The combined survey results showed that $59 \%$ of consumers felt that the location they frequented had enough healthy options. At several locations, consumers voiced the desire for more vegan options as well as a greater variety of fruit. This was inconsistent with our inventory and led us to conclude that, although UBC Food Services is actively pursuing its local, fair trade, and organic procurement goals, consumers are often unaware of their procurement policies and the nature of the goods they provide. Therefore, our recommendations for UBC Food Services includes increasing the amount of 'choose most' options at both Totem and Ike's Cafe, improving the labeling of dietary facts on snack items to increase awareness among consumers, as well as increasing the number of vegan, gluten-free and lactose-free snack alternatives.

## II. Introduction

Olivier De Shutter, the UN special rapporteur on the right to food, announced on March 12th, 2012 that the global food system has reached an international public health disaster (Zweynert, 2012). He addresses that the main problem is the production of cheap calories over quality foods that seems to be causing damage to both the developing and developed countries. The suggestions that are outlined include taxing unhealthy products and regulating foods that are high in saturated fats, salt and sugar.

Universities in North America can play an important role in addressing the current concern of the global food system (Martin \& Samels, 2012), as they are well known for holding high standards of education. Creating an environment that also supports healthy eating can be imperative in nourishing the mind. Initiatives such as the Sustainability Tracking, Assessment and Rating System (STARS) can give credit to Colleges and Universities for their efforts in improving their food system. STARS is well-known as a self-reporting framework that allows universities to assess their performance on sustainability.

According to the recent STARS report (2011), UBC has had impressive improvements such as being the first Canadian University awarded the Fair Trade Campus status, purchasing all eggs and poultry from local providers, and selling fair-trade, organic, and shade grown coffee/tea (non-branded). UBC has also put forth a Climate Action Plan that includes goals such as reducing GHG emissions by $33 \%$ by 2015 and to be a net energy producer by 2050.

Although there have been many initiatives done to analyze and score a Universities Food System performance, there has not been much addressing the options for healthy snacks. Greater improvements need to be made on the accessibility of health snacks available to the over 48000 current undergraduate and graduate students at UBC.

## a. Main Issues

The UBC food system has undergone many changes the last few years. To get a clearer idea of what is currently provided, there was an inventory list of available healthy snacks was needed at The Loop, Ike's, Vanier Residence Dining hall and Totem Residence Dining hall. In context of this project, a snack was defined as anything that is usually eaten between meals that can also be taken to-go. Furthermore, details, such as the presence of nutritional information or whether it caters to certain dietary preferences/ needs: vegan, gluten-free, lactose-free, or organic, was also lacking. There also was a need for identifying the healthiness of snack items at the four establishments. Our project will deal with these issues through conducting an inventory of snacks at the above mentioned establishments, and classifying each snack item as not recommended, choose least, choose sometimes, and choose most, as well as mentioning if they have any labeling on them or not.

Another issue is the lack of assessment previously done to get an understanding of student demands in regards to healthy snack availability on campus, and whether or not students perceive snack options available as healthy or not. So we have also conducted a survey to get a better understanding of consumers' satisfaction with the availability of healthy snacks on campus, and compared the survey results with the inventory to give UBC Food Services some recommendations to reduce the gap between what is provided, and what consumers demand.

## b. UBCFSP Vision Statement and Identification of Value Assumptions

Our project involved analyzing the Vision Statement put forth by the UBC Food Security Project (UBCFSP). Our group felt that, although it represents a utopian food system, the overall message is positive and clear. It is a clear, concise statement that serves as a model to improve all
elements of food security: affordability, accessibility, appropriateness, availability, sustainability, and safety of the food. It also involves all 3 aspects of sustainability - ecological, economical, and social.

For areas of improvement, each guideline should have been more SMART (specific, measurable, attainable, relevant, and timely). Without these measurements, the guidelines come off as rather ambiguous. We do appreciate, however, that it tackles different issues such as production, as both fair prices and safe working conditions are considered. It also places emphasis on ethnic foods and affordable prices, which are key in dealing with multicultural UBC students.

When analyzing this document, there were several value assumptions we had that affected our critique. When dealing with our projects, we valued student health as highest priority. Student life is quite busy and our group wanted to improve on not just having healthier snack food items, but also having these items be highly accessible and affordable. Furthermore, we know that we are dealing with a multicultural group of people on campus, and therefore we hoped to improve the availability of culturally appropriate items.

These values affected how we critiqued the vision statement principles. Firstly, although we enjoyed the cultural considerations, this can be contradictory when aiming to increase local food items on campus. Therefore, some restrictions on cultural and ethnic foods should be accepted based on what can be grown in the region. Also, when it comes to increasing more local foods, climate can cause many challenges and, therefore, may not always be feasible.

Furthermore, as students, we place a higher emphasis on learning. As a result, there needs to be an additional principle that focuses specifically on greater public education and how food outlets can educate the public about consumer choices. The "promoting awareness" portion
needs to more specific. It is reassuring, however, to see the last point emphasizing on public learning opportunities should be easy to obtain.

Overall, the principles are not realistic. For example, the first principle discusses that the basis of agriculture is to create an artificial ecosystem by disrupting what is there. Its focus should be not to damage the surrounding area, thereby allowing succession to re-establish postagricultural use and thus, able to return to its original state. We still appreciate how it places emphasis on educating the public to choose foods that "does not disrupt or destroy ecosystems", allowing consumers to realize that the foods they choose to eat do cause an impact on the ecosystem.

Also, some principles are not very clear. For example, our group is uncertain of how UBC could ensure that recycling was done locally. We understand that they are simply guiding principles and it would be inappropriate to include too much information, it would be beneficial, however, to include one example for each principle.

Nonetheless, these guidelines are excellent in addressing key concerns and force every individual to rethink their choices when purchasing food items on campus

## III. Methodology

The way in which we approached our UBCFSP centered on our goal of assessing snacks in the UBC Food System from a consumer perspective. For the purposes of our project, snack foods were defined as to-go items eaten between meals, as sizes of snacks varies depending on an individual's stature and eating habits. To begin, we needed to establish a better understanding of the service provider. This included becoming familiar with the UBC Food Services goals, action plans and the STARS dining service reports on their current activities. The information
was accumulated through contact with our primary stakeholder representative Victoria Wakefield, the purchasing manager for Student Housing \& Hospitality Services, by accessing reported goals and action plans from the UBC Food Service website and through the LFS 450 lecture presented by Victoria Wakefield and the head chef at the Vanier Residence, Steve Golob. To then compare UBC Food Services targets with those of other provincial programs, the Guidelines for Food and Beverage Sales in B.C. Schools from the BC Ministry of Education and Ministry of Healthy Living and Sport was reviewed and summarized after being accessed from the LFS 450 Vista website (ActNow BC. 2010.). Due to the fact that the Guidelines for Food and Beverage Sales in B.C. Schools are focused mainly on elementary/secondary schools, we also wanted to review what goals other Canadian universities have with respect to the food services that they offer. This was done principally by searching for the key words "food services" on each of the following university websites:
> University of Alberta
> University of Saskatchewan
> McGill University
With this background information we were then able to begin collecting our primary data. Our first action was to visit each of the four locations (Place Vanier, Totem Park, Ike's Cafe, The Loop), during an identified "snack time" (10-11am or 1-3pm) during the week of Feb 27th March 2nd, and create an inventory list where all snack items that were available at that time were recorded. If any nutritional information, such as vegan, gluten-free, organic, or daily average intake values were present on the food, that information was also recorded. Inventories were performed in this fashion in order to get a snapshot of what is available to consumers in between meal times. It also provided an idea as to how well UBC Food Services advertises the
goods they provide such as organic foods, vegan options and so on. The resulting lists were compiled into an excel document with each location's inventory being placed on individual sheets. Each food item from each of the locations was then assigned a category based on the criteria seen in the Guidelines for Food and Beverage Sales in B.C. Schools. These categories include:

- Not Recommended
- Choose Least
- Choose Sometimes
- Choose Most.

As previously mentioned, the focus of this project was to assess the provided services from a consumer perspective therefore a sampling of public opinion was done. To create a suitable survey, the group collaborated to come up with several questions that would give an idea as to what foods were consumed between meals as well as what other foods customers would like to see. The question draft was then sent to our stakeholder, Victoria Wakefield for approval. Ms. Wakefield identified other key areas that she hoped we could include such as determining what time of day the locations experienced the highest volume of people in search of snack foods. This was incorporated into the survey which was then sent to Molly Campbell, our teaching assistant, for comments. Molly was able to provide a great deal of feedback allowing us to modify our survey into a more user friendly version. The draft was once again sent to Ms. Wakefield for final approval before distribution. The final survey can be found in Appendix A.

From March 14th - 16th, twenty surveys were taken to each location to be filled out, where one of our group members approached random individuals, who were in the process of utilizing the food services, to ask if they would be willing to fill out a survey. The four locations
visited were Place Vanier and Totem Park Residence, Ike's Café and The Loop. We visited the locations around 1 pm and attempted to gain an equal spread between males and females to participate in the survey. This may have been limited in some cases due to the lower number of visitors frequenting the location. Once a customer agreed to fill out the survey, they were presented with an explanation that the survey was being done for an LFS 450 class project where we were working with UBC Food Services to identify how the services are being used inbetween meal times. They were also informed that the survey was anonymous and that they were under no obligation to fill out the survey and could withdraw at any time. This was accompanied by a consent form which all participants signed (Appendix B). While the survey was being filled out, the group member present remained nearby in the case of any questions. Once twenty surveys were performed at the majority of the locations, the answers were organized into a spreadsheet for analysis.

Having a group member on-site distributing the survey proved to be beneficial for many reasons. First of all, the surveyor could answer any questions the individual may have as well as act as someone for them to bounce ideas off of while they were going through the survey. This also prompted completion of the survey as questions involving a "why?" clause often goes unanswered without prompting. Having a group member approach people in the facility potentially made the participant more comfortable as well as they could speak with friends for opinions, and were in an open, familiar setting. A potential source of error however is that many of the survey participants were chosen as they were sitting down enjoying their meal or snack as they were deemed as potentially having the time to complete the survey. This may not be representative of the people who do use the location for snacks as snacks are often a grab-and-go type food.

To ensure that we had achievable goals, we decided on several parameters that would be used to determine the project's success. The first goal was to create a detailed snack inventory for each of the locations, listing a minimum of fifty items from the Totem Park and Place Vanier residence and a minimum of ten items at Ike's Café and The Loop. For the inventory to be complete, each item would have to be grouped into one of the following groups; not recommended, choose least, choose sometimes or choose most. For the surveys, a minimum goal of 15 surveys for each location was set. Concerning the data we expected to get from the surveys, we aimed for the surveys to be filled out to the extent that $70 \%$ of the anticipated data was collected. Percent completion of the survey was determined by counting all answers in the survey that were left blank or where "none" or "N/A" were written and subtracting that number by the total number of answers. The difference was then divided by the total number of answers. Once the surveys came in and were analyzed, $82 \%$ of the anticipated data had been collected. Stakeholder feedback was also sought in order to define the project's success from the UBC Food Service point of view.

## IV. Findings and Outcomes

a. Baseline Inventory Results

From the inventory list created at the four locations (Appendix C), the snack foods were then categorized into "choose most", "choose sometimes", "choose least", or "not recommended". We were able to find that in aggregate, $28 \%$ of all items included in the inventory fell into the "choose most" category, $36 \%$ were "choose sometimes" items, $19 \%$ fell under "choose least", and $17 \%$ were "not recommended".


Graph 1. Overall Percentages of Items Categorized
At Totem Park Residence, $19 \%$ of items were categorized as "choose most", $30 \%$ as "choose sometimes", $28 \%$ as "choose least", and $23 \%$ as "not recommended". Place Vanier had the highest percentage of choose most inventory items, with $44 \% .39 \%$ were classified as "choose sometimes", $6 \%$ as "choose least", and $11 \%$ as "not recommended". The Loop was second highest, with $37.5 \%$ as "choose most" items, $37.5 \%$ as "choose sometimes", $12.5 \%$ as "choose least", and $12.5 \%$ of items were "not recommended". Ike's Cafe had the lowest amount of "choose most" items, with $15 \% .20 \%$ of the items were categorized as "choose sometimes", $25 \%$ as "choose least", and $40 \%$ as "not recommended". Overall, we were also able to notice that vegan, gluten free, lactose free, and organic items were available at each location, but were not readily accessible and were limited in options.


Graph 2. Percentage of Items in Each Category Available at Each Location
A more elaborate break down of category percentages for each type of snack item at the four locations are available in Appendix D-G.

## b. Survey Results

As previously mentioned, a primary evaluation of snack and to-go foods was conducted at our four locations, Totem Park Residence Dining Hall, Place Vanier Residence Dining Hall, The Loop, and Ike's Café. This consisted of a survey we created, and approved by our primary stakeholder, which was then completed by approximately 20 people at each location. The survey questions consisted of different snack options consumers would buy or avoid, in addition to the most common time of day that these would be purchased at each location. The results are listed below.

## i. Totem Park Residence Dining Hall

$53 \%$ of respondents thought that there were enough healthy snack options, the remaining 47\% who didn’t think this was because of feelings that "things were sugary", "night snacks were unhealthy and greasy" (at Magdas), or that there were "no vegan baked goods". Baked goods were the number one most common purchase ( $84 \%$ ), followed by fruits and vegetables (both at $79 \%$ ), and beverages along with wraps/sandwiches came up third (74\%). The most common avoided purchases ranged from cookies, cakes, chips and fruit to fried foods. Some of the responses to "what snack option would you like to see at this location" included better and more variation of fruit, more vegan options, and protein rich snacks such as nuts. The most common times of purchase were between 6 pm -close ( $84 \%$ ), $3 \mathrm{pm}-6 \mathrm{pm}(42 \%)$, while $9 \mathrm{am}-12 \mathrm{pm}$ and $12 \mathrm{pm}-$ 3pm were occasional answers (32\%).

## ii. Place Vanier Residence Dining Hall

$55 \%$ of respondents thought that there were enough healthy snack options. $45 \%$ thought that there was "too much junk food", "more healthy meals than healthy snacks", and "didn't know how the food was prepared". The most common purchase were wraps/sandwiches (75\%), beverages (65\%), fruit (55\%), and vegetables and baked goods (45\%). Avoided purchases included the fruit at the salad bar, pizza, burgers, donuts and pastries. Answers for snack options wished to be seen were "trail mixes", "do-it-yourself pasta bar", "dried fruits", "healthy snack bars", and "more fruit". $12 \mathrm{pm}-3 \mathrm{pm}$ was the most frequented time ( $55 \%$ ), followed by 6 pm -close (45\%).
iii. The Loop
$79 \%$ of respondents thought that enough healthy snack options were available. Among the top choices for frequent purchase included baked goods and wraps/sandwiches (both at 50\%), followed by beverages (43\%). Frequent answers to which items were avoided were chips, brownies, and the salad bar because they were "unhealthy", "high calorie count", or "too expensive". Snack options that would be of interest to those surveyed included more salad choices, healthier wraps, dried fruit, and low-fat yogurts. The most common time to purchase snacks at this location were 9am-12pm (79\%) and 12pm-3pm (43\%).

## iv. Ike's Café

$50 \%$ of respondents thought that there were enough healthy options, while the remaining $50 \%$ thought that snacks were "high sugar", "high fat baked goods", or "should be more homey foods". Beverages were the most commonly purchased item (65\%), followed by wraps/sandwiches and baked goods (both $40 \%$ ). Most commonly avoided items for purchase were also baked goods, along with fruit, due to "fattening" or "too expensive" views. Snack options that would be of interest if available were healthier cheaper sandwiches, fruit salad, cheese and crackers. Most common time to purchase from this location was $12 \mathrm{pm}-3 \mathrm{pm}(80 \%)$, with $9 \mathrm{am}-12 \mathrm{pm}$ and $3 \mathrm{pm}-6 \mathrm{pm}$ also chosen as frequent hours ( $45 \%$ and $35 \%$ respectively).

From all of this information gathered at the various locations, we were able to create an excel spreadsheet, with separate sheets for each location, which has all the above information listed. This data is available for use.

## V. Discussion of Findings

## a. Inventory of Healthy Snacks vs. Student Awareness of Options

Taking inventory of snack items available at Ike's Cafe, the Loop, Totem Park Residence Dining Hall, and Place Vanier Residence Dining Hall showed that there was some overlap of items within the ones available at the four locations. They were generic snack items such as baked goods, prepackaged goods and beverages. However, this did not mean that the variety of these options available at all locations were the same. As it can be seen from the inventory, the varieties available at the two residence dining halls are quite different. Totem Park had a much bigger variety of options; but, the surveys showed that students wanted more options, particularly vegan ones. Vegan alternatives of baked goods are actually available at Totem Park; these items are kept in a back freezer and are available to students upon request. This discrepancy could be explained by the lack of awareness amongst students. Approximately $68 \%$ of the students surveyed at Totem's dining hall were first year students and it is likely that they may be less aware of the available snack options. Moreover, this information is not readily available in general. This was not the only discrepancy between the survey results and what was indicated to be available by our inventory. Our surveys showed that many students wanted a better selection of fruit or certain fruits to be available. Based on this, it is clear that students are not aware of UBC food procurement policies: that preference of where they purchase food items are "given to local manufacturers who demand environmental and/or reusable packaging, and limit truck traffic on campus by reducing the number of deliveries per week and the number of contracted vendors." (UBC Food Services)

In contrasting what snack items students wanted to be available at the four locations to the baseline inventory taken, it is obvious that there is definitely a lack of awareness when it
comes to food options and alternatives availability. To truly understand whether there is, indeed, a market gap between the demand of snack choices and what is currently offered, there first needs to be an ameliorated situation of awareness of options, UBC Food Services, and the UBC Food system among the students.

## b. Healthy vs. Not Healthy Options

The perception of whether there are enough healthy snack options at each location differed from the reality of the BC Ministry of Health Services Food Guideline rankings assigned to all options in our baseline inventory. At each of the four locations, a minimum of $50 \%$ of the survey sample believed the respective location they were being surveyed about offered enough healthy options. However, this was not the case at Totem Park Residence Dining Hall and Ike's Cafe. As shown in the findings, only $19 \%$ of Totem Park's snack inventory was healthy, or categorized as "choose most"; and, only $16 \%$ of Ike's inventory was healthy. Since Ike's Cafe is supplied by Totem Park, it is not surprising that they are ranked together as the bottom two most unhealthful locations of the four. It should also be noted that the situation at the Loop is not clearly reflected through our evaluation results due to their very limited selection of snack food options as well as it being a newer cafe, located in the new Centre for Interactive Research on Sustainability (CIRS) building.

Despite the fact that students felt that all four locations offer enough healthy snack options, only $28 \%$ of the aggregate baseline inventory was ranked to be healthy, or categorized as "choose most". There are major limitations to surveying whether students believed a location to have enough healthy options available for sale. The response to such a question reflects students' personal definition of "healthy" and what they perceive to be a "healthy snack"; it is
entirely subjective and can be influenced by the relative comparison of all items available and the environment of the location.

## c. Availability of Dietary Specific Options and Labelling

Nutritional labelling exists mostly for items that are commercially packaged. Snack items like individually wrapped baked goods lack nutritional labelling and are not always well labelled as vegan, gluten-free, lactose-free, or organic. In fact, in cases like the baked goods at Totem Park, items are not set out to be seen.

The baseline inventory shows that items that cater to specific dietary needs exist at all four locations. For the most part, the items that have been indicated to be vegan, gluten-free, or lactose-free are only categorized as such because the items naturally or normally do not contain gluten, lactose, or ingredients derived from animal or animal by-products. This shows that the four locations have vegan, lactose-free, and/or gluten-free items; but, not alternatives. By alternatives it means that the consumer has the choice to pick between options when snack items have varieties that cater to specific dietary preferences, such as in baked goods.

## VI. Stakeholder Recommendations:

After analyzing the data collected at Totem Park, Vanier Residence, Ike's Café and The Loop regarding healthy snack options available at these locations, our group has come up with three recommendations for our stakeholder, UBC Food Services.

Our first recommendation is that UBC Food Services increase healthier "choose most" snack varieties at Ike's Café and Totem Park due to the fact that these two cafes had the lowest level of satisfaction in terms of enough healthy snacks available at their location. According to
our survey (appendix A), $50 \%$ of students thought there were enough healthy snacks available at Ike's Cafe; while, at Totem Park, 53\% believed so. Ike's Café had mostly baked goods with very few options for fruits and vegetables and Totem also had higher selections in the baked goods and dessert categories compared with healthier snack options. If more varieties of healthy snacks were offered at Ike's Cafe and Totem, instead of only large varieties in the number of baked goods for example, students may increase their likelihood of purchasing healthier snacks as they will have a better selection. From our survey results, it is clear that students are looking for more variety in healthy snack options at these four locations. More nuts, trail mix, ethnic (Asian, Mexican etc.) snacks, fresh fruit and granola bars were examples of what students wanted to see more of at these establishments. If UBC Food Services cut back on unhealthy snack varieties and offered more options in the above listed healthier goods, then the snacks offered would please consumers, as well as increase the healthiness of snacks available. Healthier varieties should be increased slowly, adding one new item at a time at one location. This can be started next September, and slowly, the number of baked goods can be replaced with healthier options. For example, the "Two-Bite Brownies" package can be replaced with a trail mix bag, as "baked goods" was one answer that was predominant in the survey where students chose to avoid.

A major issue our team found when conducting the snack inventories was the lack of labeling at all four locations. Especially for the baked goods, it was difficult to find out if they were vegan, gluten free, or lactose free. The nutritional value and ingredients list for most baked goods were also not available to see easily. Therefore, we recommend that UBC Food Services provide ingredients lists and nutritional labeling on at least $50 \%$ of all baked goods by this time next year to increase consumers' awareness of UBC Food Services procurement policy of
providing local, fair trade and organic products. This way, students who decide to purchase snacks can make more educated decisions on what they are consuming. Healthy, local and organic snacks should also be promoted more through labeling. If students know that a snack is made from local, organic ingredients, they may be more inclined to buy the product. If a certain snack is high in a healthy nutrient such as fibre, this should be highlighted and promoted with labeling. If students are aware of the nutritional information about the snacks they consume, this will have a large impact on their purchasing decision and will ideally lead them to buy healthier, local and organic snacks.

Our team's third and final recommendation for the UBC Food Services is increasing the availability of healthy gluten free, vegan, and lactose free snacks, as well as increasing labeling for these goods. Offering at least two vegan, gluten-free or lactose-free options that are openly available with the other snacks is recommended for each location. These two types of snacks should ideally be healthier baked goods, as this was the area where vegan, gluten-free and lactose-free snacks were lacking the most. We were shocked to find out that the majority of these types of snacks offered at Totem and Vanier were kept in the freezer, away from public display. According to our survey taken at Totem, many students seemed to be unaware that UBC Food Services provided vegan and gluten free snacks. 5 out of 19 random surveys from students at Totem were either vegan, lactose intolerant, or vegetarian, and all 5 listed that they wanted more selection in vegan, and lactose free baked goods. This could be due to the fact that either they were unaware that Totem provides these special baked goods if they are personally requested, or if they were simply unsatisfied with the options available. UBC Food Services should increase labeling to educate students where they can obtain vegan/gluten free snacks as well as make them more openly available with the other baked goods. We understand that these snacks have a
lower demand, and are often more perishable than normal (non-gluten free etc.) snacks, but if advertised correctly, vegan baked goods for example can be enjoyed by all students - who may or not be vegan. Offering for example one, "special snack of the week" such as a vegan, high protein nutritious muffin may be helpful in providing more nutritious snacks as well as offering more variety to those with dietary restrictions.

If these three recommendations for the UBC Food Services are implemented within a year's time, more nutritious and healthy snacks would be made more available for consumers, and student awareness about healthy snacks will increase due to the increased labeling. All three recommendations are meant to be feasible within the next year, and are small enough changes to be cost effective and help UBC become a place where quality, nutritious, sustainable snacks are proudly served.

## VII. Scenario Evaluation \& Feedback:

Our team evaluated the successfulness our project by looking at our combined results from our extensive inventory list of snack items at each of the four establishments (Totem Park, Place Vanier, The Loop and Ike's Café), as long with our survey results to see if we reached our original goals of acquiring sufficient data to make constructive recommendations to our stakeholder. Our goal for the inventory was to have information on 50 snack items each at Totem and Vanier, and 10 snack items each for Ike's Cafe and The Loop. Our group has exceeded this goal by having 70 snack inventories at Totem, 65 for Vanier, 20 for Ike's Cafe, though only having 8 at The Loop. Our goal of the surveys was to conduct at least 15 surveys at each location. We were able to conduct 19 surveys at Totem, 15 surveys at the Loop, and 21 surveys each at Vanier and Ike's Café. Also, we aimed for a $65 \%$ minimum completion of surveys and
we had $82 \%$ completion out of all our completed surveys. Our group has successfully conducted the primary data collection in compiling a detailed list of snacks offered at the four establishments, and offered this information to the UBC Food Services along with the survey results with recommendations to improve the availability of healthy snacks on campus.

To further strengthen our evaluation of the project, we made sure to regularly correspond with our primary stakeholder, Victoria Wakefield to ensure her satisfaction. Our group strived to keep our goals in line with our stakeholder's goals, as well as to provide realistic and simple recommendations for her and UBC Food Services to work on. For a successful project, our inventory and survey data must be easily understood by our primary stakeholder and we did this by emailing in our results ahead of time to see if our results were understandable and useful to her. We also answered any questions she had regarding the results in a timely manner. Overall, our project was successful because we exceeded our inventory and survey goals as well as ensuring our primary stakeholder was satisfied with our results and recommendations.

Some challenges our group faced was conducting the snack inventory at the four locations. We had to ensure we conducted the surveys at the establishments at the designated "snack times" our team came up with. We also had to come up with a good definition for a snack, which proved to be more difficult than originally anticipated. Defining "snack" was crucial to have consistent inventory lists between the four establishments (to know what items to include/not include) as well as having consistent survey results. Another challenge was the uncertainty of whether or not our efforts in collecting the primary data and offering recommendations would be actually used to improve the snacks offered around campus. There were times our group wondered if we were actually contributing towards a positive change for improving the UBC Food System. At first, there was some confusion on what was actually
wanted from our group, but after several group meetings, getting assistance from our TA and contacting our primary stakeholder for clarification of the project, we are now confident that our recommendations will help improve overall snack quality on campus.

For recommendations for next year's LFS 450 students, students should seek clarity about the project right away from the TA, and contact their primary stakeholder as soon as possible to get a clear direction and goal for the project. They could also follow up after the project is completed to see if their recommendations were actually implemented.

For the LFS teaching team, we are very thankful for their support and hard work in helping our group succeed with our project. For the future, we recommend that we be given clearer guidelines at the beginning of the term especially with the smaller assignments such as the project outline and meeting managements. There was some confusion about the exact criteria, but after getting clarification from our TA, our group was able to understand each assignment. But if more specific guidelines were stated in the syllabus at the beginning of the term, it would have answered many questions our group had right away.

For next year's scenario, we recommend that the group further work on conducting surveys to get a bigger sample size for more comprehensive data on what consumers want as snacks on campus. What our group has done was a start to get an idea on the gap of what UBC Food Services provides and what students want. Next year's group should strive to conduct 50 surveys at each location, to get a better view on student's wants in terms of snacks. A question on the survey asking students if it would be helpful to add labeling to snacks should also be added. Another recommendation for this future scenario is for students to assist UBC Food Services create simple and effective nutritional value labeling on snacks at the four establishments studied. A starting point for this is to pick one of the establishments to start
offering labeling of snacks regarding ingredients and nutritional value. This should be possible to do within one semester.

## VIII. Conclusion

After conducting our primary inventory and survey data collection and analysis, it is clearly seen that UBC Food Services is doing a great job in offering healthy snack options on campus as well as working to provide snacks for different dietary preferences and needs. What is now needed is for students to be aware of what UBC Food Services is currently offering to provide healthy, sustainable snacks. This can be improved by UBC Food Services advertising their food procurement policies more to let students know that offering sustainable snacks is an important aspect of what UBC Food Services provides to consumers. Communication between UBC Food Services and students is key. Methods such as food labeling can be improved so that students are aware of which snacks are healthier than others as well as knowing which snacks are vegan, gluten-free and lactose-free. More of these types of snacks should be made readily available to students, as well as offering a wider variety of choices for students to choose healthier, "choose most" snacks. Students are looking for healthier alternatives, and so far, UBC Food Services is doing well to meet their needs and wants, and should be advertising their healthy snack varieties more often.

## Media release (Appendix H)

With collaboration from the UBC Food Systems Project and UBC Food Services, we had the unique opportunity of finding more information about healthy snacks on campus. As 4th year students of the Land and Food Systems (LFS) 450 course, we ventured out into 4 food retailers on campus: The Loop, Ike's Cafe, Vanier Residence Dining hall and Totem Residence Dining hall. Our main goal? To get a better understanding about the current snacks at these locations!

First path on the journey: To be able to actually make a difference in improving healthy snacks on campus, we first needed to compile a list of what is currently present. We then evaluated each item into the categories of "choose most", "choose sometimes", "choose least" and not recommended. Although there were many available healthy items, it was rather shocking to see just how easy it was to purchase baked goods. There were readily accessible and affordable at all 4 locations! Also, it was unfortunate to find out that at some locations, many gluten-free, diary-free, and vegan options were kept in the freezer and were only taken out when requested!

Second path: Our stakeholder inspired us to create a survey to get a better understanding of what students' current thoughts are about healthy snacks on campus. Much to our surprise, only about half of the students that were eating at Ike's, Vanier, and Totem thought that there were enough healthy snack options! Many students complained about the snack items containing too much sugar, which matched the results of our inventory list.

Final destination: First off, as LFS students, we felt very proud to come across many students that were willing to open up their thoughts and concerns with healthy snack items. From the results of our inventory list and survey, we were able to give suggests that we hope to see being implemented in the next few years. What a perfect way to end our university career!


Action Photo of Scenario 1 Group 2 at Ike's Cafe: (left to write) Letitia Da Ros, Hannah Shu,
Hana Tahaei, Alexandra Little, Rita Molander

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## APPENDICES

## A. Survey

Land and Food Systems 450 UBC Food Systems Project (UBCFSP) Snack Time Survey

The purpose of this survey is to give us a better idea of how to improve snacking options at this location. It will take approximately 5 minutes to complete. This is a voluntary survey, and you may withdraw from completing this survey at any time without any consequences. Your responses will remain anonymous and confidential.
As busy university students, eating at regular meal times can be challenging with our schedules. In these situations, snacks have come to be relied on to get us through the day. These can include baked goods, fruits, vegetables, and beverages, along with any other items that are eaten between meals.

1. Year level: $\square 1^{\text {st }} \quad \square 2^{\text {nd }} \quad \square 3^{\text {rd }} \quad \square 4^{\text {th }} \quad \square 5^{\text {th }} \quad \square$ Other $\square$ Prefer not to answer
2. Gender: $\quad \square \mathrm{M} \quad \square \mathrm{F} \quad \square$ Prefer not to answer
3. Do you feel that there are enough healthy snack options available at this establishment?
(check the choice that best represents your opinion)
$\square$ Yes
$\square$ No

Why?
4. What snack food items do you purchase at least once a month at this establishment? (check
all that apply)
$\square$ Baked GoodsBeveragesFruit
$\square$ Vegetables
$\square$ Wraps/Sandwiches
$\square$ Other $\qquad$
5. Which snack item(s) sold at this establishment do you avoid purchasing? Why?
6. Are there any particular snack item(s) you would be likely to purchase if they became available at this establishment in the future? (Please list items)
7. What time of the day are you most likely to purchase a snack at this establishment? (check all that apply)
$\square$ Open-9am
$\square 9 \mathrm{am}-12 \mathrm{pm}$
$\square 12 \mathrm{pm}-3 \mathrm{pm}$
$\square 3 \mathrm{pm}-6 \mathrm{pm}$
$\square 6 \mathrm{pm}$-close
Do you consent your responses from this survey being included anonymously in a Land and
Food Systems 450 class UBCFSP report?
$\square \mathrm{Yes}$
Thank you for your time in completing this survey

THE UNIVERSITY OF BRITISH COLUMBIA


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## INFORMED CONaENT

1 am agreeing to collaborete in the study entrved "The UEC Food aystem Froject, conducted by students of the Faculty of Land and Food aystems whin their couse rand, Food 5 Communlty IIP (LFS 450) in collaboration with UEC Food aerices, the Alma Mather atudent Bociety (AMB), AMB Food and Eeverage Depatment, UEC Weste Mansgement, Faculy of Land and Food aystems, Cente for Bustalnable Food aystems at UBC Farm, the UaC austainabilly Offce and is aeEDa Fiogram (aocial, economic and ecological development stodies).

I have been informed of my inght to intemupt any interview or questionnaire linked to this project In which I agree to paticipate, at ary time that I consider necessay. Also, I have been assured that my arswes will remain anonymous uniess I poovide witten pemission (below) to the UaC student conducting the interview or survey, to disciose my name, working posilion or any other infomation revealing my identry in any possible fiture use of the infometion I provide.

- Signature of the person volunteeting to peticipate in the stody:
- Name and signature if accept to reveal name, revealing my identry (or feely chosen name and signature, if you preter):
- Contact infomation if accept to be quated by name or position in public use of the information I provide to review the quates:
(Name, Teiephone =, faxi=, emell, malling addiess)
- Date:
- Name of the interviewer

If you have any conoern about thic ctudy plases contast the Prinolpal linvectigator at the above contast information or Profeccor Andrew Ricaman, the Cource inctrustor at

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De. Andrew Risemen
Fifnciple Investrgator
Sanuary, 2012
C. Baseline Inventory

| Location | Category | SNACK ITEM | CHOOSE <br> MOST/CHOOSE <br> SOMETIMES/CHOOSE <br> LEAST/NOT <br> RECOMMENDED | reasoning? | VEGAN | GLUTEN FREE | LACTOSE FREE | ORGANIC | Label with nutritional information/ nutrition facts table (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vanier | Baked Goods | cinnamon buns | Not recommended |  |  |  |  |  | no |
| Vanier | Baked Goods | eclairs | Not recommended |  |  |  |  |  | no |
| Vanier | Baked Goods | pie | Not recommended |  |  |  |  |  | no |
| Vanier | Baked Goods | cake | Not recommended |  |  |  |  |  | no |
| Vanier | Baked Goods | tarts | Not recommended |  |  | yes |  |  | yes |
| Vanier | Baked Goods | granola bars | Choose sometimes |  |  |  |  |  | no |
| Vanier | Baked <br> Goods | waffles | Choose sometimes |  |  |  |  |  | no |
| Vanier | Baked Goods | muffins | Choose sometimes |  |  |  |  |  | no |
| Vanier | Baked Goods | croissants | Choose sometimes |  |  |  |  |  | no |
| Vanier | Baked <br> Goods | buns | Choose most |  |  |  |  |  | no |
| Vanier | Baked Goods | danishs | Choose least |  |  |  |  |  | no |
| Vanier | Baked Goods | cookies | Choose least |  |  | yes |  |  | no |
| Vanier | Drinks | milk | Choose sometimes |  |  |  |  |  | yes |
| Vanier | Drinks | yop | Choose sometimes |  |  |  |  |  | yes |
| Vanier | Drinks | smoothies | Choose sometimes |  |  |  |  |  | no |
| Vanier | Drinks | V8 juice | Choose most |  |  |  |  |  | yes |
| Vanier | Drinks | happy planet | Choose most |  |  |  |  |  | yes |
| Vanier | Fruit bar | m\&m | Not recommended |  |  |  |  |  | no |
| Vanier | Fruit bar | blueberries | Choose sometimes |  |  |  |  |  | no |
| Vanier | Fruit bar | raspberries | Choose sometimes |  |  |  |  |  | no |
| Vanier | Fruit bar | yogurt | Choose most |  |  |  |  |  | no |
| Vanier | Fruit bar | dried grains (oats, ect.) | Choose most |  |  |  |  |  | no |


| Vanier | Fruit bar | oranges | Choose most |  | no |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Vanier | Fruit bar | pineapples | Choose most |  | no |
| Vanier | Fruit bar | mixed fruit | Choose most |  | no |
| Vanier | Fruit bar | trail mix | Choose most |  | no |
| Vanier | Fruit bar | dried fruit | Choose most |  | no |
| Vanier | Fruit bar | seed mix | Choose most |  | no |
| Vanier | Other | desert tofu | Choose sometimes |  | yes |
| Vanier | Other | pudding | Choose least |  | no |
| Vanier | Other | ice cream | Choose least |  | no |
| Vanier | Packaged Goods | two bite brownies | Not recommended |  | yes |
| Vanier | Packaged Goods | sushi | Choose sometimes |  | yes |
| Vanier | Packaged Goods | sandwhichs | Choose sometimes |  | yes |
| Vanier | Packaged Goods | wraps | Choose sometimes |  | yes |
| Vanier | Packaged Goods | yogurt | Choose sometimes |  | yes |
| Vanier | Packaged Goods | nutri-grain bars | Choose sometimes |  | yes |
| Vanier | Packaged Goods | sandwhichs | Choose most | yes | no |
| Vanier | Packaged Goods | wraps | Choose most | yes | no |
| Vanier | Salad bar | olives | Choose sometimes |  | no |
| Vanier | Salad bar | humus | Choose sometimes |  | no |
| Vanier | Salad bar | noodle salad | Choose sometimes |  | no |
| Vanier | Salad bar | greek salad | Choose sometimes |  | no |
| Vanier | Salad bar | carrots | Choose sometimes |  | no |
| Vanier | Salad bar | bean sprouts | Choose sometimes |  | no |
| Vanier | Salad bar | chickpeas | Choose most |  | no |
| Vanier | Salad bar | spinach | Choose most |  | no |
| Vanier | Salad bar | mixed greens | Choose most |  | no |
| Vanier | Salad bar | cauliflower | Choose most |  | no |
| Vanier | Salad bar | tomatoes | Choose most |  | no |
| Vanier | Salad bar | cucumber | Choose most |  | no |
| Vanier | Salad bar | guacamole | Choose most |  | no |
| Vanier | Salad bar | beets | Choose most |  | no |
| Vanier | Salad bar | tofu | Choose most |  | no |


| Vanier | Soups | Cream of brocoli | Choose sometimes |  |  |  |  | no |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vanier | Soups | chicken gumbo | Choose sometimes |  |  |  |  | no |
| Vanier | Soups | salmon corn chowder | Choose sometimes |  |  |  |  | no |
| Vanier | Soups | vegetable soup | Choose sometimes |  |  |  |  | no |
| Vanier | Whole fruit | bananas | Choose most |  |  |  |  | no |
| Vanier | Whole fruit | apples | Choose most |  |  |  | yes | no |
| Vanier | Whole fruit | oranges | Choose most |  |  |  |  | no |
| Vanier | Whole fruit | grapefruit | Choose most |  |  |  |  | no |
| Vanier | Whole fruit | avacados | Choose most |  |  |  |  | no |
| Vanier | Whole fruit | red grapes | Choose most |  |  |  |  | no |
| Totem | Baked goods | donut fritters | Not recommended | no | no | no | no | no |
| Totem | Baked goods | donnuts | Not recommended | no | no | no | no | no |
| Totem | Baked goods | pecan tarts | Not recommended | no | no | no | no | no |
| Totem | Baked goods | assortment of cake and pie slices | Not recommended | no | no | no | no | no |
| Totem | Baked goods | brownies | Not recommended | no | no | no | no | no |
| Totem | Baked goods | blueberry cobbler | Not recommended | no | no | no | no | no |
| Totem | Baked goods | nanaimo bars | Not recommended | no | no | no | no | no |
| Totem | Baked goods | rocky road brownies | Not recommended | no | no | no | no | no |
| Totem | Baked goods | eclaires | Not recommended | no | no | no | no | no |
| Totem | Baked goods | butter tarts | Not recommended | no | no | no | no | no |
| Totem | Baked goods | cinnamon buns | Not recommended | no | no | no | no | no |
| Totem | Baked goods | sesame bagels | Choose sometimes |  | no |  | no | no |
| Totem | Baked goods | plain bagels | Choose sometimes |  | no |  | no | no |
| Totem | Baked goods | blueberry bagels | Choose sometimes |  | no |  | no | no |


| Totem | Baked goods | cinnamon-raisin bagels | Choose sometimes |  | no |  | no | no |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totem | Baked goods | white toast | Choose sometimes | yes | no | no | no | no |
| Totem | Baked goods | plain english muffins | Choose sometimes | yes | no | no | no | no |
| Totem | Baked goods | bran muffins | Choose sometimes | no | no | no | no | no |
| Totem | Baked goods | whole-wheat bagels | Choose most |  | no |  | no | no |
| Totem | Baked goods | whole-wheat toast | Choose most | yes | no | no | no | no |
| Totem | Baked goods | regular croissants | Choose least | no | no | no | no | no |
| Totem | Baked goods | cheese croissants | Choose least | no | no | no | no | no |
| Totem | Baked goods | fruit filled danishes | Choose least | no | no | no | no | no |
| Totem | Baked goods | poppyseed muffins | Choose least | no | no | no | no | no |
| Totem | Baked goods | cheese scones | Choose least | no | no | no | no | no |
| Totem | Baked goods | cranberry scones | Choose least | no | no | no | no | no |
| Totem | Baked goods | cookies | Choose least | no | no | no | no | no |
| Totem | Baked goods | ponderosa cake | Choose least | no | no | no | no | no |
| Totem | Baked goods | Desert Loaves | Choose least | no | no | no | no | no |
| Totem | Baked goods | biscotti | Choose least | no | no | no | no | no |
| Totem | Baked goods | peanut butter granola bar | Choose least |  |  | no | no | no |
| Totem | Baked goods | cornflake krispies | Choose least |  | no |  | no | no |
| Totem | Baked goods | herb/cheese scones | Choose least | no | no | no | no | no |


| Totem | Cereals | cereals | Choose sometimes | yes | 3 out of the 15 options | yes | no | yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totem | Condiments | cream cheese | Not recommended | no | yes | no | no | no |
| Totem | Condiments | peanut butter | Choose sometimes |  |  |  |  |  |
| Totem | Condiments | honey | Choose sometimes |  |  |  |  |  |
| Totem | Condiments | jams | Choose least | yes/no | yes | no | no | no |
| Totem | Drinks | yop drinks | Choose sometimes | no | yes | no | no | yes |
| Totem | Drinks | so good soy beverages | Choose most | yes | yes | yes | no | yes |
| Totem | Other | ice cream bars | Not recommended | yes | yes | yes | no |  |
| Totem | Other | ice cream by the scoop | Choose sometimes | no |  | no | no | no |
| Totem | Other | popsicles | Choose least |  |  |  |  |  |
| Totem | Packaged Goods | bagged chips | Not recommended | yes | no | no | no | yes |
| Totem | Packaged Goods | bagged baked chips | Not recommended | yes | yes | yes | no | yes |
| Totem | Packaged Goods | bagged brownies | Not recommended | no | no | no | no | yes |
| Totem | Packaged Goods | allbran bars | Choose sometimes | no | no | no | no | yes |
| Totem | Packaged Goods | dairyland yogurts | Choose sometimes | no | yes | no | no | yes |
| Totem | Packaged Goods | sunrise tofu dessert (banana, coconut, custard, almond) | Choose sometimes | yes | yes | yes | no | yes |
| Totem | Packaged Goods | gluten free/vegan/lactose baked goods: kept in freezer and must ask for them | Choose sometimes | yes | yes | yes |  |  |
| Totem | Packaged Goods | cheesestring | Choose most | no | yes | no | no | yes |
| Totem | Packaged Goods | nutrigrain granola bars | Choose least | no | no | no | no | yes |
| Totem | Packaged Goods | vector cereal bars | Choose least | no | no | no | no | yes |
| Totem | Packaged Goods | jello | Choose least | yes | yes | yes | no | no |


| Totem | Packaged Goods | kozy-shack pudding (tapioca and vanilla) | Choose least |  | no | yes | no | no | yes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Totem | Salad bar | yogurt | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | cottage cheese | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | chickpeas | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | hummus | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | various cheeses | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | pasta salad | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | greek salad | Choose sometimes |  |  |  |  |  |  |
| Totem | Salad bar | fresh vegetables | Choose most |  |  |  |  |  |  |
| Totem | Salad bar | cous-cous salad | Choose most |  |  |  |  |  |  |
| Totem | Salad bar | canned fruit | Choose least | most items okay, some salads high fat content | yes | yes | yes |  | no |
| Totem | Salad bar | canned vegetables | Choose least |  |  |  |  |  |  |
| Totem | Whole fruit | apples | Choose most |  | yes | yes | yes | yes | - |
| Totem | Whole fruit | oranges | Choose most |  | yes | yes | yes | no | - |
| Totem | Whole fruit | bananas | Choose most |  | yes | yes | yes | no | - |
| Totem | Whole fruit | kiwi | Choose most |  | yes | yes | yes | no | - |
| Totem | Whole fruit | cantaloup | Choose most |  | yes | yes | yes | no | no |
| Totem | Whole fruit | honeydew | Choose most |  | yes | yes | yes | no | no |
| Totem | Whole fruit | green grapes | Choose most |  | yes | yes | yes | no | no |
| Totem | Whole fruit | avocado | Choose most |  | yes | yes | yes | no | - |
| The Loop | Drinks | Infused freshly made Iced tea (3 options) | Choose sometimes | fresh real iced brewed tea | yes | yes | yes | some | no |
| The Loop | Drinks | Italian Sodas | Choose least | added sugar, minimal nutrients | yes | yes | yes | no | yes |
| The Loop | Packaged Goods | Mini-birthday cake in a jar | Not recommended | energy dense | no | no | no | no | yes |
| The Loop | Packaged Goods | Canadian Dry Roasted Hazelnuts | Choose sometimes | sodium a bit too high | yes | yes | yes | no | yes |
| The Loop | Packaged Goods | Pickled asparagus (in a jar) | Choose sometimes | Sodium a bit too high | yes | yes | yes | no | yes |
| The Loop | Packaged Goods | Oatmeal to go (oatmeal in a cup, just had hot water) | Choose most | highly nutritious, natural ingredients/not processed | yes | no | yes | no | yes |


| The Loop | Salad bar | small salads | Choose most | assortment of vegetables. Not packaged, made fresh, customer can choose ingredients. | Some | some | some | some | no |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The Loop | Whole fruit | Fresh fruit | Choose most | whole food item | yes | yes | yes | some | no |
| Ike's Café | Baked goods | muffins | Choose least | if made with whole grains | no | no |  |  | no |
| Ike's Café | Baked goods | scones | Choose least |  | no | no |  |  | no |
| Ike's Café | Baked goods | cookies | Choose least |  | no | no |  |  | no |
| Ike's Café | Baked goods | loaves | Choose least |  | no | no |  |  | no |
| Ike's Café | Baked goods | biscotti | Choose least |  | no | no |  |  | no |
| Ike's Café | Baked goods | squares | Choose least |  | no | no |  |  | no |
| Ike's Café | Baked goods | Sponge Cake | Choose least |  |  |  |  |  |  |
| Ike's Café | Baked goods | reduced fat muffin | Choose sometimes | depends on if made with whole grains and size | no | no |  |  | no |
| Ike's Café | Baked goods | bagels | Choose sometimes |  | no | no |  |  | no |
| Ike's Café | Baked goods | croissants | Choose sometimes |  |  |  |  |  |  |
| Ike's Café | Baked goods | cinnamon buns | Not recommended |  | no | no |  |  | no |
| Ike's Café | Baked goods | rice krispies | Not recommended |  | no | no |  |  | no |
| Ike's Café | Drinks | so good beverages | Choose most |  |  |  |  |  |  |
| Ike's Café | Drinks | Happy Planet | Choose sometimes |  |  |  |  |  |  |
| Ike's Café | Drinks | odwalla smoothie | Choose sometimes |  |  |  |  |  |  |
| Ike's Café | Drinks | Milk | Choose sometimes |  |  |  |  |  |  |
| Ike's Café | Other | pepperoni stick | Choose least |  | no | no |  |  | no |
| Ike's Café | Other | wraps | Choose sometimes | depends what | no | no |  |  | yes |

## is in the wrap

| is in the wrap |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ike's Café | Other | ham and cheese croissant | Choose sometimes |  | no | no | no | no |
| Ike's Café | Other | samosa | Not recommended | depends if baked/fried | no | no |  | no |
| Ike's Café | Other | calzone | Not recommended | dependant on contents | no | no |  | no |
| Ike's Café | Other | english muffin fritata | Not recommended | high fat content | no | no |  | yes |
| Ike's Café | Packaged Goods | fat-free yogurt | Choose most |  | no | yes | no | yes |
| Ike's Café | Packaged Goods | vegetable \& dip | Choose sometimes |  | yes | yes | yes | yes |
| Ike's Café | Packaged Goods | premade (bagel) sandwiches | Choose sometimes | depends what is inside | no | no |  | yes |
| Ike's Café | Packaged Goods | two bite brownies | Not recommended |  |  |  |  |  |
| Ike's Café | Soups | Split Pea and ham | Choose sometimes |  |  |  |  |  |
| Ike's Café | Soups | Creamy Garden vegetable | Choose sometimes |  |  |  |  |  |
| Ike's Café | Whole fruit | Apples | Choose most |  | yes | yes | yes | no |
| Ike's Café | Whole fruit | oranges | Choose most |  |  |  |  |  |
| Ike's Café | Whole fruit | Bananas | Choose most |  |  |  |  |  |

D. Graph: Breakdown of Category Percentages of Types of Snacks (Place Vanier)

E. Graph: Breakdown of Category Percentages of Types of Snacks (Totem Park)

F. Graph: Breakdown of Category Percentages of Types of Snacks (The Loop)

G. Graph: Breakdown of Category Percentages of Types of Snacks (Ike's Cafe)


With collaboration from the UBC Food Systems Project and UBC Food Services, we had the unique opportunity of finding more information about healthy snacks on campus. As $4^{\text {th }}$ year students of the Land and Food Systems (LFS) 450 course, we ventured out into 4 food retailers on campus: The Loop, Ike's Cafe, Vanier Residence Dining hall and Totem Residence Dining hall. Our main goal? To get a better understanding about the current snacks at these locations!

First path on the journey: To be able to actually make a difference in improving healthy snacks on campus, we first needed to compile a list of what is currently present. We then evaluated each item into the category of Not Recommended, Choose Least, Choose Sometimes, Choose Most. Although there were many available healthy items, it was rather shocking to see just how easy it was to purchase baked goods. There were readily accessible and affordable at all 4 locations! Also, it was unfortunate to find out that at some locations, many gluten-free, diary-free, and vegan options were kept in the freezer and were only taken out when requested!


Second path: Our stakeholder inspired us to create a survey to get a better understanding of what students' current thoughts are about healthy snacks on campus. Much to our surprise, only about half of the students that were eating at Ike's, Vanier, and Totem thought that there were enough healthy snack options! Many students complained about the snack items containing too much sugar, which matched the results of our inventory list.

Final destination: First off, as LFS students, we felt very proud to come across many students that were willing to open up their thoughts and concerns with healthy snack items. From the results of our inventory list and survey, we were able to give suggests that we hope to see being implemented in the next few years. What a perfect way to end our university career! (9)

