

**SEEDS Project: AMS FOOD BANK**

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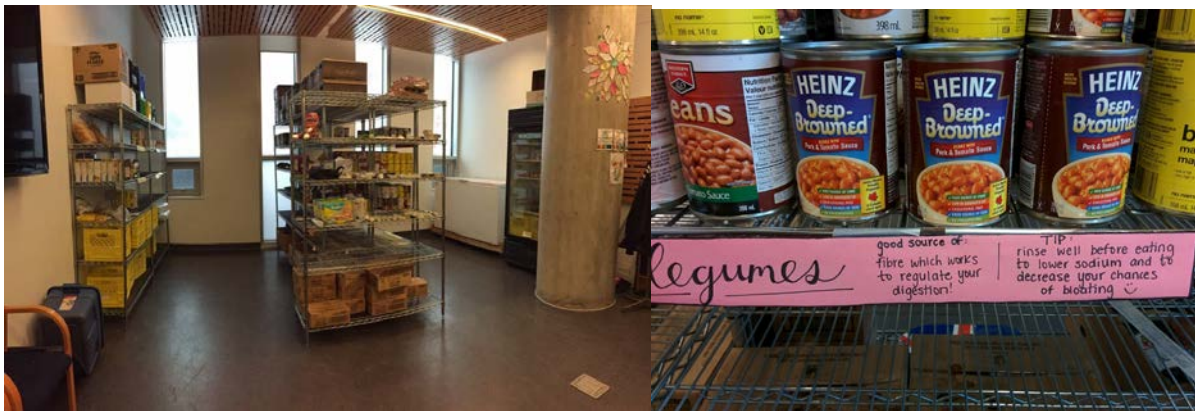
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# SEEDS Project: AMS FOOD BANK



## FNH 473: Applied Public Health Nutrition The University of British Columbia

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## **Executive Summary**

The UBC Alma Mater Society (AMS) established a food bank in 2006 to address food insecurity within the student community. Food insecurity has been a prevalent issue throughout Canada (CPHA, n.d.), and a study by James and Rideout at UBC found that ~45% of the respondents experienced food insecurity in 2016 (2017).

A situational analysis was conducted in the early phase of the project. Through meetings and email exchanges with the AMS Food Bank Coordinator and the Nutrition Coordinator, we identified that interventions could be conducted on the availability of the food bank's fresh produce, as well as on its blog which was launched in late 2016. This project aimed to help improve the food bank's services by utilizing the team members' knowledge in food, nutrition and health. The goals of our project include: (1) to increase the availability of nutrient-dense foods at the food bank; and (2) to improve food bank clients' self-efficacy on healthy meal planning and preparation. Short-, medium-, and long-term objectives were identified using the Communication Theory framework.

The outputs of this project include a summary sheet which offers purchasing, storage and nutritional tips to the food bank staff, a voting sheet which helps determine the demand for fresh produce, and a list of suggestions for improving the blog. All outputs borrowed concepts learned from the Communication Theory and self-efficacy, and reflected evidence-based ideas acquired from relevant literature. Due to privacy concerns and time constraints of the project, we were not able to determine client's nutritional knowledge and dietary behaviors to evaluate the effectiveness of our outputs. We suggest the AMS Food Bank consider our recommendations and evaluate its services regularly through a feedback system, to maximize its function in improving food security in students.

## **Introduction**

Food insecurity, “the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so” (Health Canada, 2012), is considered a serious public health issue because it can have direct consequences on individuals’ health and wellbeing. In a recent 2014 report on household food insecurity in Canada, it shows that 12% of households in the country are food insecure, which equate to approximately 3.2 million people, including nearly 1 million children under the age of 18 (PROOF, 2016).

Post-secondary students are especially vulnerable to food insecurity, due to the high cost of education and accommodation (Farahbakhsh et al., 2017). To help combat food insecurity in the student population, many large post-secondary institutions across the country offer food bank services for their students. The University of British Columbia (UBC) Alma Mater Society (AMS) has been running its food bank since 2006 (Garbiec, Liang, Ling & Ly, 2016). The AMS Food Bank provides non-perishable foods, fresh produce and dairy products to any person with a valid student I.D. (up to six times per term) and in need of its services. According to statistics collected, they averaged about 68 visits per month May 2016 to January 2017. In order to provide updates for its client and to provide tips on preparing nutritious meals, the AMS Food Bank launched a new blog in late 2016, which is primarily managed by its Nutrition Coordinator.

This SEEDS project aims to investigate the current situation and to help improve the services provided by the AMS Food Bank. Through working collaboratively with the Food Bank Coordinators, we identified two main goals: (1) increasing availability of nutrient-dense foods at the food bank and (2) increasing food bank visitors’ self-efficacy in healthy meal planning and preparation.

## **Situational Analysis and Planning Framework**

### **A) Problems**

According to the 2014 Household Food Insecurity report by Food Insecurity Policy Research (PROOF), food insecurity is a growing problem in British Columbia (B.C.), where more than 12.7% of households are affected (2016). There are many causes associated with this increasing trend, including the increased cost of living in B.C. In the lower mainland, housing prices have increased by 50% over the past five years (Real Estate Board, 2017) and the average monthly cost of a nutritious food basket in B.C. has increased by \$60 between 2013 and 2015 (Provincial Health Services Authority, 2015). The cost of tuition at UBC has also increased (Warburton, 2015). During this time, household incomes have remained relatively stable (Statistics Canada, 2016), which means the purchasing power of households has decreased and less money is available to be spent on attaining high quality nutritious foods.

The consequences of food insecurity are numerous and are associated with many adverse health outcomes, including an increased risk for chronic diseases such as heart disease, diabetes and high blood pressure (PROOF, 2016). In addition, food insecurity is an underlying cause of many other health and social challenges, including poor maternal health, birth outcomes, restricted growth and development, and poor mental health (Provincial Health Services Authority, 2016). Specifically for university students, the inability to access and consume enough high quality foods amidst demanding and stressful schedules can impact the student's' ability to focus and do well in school. This may affect their future employment opportunities and income levels.

In efforts of providing food to those in need, food banks have been established and proven to be an important strategy to support individuals and families with limited

access to food. In general, most food banks, the AMS Food Bank included, operate primarily on a donation basis, where local organizations and food purveyors will donate food to supply the food bank. In this respect, food banks have limited control over the quantity and quality of foods they receive. This lack of consistency in food donations is a challenge for food banks, as they must continuously manage their food supplies to ensure they always have an adequate quantity and diversity of foods available to satisfy the needs of their clients. Furthermore, many food banks operate on limited funds and rely on volunteers to support their work. Thus, the resources present must be directed towards the highest priorities, namely to ensure clients have enough food to meet their energy needs. This has been the primary role of foods banks; however, many now realize the importance of providing high quality nutritious foods to their clients. They understand that if people are to overcome the barriers that keep them within the cycle of poverty, and living with food insecurity, they must have the health to do so (Feeding America, n.d.). In efforts of supporting those living with food insecurity, it is important that food banks make nutrition a priority by providing nutritious foods to their clients and not be the cause of ill health by providing highly processed junk foods that are known to cause adverse health outcomes (Feeding America, n.d.).

Another challenge that food banks confront is that many people living in poverty and affected by food insecurity may not have the nutrition knowledge to make healthy food choices or prepare healthy meals. This will be elaborated in the following section.

### ***B) Behaviors***

Presently, there is very limited literature on food-related health behaviours of campus-based food bank clients. The AMS Food Bank also does not have much data,

especially on how clients use the items they received from the food bank, the clients' food and nutrition knowledge level, and menu planning, shopping and food preparation skills. Due to time constraints, low number of users and confidentiality issues, it was difficult to collect relevant data on food-related skills and level of knowledge the users of the AMS Food Bank have through data collection methods such as surveys and focus groups. As such, behaviours contributing to the problem of possible poor nutrition in this group were identified through past studies related to food banks, reports on food insecurity at UBC and discussions with the food bank's staffs.

Limited menu planning, shopping and food preparation skills in food bank clients were reported across different studies conducted in the United States (Dave, Thompson, Svendsen-Sanchez, McNeill, & Jibaja-Weiss, 2017; Evans, Clarke, & Koprowski, 2009; Hoisington, Shultz, & Butkus, 2002). Dave et al.'s study reported findings from their survey and focus groups on 54 food bank clients from 10 food banks, which highlighted clients' demand for nutrition education on "eating on a budget, shopping and cooking skills, reading food labels, foods to eat for different health conditions such as diabetes and hypertension, and portion/serving size" (2017). The younger clients from the same group reported a lack of knowledge on using food they received from the food bank, particularly fresh produce. This demonstrated a lack of relevant skills and knowledge in food bank visitors to engage in healthy eating behaviour, which may have an impact on health outcomes in this group. These findings form the basis of our CBEL project.

It was also reported that many from low income groups find fresh produce unappealing or difficult to prepare, compared to convenience items (Block, Scribner, &



DeSalvo, 2004). These groups usually face issues with affordability and availability of foods, resulting in a preference for cheaper, highly processed food options which are linked undesirable health outcomes (Block, Scribner, & DeSalvo, 2004). This preference may also be prevalent in the AMS Food Bank client group, and hence, strategies to modify the target group's perception towards fresh produce, i.e. they can be appealing and easier to prepare, could be prioritized in the efforts to improve nutrition status in this group. A needs assessment could be conducted to confirm the presence of this behaviour in AMS Food Bank clients, but is beyond the scope of this project.

### ***C) Mediating Factors***

Factors that encourage the abovementioned behaviors can be categorized into individual, interpersonal, and institutional levels, following the ecological model.

Individual factors involve autonomy, self-efficacy, knowledge and belief, as well as skills of one's healthy eating practices (Story et al., 2008). As commented by the Food Bank Coordinator, some clients demonstrate a desire to increase healthy food consumption and request more fresh produce. Also, both coordinators are passionate about addressing food insecurity on campus. These illustrate the “assets” available to assist the momentum of the change. Some possible challenges include limited time for grocery shopping, meal preparation and acquiring skills and knowledge to improve healthy eating practices, and high levels of stress experienced by food bank users. People experiencing stress are more prone to compromising their eating habits, since their energy is channeled into “surviving” the ordeal (Mikkonen and Rapheal, 2010). We were unable to determine the level of nutrition knowledge and cooking skills of the

clients, and therefore had to rely on relevant literature to make assumptions on these factors, which may or may not reflect our target group.

Interpersonal factors are challenging to identify due to the lack of access to information clients' social relationships with their friends and family. However, the interaction between the food bank volunteers and clients is a crucial point that should not be neglected. This interaction can have a profound impact on users' choice of produce and sense of support. Cultural and community pride can also be a key interpersonal determinant (Brownson et al., 2010) According to the Food Bank Coordinator, volunteers at the AMS Food Bank are well-trained in maintaining a welcoming and respectful environment when interacting with food bank clients, which is critical in cultivating a supportive community.

Institutional factors are demonstrated to have the biggest impact on influencing individual's dietary habits in the case of AMS Food Bank. According to the Food Bank Coordinator, it is very challenging to predict what kind of food will be available at the food bank, due to inconsistencies in the quantity and types of food donated. While they are provided a budget to purchase food items for its clients, it is difficult to predict the number of visitors and large purchases are avoided to prevent spoilage and wastage, especially for fresh produce. On the other hand, the Food Bank Coordinator is very passionate and actively tries to introduce more variety of fresh produce into the food bank. The Nutrition Coordinator provides healthy and affordable meal recommendations that incorporate what is available in the food bank on the blog.

It is critical to evaluate both the strengths and limitations of the situation, following the guideline of Assets-Based Community Development (ABCD) to maximize the involvement of the community and the existing assets.

#### ***D) Health Behavior Theories***

This project focuses on the community level of intervention and we considered between three potential models to frame the project: Community Organization Model, Diffusion of Innovations Theory, and Communication Theory (Rimer & Glanz, 2005). The Community Organization Model uses a community driven approach, which is not the basis of our project. The Diffusion of Innovations Theory focuses on the distribution of new ideas, while our project is working on fine tuning the existing resources to improve the food choice quality at the AMS Food Bank. The Communication Theory describes the effect communication has on interventions, which is a helpful framework for us to develop outputs for our target group.

Our project uses several concepts of the Communication Theory, i.e. Problem definition, Media agenda setting, Framing, and Public agenda setting (*refer to Appendix C*). Our community partner had already determined the situation regarding the nutrition of the food provided through her involvement with the food bank as the coordinator (Problem definition). As a result, the AMS Food Bank started a blog to influence the information provided to clients around nutrition (Media agenda setting and Framing). We hope to align both the blog framing and the summary sheet with students' nutritional behaviour (Public agenda setting).

Our project focuses on a community level of intervention, specifically the AMS Food Bank and its users. Our goal is to make improvements on a community level - i.e.

the blog and the supply of fresh produce at the food bank, which may trickle down to the individual level and improve eating behaviours of UBC students.

### **Project goals and objectives**

The two overarching goals for the project are to improve the nutritional quality of food available to students at the AMS Food Bank and to increase the clients' self-efficacy on meal planning and preparation. In order to achieve these goals, our group has outlined several objectives, which we believe are feasible given the present resources and commitment of the AMS Food Bank.

#### Short-Term Objectives:

- Increase the supply of nutrient-dense fruits and vegetables available to clients by ensuring fresh produce is always available at the food bank. An indicator of success could be the presence of fresh produce at all times at the food bank.
- Increase number of views of the food bank blog from 0 to 30 per month by October 2017, especially on blog posts involving nutrition information and tips.

#### Medium-Term Objectives:

- Provide more nutrition-related resources to the food bank clients by increasing the number of nutrition posts on the blog (2X/month), using more health-promoting signage in the food bank and collecting client's nutrition concerns. Indicators of success could be the number of clients accessing the food bank's blog or providing feedback on the nutrition messages displayed in the food bank.

#### Long-Term Objectives:

- Improve the client experience at the food bank by ensuring their most important needs are being addressed, in a respectful and sustainable way, by offering consultation sessions or feedback incentives to measure client's satisfaction level. An indicator of success could be client feedback, when asking clients if they found everything they were looking for as they leave the food bank.

### **Description of Project Outputs**

#### **A) Suggestion List for AMS Food Bank's Blog**

[\(https://amsfoodbank.wordpress.com/\)](https://amsfoodbank.wordpress.com/)

Under the direction of the Food Bank Coordinator, the AMS Food Bank launched a new WordPress blog in late 2016 to provide nutrition tips and recipes tailored to the food bank clients, and to shift its main communication platform with its clients from email to the blog (personal communication, February 27, 2017). The blog's content is managed by the AMS Food Bank Nutrition Coordinator, who is a Food, Nutrition and Health program student at UBC. Every month, 1 -2 recipes are published along with nutrition tips after being vetted by the Food Bank Coordinator, and updates of their food inventory will be available regularly in the near future.

As requested by the Food Bank Coordinator, this SEEDS AMS Food Bank project provided assistance to improve the blog using group members' expertise in nutrition and public health, and through review of literature. A final product in the form of a list of suggestions was produced after consulting and receiving feedback from the coordinators. The rationales of this output included: (1) To increase viewership of the blog; (2) to help increase the impact of the blog on health behaviours in food bank clients; and (3) to improve readers' experience with the blog.

This output was structured in a way that the suggestions were categorized into “immediate changes”, “changes to consider for upcoming term” and “other suggestions”, to help the Nutrition Coordinator identify which suggestions can be implemented immediately, and which suggestions can be considered later under the leadership of a new Food Bank Coordinator. The suggestions were designed to be in concise and clear sentences, accompanied by the rationale of suggestions, and if needed, followed by examples of how the suggestions would look like when implemented.

For its content, we drew upon key attributes of the Communication Theory and the concept of self-efficacy. Questions such as “what factors affect the likelihood that a person will be exposed to a given message? and “how do media effects vary with the amount of exposure to that message?” as described in the “Media Effects” of the Communication Theory guided us to consider and understand the effects of the media on the target audience (Rimer & Glanz, 2005). With that, a list of suggestions was created to increase the exposure and impact of health promoting messages through the content of the blog. For example, we suggested the blog to follow a fixed update schedule, e.g. a recipe published every 1st day of the month, so that the clients will have an idea of when new content is available. We also strategized ways to help increase self-efficacy in our target group, e.g. providing a list of resources, such as links to a food asset map and Healthlink BC on the blog. By providing practical suggestions to make the blog easier to navigate, the recipes easier to follow, the resources easier to access, we hope to help increase the confidence level of the food bank clients in preparing healthy meals and engaging in other health promoting behaviours.

The finalized list of suggestions was delivered to the Food Bank Coordinator and the Nutrition Coordinator via email, and the team members were available to answer any further questions through email. *(See Appendix D for finalized list of suggestions)*

### ***B) Summary Sheet and Voting system***

Our summary sheet and voting system were designed around the agenda setting concept of the Communication Theory; and focused on the outcome: to increase the availability of fresh produce in AMS Food Bank. According to the Food Bank Coordinator, there were no concrete guidelines in purchasing fresh produce - she placed order for items based on previous experiences and suggestions from the clients. As a result, the supply of fresh produce was inconsistent. Furthermore, limitation in nutrition knowledge and shelf stability of foods imposed challenges in making healthy fresh food available. The summary sheet will provide nutrition and storage information on healthy choices from all four food groups which can help influence future purchases. We also understand that it is impossible to include all possible options on the list, so we have clarified in our guideline that “However, acknowledgment and exploration of healthy food alternative should NOT be ignored.” *(See Appendix E for complete detail)*

Currently, clients must voice their requests in person or via email, which only addresses individual needs. By implementing a voting system, a transparent communication between the staff and clients regarding the selection of fresh produce can be established. Each client would be eligible for one vote in each food category, and the voting would be held during the month prior. The number of food items can range from 0 to 5 depending on seasonality and availability. Voting sheet will be presented to the clients when they check in and will not take more than 3 minutes to

complete the sheet. Additionally, the blog would serve as a platform to announce the start and results of voting. *(Refer to Appendix F for an example of voting sheet)*

The concept of agenda setting demonstrates and requires cross-ecological level analysis (Kozel et al., 2006). Agenda setting can be dissected into multiple levels such as problem identifying, alternative solution development, pre-decision influence, media, public and policy agenda setting and framing (Kozel et al., 2006). We designed the summary sheet to address the issues of fresh produce deficit and absence of concrete guideline regards to purchases within the AMS Food bank. Per Rimer and Glanz (2005), the primary objective of the concept is to deliver the message of “what to think” which is parallel to the design and notion of our summary sheet. As of result, advocacy and prioritization for changes in problem identifying and alternative solution development stages of agenda setting can be achieved. Additionally, due to the high turnover rate of coordinators and volunteers each school year, it imposes barriers in establishing effective and efficient communication within the organization. Our summary sheet can be easily distributed among the food bank staff, thus achieving the concepts of health promotion agenda building. In order to support future coordinators with defining problems that require institutional remediation and collaboration with other stakeholders (Kozel et al., 2006). The agenda setting framework outlines the critical issue within the context and foster “up-stream” thinking to approach the issues (Kozel et al., 2006).

The voting system embodies the media and public agenda settings. The summary sheet prioritized and shift the attention to fresh produce deficit, and the voting system linked the problems with public priorities, hence bringing awareness to the public demonstrating the latter stages of agenda setting (Rimer & Glanz, 2005). We also



selected a few core concepts from the Social Cognitive Theory (SCT) to synthesize with the Communication Theory to deliver a thorough and efficient voting strategy. The SCT emphasizes on increasing confidence and creating realistic goals to bring changes to individual health behaviour (Rimer & Glanz, 2005). Through an interactive voting system, clients can actively engage with the improvements at the food bank and also develop a sense of being involved in shaping a better food bank. The voting system assists the dissemination and prioritization of the issues we have identified; however, without active public engagement, improvements cannot be observed.

### **Evaluation Plan**

Our evaluation has been split into two parts; part A to discuss the blog evaluation, and part B for the summary sheet evaluation. Since even our short term outcomes required **more** time than allotted to collect and analyze data, we were unable to formally evaluate and provide results for the effectiveness of our outputs.

#### ***A) Blog***

Since the blog was made public in November of 2016, we do not have a solid baseline for comparison to truly determine if our intervention would have had a significant impact. Thus, any evaluation done would be subject to some scrutiny.

If recommendations were implemented, we would monitor the blog's traffic for a year after supplying the blog recommendations to the Nutrition Coordinator. Traffic would be monitored via number of page views, as well as number of comments left on the pages. We would record the numbers on a monthly basis to determine if there was any overall increase during this time period.

Increasing page views could mean an increased number of returning page visitors, an increased number of new viewers, or both. Regardless, this would hopefully mean individuals were finding the page useful and more user-friendly, and were revisiting and or promoting it to their friends. Thus, increasing the awareness of the new valuable resource, resulting in increased (nutrition) knowledge on campus.

Additionally, at the end of the next school year, we would ask viewers to participate in a survey to provide feedback on the blog. The survey would be used to determine if the viewers found the blog helpful in improving their personal nutritional diet and increasing their knowledge and awareness of resources available. Since we acknowledge lack of participation to surveys in the past, we suggest a raffle gift card reward to entice and increase participation.

### ***B) Summary Sheet***

The summary sheet is another output of our project. We emailed the summary sheet to the Food Bank Coordinator, so we can get some feedback from her. The feedback that were received back ensured that our summary sheet is going to be clear and easy to read when the new Food Bank Coordinator takes over. If we were given more time, another evaluation process would be to determine what was purchased this year by the Food Bank Coordinator, and compare it to next year's purchases, after providing the summary sheet to the new coordinator. We would see if there is an increase in purchases of fresh produce, such as vegetables and fruits. By doing this, it would ensure us that we are addressing the short-term objectives, such as improving food variety/choices offered by the food bank. Also it would help us move towards

achieving our medium term objective of increase client's decision to choose fresh produce as there would be more fresh produce available.

Unfortunately, with high turnover rate for the Food Bank Coordinator position, there will be some limitations to the analysis, most notably the individual differences between the coordinators. We would take the data, and analyze it to determine if food purchasing habits have changed since the provision of the summary sheet. If there is a positive change in food purchase habits, this would tell us that the summary sheet is a successful intervention as it addresses our short-term objectives of increasing the awareness about healthy eating and help move towards our medium-term and long-term objectives.

### **Conclusion**

This project was an important step towards increasing the availability of nutrient-dense foods at the food bank and improving clients' self-efficacy in healthy meal planning and preparation. These two goals were addressed in our outputs, which included the creation of a summary sheet, voting sheet and blog recommendations.

To reach the short-term objectives, we recommend planning produce orders to ensure consistent access to fresh produce, and advertising the food blog through different mediums. For the medium-term, we recommend posting health related content to the blog more often and making these resources available within the food bank. For the long-term, engaging the food-bank clients for their feedback will be necessary to improve their experience of using the food bank and to assure their needs are being addressed, and by reaching out to other UBC campus services to increase partnerships for donations and awareness of food insecurity within the student community.

Many things were learnt through working on this project, most importantly how food insecurity is a hidden issue at UBC, which made it difficult to determine the scope of the issue. In this respect, we also learnt that conducting situational analysis can be more difficult when targeting certain at-risk populations and can require more time than anticipated, compared to the general public. Another thing we learnt is that providing knowledge may not change behavior, which is a key limitation in many public-health promotion projects.

We acknowledge that not all goals and objectives we have outlined will be easy to reach, however we are confident that the dedicated group of volunteers at the core of the AMS Food Bank will evaluate our advice and implement what they believe will best serve their community.

### **Authors' Contributions**

All group members were actively involved in project planning, researching, drafting goals and objectives, referencing, reviewing, and editing the report. Daisy Shen (DS) contributed to the Executive Summary and Introduction section of the paper. Stephanie Marcil (SM) contributed by directing the research on the situational analysis and outlining the problems included in the situational analysis. Project goals and outcomes were also identified by SM as well as specific blog outcomes, finally the conclusion was written. SM took on the role of being the person in-charge for the group's communications with the Food Bank Coordinator. Xiang Chuin Seah (XCS) contributed in sending reminders to the group, the writing of the Behaviours section of the situational analysis, as well as the section on the blog suggestion output. She was involved in the development of the list of suggestions for the food bank blog, including

the in-person discussions with the Food Bank Coordinator and nutrition coordinator, email communications with the nutrition coordinator and the design of the final product. DS, SM and XCS worked on making a list of suggestions to the food bank blog. Megan Chua (MC) and Lisa Chu (LC) have co-worked on the creation logic model in appendix A, the implementation of the Communication Theory, and the evaluations. MC has also completed the newsletter report, and XCS helped with the final design of the newsletter report. LC, MC, and Steven Wu (SW) worked on the summary sheet together. SW organized and put all the information for the summary sheet together. He also contributed in the Mediating Factors section of the situational analysis, summary sheet and voting system outputs and finalize the edit of the report.

All authors made substantial contribution to the project, and the workload was distributed equally. All authors read and approved the final version of the report.

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UBC SEEDS Sustainability Program library:

[https://sustain.ubc.ca/sites/sustain.ubc.ca/files/seedslibrary/LFSFS\\_0.pdf](https://sustain.ubc.ca/sites/sustain.ubc.ca/files/seedslibrary/LFSFS_0.pdf)



**Appendix A - Logic Model**

<b>AMS Food Bank Logic Model</b>						
<b>Situation</b>	<b>Input</b>	<b>Output</b>		<b>Outcomes</b>		
Improving nutritional quality of food offered by the food bank	<ul style="list-style-type: none"> <li>• Time</li> <li>• Nutrition knowledge and research</li> <li>• Research on food banks' approaches on nutrition</li> <li>• Community partners</li> </ul>	<ul style="list-style-type: none"> <li>• What we do                             <ul style="list-style-type: none"> <li>○ Summary sheet for coordinator</li> <li>○ Blog assessment and improvement</li> <li>○ Communication shift from email to blog</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Who we reach                             <ul style="list-style-type: none"> <li>○ Food Bank Coordinators</li> <li>○ Food Bank Clients</li> <li>○ Food Bank Volunteers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Short-term                             <ul style="list-style-type: none"> <li>○ Increase awareness about healthy eating</li> <li>○ Increase nutrition knowledge</li> <li>○ Improve food variety/choices</li> <li>○ Perception of food (satiety --&gt; nutrition)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Medium-term                             <ul style="list-style-type: none"> <li>○ Increase client decision to choose fresh produce</li> <li>○ Incorporate more fresh produce into client's meals</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Long-term                             <ul style="list-style-type: none"> <li>○ Improve community nutrition</li> <li>○ Foster sense of community</li> </ul> </li> </ul>

## Appendix B - Newsletter-Style Report for Community Partner



THE UNIVERSITY OF BRITISH COLUMBIA

# SEEDS Project: UBC AMS Food Bank



Food Bank

A group of six students from the Faculty of Land and Food Systems at University of British Columbia conducted a SEEDS project with the UBC AMS Food Bank. Taruni Singh, the Food Bank Coordinator, and Alisha Buttar, the Nutrition Coordinator, assisted us with introducing the functions of UBC AMS Food Bank and provided crucial information to facilitate the development of our suggestions for (1) the AMS Food Bank blog, (2) a summary sheet on purchasing tips for fresh produce and (3) the introduction of a voting system to determine the demand for fresh produce. It was a great learning experience and a pleasure collaborating with the coordinators.

What we learned:

### Ourselves

Through this project, we gained insight into where our values of interventions lie. For example, we chose to value a more top-down approach by focusing on a community level of intervention in attempts to influence the individual level, rather than a bottom-up approach where we would have focused on the individual level to influence the community level.

### Community we worked with

Although we were unable to work directly with the community members, we were still able to learn a lot about our target population. For example, we learned that an average of 68 individuals access the food bank each month. This led to the realization that many individuals use the food bank without most people's knowledge, making food insecurity a hidden issue. We also learned more about the demographics of our population, such as the higher than proportionate number of international students, contrary to our initial beliefs.

### What it's like to 'do' public health nutrition in the community

Working on public health nutrition is both difficult and variable. There are many ways to approach changing public health nutrition, and figuring out the best way to do that is always a challenge. It's especially difficult because each population will be slightly different, meaning what worked for one group of people may not work for another similar, but different, group. This made it extremely difficult for us to transfer our course learnings into practical uses in the real world. Additionally, there may be key information missed because we are not fully integrated into the community. This means that even if the intervention worked, it's unknown to us if the intervention will be sustained.

Our project focused on increasing knowledge in clients, to improve overall individual nutrition in the community. It is a difficult assumption, and we realized that the provision of knowledge does not always equate to a behaviour change. This was one large factor that was overlooked and affects our prediction if the intervention will be sustained.



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| Megan Chua | Lisa Chu | Stephanie Marcil | Xiang Chuin (Ariel) Seah | Daisy Shen | Steven Wu |

**Appendix C - Key Concepts of the Communication Theory**

<b>Table 9. Agenda Setting, Concepts, Definitions, and Applications</b>		
<b><i>Concept</i></b>	<b><i>Definition</i></b>	<b><i>Potential Change Strategies</i></b>
<b>Media agenda setting</b>	Institutional factors and processes influencing how the media define, select, and emphasize issues	Understand media professionals' needs and routines for gathering and reporting news
<b>Public agenda setting</b>	The link between issues covered in the media and the public's priorities	Use media advocacy or partnerships to raise public awareness of key health issues
<b>Policy agenda setting</b>	The link between issues covered in the media and the legislative priorities of policy makers	Advocate for media coverage to educate and pressure policy makers about changes to the physical and social environment needed to promote health
<b>Problem definition</b>	Factors and process leading to the identification of an issue as a "problem" by social institutions	Community leaders, advocacy groups, and organizations define an issue for the media and offer solutions
<b>Framing</b>	Selecting and emphasizing certain aspects of a story and excluding others	Advocacy groups "package" an important health issue for the media and the public

Theory at a Glance page 31

## **Appendix D - List of Suggestions for AMS Food Bank Blog**

(Colour version, page 1)



THE UNIVERSITY OF BRITISH COLUMBIA

# Suggestions for AMS Food Bank Blog



### Immediate changes

- Get in touch with previous coordinator to remove old blog from search results.
- Consider moving relevant content from the old blog to new blog.
- Consider changing case of the paragraphs - do not capitalize the whole paragraph.
- Ensure wordings are straightforward - change "portfolio" to "recipes".
- Change links to recipe - instead of two clicks, they should only require one click.
- Consider listing categories that bring visitors to pages they may be interested in, e.g. "breakfast", "snack ideas".
- Consider including relevant tags at the end of every post, e.g. "cauliflower", "carrots".
- Embed AMS' video about the food bank on website.

### Changes to consider for upcoming term

- Have a fixed update schedule.
- Consider having recipes up on the food bank's television screen/pamphlets.
- Ensure that all recipes are concise, printable, able to be viewed without scrolling, have consistent formats.
- Consider changing header, e.g. use an attractive food photo.
- Have a "Meet the Team" page introducing the director and volunteers to make the blog welcoming.
- Help improve client's access to affordable, nutritious food by including resources on website - food asset map, other food banks, community meals, Dietitians of Canada, HealthLink BC, eaTracker, etc.
- Include pages for "prospective clients", "for donors", to provide more information about the food bank and donation details.
- Use royalty-free photos and cite the source, if required.

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# Suggestions for AMS Food Bank Blog



## Other suggestions

- Engage with food bank clients about what they would like to see in the blog/their opinions towards the blog if they have seen it.
- Create and make a feedback form available and visible on the blog
- Create short video to introduce food bank to new clients and show behind-the-scenes (with assistance from the AMS or collaborate with The Ubyyssey), and provide link to the blog in the video's description.
- Consider marketing director position to promote the food bank and blog.
- After the making changes to the blog, ask AMS/The Ubyyssey/other faculties to help advertise the food bank and food bank blog on their facebook pages/newsletters.

## Sample recipe format

### LEMON GARLIC PASTA WITH SALMON



**Ingredients**

- 4 cups pasta
- ½ teaspoon garlic, minced
- 1 tablespoon extra virgin olive oil
- salt and pepper to taste
- 230g (½ lb) of canned salmon
- zest of ½ lemon
- 1 tablespoon lemon juice
- parmesan cheese, grated

**Preparation Time:** 10 mins  
**Cooking Time:** 20 mins  
**Servings:** 4

**Can be made ahead?** Yes  
**Can be frozen?** Yes  
**Good for leftovers?** Yes

**Steps**

1. Cook the pasta (according to package directions).
2. Season salmon with salt and pepper to taste. If fish is cooked, warm it up using microwave, stove or oven. If uncooked, cook fish as instructed on the can.
3. Drain and toss cooked pasta with garlic, olive oil and season with salt and pepper to taste.
4. Add lemon juice, zest (and capers, if preferred) to the pasta and toss.
5. Flake the salmon into bite-size pieces
6. Toss in cooked salmon with pasta.
7. Add freshly grated parmesan cheese.

Retrieved from:  
<http://www.thecookingjar.com/wp-content/uploads/2015/06/light-lemon-garlic-pasta-salmon-2.jpg>

For more information, please see : <https://amsfoodbank.wordpress.com>

## Useful resource

Evans, S. H., Clarke, P., & Koprowski, C. (2010). Information design to promote better nutrition among pantry clients: Four methods of formative evaluation. *Public Health Nutrition*, 13(3), 430-437. doi:10.1017/S1368980009990851

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# Suggestions for AMS Food Bank Blog



Food Bank

## Immediate changes

- Get in touch with previous coordinator to remove old blog from search results.
- Consider moving relevant content from the old blog to new blog.
- Consider changing case of the paragraphs - do not capitalize the whole paragraph.
- Ensure wordings are straightforward - change "portfolio" to "recipes".
- Change links to recipe - instead of two clicks, they should only require one click.
- Consider listing categories that bring visitors to pages they may be interested in, e.g. "breakfast", "snack ideas".
- Consider including relevant tags at the end of every post, e.g. "cauliflower", "carrots".
- Embed AMS' video about the food bank on website.

## Changes to consider for upcoming term

- Have a fixed update schedule.
- Consider having recipes up on the food bank's television screen/pamphlets.
- Ensure that all recipes are concise, printable, able to be viewed without scrolling, have consistent formats.
- Consider changing header, e.g. use an attractive food photo.
- Have a "Meet the Team" page introducing the director and volunteers to make the blog welcoming.
- Help improve client's access to affordable, nutritious food by including resources on website - food asset map, other food banks, community meals, Dietitians of Canada, HealthLink BC, eaTracker, etc.
- Include pages for "prospective clients", "for donors", to provide more information about the food bank and donation details.
- Use royalty-free photos and cite the source, if required.



# Suggestions for AMS Food Bank Blog



Food Bank

## Other suggestions

- Engage with food bank clients about what they would like to see in the blog/their opinions towards the blog if they have seen it.
- Create and make a feedback form available and visible on the blog
- Create short video to introduce food bank to new clients and show behind-the-scenes (with assistance from the AMS or collaborate with The Ubyyssey), and provide link to the blog in the video's description.
- Consider marketing director position to promote the food bank and blog.
- After the making changes to the blog, ask AMS/The Ubyyssey/other faculties to help advertise the food bank and food bank blog on their facebook pages/newsletters.

## Sample recipe format

### LEMON GARLIC PASTA WITH SALMON



Retrieved from:  
<http://www.thecookingjar.com/wp-content/uploads/2015/06/light-lemon-garlic-pasta-salmon-2.jpg>

#### Ingredients

- 4 cups pasta
- ½ teaspoon garlic, minced
- 1 tablespoon extra virgin olive oil
- salt and pepper to taste

- 230g (½ lb) of canned salmon
- zest of ½ lemon
- 1 tablespoon lemon juice
- parmesan cheese, grated

Preparation Time: 10 mins

Cooking Time: 20 mins

Servings: 4

Can be made ahead? Yes

Can be frozen? Yes

Good for leftovers? Yes

#### Steps

1. Cook the pasta (according to package directions).
2. Season salmon with salt and pepper to taste. If fish is cooked, warm it up using microwave, stove or oven. If uncooked, cook fish as instructed on the can.
3. Drain and toss cooked pasta with garlic, olive oil and season with salt and pepper to taste.
4. Add lemon juice, zest (and capers, if preferred) to the pasta and toss.
5. Flake the salmon into bite-size pieces
6. Toss in cooked salmon with pasta.
7. Add freshly grated parmesan cheese.

For more information, please see : <https://amsfoodbank.wordpress.com>

## Useful resource

Evans, S. H., Clarke, P., & Koprowski, C. (2010). Information design to promote better nutrition among pantry clients: Four methods of formative evaluation. *Public Health Nutrition*, 13(3), 430-437. doi:10.1017/S1368980009990851

SEEDS PROJECT | FNH 473 |

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(Detailed version with rationale and examples, page 1)

### **Suggestions for AMS Food Bank Blog**


#### Immediate changes

<b>Suggestion</b>	<b>Rationale</b>	<b>Example</b>
Get in touch with previous coordinator to remove old blog ( <a href="https://blogs.ubc.ca/amsfoodbank/">blogs.ubc.ca/amsfoodbank/</a> ) from search results.	The link to the old/inactive AMS Food Bank blog appears in the top search engine result instead of the current one. To avoid confusion in people trying to look up the current food bank's WordPress account, have the previous coordinator deactivate/delete the old account.	N/A
Consider moving relevant content from the old blog to new blog.	There are some recipes and relevant food bank information in the old blog which can be transferred to the new blog to make more information available for food bank clients and potential donors/volunteers.	N/A
Consider changing case of the paragraphs - do not capitalize the whole paragraph.	Having all paragraphs on the page in upper case may be aesthetically unappealing and may turn readers away. Having them in normal case may be more reader-friendly.	N/A
Ensure wordings are straightforward - change "portfolio" to "recipes".	Using straightforward, easy-to-understand wordings will help the readers of the blog navigate through the blog more easily.	N/A
Change links to recipe – instead of two clicks, they should only require one click.	The current setup requires readers to click on the recipe link two times before they can see the recipe. Readers may be confused and may think that the link isn't working properly if they only click once. Making this change will help the readers access the recipes more easily.	N/A
Consider listing categories that bring visitors to pages they may be interested in, e.g. "breakfast", "snack ideas", and/or include relevant tags at the end of every post, e.g. "cauliflower", "carrots".	It may be challenging for readers to find the recipe they want when there are too many recipes available on the blog. To make it easier for them to find what they are interested in, have the recipes listed in relevant categories and/or attached with tags.	Ideas for "Lemon Garlic Pasta with Salmon": <ul style="list-style-type: none"> <li>- Categories: Dinner, Mediterranean, Seafood, Pasta</li> <li>- Tags: dinner, Mediterranean, seafood, salmon, pasta, lemon, pescatarian</li> </ul>
Embed AMS' video about the food bank on website ( <a href="https://www.youtube.com/watch?v=h1vv4DglU2w">https://www.youtube.com/watch?v=h1vv4DglU2w</a> )	Some people may prefer learning more about the AMS Food Bank via video and audio, hence it may be helpful to make the recent AMS-made video about the food bank available on the blog, in addition of it being available on AMS Facebook page.	N/A



(Detailed version with rationale and examples, page 2)

Changes to consider for upcoming term

Suggestion	Rationale	Example
Have a fixed update schedule.	To make it easier for clients to know when to check the blog for updates. By doing so, a steady viewership may be achieved.	Publish a new recipe and nutrition tips on 1st day of every month, and/or publish a list of what's available in the food bank every Sunday/every other Sunday. Inform readers of this update schedule through blog's homepage and in-person communications with assistance from volunteers.
Consider having recipes up on the food bank's television screen/pamphlets.	To increase food bank client's exposure to the recipes and invite them to visit the blog for more recipes and nutrition tips.	N/A
Ensure that all recipes are concise, printable, able to be viewed without scrolling, have consistent formats.	To make recipe-reading easier for readers, and increase the chances of them using the recipes.  It may not be convenient for readers to scroll up and down the page to read the recipe while making it. The process can be made easier by having the recipes viewable without scrolling.	Sample recipe format using recipe found on the AMS Food Bank blog and information design tips from literature on food banks.  Evans, S. H., Clarke, P., & Koprowski, C. (2010). Information design to promote better nutrition among pantry clients: Four methods of formative evaluation. <i>Public Health Nutrition</i> , 13(3), 430-437. doi:10.1017/S1368980009990851   <p><b>LEMON GARLIC PASTA WITH SALMON</b></p> <p><b>Ingredients</b></p> <ul style="list-style-type: none"> <li>- 4 cups pasta</li> <li>- 1/2 teaspoon garlic, minced</li> <li>- 1 tablespoon extra virgin olive oil</li> <li>- salt and pepper to taste</li> <li>- 230g (1/2 lb) of canned salmon</li> <li>- zest of 1/2 lemon</li> <li>- 1 tablespoon lemon juice</li> <li>- parmesan cheese, grated</li> </ul> <p><b>Preparation Time:</b> 10 mins <b>Cooking Time:</b> 20 mins <b>Servings:</b> 4</p> <p><b>Can be made ahead?</b> Yes <b>Can be frozen?</b> Yes <b>Good for leftovers?</b> Yes</p> <p><b>Steps</b></p> <ol style="list-style-type: none"> <li>1. Cook the pasta (according to package directions).</li> <li>2. Season salmon with salt and pepper to taste. If fish is cooked, warm it up using microwave, stove or oven. If uncooked, cook fish as instructed on the can.</li> <li>3. Drain and toss cooked pasta with garlic, olive oil and season with salt and pepper to taste.</li> <li>4. Add lemon juice, zest (and capers, if preferred) to the pasta and toss.</li> <li>5. Flake the salmon into bite-size pieces</li> <li>6. Toss in cooked salmon with pasta.</li> <li>7. Add freshly grated parmesan cheese.</li> </ol> <p><small>Revised from: <a href="http://www.thefoodbank.ca/recipe/lemon-garlic-pasta-with-salmon">http://www.thefoodbank.ca/recipe/lemon-garlic-pasta-with-salmon</a></small></p> <p><small>For more information, please see: <a href="https://amsfoodbank.wordpress.com">https://amsfoodbank.wordpress.com</a></small></p>
Consider changing header, e.g. use an attractive food photo.	The current header on the homepage can be a little plain. The blog can be made more attractive with a good food photo or a photo of the food bank.	N/A
Have a "Meet the Team" page introducing the director and volunteers to make the blog welcoming.	To add a more welcoming and personal touch to the food bank blog, having a page with descriptions and photos of the people involved in the food bank may be helpful.	See old AMS Food Bank blog for example: <a href="http://blogs.ubc.ca/amsfoodbank/our-executive-team/">http://blogs.ubc.ca/amsfoodbank/our-executive-team/</a>
Help improve client's access to affordable, nutritious food by including resources on website.	The AMS Food Bank service may not be enough to help improve food insecurity in the food bank clients, especially when food bank hours are limited and students can only visit up to six times per term.	Food asset map: <a href="http://goo.gl/Rb7QJu">http://goo.gl/Rb7QJu</a>  Other food banks: <ul style="list-style-type: none"> <li>- The Greater Vancouver Food Bank <a href="https://www.foodbank.bc.ca/">https://www.foodbank.bc.ca/</a></li> <li>- Richmond Food Bank Society <a href="http://richmondfoodbank.org/">richmondfoodbank.org/</a></li> </ul>

(Detailed version with rationale and examples, page 3)

	<p>This can be improved by providing them with resources on how and where they can access healthy and affordable food close to them, other than the AMS Food Bank.</p> <p>Links to other helpful websites on healthy eating and living can be included in the resource page too, as the information available on the AMS Food Bank blog may be limited.</p>	<p>HealthLink BC ("provides medically-approved information on more than 5,000 health topics, symptoms, and interactive health tools and tips for maintaining a healthy lifestyle"): <a href="https://www.healthlinkbc.ca/">https://www.healthlinkbc.ca/</a></p> <ul style="list-style-type: none"> <li>- Call 8-1-1 toll-free to speak with a registered nurse, registered dietitian or licensed pharmacist about health concerns.</li> </ul> <p>eaTracker ("Check food and activity choices, analyze recipes and plan meals"): <a href="http://www.eatracker.ca/">http://www.eatracker.ca/</a></p> <p>Dietitians of Canada: <a href="http://www.dietitians.ca/">http://www.dietitians.ca/</a></p>
Include pages for "prospective clients", "for donors".	To provide more information about the food bank and donation details.	N/A
Use royalty-free photos and cite the source, if required.	To acknowledge source of materials and avoid legal complications.	N/A

Other suggestions

Suggestion	Rationale
Engage with food bank clients about what they would like to see in the blog/their opinions towards the blog if they have seen it.	To understand and work towards meeting the needs of the clients. This engagement may also motivate the clients to check out the blog.
Create and make a feedback form available and visible on the blog.	To understand and work towards meeting the needs of the clients. This engagement may also motivate the clients to check out the blog.
Create short video to introduce food bank to new clients and show behind-the-scenes (with assistance from the AMS or collaborate with The Ubysey), and provide link to the blog in the video's description.	Some people may prefer receiving information via video/a video may be a good promotion material for the food bank. Showing the behind-the-scenes can increase awareness of how the food bank is run and who are the people involved in the process.
Consider marketing director position to promote the food bank and blog.	A volunteer with marketing expertise can focus on promoting the blog. The increased media exposure may attract more donors/volunteers to give assistance to the food bank.
After the making changes to the blog, ask AMS/The Ubysey/other faculties to help advertise the food bank and food bank blog on their Facebook pages/newsletters.	To increase awareness of the food bank and invite more readers to the blog.

(Detailed version with rationale and examples, page 4)

### Other tips on information design

**Table 1** Principles about information design

Principle	Rationale
#1: Each recipe should be anchored in a single vegetable (such as broccoli, or cauliflower, or onions)	Fresh produce at pantries surges into availability and evaporates swiftly and unpredictably. Pantries, if they offer produce at all, may distribute one to four different vegetables, seldom more
#2: A vegetable recipe should only be given to clients if the vegetable is being distributed that day	A day when carrots are available, for example, offers an occasion to increase clients' knowledge about preparing carrots. But it would be pointless to hand out recipes about cabbage or other items if they were not available that day, because the 'teachable moment' for them is not at hand <sup>(16)</sup>
#3 Recipes should avoid ingredients that clients of pantries do not have at home	Low-income cooks do not have easy access to herbs, spices or other flavourings beyond salt, pepper and garlic, which are inexpensive. Recipes that combine fresh produce with canned soups, rice, or with chicken are helpful because such items are commonly in stock at pantries or within the reach of low-income people. Recipes should show ingredients as 'optional', where appropriate, encouraging cooks to experiment or adapt to available items
#4: Recipes should accommodate limited skills of literacy and numeracy among many pantry clients <sup>(17)</sup>	References to 'small spoons' or 'large spoons' should substitute for teaspoons and tablespoons; fractions should be avoided, if possible. Instructions should use a limited vocabulary. At a minimum, recipes should be available in English and Spanish
#5: A set of recipes about a vegetable should present various methods of preparing servings and snacks	Low-income clients use and/or are interested in learning about many different cooking methods, including steaming, baking, stir-frying, making a soup, using a slow cooker, and so on. This variety can expose the household to new food textures, aromas, appearances and flavours that could increase liking for the vegetable
#6: Recipes should contain as few steps, require as few ingredients, and be accomplished in as little time as possible	Economic deprivation produces stress, leaving people with reduced time and energy to invest in meal preparations <sup>(18,19)</sup>
#7: Generally recipes should make sparing use of salt, sugar and refined carbohydrates	Basic principles of sound nutrition are of interest to low-income cooks and should be reinforced
#8: Include a colour photograph with the recipe	A colour photograph of the finished dish is much desired by low-income cooks. If possible, cooks also like seeing a photograph of an intermediate step in the preparation process

Screenshot from page 432 of Evans, S. H., Clarke, P., & Koprowski, C. (2010). Information design to promote better nutrition among pantry clients: Four methods of formative evaluation. *Public Health Nutrition*, 13(3), 430-437. doi:10.1017/S1368980009990851

Appendix E - Summary Sheet

# AMS FOOD BANK

## Nutrition Information

## Storage Information

### Fruit and Vegetables



Apple contains high amount of dietary fibre and Vitamin C. Low in calories and sodium. No fat or cholesterol

Ideally store at 0 -1° C (32 -34° F). Lose texture and flavor over 4 months



Carrots is low in saturated fat and cholesterol. Excellent source of Vitamin A, C, K and Potassium. Contribute to daily orange vegetable intake

Wash only when ready to use. DO NOT store with apple, pears potatoes. Keep in a plastic bag when refrigerated



Fully ripen bell peppers are a great source of Vitamin A and C. They are also rich in antioxidant and low in calories

Keep in the plastic bag for about a week in refrigerator. Green paper remains fresh a bit longer than yellow and red



Kale provides high source of Vitamin K, A, C and B6. Rich in copper, iron manganese and calcium. Excellent source of fibre

Should be refrigerated in an airtight bag. Will be remain fresh up to 5 days. Wash only when using



Broccoli is a great source of Vitamin C, K, iron potassium and fibre

Stores in sealed plastic bag in the fridge. Typically, will remain fresh with 7 - 14 days



Cucumber contains rich source of Vitamin C, K and potassium. Low in saturated fat cholesterol and sodium

Generally last up to 14 days. Should be stored above 10° C

### Grain Products



- Reduce risk of heart disease, stroke, type 2 diabetes and obesity.
- Good sources of B vitamins, iron, and folic acid.
- Refined grains contain significantly less fibre and vitamins
- Avoid grain products with added sugar and sodium
- Consume wide variety of grains

- Keep bread away from direct sunlight and stores in a cool/dry area at room temperature for NO MORE THAN 2 DAYS
- When storing bread in freezer, keep it in a plastic bag
- Typically grain products (seeds, rice etc.) have long shelf life, keep them in a cool/dry area

## Milk and Alternatives



Milk is a great source of Vitamin D, riboflavin, and calcium. Choose low fat options, e.g. skim, 1% or 2%

Can store up to 2 weeks in the fridge and should be refrigerated immediately. Can last 1-3 days beyond "sell-by" date (use your best judgement)



Yogurt is an excellent source of high-quality protein, calcium and B12. Sugar content varies depend on the brand.

Should be well covered in the fridge. Do not freeze, may change texture.



Fortified soy beverage is also a great source of calcium, Vitamin D and protein for vegetarian and vegan. Choose unsweetened to avoid excess sugar.

Typically, has longer shelf life than milk. Nonetheless, the storage information is similar to milk

## Meat and Alternatives



Tofu contains high source of good quality protein and calcium. Low in fat, calories, and cholesterol free

Must be in refrigerator. Expiry date NOT flexible. Can keep for 2 - 3 days after opening.



Hummus is a good source of protein. It is rich in unsaturated fat, folate, iron, and dietary fibre.

Commercial hummus usually last anywhere between 3 - 10 days in the fridge. If it is opened, it is best to consumed within a week. Can be frozen but texture and consistency may change

This information sheet provides options and discussion on cost-effective and nutrient-dense foods for future purchases. All the food listed are ubiquitous and familiar to most of the population. However, acknowledgment and exploration of other healthy food alternatives should NOT be ignored. Please consider the information above prior to purchasing fresh produce to provide healthy and nutritious foods to the clients.

Appendix F - Voting Sheet

***You want it, we bring it! VOTE!***



Category	Item	Number of ballots
Fruit and Vegetables		
Grain products		
Milk and Alternative		
Meat and Alternative		