

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

AMS Food Bank Strategy to Support all Members

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University of British Columbia

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Themes: Community, Food, Wellbeing

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AMS FOOD BANK STRATEGY TO SUPPORT ALL MEMBERS



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UBC Social Ecological Economic
Development Studies (SEEDS)
Student Report

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The University of British Columbia
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Executive Summary

The AMS Food Bank is an emergency food relief service that serves food insecure students at the University of British Columbia in Vancouver, Canada (Alma Mater Society of UBC, n.d.). The purpose of this student-led research project was to investigate and implement new strategies for the AMS Food Bank to address their well-being needs in an effort to alleviate food insecurity beyond the provision of emergency food relief. The objectives of this project were to identify best practices for registering members at food banks to monitor needs, to evaluate the needs of AMS Food Bank members and their awareness of additional support resources, and to deliver a strategy to communicate information to members about resources that address their needs.

We used three research methods to develop a communication and management strategy. The first was a review of best practices for registering members at food banks and monitoring well-being needs. The second was an analysis of the registration and visitation data collected by the AMS Food Bank between 2013-2017 to understand user patterns and the current usership of the Food Bank. The third was the collection and analysis of primary data collected from Food Bank members through an online survey questionnaire to evaluate perception of the AMS Food Bank, user experience, well-being needs, awareness of additional resources, and preferred communication strategies.

Key findings of our research include that 37% of AMS Food Bank members had experienced severe food insecurity, the most frequent users of the AMS Food Bank were predominantly off-campus graduate students supporting families, and that the majority of members were interested in learning about financial support resources through a monthly newsletter and website content. The outcomes of this project include a communication strategy entailing a monthly newsletter, a welcome email for new members, and proposed modifications to the member registration system.

We recommend to the AMS Food Bank that they further develop and implement our proposed communication strategy and member registration system modifications. Our research notably highlights the success of the AMS Food Bank as a low-barrier model for all students experiencing varying levels of food insecurity. As a next step, we recommend that the AMS Food Bank explore the opportunity to build on the success of their low barrier approach, and further to explore community food hub models implemented elsewhere. We expect that our contributions, and the steps that follow, will advance the AMS Food Bank as a service that not only provides emergency food relief, but also addresses the root causes of student food insecurity.

Introduction

Our project 'The AMS Food Bank Strategy to Support All Members', is a student-led initiative in the Social Ecological Economic Development studies (SEEDS) Sustainability Program at the University of British Columbia (UBC). SEEDS projects synergize various stakeholders and resources of the UBC campus with UBC students to develop projects and innovative strategies that impact sustainability on campus and beyond ("SEEDS Sustainability Program" n.p.). Previous SEEDS projects have explored various challenges the AMS Food Bank faces in having an availability of nutrient dense foods to satisfy the food-related needs of students (Shen et al. 3; Cho et al. 3). Our project this year focuses on the challenges the Food Bank faces with regards to communicating the purpose of the Food Bank to its members and a lack of awareness of alternative resources. Additionally, there is a lack of clarity regarding the AMS Food Bank's purpose due to communication gaps. The mission of the AMS Food Bank is to provide "immediate, low-barrier emergency food relief to students most in need" (Alma Mater Society n.p.). The lack of clarity of the Food Bank's purpose could mean that some students who require help are unaware of its purpose and remain underserved. These gaps were communicated to us by the AMS Food Bank coordinator, Joshua Kriesel, at the outset of this project.

To address these challenges, we developed and proposed an internal communication strategy that extends the outreach of the AMS Food Bank to its members. This communication strategy is intended to connect members with multiple resources that address the multiple causes and effects of food insecurity, and build greater individual and community resiliency in overcoming welfare challenges.

Relevance to Sustainability on Campus and Beyond

In a previous SEEDS projects on student hunger, student food insecurity was found to be a prevalent issue at Canadian universities and at UBC (Rideout and James 2). Further, the 2017 Academic Experience Survey conducted by Insights West for the AMS of UBC additionally found that 45% of undergraduate students have at some point worried about sufficient food during their studies ("2017 Academic Experience Survey" n.p.). We will refer to the previous SEEDS project to broaden our understanding of how we will address challenges in communication, awareness, and use of the AMS Food Bank. By building knowledge of these issues in a community context, we will be making important contributions to improve the operation of the AMS Food Bank. This will provide a greater benefit to students, and serve as a model for social innovation that can be used in other communities.

The literature on food insecurity demonstrates the negative impact it can have on well-being (Olson n.p.). For students, food insecurity poses as an additional burden on the demands of higher education, which exacerbates vulnerability (Shen et al. 4). Thus, there are various opportunities to optimize this service to make important contributions to social sustainability on campus and beyond.

Project Context

A nationwide survey conducted in 2016 found that approximately 2 in 5 post-secondary students in Canada were food insecure (Silverton et al., p. 1). Student food insecurity has created a need for food relief services at Canadian Universities. At UBC, this need is filled by the AMS Food Bank, whose pertinence to students is demonstrated most strikingly by a seven-fold increase in usage between 2011 and 2015 (Figure 1). Our project intends to impact the lives of UBC students on a regional level. Our intentions are to create a communication strategy which will extend the outreach of the AMS Food Bank to its members.

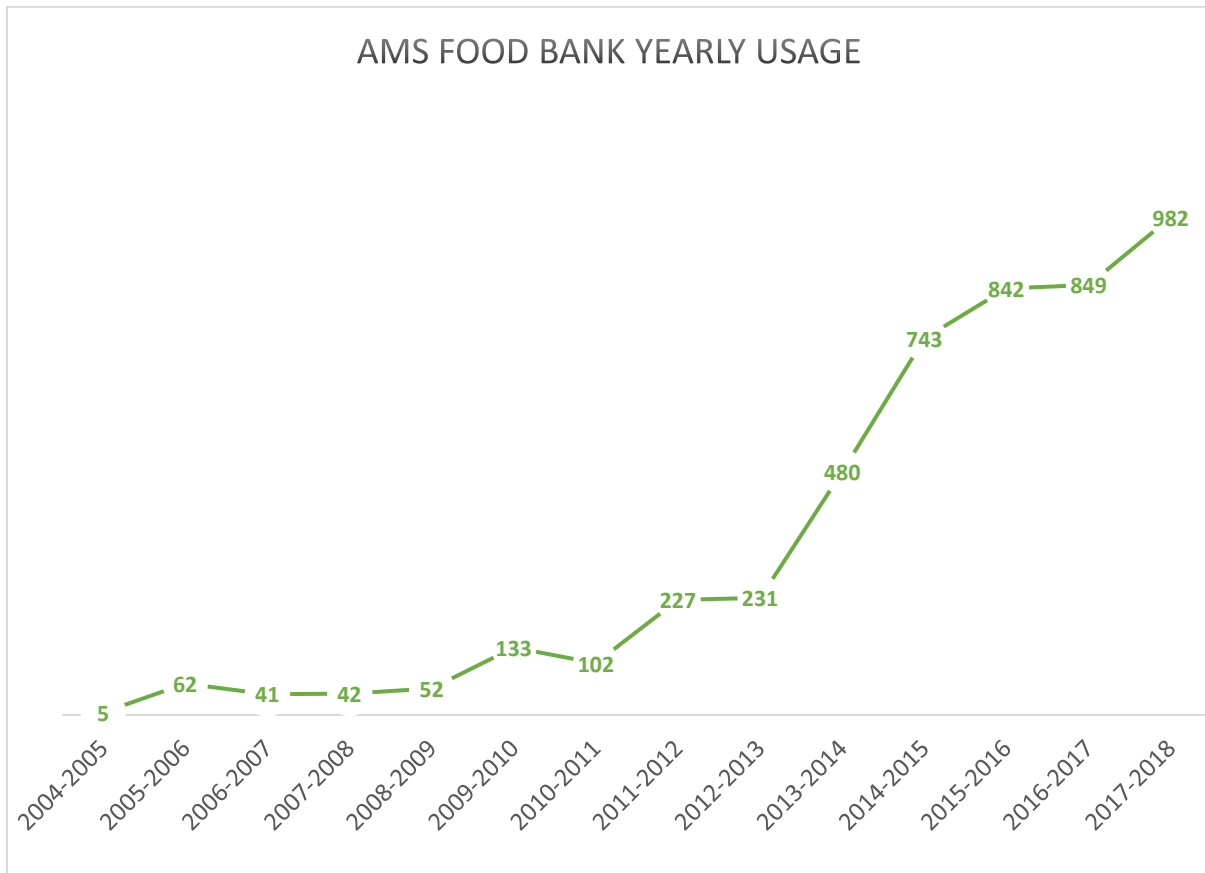


Figure 1: Number of visits per year at the AMS Food Bank from 2004 - 2018. Source: AMS Food Bank

Our internal communication strategy aims to connect the AMS Food Bank members with alternative resources within Vancouver. Some resources may include the Greater Vancouver Food Bank (GVFB), Quest Exchange, and other resources from the Vancouver Food Asset Map (VCH n.p.). This will help ensure all members needs are met and that they feel fully supported. Inadequacies can result in nutrient deficiencies and psychological impacts, which is why it is imperative to optimize the outreach of the AMS Food Bank. In doing so, this outreach can engage food insecure students in taking the first step towards seeking support from the Food Bank. This entails a commitment to upholding the dignity, privacy, and confidentiality of the Food Bank member.

Project Goals and Objectives

The purpose of this research project was to investigate and implement new strategies for communication between the AMS Food Bank and its members, and management practices to sustain these strategies. Our first objective was to identify best practices through literature research. Our literature research helped inform our projects deliverables by assessing what practices are used at other food banks to address food insecurity in ways other than the provision of emergency food relief. Our second objective was to identify the needs and user patterns of the Food Bank members. To do so, we analyzed secondary data collected by the AMS Food Bank since 2013, which comprised of registration and visitation data. With this data, we conducted a baseline analysis of user practices and current communication practices, with a particular focus on the member registration process. Our third objective was to develop communication recommendations to the AMS Food Bank based on survey research that we conducted, and on the analysis of secondary data. Importantly, survey responses identified the strengths and gaps of the Food Bank, which alternative support resources were most valued by Food Bank members, and in what form they wish to receive information about these resources.

Methods and Methodology

As a SEEDS project, we applied Community-Based Action Research (CBAR) as the primary methodology for this project. CBAR is an approach to research in which the research topic, process, and outcomes are developed collaboratively with the research participants. In this project, we worked alongside the AMS Food Bank Coordinator Joshua Kriesel, to develop the research questions, elaborate the methods, and deliberate next steps in response to the results.

Methods

To answer our research questions, we applied three methods. The first was a review of secondary sources to identify best practices in identifying AMS Food Bank member needs and providing additional support. The second was the analysis of registration data from the AMS Food Bank to identify user practices and characteristics of current AMS Food Bank members. The third was the collection and analysis of primary data from AMS Food Bank members in the form of a survey which evaluated the perceptions of the AMS Food Bank by members, user practices, user needs, awareness of additional resources and services that promote health and well-being, and preferred methods of learning about these resources.

Literature Review

Our objective in our review of secondary sources was to identify practices used at other food banks for member registration and provision of additional supportive resources that could be transferred to the AMS Food Bank. The following three sets of questions guided our review of secondary sources:

- What are standard practices in registering food bank members based on need and, collecting information on food bank members, in order to serve them better?

- Which food bank models best promote comfortable and appropriate use by users?
- How do food banks connect their members with resources, services, and networks that promote health and well-being that are not directly food related?

In selecting secondary sources, our approach was to focus on information and documents about the operation of food banks in Canada and at Universities across Canada and the United States that were available online, in annual report documents, in news articles, scholarly journal articles, and in municipal policy documents.

Secondary Data Collection and Research Methods

Secondary research was a two-tiered approach, and comprised the analysis of two separate data sources, both individually, and in relation to one another. The first data source was an excel file which we received from the food bank director and detailed all the clients who have registered and visited the AMS food bank between September 2014 and March 2018. The second data source was a .pdf file which contained the specific, accurate data as it related to the overall UBC student population. This document was downloaded (after entering campus-wide login data) from the Planning and Institutional Research Office’s website (PAIR, 2017).

Registration and Visitation Data

| | Term 1 | Term 2 | Summer Term |
|------|--------|--------|-------------|
| 2014 | ✓ | ✓ | X |
| 2015 | ✓ | ✓ | ✓ |
| 2016 | ✓ | ✓ | ✓ |
| 2017 | ✓ | ✓ | ✓ |
| 2018 | ✓ | X | ✓ |

The first data source was an excel file which contained within it 13 separate spreadsheets (Figure 2).

Figure 2: Registration and visitation datasets from the AMS Food Bank.

To facilitate the data analysis, all 13 of the spreadsheets were amalgamated into a single excel spreadsheet, which ultimately contained 3,402 lines of data. We outline the various parameters in this data (the columns) below. The initial data analysis began within an exploratory framework, essentially looking to learn about who was registering for the food bank, who was visiting the food bank, and were they markedly different? The primary methodology employed to answer these questions was analysis of the excel spreadsheets within the Microsoft Excel (2018) software program, and primarily using their “Pivot Table” feature.

Responses to the parameters were either dichotomous or open ended. Though all parameters were analyzed in attempt to discover any trends or other information which could serve to improve future communications between the AMS Food Bank and its members (i.e. our deliverables), it was only the dichotomous parameters that were analyzed via the Pivot Table feature in Excel 2018. To decipher who was registering for the Food Bank and who was visiting the Food Bank, a pivot table was employed within the Microsoft Excel software program, filtering by the “Type of Client” parameter, and then listing the associated “Student Number(s).” As the “Type of Client” was a dichotomous parameter, requiring either a “new” response when a student registers to become a food bank member, or a “returning” response when the student/member then subsequently visits the food bank, this was a rather straightforward

process. Similarly, analysis of the “Housing,” “International,” and “Are you supporting a family?” parameters were likewise straightforward as they also required a dichotomous response of “Off-campus/ On-campus,” “Yes/No,” and “Yes/No” respectively.

The parameters which had dichotomous responses were:

- Type of Client
- Student Status
- Housing
- International Student
- Are you supporting a family?

It was initially intended to categorize the responses to the open-ended parameters to allow for a more rigorous analysis. However, it was found that the variation in the quality, coherency and ambiguity among these responses precluded this categorization from occurring to the extent initially desired. Nevertheless, some categorization took place, and some corresponding recommendations for future data collection practices will follow in the discussion section of this report.

Parameters with open-ended responses were:

- Sources of Income
- How did you hear about us?
- Please outline in a few sentences why you would benefit from accessing this service.
- Would you like to be contacted about AMS Food Bank events?

The remaining parameters:

- Timestamp
- Student Number (last 5 digits)

The remaining parameters were specific to each excel entry and were used to identify the visitation frequency of all food bank clients, and specific food bank clients as they relate to the above dichotomous response parameters.

UBC PAIR Data

The second (secondary) data source consulted was the “Fact Sheet, Vancouver Campus, Winter 2016” which was prepared by UBC’s Planning and Institutional Research (PAIR) office. The data used from this document was:

- The overall UBC student population number
- Number of International Students
- Number of Domestic Students
- Number of Graduate Students
- Number of Undergraduate Students
- Number of Students living on Campus
- Number of Students living off Campus

This would allow for a contextual basis which could be used to determine whether the respective cohorts which were registering and visiting the AMS food bank were underrepresented, overrepresented, or neither.

Primary Data Collection Research Methods

Within the frame of this research project, we collected primary data directly from active AMS Food Bank members through the use of a survey. The objective of this survey was to evaluate their perceptions on the AMS Food Bank, user experience, reasons for accessing the food bank, awareness of additional resources of on and off-campus that support health and wellbeing, welfare needs of AMS Food Bank members extending beyond food, and preferred communication strategies for learning about additional resources. The rationale for employing surveys as the primary data collection method was to generate a representative sample of responses. Recruiting a representative sample enabled us to generate a strong case for specific recommendations in developing a communications and management strategy to better serve the needs of AMS Food Bank members.

The survey, consisting of 21 questions, was created electronically using the UBC Qualtrics survey tool. Response formats included multiple choice, multiple selection, and text responses. We designed it such that it could be completed in less than 10 minutes. The survey used can be found in Appendix B. The survey was administered to all approximately 400 active AMS Food Bank members via email. No member was excluded from being invited to participate, as we sought to get a representative perspective of how the members use the AMS Food Bank, and what additional resources they would benefit from learning about. Our goal was to receive a sample size of approximately 50 and a corresponding response rate of about 12.5%. To promote participation, we organized five incentive packages to gift to participants randomly: two packages consisting of a \$25 UBC Bookstore gift card and a \$25 grocery gift card, and three \$25 grocery gift cards.

The survey we created was administered by the AMS Food Bank coordinator via email to all active AMS Food Bank members on March 5th, 2018. The survey was open for responses from March 5th at 12PM until March 12th, 2018 at 10PM. A reminder email was sent on March 9th to promote participation. At the AMS Food Bank, electronic tablets linked to the survey were used to facilitate in-person collection of responses by Food Bank volunteers. Additionally, we created a poster to encourage participation that was posted at the AMS Food Bank during the survey response collection period.

Evaluating Level of Food Insecurity and User Practices

An important consideration in the analysis of this survey was to distinguish the needs and user practices of those most food insecure. The AMS Food Bank intends to serve as an emergency food relief service for students who would not have food to eat otherwise. Thus, a survey question was posed to respondents to permit the differentiation of respondents by level of food insecurity was central to this investigation. To evaluate varying levels of Food Insecurity, we used the definitions of marginal, moderate, and severe food insecurity used by the PROOF Food Insecurity Policy Research group at the University of Toronto (n.p.). Their typology defines marginal food insecurity as having worried “about running out of food and/or limiting food selection due to a lack of money for food,” moderate food insecurity as having compromised

“quality and/or quantity of food due to a lack of money for food,” and severe food insecurity as having “[missed] meals,” or “reduced food intake.” Question 10 (Appendix B) asked respondents to indicate which of these three types of experiences they had encountered. We also included the option to indicate that they had not worried about running out of food. With the responses, we then manually assigned respondents to a level of food insecurity based on the highest level of food insecurity they had experienced, based on their response. Categorizing respondents by level of food insecurity allowed us firstly to generate an understanding of the level of food insecurity experienced by AMS Food Bank members, and secondly to conduct cross-tabulations to better understand the user practices and needs of those most food insecure. The results of these cross-tabulations are at the end of the Results section of this report.

Evaluating Emergency vs. Non-Emergency Use of the AMS Food Bank

In a separate question, we asked respondents about the contexts in which they had used the AMS Food Bank: whether they had used it in emergency situations (defined to respondents as lacking enough food and not being able to eat otherwise), or in non-emergency situations (defined to respondents as a situation in which they worried about running out of food in the future, or wanted a broader selection of food). They also had the option to specify “other” or “prefer not to say.” This question permitted multiple responses. Similar to our analysis of the responses to the question evaluating level of food insecurity, we manually assigned respondents to a user type based on their response: “exclusively emergency-use”, “exclusively non-emergency use”, “mix of use”, and “other”. This analysis permitted us to understand how the Food Bank was playing a role in the alleviation of members’ food insecurity, and how different groups of Food Bank members (e.g. severely food insecure members) were using the Food Bank.

Results

Literature Review

In this section, findings from the literature review will be presented based on a set of guiding questions and organized accordingly below.

What are some practices for registering bank members and collecting data?

At food banks such as the Surrey Food Bank (“Registration requirements” n.p.) and the Daily Bread Food Bank in Toronto (“Need Help? Frequently Asked Questions” n.p.) registration is an in-person process that requires an in-person interview to assess need. Daily Bread uses this opportunity to collect information from members such as family composition, income, housing status, and education (ibid n.p.). In their scan of social innovation at food banks across Canada, the Greater Vancouver Food Bank found that both the Ottawa Food Bank and Feed Nova Scotia were trialing an electronic case management system called Link2Feed to optimize tracking of use (Greater Vancouver Food Bank 18).

How do food banks promote comfortable use?

The AMS Food Bank currently applies a low-barrier model for accessing the service to assure comfortable use. Two emergency food services at universities that have both started operating this year also apply a low-barrier model. These are the Food Pantry at UC Irvine in California (Medina n.p), and the Cherry Pantry at Temple University in Philadelphia (Biederman n.p.). Neither ask for proof of income or otherwise exclude students from using the service.

How do food banks connect members with other resources, services, and networks?

Major food banks such as Daily Bread in Toronto provide their members referral services to connect members with welfare programs, legal services, housing agencies, employment agencies, free or low-cost clothing stores, and others (Tarasuk et al. 2014 5; “Information and Referral Services”). Information about these resources are also available for the general public in an online document called “Resources at a Glance.” Valerie Tarasuk also found that the Edmonton Food Bank similarly refers members to additional resources, including food-buying co-ops, bread runs, gardens, kitchens, and inexpensive grocers. Vancouver’s Neighbourhood Food Networks, which are small community organizations addressing community food insecurity, connect community members with resources through food asset maps (“Harvesting Food Security” 22). In Vancouver, the Grandview Woodland Food Connection and South Vancouver Neighbourhood Food Network have both created local food asset maps, compiling information on community gardens, food stores, food programs, kitchen spaces, and organizations and agencies running food skill workshops (ibid n.p.). In addition to connecting members with resources that build individual and community resiliency, food banks also facilitate these services and resources themselves. For example, Mustard Seed, Feed Nova Scotia, and Daily Bread all offer culinary skills and food literacy workshops (Tarasuk et al. 5). Mustard Seed additionally runs family dinners, parenting support, and financial skills workshops (ibid n.p.). This model of social service – in which food banks not only provide emergency food relief but also connect members with resources and services that address the causes and effects of food insecurity and build long-term community food security – can be referred to as the “community food hub (CFH)” model (BC Food Systems Network 6).

Secondary data analysis: registration and visitation data

In total there were 3,391 visits to the AMS Food Bank between the months of September 2014 and March, 2018. Though 1,910 of these visits were associated with 667 unique student numbers, 1,481 of the Food Bank visits had no data other than timestamp documented. Figure 3 illustrates the frequency of AMS Food Bank utilization, whereas Graph B (Appendix A) illustrates the overall usability of the AMS Food Bank’s visitation data.

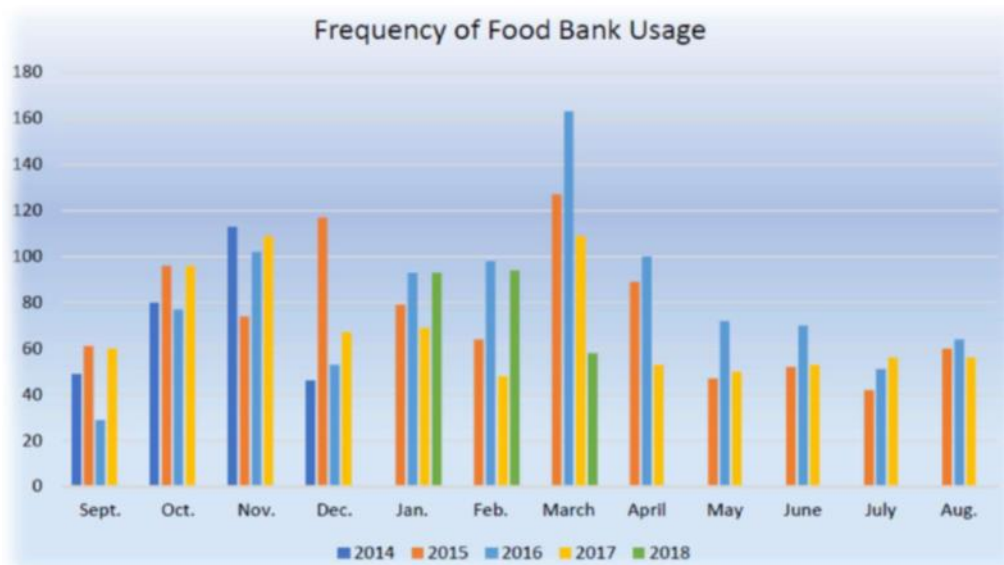


Figure 3: Number of visits to the AMS Food Bank recorded monthly from September 2014 - March 2018.

Dichotomous Parameters:

There were 667 unique student numbers provided for all data.

- 296 identified as international
- 300 identified as not international
- 96 were supporting a family
- 209 identified as graduate students
- 400 were undergraduate students
- 362 were living off campus
- 246 were living on campus

Open-ended Parameters:

Analysis of the “Sources of Income,” “How did you hear about us?” and “Please outline in a few sentences why you would benefit from accessing this service” parameters was relatively complex as the responses were not dichotomous, rather they were open-ended, with responses falling into one of 90, 77, and 604 categories, respectively. The prevailing responses with regards to “Sources of Income” included a combination of the following: “savings,” “family support,” “student loans,” “part-time work” and “scholarships/bursaries.”

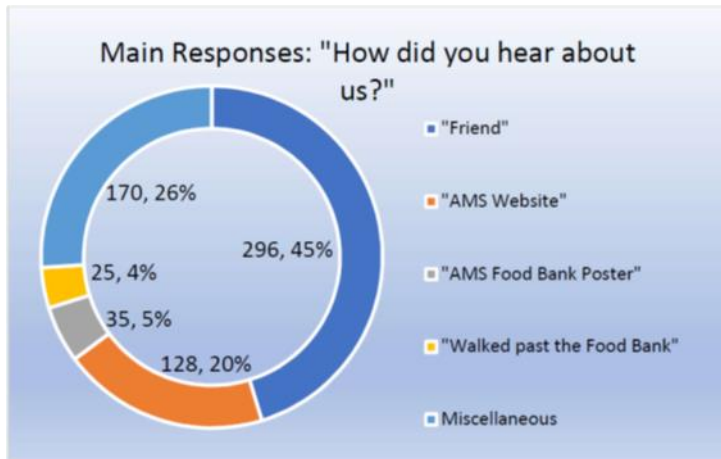


Figure 4: Responses to open-ended registration question at the AMS Food Bank "How did you hear about us?"

The responses to "How did you hear about us?" though highly variable, demonstrated a clear orientation towards "Friend," "AMS Website," "AMS Food Bank Poster," and "Walked past the Food Bank", with each response receiving 296, 128, 35, and 25 responses respectively, with the remaining responses remaining relatively insignificant and unordered (Figure 4).

With regards to the "Please outline in a few sentences why you would benefit from accessing this service" parameter, the quality, consistency and specific answers were all highly variable, though the overwhelming majority of responses were indicative of food insecurity, with the remaining minority of responses being ambiguous, and an even smaller minority indicative of non-food-insecure students using the AMS Food Bank for free food.

PAIR Data

Graph B in Appendix A summarizes the UBC Pair data utilized in the analysis. Figure 5 illustrates the relationship between the AMS Food Bank data and the UBC PAIR data. Left (first) column denotes the respective cohort. Second column represents PAIR data, third column represents AMS food bank registration data, and the right (last) column represents top 15 clients of food bank. Cohorts are grouped in two (denoted by emboldened borders), each paired with their counterpart, so that each column along the two comprising rows represent 100% of the students for the two comprising cohorts. A green cell denotes that specific cohort is under-represented relative to the overall UBC student population (PAIR data in yellow), whereas a red cell similarly denotes an over-representation.

| Students (cohort) | UBC Student Population (%) | AMS Food Bank Clients (%) | Top 15 Clients (>15 visits each) |
|-----------------------|----------------------------|---------------------------|----------------------------------|
| Domestic | 76 | 50 | 80 |
| International | 24 | 50 | 20 |
| Undergraduates | 79 | 66 | 53 |
| Graduate | 21 | 34 | 47 |
| On Campus | 22 | 40 | 40 |
| Off Campus | 78 | 60 | 60 |

Figure 5: UBC PAIR data in relation to AMS Food Bank data.

Primary data analysis: AMS Food Bank Experience Survey

In this section, the results from the survey will be reviewed in the order that they were posed to the respondents, alongside the results for specific cross-tabulations that we conducted to better understand how AMS Food Bank members, based on their level of food insecurity indicated in this survey, responded to specific questions. The survey received 57 partial and full respondents, which translates to a response rate of approximately 14%. 53 filled the survey entirely.

Level of Service

The first question asked respondents to rate the level of service at AMS Food Bank. The intention of this question was partially to ease respondents into the survey, and partially to evaluate user experience. 12 (21.05%) rated it “Satisfactory,” 23 (40.35%) rated it “Good,” and 22 (38.60%) rated it “Excellent.”

Frequency of Use

The second set of questions pertained to self-reported frequency of use of the AMS Food Bank last semester. There were 19 (33.33%) reported to have used the Food Bank once or twice last term, 12 (21.05%) reported 3-4 times, 11 (19.30%) reported 5-6 times, and 15 (26.32%) reported that they did not use the AMS Food Bank last term. When asked about the last/most recent time they used the AMS Food Bank, 12 (21.05%) respondents indicated within the last week, 15 (26.32%) indicated within the last month, 7 (12.28%) indicated some time this semester (i.e. after January 2018), and 8 (14.04%) indicated more than one year ago. No respondent indicated “I have never used the AMS Food Bank.”

Temporal Patterns in Use

The third set of questions inquired on temporal changes in need for the AMS Food Bank. When asked if there was a time of year that the AMS Food Bank was more needed than other times, 28 (59.57%) responded Yes, and 19 (40.43%) responded No. Those who responded Yes were asked to indicate all months they felt they needed the Food Bank more frequently. There were 12 (42.86%) respondents who indicated January, 9 (32.14%) had indicated February and/or March, 8 (28.57%) had indicated May, September, November, and/or December, 7 (25%) had indicated April, 6 (21.43%) had indicated June, August, and/or October, and 5 (17.86%) had indicated July. These same respondents were asked to elaborate on what caused them to need the Food Bank more during these times. The most selected reasons for requiring the AMS Food Bank at a specific time of year were Tuition and Changes in Income, 13 (46.43%) respondents having selected either or both. Other highly-responded options included “holiday-related expenses,” “academic stress,” and “textbook expenses,” while the least prevalent response was “lack of time to cook” (Appendix C, Figure 1). Notable responses in the Other field included “lack of job hours,” “money running low due to unforeseen expenses the rest of the year,” and “debts, family member’s illness.”

When the survey respondents were asked if there was a time of month when they needed the Food Bank more than others, 20 (36.36%) responded No and 11 (20%) indicated that They Didn’t Know. There were

6 (10.91%) respondents who indicated that they needed the Food Bank more during the First Week of the Month, 9 (16.36%) indicated that they needed it more in the Second and Third Weeks of the Month, and 9 others (16.36%) indicated that they needed the Food Bank more in the Last Week of the Month. The 24 respondents who did not indicate “No” or “I don’t know” to this question were asked to expand on what caused them to use the AMS Food Bank during these times of month. The survey found 9 (37.5%) respondents indicated “timing of payroll,” 10 (41.67%) indicated “timing of income from other sources (e.g. family, grants, loans, etc.),” 13 (54.17%) indicated “Rent,” and 5 (20.83%) indicated “Other.” 3 of the responses to “Other” provided text clarifications, which were “Unexpected hardships and saving up for taxes,” “holiday expense,” and “overall expenses.”

Perceptions of the AMS Food Bank’s Mission

When respondents were asked which of three potential mission statements they felt was most aligned with the AMS Food Bank’s mission, we found that over half (52%) did not readily identify the intended mission of the AMS Food Bank, which is to serve as “an emergency food relief service for UBC students without access to enough food to eat” (Figure 6).

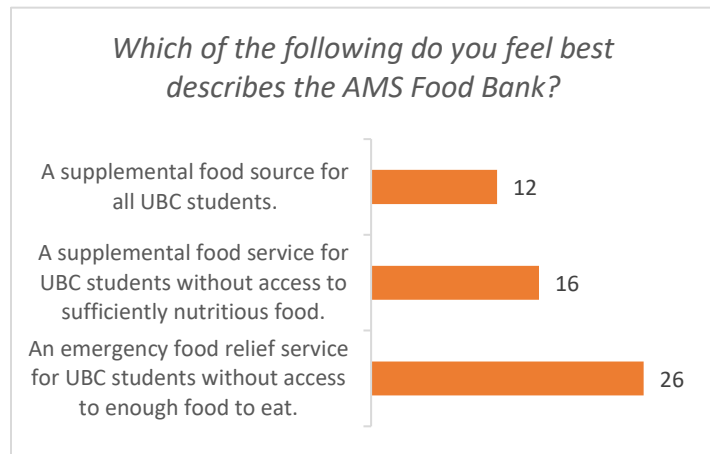


Figure 6: Summary of responses to Q9. n = 54

Levels of Food Insecurity Experienced by AMS Food Bank Members

When asked about their experiences facing food insecurity, 28 (51.85%) indicated that they had worried about running out of food and/or limited food selection due to a lack of money for food, 35 (64.81%) had indicated they had compromised quality and/or quantity of food due to a lack of money for food, 20 (37.04%) indicated that they had missed meals or reduced food intake, 8 (14.81%) indicated that they had not worried about sufficient food, and 1 (1.85%) preferred not to say. When we categorized the unique responses into levels of food insecurity based on the highest level of food insecurity indicated by each responded (a procedure described in the Methods section of this report), we found that 20 (37.04%) respondents were severely food insecure, 18 (33.33%) were moderately food insecure, 10 (18.52%) were marginally food insecure, and 6 (11.11%) were not food insecure (Figure 7).

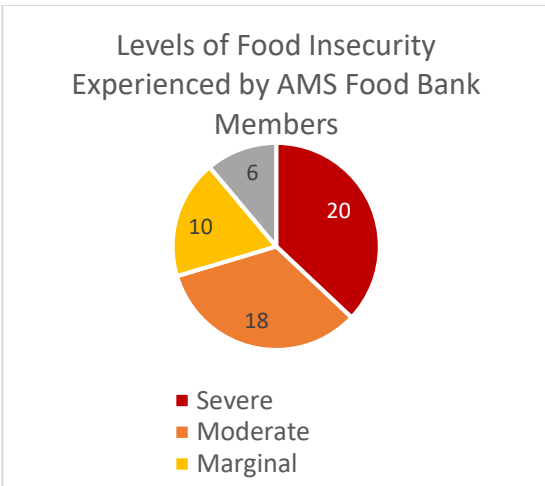


Figure 7: Survey responses categorized by highest level of food insecurity experienced, based on responses to Q10. n = 54

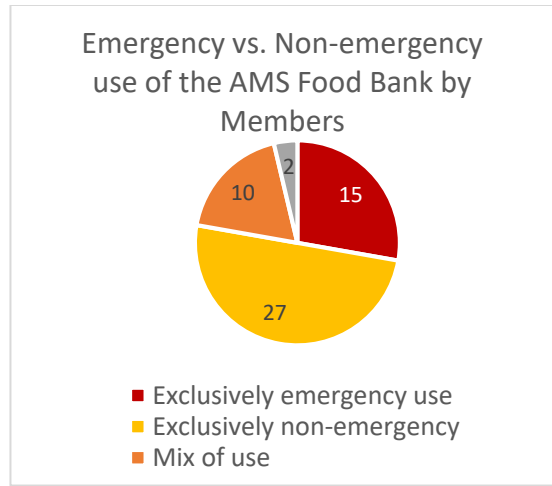


Figure 8: Survey responses categorized by type of use of the food bank, based on responses to Q11. n = 54

Emergency vs. Non-Emergency Use of the AMS Food Bank by Members

When asked to select responses that describe the use of the AMS Food Bank by the respondent, we found that 29 (53.7%) respondents had used the Food Bank for emergency food relief (that is, accessing the food bank because of lack of food and not being able have food to eat otherwise), 32 (59.26%) respondents had used the AMS Food Bank in non-emergency situations (e.g. worrying about running out of food in the future, wanting a broader selection of food), 3 (5.56%) respondents had selected “Other,” and 1 (1.85%) indicated that they preferred not to say, or that they did not know. Two respondents selecting “Other” had specified their response: one wrote “to save money,” and the other wrote “I see the food bank as a form of assurance that my family will not go without food when I do not have money to buy it.” When we categorized the unique responses into user types based on their responses to this question (a procedure described in the Methods section of this report), we found that 15 (27.78%) respondents used the Food Bank exclusively in emergency situations, 27 (50%) respondents used the Food Bank exclusively in non-emergency situations, 10 (18.52%) respondents had used the Food Bank in both emergency and non-emergency situations, and 2 (3.7%) did not indicate whether they had used the Food Bank in emergency or non-emergency situations (Figure 8).

User Experience and Sense of Community Awareness of the AMS Food Bank

The following three questions asked respondents about their experience asking for support from the AMS Food Bank, their perception of how aware the UBC community is of the AMS Food Bank, and how they felt the AMS Food Bank compared to other Food Banks (implicitly exploring whether AMS Food Bank members have used other Food Banks in the past). The first question found that 37 (68.52%) respondents either agreed or strongly agreed with the statement “I feel comfortable approaching the AMS Food Bank for support” (Appendix C, Figure 2). The second question found that respondents generally did not feel strongly about whether the UBC community was aware of the AMS Food Bank, 38 (70.37%) responding either “Somewhat disagree”, “Neither agree nor disagree,” or “Somewhat agree” (Appendix C, Figure 3). The third question found that 18 (33.33%) respondents had never used another food bank, that 13 (24.07%) either strongly disagreed or disagreed with the idea that other food banks were preferential to

the AMS Food Bank. Only 4 (7.41%) either agreed or strongly agreed with this statement (Appendix C, Figure 4).

Awareness and Use of On and Off-Campus Resources and Services

The following three questions asked respondents about their awareness and use of other resources and services that aim to support the well-being of community members, and their opinion on the quality of service from UBC resources and services in general. The first question, gauging awareness of several key resources and services on and off-campus, found that the majority of 54 respondents were aware of the Enrolment Services Professionals (ESPs) (31: 57.41%), the UBC Wellness Centre (32: 59.26%), and the Greater Vancouver Food Bank (29: 53.7%). Notably, 5 respondents (9.26%) had not heard of any of the listed resources (Figure 9). When asked which of the listed resources and services they had used, we found that 24 (44.44%) hadn't used any of these resources, 21 (38.89%) had used ESPs, and 12 (22.22%) had used the Greater Vancouver Food Bank (Figure 9). When asked about whether services at UBC have generally supported the wellbeing of the respondents, 30 (55.55%) respondents – the majority – agreed or strongly agreed (Figure 10).

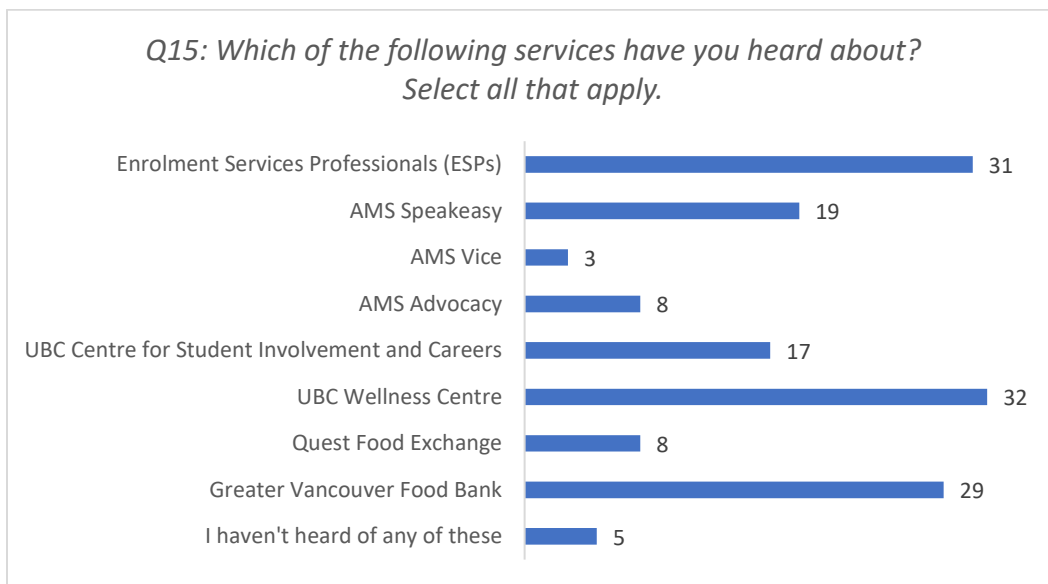


Figure 9: Bar graph summarizing responses to Q15. n = 54

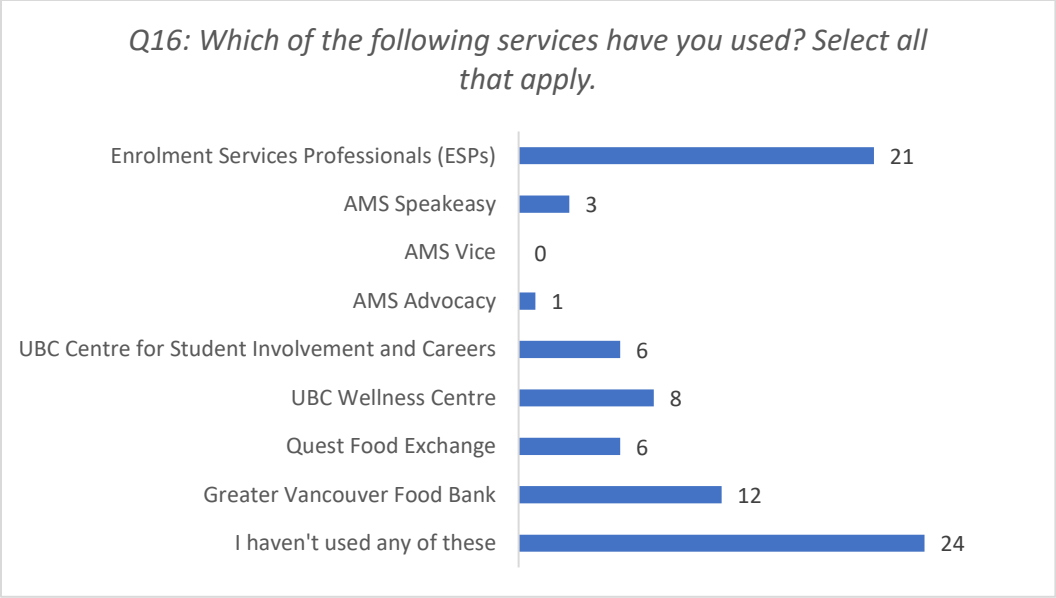


Figure 10: Bar graph summarizing responses to Q16. n = 54

Learning about Additional Resources

There were 48 respondents (88.89%) who either somewhat agreed, agreed, or strongly agreed that it would be helpful to learn about additional resources that can support health and wellbeing (Appendix C, Figure 6). These 48 respondents were asked to indicate the types of resources they would like to learn more about. Of the list of categories provided, types demanded by the majority were “programs to purchase food cheaply” (33 respondents; 68.75%) and “financial support” (31 respondents: 64.58%). The following most highly-demanded resource categories were “career and employment support” (45.83%), “counselling services” (39.58%), and “support with mental health” (37.5%) (Figure 11). In the responses to the following question, we found that the website (30 respondents; 62.5%) and the newsletter (33 respondents; 68.75%) were both modes of learning about these additional resources indicated by the majority (Figure 12).

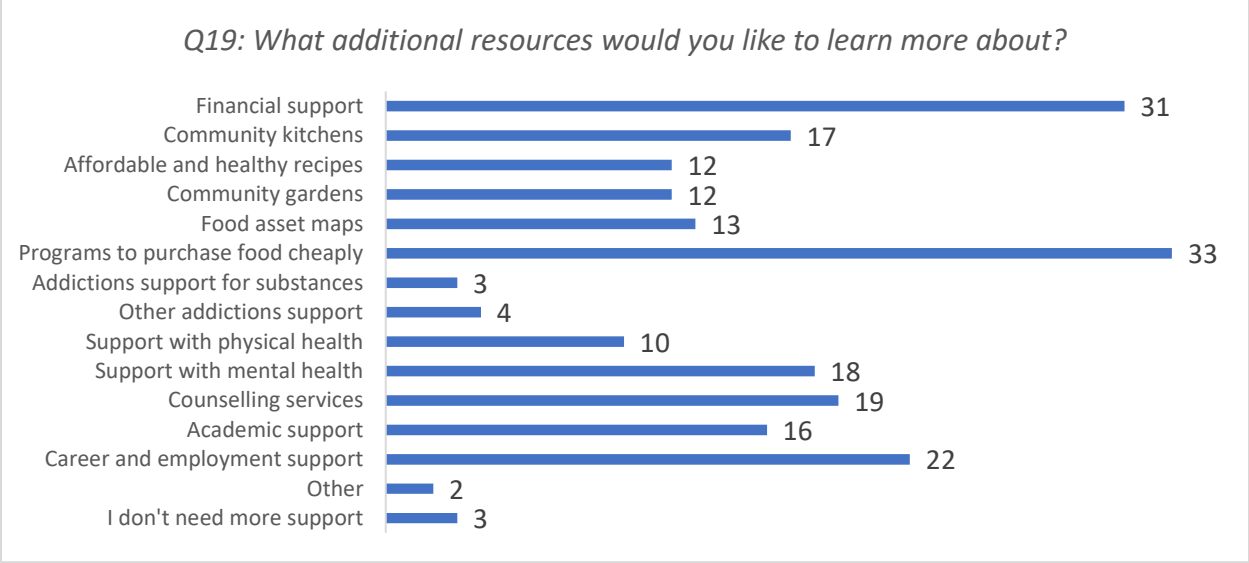


Figure 11: Bar graph summarizing responses to Q19. n = 48



Figure 12: Bar graph summarizing responses to Q20. n = 48

Additional Comments from Respondents

The two final questions invited respondents to provide text comments. The first prompted respondents with the question “Do you have any suggestions on how the service of the AMS Food Bank could be improved? (e.g. food, products, communication, number of visits, etc.)” 14 (26.42%) respondents provided comments, while 39 (73.58%) left no comment. Of the 14 respondents, 4 indicated an interest in increasing the number of visits permitted per person, 3 suggested more fresh produce, 2 suggested diversifying food provided in other ways (more dairy and more staple items like rice and potatoes), 3 suggested more partnerships (with community businesses, food services, and gardens), 2 suggested longer and more frequent office hours. The following open format question simply asked respondents if they had anything they wished to add. 11 (20.75%) wished to comment, while 42 (79.45%) had no comment. Of the 11 respondents who left a comment, 8 expressed gratitude or praise for the AMS Food Bank.

Discussion

In this section of the report, we will discuss the findings of our research as they relate to several key questions pertinent to our objective of better understanding the current use of the AMS Food Bank, the needs of its members, and methods of addressing these needs.

What are some limitations of the registration data and registration/check in system?

There were two major limitations with the registration and visitation data. The first was that there were several empty data fields in the registration and visitation data that made it impossible to generate a completely accurate picture of how members are accessing the Food Bank. For example, for the visitation data, 43% (1471 of the 3391 visitation entries) did not input a student number, meaning that it was impossible to relate these entries with an individual case (Appendix A, Graph B). Vigilantly assuring that each visit is associated with a registered member would facilitate program monitoring and future research. The second limitation was that the open-ended responses in the registration data were challenging to interpret and therefore categorize. This further made it challenging to draw key conclusions from this dataset. In the future, this could be improved by providing finite options for clients to select when, for example, indicating why they are accessing the service. Recommendations addressing this will be covered later in this report.

Who is accessing the AMS Food Bank?

The registration data and visitation data found that, relative to the general UBC student population, international students, graduate students, and on-campus students were overrepresented among members of the AMS Food Bank. This reinforces a few key ideas relevant to this research. The first is that on-campus resources can play an important role in addressing the needs of AMS Food Bank members, and thus the AMS Food Bank should prioritize generating awareness of these resources among their members. The second is that it highlights the value of on-campus outreach where students live (e.g. student residences) to effectively address the needs of members and potential members. The second is that there is an opportunity to explore the phenomenon of international students using the food bank to serve them better at the AMS Food Bank but also to accommodate this population better at UBC.

The registration and visitation data found that the most frequent users of the AMS Food Bank were off-campus graduate students supporting dependents. The specific needs of this group of students stand to be better understood through further research to better inform how the AMS Food Bank and the University can better serve the needs of these individuals. The survey further illuminated that a significant proportion of AMS Food Bank members have not approached other support services, or other food banks. 44% of respondents indicated they had never approached an ESP, the UBC Wellness Centre, the Centre for Student Involvement and Careers, the Greater Vancouver Food Bank, or Quest Food Exchange. At least 33.33% (one third) have never used another food bank, based on a response to a question evaluating their preference of other food banks (Q14). What this highlights is firstly the role of the AMS Food Bank as a gateway to other services and resources, and secondly the importance of clarifying the concept of a food bank to new members.

What are the members' perceptions of the AMS Food Bank? How do they impact user practices?

Based on the survey results, AMS Food Bank members have varying perspectives on the purpose, but generally report to have very positive experiences. The high level of comfort with the service that we have found in the survey results, seemingly due to the low-barrier model applied at the Food Bank, appears to promote members using the service in a diversity of genuine food-insecurity related experiences, not just immediate food shortage requiring emergency food relief.

While 48% of respondents felt that the intended mission statement of the AMS Food Bank (an emergency food relief service for UBC students without access to enough food to eat) best described the service in their view, 12 respondents (22%) perceived it as a supplemental food source for all UBC students. Perceiving the AMS Food Bank as a more open service than it intends to be is not inherent to those who would be less deserving of the service with the knowledge that it is only for emergency food relief. In fact, among the 20 severely food insecure respondents, 6 (30%) thought that "a supplemental food source for all UBC students" best described the AMS Food Bank, a larger proportion than for the respondent group. What this means is that even the most food insecure individuals accessing the food bank - the target population for this service - may prefer the AMS Food Bank as a service open for use by food insecure individuals in a variety of situations. This can be reinforced by the fact that the 20 severely food insecure survey respondents were all using the Food Bank in a diversity of ways: 35% used the Food Bank in both

emergency and non-emergency situations, 35% in exclusively non-emergency situations, and 30% in exclusively emergency situations. The majority (70%) of these individuals, for whom the service is most intended, had accessed the food bank in non-emergency situations. We do not doubt that this consists of beneficial use of the Food Bank by its members. One respondent who selected “Other” to Question 11 (Which of the following describes your use of the AMS Food Bank?) indicated that they saw “the food bank as a form assurance that [their] family will not go without food when [they] do not have the money to buy it.” This illustrates how the Food Bank can play a role in serving individuals prone to severe food insecurity by allowing them to use the Food Bank preventatively in a non-emergency situation, as this individual indicated.

The high levels of satisfaction with the AMS Food Bank affirm its success as a low-barrier food service model for food insecure students. The survey data illustrates this in four ways. The first is that 79% of members rate the level of service at the Food Bank as “Good” or “Excellent.” The second is that 69% agreed or strongly agreed that they felt comfortable approaching the AMS Food Bank for support. The third is that only 7% of respondents either agreed or strongly agreed that they preferred other food banks to the AMS Food Bank. The fourth is that 8 individuals left a final comment (out of 11; 73%) in the survey including an expression of gratitude. Those who left these comments provided reasons including the lack of judgmental atmosphere, level of choice and freedom relative to other food banks, and ability to interact with fellow students (Appendix C). The survey results demonstrate that the AMS Food Bank already succeeds in serving its members well with its current low-barrier model. While the low-barrier model might also be the cause of its use in non-emergency situations, modifications to render the Food Bank more exclusive may discourage well-justified use by members who are prone to severe food insecurity, and generally reduce sense of support among the student body.

When do AMS Food Bank members need the service most?

Our analysis of the visitation data confirmed that the AMS Food Bank is most used in the months of October, November, March, and April. This indicates a key opportunity to provide additional support to Food Bank members in these months by providing additional notification of other sources of food support or other resources that support the wellbeing of members and contribute to mitigating food insecurity indirectly.

What are the needs of members? How can the AMS address those needs?

Registration and visitation data indicate that the most frequent users are off-campus graduate students supporting dependents, suggesting that the Food Bank could explore the specific needs of these individuals and serve this group better in the future. Survey data indicated that the types of resources most demanded by Food Bank members were those which address financial need, food need, mental health needs, and career and employment needs. Elaborations on why the members needed the Food Bank more at certain points in the year illuminated that these struggles are predominantly financial in nature.

Importantly, there is a gap between how much the Food Bank members want to learn about other resources, and the rate at which they use them. 44.44% had not used any of the resources listed in

question 15, and 89% wanted to learn more about resources that supported wellbeing to some extent. This further highlights the opportunity to support members better by connecting them with additional resources. Results of the survey showed that methods of learning about other resources requested by the majority were website content and a monthly newsletter. Thus, these are both viable methods of delivering key information to members.

Recommendations to the AMS Food Bank

Our survey results affirmed that the majority (70%) of Food Bank members had experienced moderate or severe food insecurity, justifying their need to use the Food Bank's services. Moreover, we found that the minority of members (28%) were accessing the Food Bank exclusively in emergency food relief situations. This indicates both that there is a lack of clarity regarding the mission of the Food Bank, and that there is an opportunity for the Food Bank to play a role in addressing food insecurity and food needs beyond the provision of emergency food relief. These two findings were key considerations in the development of our deliverables and recommendations for the AMS Food Bank that we will cover in this section.

Our deliverables also incorporated specific considerations derived from our research results. This includes the resources demanded by Food Bank members. Our survey results indicated to us that the majority (88.9%) of members were interested in learning more about additional resources and services. Members of the Food Bank further indicated that they would prefer this information communicated through monthly emails (69%) and a redesigned website (63%). Thus, we developed recommendations for the AMS Food Bank website, a monthly newsletter, as well as a welcome email.

Action

Welcome Email and Website Recommendations

During the span of our research, we had presumed that the current resources available on the AMS Food Bank website had potential for possible improvement. These current resources were focused around providing alternatives for obtaining food however, we believe there are areas of improvement for supportive resources the AMS Food Bank can employ. These improvements include providing additional resources that encompass supporting a wider selection of needs as well as providing relevant background information for each corresponding resource. Our survey results had substantiated our presumptions about our anticipated changes to the AMS Food Bank website, according to 63% of our survey respondents who were interested in additional website content. However, we wanted to develop a way of ensuring new members would be aware of these resources available to them. We developed a welcome email (Appendix E) intended to direct new Food Bank members to the resources that we have recommended. This is to direct new members to resources and services that may address gaps in their health and wellbeing needs. Survey results indicated that there was a lack of awareness of the Food Bank's purpose as an emergency food relief service for students who need it, potentially leading to a degree of mis-use. To address this, we also incorporated emphasis on the Food Bank's current mission in the welcome email.

Both our website recommendations and welcome email incorporate five categories of supportive resources based on the resources in which survey respondents were most interested: programs to purchase affordable food (69%), financial support (65%), career and employment support (46%), counselling services (40%), and academic support (32%). Further research was conducted to identify the most appropriate available services that fit into these categories. The services were selected according to their availability, ease of access, and functionality to attract rather than deter members in need of additional support. The categories of supportive resources listed in our website recommendations and welcome email include key details about what the resources specifically provide, when the resources are available, and where the resources can be reached at. This information will be available in full detail following our recommendations for the Food Bank website content. The email (Appendix D) includes hyperlinks to different sections of the websites for each supportive resource. This was to promote the transparency of additional information that new members can conveniently access without the hindrance of searching for this information. We recommend that the design elements of the welcome email (hyperlinks, organization) should be reflected in the changes made on the AMS Food Bank website. This is to ensure consistency in how the information is presented between both platforms.

Newsletter

We also developed a monthly newsletter in order to provide current Food Bank members with ongoing updates, such as programs, services, and activities that may be of interest to them. While 88.9% of our survey respondents expressed interest in additional information, our survey also indicated that 69% of respondents expressed the most interest in a newsletter. This indicated to us that we would need to consider certain types of information that the newsletter would communicate. We designed a sample newsletter template that will organize the content of information into three main sections: “events”, “updates”, and “recipe of the month”.

We determined that three main sections for the newsletter was appropriate because it would help structure content to encourage readability. The “events” section was selected according to our survey results, which indicated that 42% of respondents were interested in workshops. From this, we gathered that devoting a section of the newsletter to upcoming food-related events such as cooking workshops or food drives. Doing so will contribute to addressing the dietary impacts Food Bank members may be facing due to their insufficiency of nutritious foods caused by their food insecurity (Shen et al. 7).

The following “updates” section was selected according to the 88.9% of survey respondents who were interested in learning more about additional resources and services. So, the newsletter will deliver general news updates that are within the scope of the five categories of information we gathered that were of most interest to Food Bank members. These news updates can include on-campus employment opportunities (e.g. Agora Cafe, The Nest), or possibly share articles that are relevant to addressing the wellbeing needs (physical, mental, financial, academic) of members.

We also felt that including a “recipe of the month” section was appropriate considering that the AMS Food Bank’s current recipes blog on their website has not been actively updated in the past year. These recipes are intended to be nutritious and palatable, while including a majority of ingredients that can be obtained from the current stock of food available at the Food Bank. The inclusion of these recipes will address the

lack of nutritional knowledge and culinary skills that also contribute to dietary impacts Food Bank members may be facing (Shen et al. 7).

Registration and Data Collection

We recommend that one of the next steps taken for future development of the AMS Food Bank should be focused on developing registration system updates. When we conducted our primary data collection, the AMS Food Bank had inconsistencies in their registration data that they had recorded. This included empty fields in the data spreadsheets, which limited cross-referencing during our data analysis. Therefore, we recommend promoting improved data collection methods to improve the consistency of data. This will allow for accurately monitoring and evaluating changes in the usage of the AMS Food Bank, which will indicate whether the needs of the Food Bank members are being met. This will in turn create opportunities for future research on the impacts of food insecurity at UBC in better understanding the changes in the food insecure campus community.

As a deliverable of this project, we have attached a registration survey template to this report (Appendix G). It includes many of the same questions in the current registration survey, and additional questions (many from the survey applied in the primary research of this project) to evaluate why the individual is accessing the service, and what additional support they may need.

Addressing gaps in the current registration data discussed in the 'Discussion' section of this report, we additionally recommend using the Qualtrics survey tool to securely record information of registered members, and the establishment of a mandatory check-in system in which student numbers are inputted at every use.

Future Research

Exploring the viability of a community food hub model

Through our research, we have been able to show that the Food Bank plays an important role in the support systems of students experiencing varying levels of food insecurity. Responding to this, we have put forward a communication strategy to ensure that the Food Bank's resources go to those most in need. We have also put forward a strategy to support the health and mental wellbeing in members in ways beyond providing emergency food relief: by providing information about supportive resources that fall within the scope of indicated interest by survey respondents.

However, we additionally recommend that the AMS Food Bank explore a transition to a more open model that is not only dedicated to emergency food relief. Even among members prone to severe food insecurity, only a minority were accessing the food bank exclusively for emergency food relief. While this can be framed as a challenge in the face of the Food Bank's limited resources, our research additionally highlights the high level of satisfaction and success of the AMS Food Bank's low-barrier approach as an opportunity to build a broader support system for all students facing food insecurity.

In addition to building on its own success, the AMS Food Bank can continue to follow the approach of the community food hub model, especially where it has been applied in North American universities. Examples of these include Anabel's Grocery at Cornell University, Irvine Pantry at the University of California, and Cherry Pantry and Temple University. Anabel's Grocery offer subsidized foods that are healthy and nutritious, which accommodates food insecure students, while also offering cooking classes and skills workshops open to all students (Anabel's Grocery n.p.). Cherry Pantry and Irvine Pantry are both low-barrier food services like the AMS Food Bank, both of which opened in 2018. The Irvine Pantry is supported by a \$3 yearly fee from students. A next step for the AMS is to evaluate the extent to which the AMS already espouses principles of these models, the effectiveness of these systems intended for all food insecure students, and the business case for supporting a service like this at the AMS. We believe that findings from our research can be mobilized to foster support for initiatives such as the creation of a student fee levy similar to the one instituted at UC Irvine.

Additional Research to Understand Needs

Applying our recommendations for improvements of the registration system will enable the AMS Food Bank to be a mobilizer of ongoing research on student food insecurity. This research will permit the development of innovative models to address the root causes of food insecurity, and deeper understanding of welfare issues among students that can mobilize broader policy changes to improve student support. Future research topics include:

- Who are the international students using the food bank? What is the experience of international student unaffordability?
- What are the needs of the most frequent users: graduate off-campus students supporting families? What can focus groups/interviews inform us about their experiences?
- How does food insecurity change over time for students? What is the effectiveness of the AMS Food Bank in alleviating food insecurity for individuals?

Conclusion

Over the span of four months, our work on this project involved literature reviews, primary and secondary data collection. Conducting a literature review provided us with a more informed outlook on how we were to proceed with our project. In doing so, we formed our presumptions about the Food Bank members' milieus and whether their wellbeing-needs were adequately accommodated. Conducting a survey allowed us to understand the circumstances of members using the Food Bank, their perceptions of the AMS Food Bank, and their interests in particular resources intended to meet their needs. With the results, we have generated a comprehensive user analysis of the AMS Food Bank, and delivered components of a communication strategy that address the specific needs and preferences of AMS Food Bank users.

We believe that our recommendations will improve the transparency of information that members of the AMS Food Bank can benefit from to improve their wellbeing. Moreover, promoting communication between the Food Bank and their members will clearly inform members about the Food Bank's purpose to ensure appropriate use of its services. In doing so, the resilience of the campus community will be promoted in such a way that will ultimately result in the alleviation of food insecurity at UBC.

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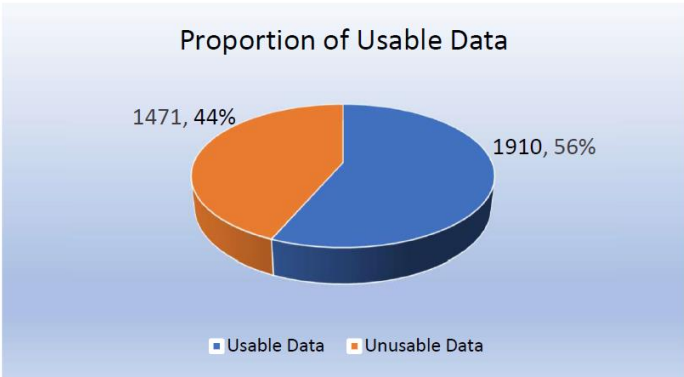
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Appendix A: Secondary Data Analysis Additional Figures from Results

Chart A: PAIR data for analysis

| Planning and Institutional Research (PAIR) Data of Relevant Cohorts (Vancouver Campus, 2016) | | | | |
|--|---------------------------|--------------------|----------------------|-----------|
| Cohort | Sub-Classification | Sub-Population (#) | Total Population (#) | Total (%) |
| Domestic | n/a | n/a | 41,050 | 76 |
| International | n/a | n/a | 13,182 | 24 |
| Total (both) | | | 54,232 | 100 |
| Undergraduate | Baccalaureate Degree | 35,507 | 43,050 | 79.4 |
| | Diploma & Certificate | 2,359 | | |
| | Non-Degree | 2,510 | | |
| | Post-Baccalaureate Degree | 2,674 | | |
| Graduate | Residents | 1,437 | 11,182 | 20.6 |
| | Diploma & Certificate | 75 | | |
| | Doctoral Degree | 3,507 | | |
| | Master's Degree | 6,162 | | |
| | Non-Degree | 1 | | |
| Total (both) | | | 54,232 | 100 |
| On-Campus | Undergraduate | 8,739 | 9,764 | 22 |
| | Doctoral Degree | 603 | | |
| | Master's Degree | 422 | | |
| Off-Campus | Undergraduate | 26,768 | 35,412 | 78 |
| | Doctoral Degree | 2,904 | | |
| | Master's Degree | 5,740 | | |
| Total (both) | | | 45,176 | 100 |

Graph B: Proportion of usable vs. unusable visitation data



Appendix B: Survey Questionnaire

AMS Food Bank Experience Survey

Start of Block: Block 1

Thank you for taking the time to complete this survey. The purpose of this survey is to evaluate how information about the AMS Food Bank and other services is being communicated to AMS Food Bank members. Your response will help inform efforts to improve how the AMS Food Bank interacts with its members to better serve you and other students.

This survey should take 5 - 10 minutes of your time. The responses are collected by students enrolled in LFS 450 who are working with the AMS Food Bank on a research project. **Your response is anonymous and will be kept confidential.**

The results of this study will be reported in course-based undergraduate reports and will be published in the SEEDS Sustainability Library and UBC cIRcle Digital repository. **Some of the questions we ask may be sensitive and personal. You do not have to answer any question if you do not want to. Your participation in this survey is voluntary and you may stop taking this survey at any time.**

If you have any questions or concerns about this survey, you may choose to contact any of the following individuals:

Liska Richer, LFS 450 Course Instructor: liska.richer@ubc.ca

Joshua Kriesel, AMS Food Bank Coordinator: foodbank@ams.ubc.ca

Julian Villafuerte, Student Researcher: [REDACTED]

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598

At the end of the survey, you will be given the opportunity to follow a link to another survey where you can enter your email address for a chance to win one of two (2) \$50 value gift packages (\$25 gift card to UBC Bookstore + \$25 grocery gift card), and three (3) \$25 grocery gift cards. Only the AMS Food Bank Coordinator will have access to this list.

Q20 Please confirm that you have understood the above information.

I understand

End of Block: Block 1

Information has been redacted from this report to protect personal privacy. If you require further information, you can make an FOI request to the Office of University Council.

Start of Block: Block 2

Q1 How would you rate the quality of service at the AMS Food Bank?

- Very Poor
 - Poor
 - Satisfactory
 - Good
 - Excellent
-

Q2 Approximately how many times did you access the AMS Food Bank last semester (September - December 2017)?

- Once or twice
 - 3-4 times
 - 5-6 times
 - Did not use
-

Q3 When was the last time you used the AMS Food Bank?

- Within the last week
- Within the last month
- During this semester
- Last semester
- More than one year ago
- I have never used the AMS Food Bank

End of Block: Block 2

Start of Block: Block 3

Q4 Is there a time of year when you need the AMS Food Bank more than usual?

- Yes
- No
- I don't know

Display This Question:

If Q4 = Yes

Q5 During which months do you need the AMS Food Bank most? (Ctrl + click to select more than one)

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Display This Question:

If Q4 = Yes

Q6 What causes you to need the AMS Food Bank more at these times of year?

- Tuition
 - Textbook costs
 - Taxes
 - Holiday expenses
 - Academic-related stress
 - Lack of time to cook
 - Lack of time to do groceries
 - Childcare expenses
 - Changes in income
 - Other: _____
 - I don't know
-

Q7 Is there a time during the month when you need the AMS Food Bank most?

- No.
- Yes, during the first week of the month.
- Yes, during the second or third weeks of the month.
- Yes, during the last week of the month.
- I don't know.

Display This Question:

If Q7 = Yes, during the first week of the month.

Or Q7 = Yes, during the second or third weeks of the month.

Or Q7 = Yes, during the last week of the month.

Q8 What causes you to need the AMS Food Bank during this time of the month?

- Timing of payroll
- Timing of money transfers from other sources (e.g. family, grants, loans)
- Rent
- Other: _____
- I don't know

End of Block: Block 3

Start of Block: Block 4

Q9 Which of the following do you feel best describes the AMS Food Bank?

- An emergency food relief service for UBC students without access to enough food to eat.
 - A supplemental food service for UBC students without access to sufficiently nutritious food.
 - A supplemental food source for all UBC students.
 - I don't know
 - Other: _____
-

Q10 Please select the following as they apply to you. In the past year...

- I have worried about running out of food and/or limited food selection due to a lack of money for food.
- I have compromised quality and/or quantity of food due to a lack of money for food.
- I have missed meals, or reduced food intake.
- I have not worried about having sufficient food.
- Prefer not to say.

End of Block: Block 4

Start of Block: Block 5

Q11 Which of the following describes your use of the AMS Food Bank?

I have used the AMS Food Bank for emergency food relief (I lacked enough food and would not have had food to eat otherwise).

I have used the AMS Food Bank in non-emergency situations (e.g. worried about running out of food in the future, wanted a broader selection of food).

Other _____

I don't know / Prefer not to say.

Q12 *Do you agree with the following statements?*

I feel comfortable approaching the AMS Food Bank for support.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q13 The UBC community is aware of the AMS Food Bank.

- Strongly disagree
 - Disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Agree
 - Strongly agree
-

Q14 I prefer other food banks (e.g. Greater Vancouver Food Bank) over the AMS Food Bank.

- Strongly disagree
- Disagree
- Somewhat Disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly Agree
- I have never used another food bank

End of Block: Block 5

Start of Block: Block 6

Q15 Which of the following services have you heard about? Select all that apply.

Enrolment Services Professionals (ESPs)

AMS Speakeasy

AMS Vice

AMS Advocacy

UBC Centre for Student Involvement and Careers

UBC Wellness Centre

Quest Food Exchange

Greater Vancouver Food Bank

I haven't heard of any of these

Q16 Which of the following services **have you used**? Select all that apply.

- Enrolment Services Professionals (ESPs)
- AMS Speakeasy
- AMS Vice
- AMS Advocacy
- UBC Centre for Student Involvement and Careers
- UBC Wellness Centre
- Quest Food Exchange
- Greater Vancouver Food Bank
- I haven't used any of these

End of Block: Block 6

Start of Block: Block 7

Q17 *How much do you agree with the following statements?*

Overall, services and resources provided at UBC have supported my physical, mental, and social wellbeing.

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

Q18 It would be helpful to receive information about other resources that can support my wellbeing.

- Strongly disagree
 - Disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Agree
 - Strongly agree
-

Display This Question:

If Q18 = Somewhat agree

Or Q18 = Agree

Or Q18 = Strongly agree

Q19 What additional resources would you like to learn more about?

- Financial support
 - Community kitchens
 - Affordable and healthy recipes
 - Community gardens
 - Food asset maps (See UBC Example and Vancouver Example)
 - Programs to purchase food cheaply (e.g. bulk buying, discount grocery stores)
 - Addictions support for substances (e.g. alcohol, drugs)
 - Other addictions support (e.g. gaming, gambling, social media, etc.)
 - Support with physical health
 - Support with mental health
 - Counselling services
 - Academic support
 - Career and employment support
 - Other _____
 - I don't need more support
-

Display This Question:

If Q18 = Somewhat agree

Or Q18 = Agree

Or Q18 = Strongly agree

Q20 How would you like to learn about other resources and services through the following methods? Select all that apply.

- Website
- Monthly emails/newsletter
- A physical pamphlet or guide available at the Food Bank
- Workshops (e.g. cooking, bulk-buying, support groups)
- Other: _____
- I don't want to learn about other resources

End of Block: Block 7

Start of Block: Block 8

Q21 Do you have any suggestions on how the service of the AMS Food Bank could be improved? (e.g. food, products, communication, number of visits, etc.)

- Yes: _____
 - No Comment
-

Q22 Do you have anything else you would like to add?

- Yes: _____
- No Comment

End of Block: Block 8

Appendix C: Additional Figures from Survey Results & Responses to Open-Ended Questions

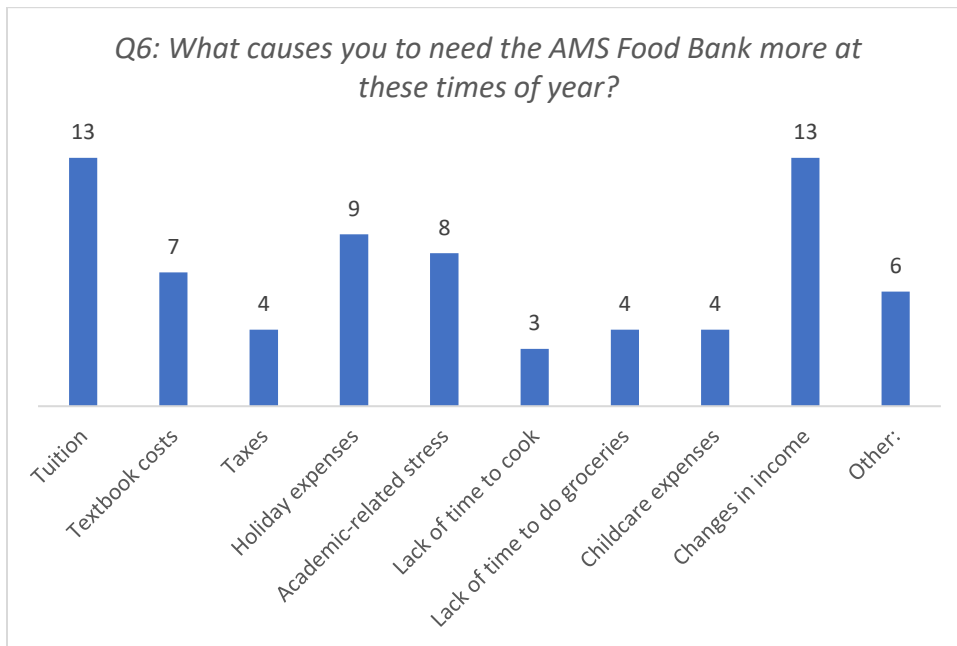


Figure 1: Bar graph summarizing responses to Q6. n = 28

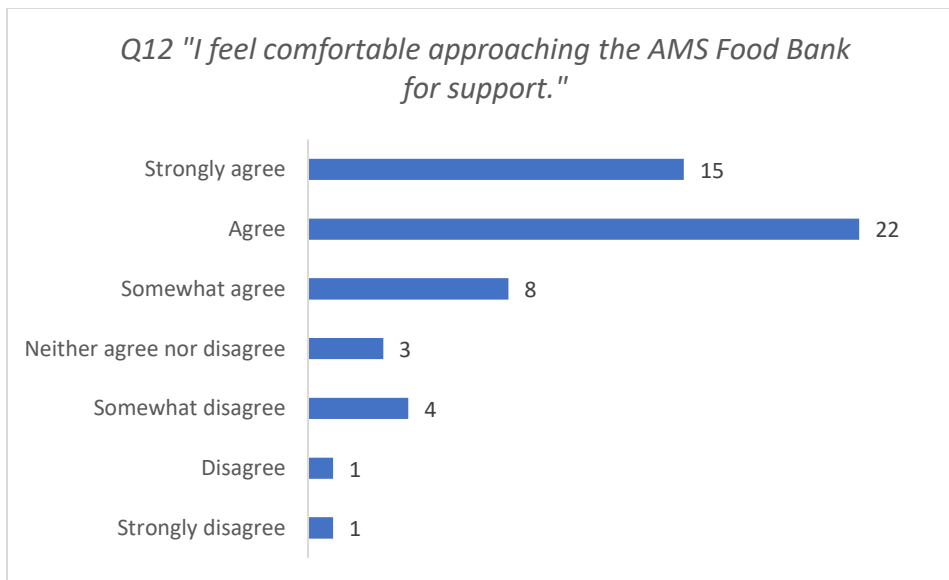


Figure 2: Bar graph summarizing responses to Q12. n = 54

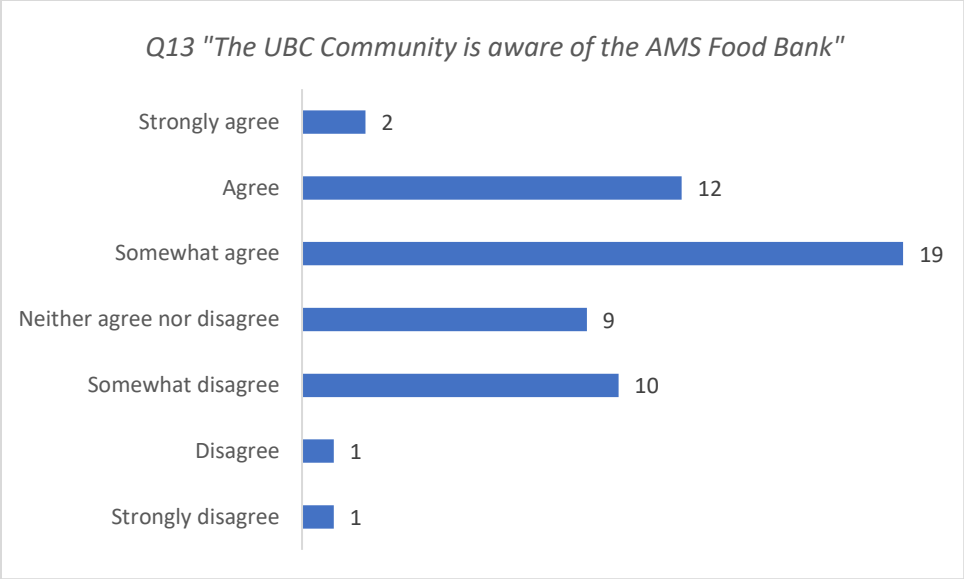


Figure 3: Bar graph summarizing responses to Q13. n = 54

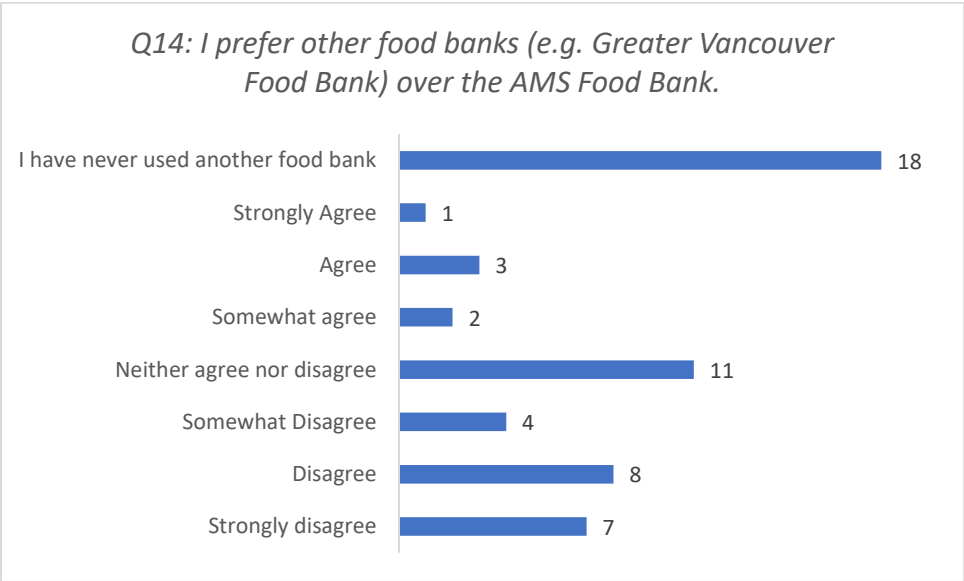


Figure 13: Bar graph summarizing responses to Q14. n = 54

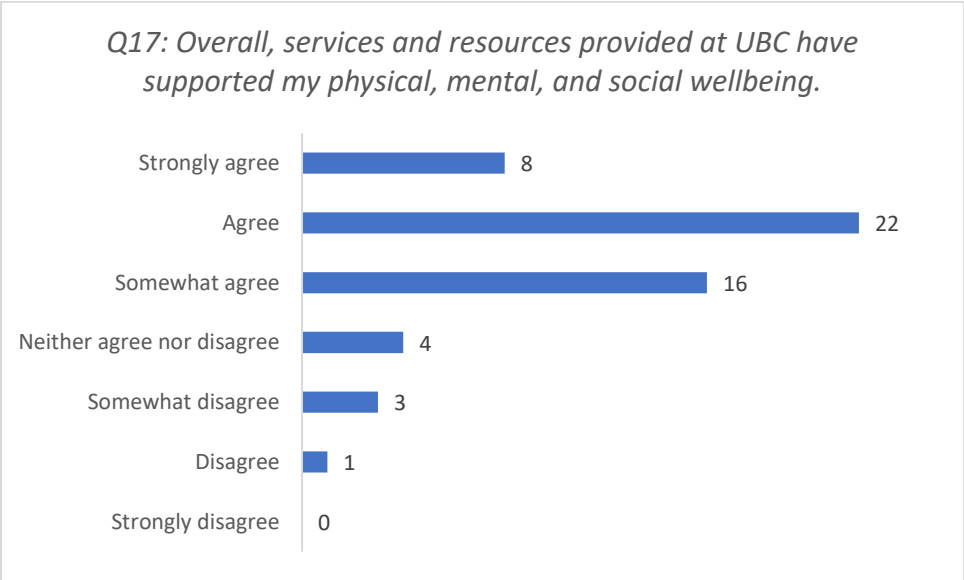


Figure 5: Bar graph summarizing responses to Q17. n = 54

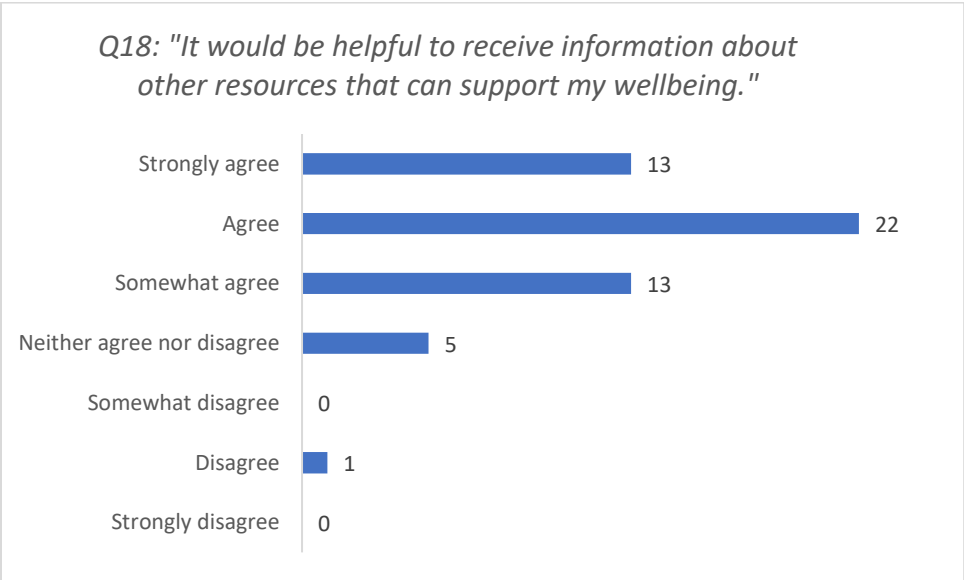


Figure 6: Bar graph summarizing responses to Q18. N = 54

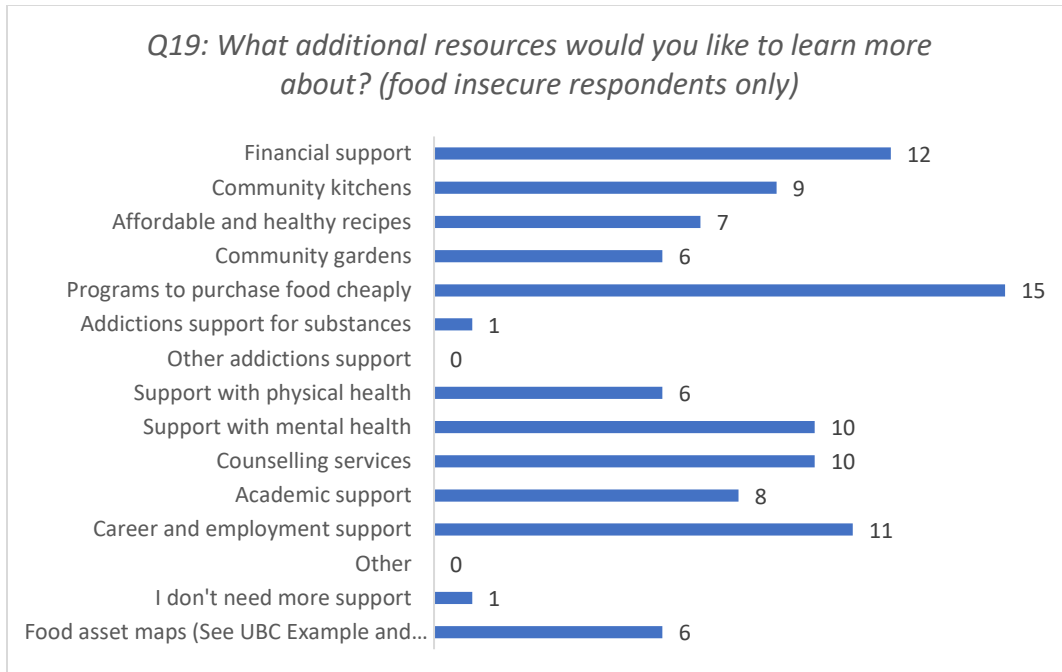


Figure 7: Bar graph summarizing responses to Q19 by respondents who had experienced severe food insecurity. n = 20

Q21: Do you have any suggestions on how the service of the AMS Food Bank could be improved? (e.g. food, products, communication, number of visits, etc.)

13 responses:

The food products offered are mostly canned and packaged foods which are all high in sodium and low in nutrients, neither of which is good. I have only 1 time observed a dairy item or a vegetable/fruit item. I would prefer items like yogurt, milk, eggs, bread, potatoes, apples etc...I think the AMS should rethink the entire model of the food bank to include healthy options to students instead of unhealthy options. One food bank I used had 1 day a week that offered bread/produce while the other days was canned goods. Another option which is currently at SFU is a GC for a local grocery store for \$25 once a month so I could choose the healthy options I need. Work harder with local grocery stores to offer produce, maybe offer students a "produce GC" each time they access that they could use at the Save On Foods for a pre-determined amount or selection of produce items. There are healthier Food Bank models that UBC should be looking into.

open on Friday

It would be good if the number of visits could be increased although I have never found myself accessing the service more than 6 times a semester. I do know people who have.

meat protein, fresh all-color vegetables, kids toys, laundry detergent, #s of visits more to AMS

It should be open longer and every day of the week.

Increase number of visits per term - from 6 to 12

it would help to have more staples like rice, cereal, and pasta, and fewer condiments

More fresh produce, if possible of course

Perhaps more partnerships with food services or gardens around UBC to receive food that would be otherwise wasted. Maybe emails to food bank goers that there is new and exciting food in stock to encourage people to come and get while it's still fresh.

Involving other people from the community and business, stores

A little bit more operation hours

increase number of visits per person

What's available is lower, more people come by but staff is friendly and understanding

Q22: Do you have anything else you would like to add?

11 responses

The UBC Food Bank has an excellent staff and it feels very non-judgmental to go in there. I appreciate that we are able to choose the food items that we want rather than a pre-designed food box. I would be less likely to go to the food bank if I had to get a box that was already made up for me. This feels more acknowledging of our individual needs and less like charity for the "undeserving poor".

the badly indent and crooked tomato pasta sauce, which I opened it spewing all over the places, walls, floors, kitchen counter taking me great time to clean up the messy. Please AMS don't give me the badly dent cans anymore. Besides, any out of shape of cans subject to food poison I heard.

please have more hours and be open every day of the week.

Thanks for providing this service to help students.

Was so happy that tampons were included in products offered to me. Such a necessity that is too costly.

I think the UBC food bank is doing an awesome job.

It is a great service, helps me a lot in the past two semesters. However, this semester I feel embarrassed to come and have food because I would give other students opportunity to have some food support. I might faces some financial issues during the next few months especially I live with my husband and my daughter so we spend a lot on food. Anyway, great service and great staff. Thanks a lot UBC. 🙏

Gratitude

Thank you. Sometimes food banks make me feel like a number or less than human. At AMS food bank I feel free to choose, free to talk with staff about being a student - student to student. Please continue this wonderful work!

Maybe open later?

thank you for your help

Appendix D: Survey Results Cross tabulations

We conducted four additional cross-tabulations of the dataset with the purpose of better understanding the characteristics of the respondents who indicated that they had experienced severe food insecurity. The first was to evaluate the understanding of the Food Bank’s mission among the most food insecure individuals. The result of this cross-tabulation found that, of the 20 severely food insecure respondents, 10 (50%) felt that “an emergency food relief service for students without access to enough food to eat” best described the AMS Food Bank, 4 (20%) understood the Food Bank as “a supplemental food service for UBC students without access to sufficiently nutritious food,” and 6 (30%) saw the Food Bank as “a supplemental food source for all UBC students.

The second cross-tabulation was conducted to evaluate how self-reported frequency of use in the previous term varied among groups of respondents by level of food insecurity. The average self-reported number of uses of the food bank in the previous term was 2.3. By cross-tabulating number of reported uses by level of food insecurity, we found that severely food insecure individuals reported to have use the Food Bank 2 times in the previous term, whereas marginally food insecure individuals reported to have used it around 3 times in the previous term (Figure 1).

The third cross-tabulation was conducted to evaluate emergency vs. non-emergency use of the AMS food bank by severely food insecure individuals. By doing so, we found that 6 of the 20 severely food insecure individuals (30%) used the Food Bank exclusively in emergency situations, 7 (35%) used the Food Bank in both emergency and non-emergency situations, and 7 others (35%) used the Food Bank exclusively in non-emergency situations.

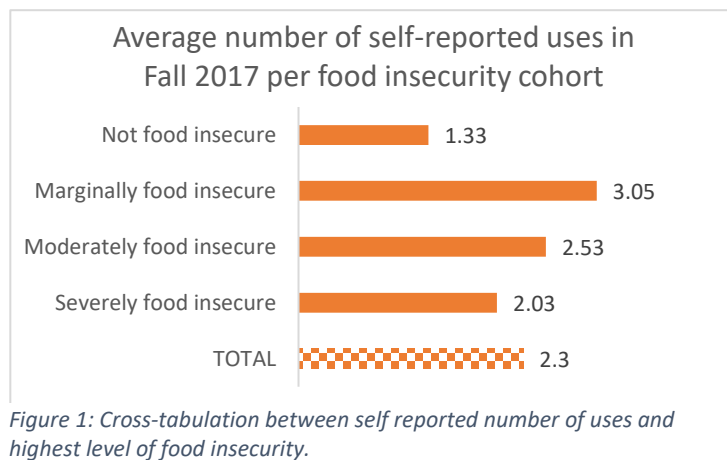



Figure 1: Cross-tabulation between self reported number of uses and highest level of food insecurity.

The final cross-tabulation analyzed the categories of additional support resources that severely food insecure individuals were interested in learning more about. We found that, of the 20 severely food insecure individuals, 15 (75%) were interested in programs to purchase food cheaply, 12 (60%) were interested in financial support, 11 (55%) were interested in career and employment support, and 10 (50%) each were interested in support with mental health and counselling services (Appendix C, Figure 7).

Appendix E: Welcome Email Template


Hi _____, Welcome to the AMS Food Bank! 

[Resources](#) [Homepage](#) [Events](#)

Providing Emergency Food Relief since 2006

We want to thank you for visiting us at the AMS Food Bank! We want you to know that the AMS Food Bank is here for you and the community in order to provide supportive relief, where we ensure a safe space that is open without any borders. We assure you that the privacy of your information will remain strictly confidential.

Below, we have provided a list of additional supportive resources that are available to access:

 **Supportive Food Relief Resources**

- ❖ If you are seeking additional food relief, the Greater Vancouver Food Bank (GVFB) provides weekly access to food, where you can [register](#) at their head-office or at [any of their locations](#) in North Vancouver, Vancouver, Burnaby, and New Westminister. For more information, visit their [website](#) or contact them at (604) 876-3601.
- ❖ Vancouver Coastal Health (VCH) offers a food asset map, which contains a list of food services that provide free and low-cost meals available on their [map](#) of Vancouver.



Financial Support

- ❖ Financial support is available at UBC, where they will ensure you have the financial resources to continue your studies (as defined by [UBC Policy #72](#)). UBC offers bursaries, scholarships and awards, and wage subsidy programs like their [Work Learn program](#). You can find out more by following the [link](#) and contacting your [Enrolment Services Professional](#) (ESP).
- ❖ Other alternatives include student loans from StudentAidBC, which also offers [grants and scholarships](#), which do not have to be repaid, as well as [interest-free repayments](#) for their loans. You can apply online on StudentAidBC's [website](#) and receive support so long as you apply 6-weeks before the end of the term. If you have any questions, you can visit their [online help centre](#) or contact them toll-free at 1-800-561-1818.



Counselling Services

- ❖ Counselling services are available, whether it's for mental health support, physical health support, or having somebody to talk to.
- ❖ Vancouver General Hospital (VGH) offers drop-ins for mental health support at their Access and Assessment Centre or you can call them (available 24/7) at (604) 675-3700.
- ❖ UBC also offers drop-ins for mental and physical health support, where you can [visit Counselling Services](#) by drop-in, [visit a nurse](#) on campus from UBC's Student Health Services, or visit one of [UBC's wellness workshops](#).
- ❖ If you need somebody to talk to, [Empower Me](#) offers qualified counselling for whatever support you want to talk about. You can visit them at their [website](#) (password: Studentcare) or call them toll-free at 1-844-741-6389.



Career and Employment Support

- ❖ If you are seeking part-time or full-time employment, UBC provides a listing of job opportunities at [CareersOnline](#) or you can also visit their [job board](#). If you are seeking part-time jobs, other opportunities include [notetaking](#) for courses, where you can earn a total of \$337 for a 3-credit course or \$674 for a 6-credit course. You can also seek employment with [AMS](#), where you get involved with UBC and the services it provides the community.
- ❖ You can also access [WorkBC](#) for employment opportunities, where you can filter through jobs according to your location, job type, and education. Listings for these jobs are updated regularly, so you have the flexibility of applying anytime during the year.



Academic Support

- ❖ UBC offers academic support that meet a [variety of different needs](#), such as figuring out your progress in your degree to tutorial sessions that can ensure your academic success. If you have any questions regarding your degree or academics, you can [contact an advisor](#) from your program or your [Enrolment Services Professional](#) (ESP) who can direct you and provide appropriate referrals. UBC also offers a range of tutorial sessions for [studying](#), [writing](#), and [ESL](#) that are available for sign-up or drop-in.

Give when you can, take what you need, we'll be here for you. If you would like more information or have any questions about our resources, please visit our website or get in touch with us in-person, by phone, or by email, whatever is most comfortable for you.



Sincerely,
The AMS Food Bank Team



(604) 822-2371



foodbank@ams.ubc.ca

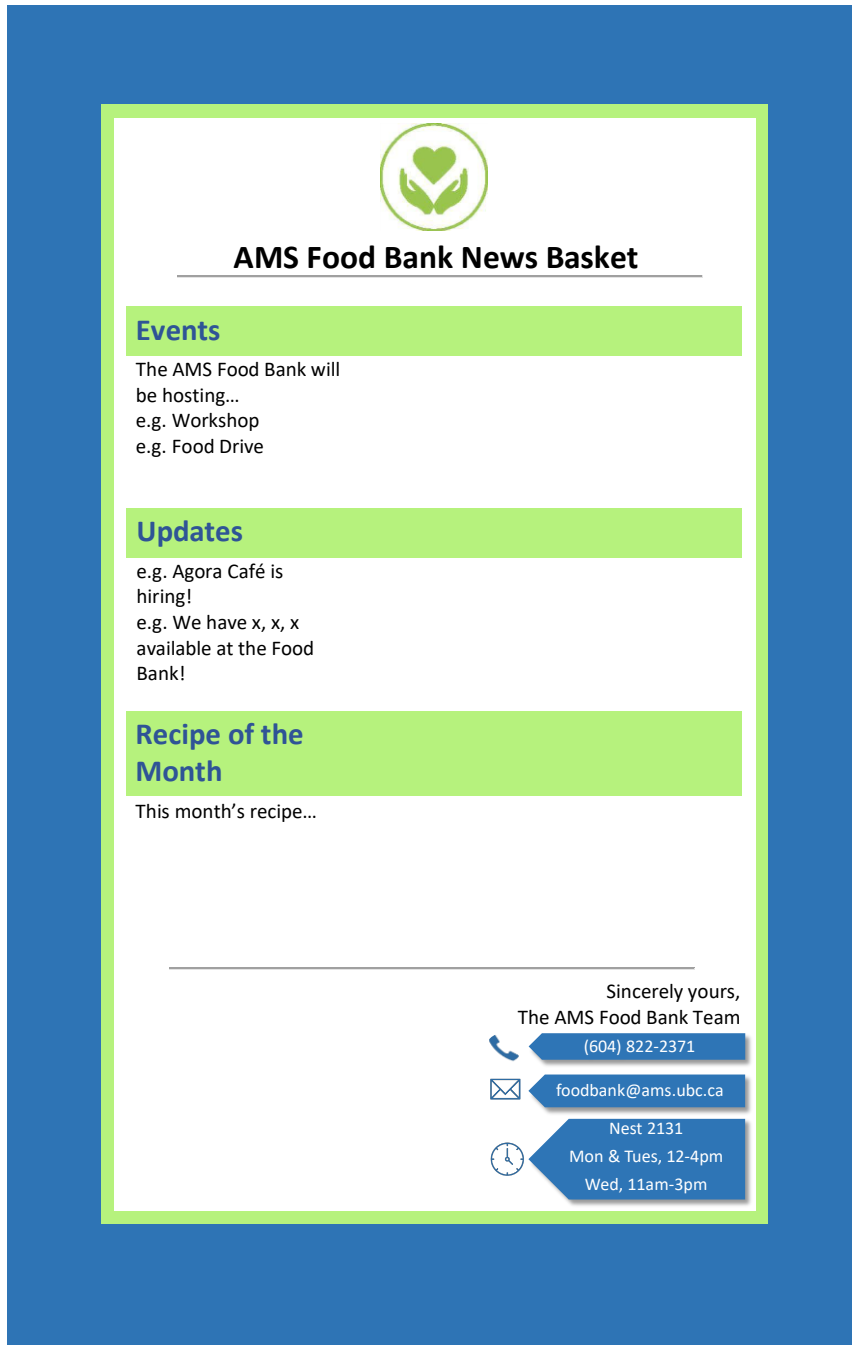


Nest 2131


Mon & Tues, 12-4pm

Wed, 11am-3pm

Appendix F: Newsletter Email Template



The image shows a newsletter email template for the AMS Food Bank. It features a blue background with a central white content area. At the top, there is a logo of a heart with two hands holding it, inside a circle. Below the logo is the title "AMS Food Bank News Basket" underlined. The content is organized into three sections: "Events", "Updates", and "Recipe of the Month". Each section has a light green header bar. The "Events" section includes text about hosting workshops and food drives. The "Updates" section includes text about hiring at Agora Café and food availability. The "Recipe of the Month" section includes text about the month's recipe. At the bottom right, there is a signature block for "The AMS Food Bank Team" with contact information: phone number (604) 822-2371, email foodbank@ams.ubc.ca, and address Nest 2131, with operating hours: Mon & Tues, 12-4pm; Wed, 11am-3pm.



AMS Food Bank News Basket

Events

The AMS Food Bank will be hosting...
e.g. Workshop
e.g. Food Drive


Updates


e.g. Agora Café is hiring!
e.g. We have x, x, x available at the Food Bank!


Recipe of the Month

This month's recipe...

Sincerely yours,
The AMS Food Bank Team

 (604) 822-2371

 foodbank@ams.ubc.ca

 Nest 2131
Mon & Tues, 12-4pm
Wed, 11am-3pm

Appendix G: Newsletter + Welcome Email Communication Strategy

Programs to Purchase Affordable Food

In this category, we included the following services: Greater Vancouver Food Bank (GVFB n.p.), Vancouver Coastal Health (VCH n.p.) Food Asset Map, Quest Exchange, and Allrecipes.

The GVFB was an appropriate service to include because they provide weekly access to food, which provides the availability and functionality of additional food relief for members (GVFB n.p.). Moreover, the GVFB is located in multiple locations in North Vancouver, Vancouver, Burnaby, and New Westminister, providing the ease of access for members who live off-campus (GVFB n.p.).

Vancouver Coastal Health was an appropriate service because it includes an online interactive map of Vancouver, which lists the locations of affordable food services. This service also includes food services available on campus, such as Seedlings, Agora Cafe, and Community Eats, which offer healthy and nutritious foods at an affordable cost. These services in particular will benefit the health and wellbeing needs of Food Bank members without burdening them financially.

Quest Exchange was also selected since it offers subsidized food for their members in order to promote access to affordable food. Quest also has multiple locations in North Vancouver, Vancouver, Burnaby, and Surrey, which promotes ease of access for members of the AMS Food Bank who live off-campus. Quest Exchange does require members to register in order to access their resources. However, it is low-barrier since the only criteria is that members are low-income and complete a client referral form, which the AMS Food Bank provides.

Allrecipes was an appropriate service since it contains a library of recipes that users can access based on the ingredients they have available. This will allow AMS Food Bank members to make use of their food through the functionality of the service Allrecipes provides.

Financial Support

The availability of financial resources available at UBC were mentioned. A link of UBC Policy #72 was mentioned to inform members about UBC's financial policies. Other resources mentioned included UBC's offering of bursaries, scholarships, awards, and wage subsidy programs.

The availability of other financial resources available outside of UBC included the mention of student loans available from StudentAidBC. Relevant information about grants, scholarships, and interest-free repayments were included in order to guide members through the process of applying for loans as well as informing them about the options available to them.

The Income Assistance program offered by the Government of British Columbia was also mentioned for those who have not been financially independent for two consecutive years. This is of benefit especially for members of the Food Bank with dependents, who may benefit from being informed about this program.

Career and Employment Support

Resources regarding employment opportunities were included in order to empower members of the AMS Food Bank who have been unable to find career opportunities tailored to their academic background.

UBC's CareersOnline was mentioned so that members of the Food Bank can benefit from obtaining employment on-campus, while supporting their financial wellbeing. Other opportunities at UBC included notetaking for courses, which allow students to earn some income for recording notes in their classes or other classes as well. Employment at the AMS was mentioned as well, where their job board can be accessed online.

WorkBC was also included due to its unique search function that allows users to filter through jobs according to their location, job type, and education. Some jobs that were available sought students, which can benefit students in using their academic background and applying themselves in a relevant field.

Counselling Services

The counselling services that were included resources available in-person and online so that members seeking support could do so anonymously if they felt more comfortable in doing so. This was to provide them with the opportunity to at least talk to somebody if they previously felt uncomfortable in doing so. This included supportive resources for mental and physical health.

FoundryBC was selected due to its transparency of information about the list of mental health support networks available on their interactive online map of Vancouver. Those making use of this resource will be able to find the closest support that meets their needs.

Vancouver General Hospital (VGH) was also included due to its immediate and low-barrier services. VGH offers drop-ins for mental health support as well as their 24/7 telephone services that allow individuals seeking support to have somebody to immediately talk to.

UBC's Counselling Services was also included due to its availability on campus as well as its offering of drop-ins for mental and physical health support. UBC Student Health Services was also included if students were seeking medical attention from a nurse on campus. UBC's wellness workshops were also included for those seeking more information about mental and physical health.

Empower Me was also included because it provides qualified counselling that is available by phone, allowing those seeking support to do so confidentially. This service accommodates those seeking support about whatever it is that is impacting them, such as their person wellbeing, disordered eating, academics, careers, or finances.

Academic Support

UBC's offering of academic support was included in order to promote transparency about services members of the Food Bank may not have been aware of. Information relevant to academic support included details about contacting program advisors, about Enrolment Services Professionals, and the details about the availability of studying, writing, and ESL tutorials.

Appendix H: Registration Survey Template

| Question | Responses | Formatting and other considerations |
|--|---|--|
| The AMS Food Bank is an emergency food relief service for students without access to sufficient food to eat. This survey is mandatory for registration and is intended to help us serve you and other students better. Some of the questions might be sensitive. We will keep this information confidential. | I understand | Forced response |
| Student Number | | Forced response |
| Email address | | Forced response |
| Housing | On Campus Off Campus | Forced response |
| Student Status | Graduate Undergraduate | Forced response |
| Is this your first time ever accessing a Food Bank? | Yes No, I have accessed other Food Banks in the past No, I currently access other Food Banks (e.g. Greater Vancouver Food Bank) | Forced response |
| Sources of Income | Savings Scholarship Student Loan Bursaries/Grants Part time work Full time work Family Support Disability Income assistance Other: _____ | Forced response Select all that apply |
| Faculty or School | Arts Science Commerce Engineering Applied Sciences Forestry Land and Food Systems Law Education Music | Forced response Select all that apply |

| | | |
|---|---|--|
| | Kinesiology Graduate Studies Other: _____ | |
| Are you supporting any dependents (e.g. children, spouse, family members, etc.)? | Yes No | Forced response |
| How many dependents do you support? | 1, 2, 3, 4, 5, 6 or more please specify: _____ | Forced response |
| Select ALL of the following as they apply to you: In the past year... | I have worried about running out of food and/or limited food selection due to a lack of money for food; I have compromised quality and/or quantity of food due to a lack of money for food; I have missed meals, or reduced food intake; I have not worried about running out of food. | Forced response Select all that apply Consider emailing individuals who solely indicate "I have not worried about running out of food." (based on survey responses, there are not many of these) |
| (consider making two questions with the same response scheme): Which of the following hardships: 1. Have you faced in the past six months? 2. Do you face currently? | Finances and expenses, Academic stress, Mental health, Lack of adequate nighttime residence, Legal disputes, Disability, Other: _____ None of the above Prefer not to say | Forced response |
| Please elaborate on the causes of your financial hardship. Select all that apply. | Lack of sufficient income Lack of steady income Childcare expenses Tuition expenses Textbook expenses Debts Housing costs Other expenses: _____ Prefer not to say | IF responded "finances and expenses" in the previous section, the prospective members answers this question. Forced response |
| How did you hear about the AMS Food Bank? Select all that apply. | AMS Website AMS Food Bank Poster Access and Diversity Enrolment Services Professional First Week Orientation UBC Counselling Friend | Forced response. |

| | | |
|--|--|-----------------------|
| | Referral from another service (please specify): ____ Other: ____ | |
| Dietary restrictions | Vegan Vegetarian Gluten Free No Pork Allergies: ____ Other: ____ | Not required question |
| Have you heard of any of the following resources and services? Select all that apply. | Enrolment Services Professionals AMS Speakeasy AMS Advocacy UBC Centre for Student Involvement and Careers UBC Wellness Centre Quest Food Exchange Greater Vancouver Food Bank I haven't heard of any of these | Forced response |
| Have you use any of the following resources? Select all that apply. | Enrolment Services Professionals AMS Speakeasy AMS Advocacy UBC Centre for Student Involvement and Careers UBC Wellness Centre Quest Food Exchange Greater Vancouver Food Bank I haven't heard of any of these | Forced response |
| Would you like to receive additional information about other resources and services that can support your wellbeing by receiving updates from the AMS Food Bank via email? | Yes No | Forced response |
| Would you like to add anything regarding why you would benefit from accessing this service? | Open text response | |
| Do you have anything else that you would like us to know? | Open text response | |