

University of British Columbia

Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

# Understanding Student Perceptions of Just, Equitable, and Dignified Food Access

Prepared by: Ella Moreira Gerlach, Courtney Lau, Chiron Robinson, Nadia Mary Te

Prepared for: UBC Wellbeing

Course Code: LFS 450

University of British Columbia

Date: 30 April 2021

*Disclaimer: "UBC SEEDS Sustainability Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student research project and is not an official document of UBC. Furthermore, readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Sustainability Program representative about the current status of the subject matter of a report".*



## EXECUTIVE SUMMARY

**Project Context:** Food insecurity disproportionately impacts university students as compared to the general public, an issue that is perpetuated by the increasing cost of education (Dela Cruz et al., 2020). The University of British Columbia (UBC) has continued to put resources into mitigating this issue, including the formation of the Food Security Initiative (FSI) (Board of Governors, 2020).

The UBC Food Security Initiative (FSI) was formed in February 2020 to alleviate food insecurity and address long-term food sustainability alongside the UBC Wellbeing Strategic Framework (Board of Governors, 2020). FSI is planning to create a physical food hub which aims to bring a social approach to tackle food insecurity through combining knowledge, adopting new ideas and creating stronger social bonds (Board of Governors, 2020; Nelson et al., 2013). Previous research conducted by students elevated voices of food insecure UBC students on their experiences, however, little work has been done to question how students define food resources that are just, equitable and dignified (Dela Cruz et al., 2020).

**Overall Goals:** The main purpose for this research is to gain more knowledge and understanding within the UBC community to establish a food secure, just and equitable environment by educating individuals regarding new policies, initiatives and/or advocacy opportunities. Marginalized communities were the main focus of this research study because previous research has proven that these demographics tend to be at a higher risk of being food insecure (Flores and Amiri, 2019).

**Specific Objectives:**

1. Adding support to the understanding within the UBC community on food justice within the university context through primary and secondary research
2. Providing a platform for students to voice their perceptions and/or experiences in the growing conversation about food (in)security in post-secondary environments through focus groups and surveys
3. Co-informing the development of UBC's "Community Food Security Framework"
4. Providing recommendations on opportunities for policies and/or advocacy efforts to advance food justice and community food security.

**Methods:** Student perceptions of food access were primarily collected through an online Qualtrics survey and supplemented with both an online focus group session and multiple online informal interviews. The marginalized communities included in this study were FGS, BIPOC, LGBTQ+, and students with mental and/or physical disabilities (identified as Diversabilities). Recruitment for primary research methods were done through the support of various UBC clubs, staff and through social media posts. In addition, secondary data through literature review was conducted to identify which interventions have already been planned throughout post-secondary institutions, identify knowledge gaps and provide new insights to help alleviate food insecurity.

**Conclusion:** With n=87 survey respondents and n=4 participating in focus groups/ informal interviews, student definitions of just, equitable and dignified food access, groups shared many overlapping themes. Criticism for current UBC food resources revolved around the lack of physical, economic and cultural food access; as well as the personal and social stigmas surrounding food insecurity. Therefore, recommendations for action include 1) promoting and normalizing the use of food resources through increased education of food insecurity; 2) providing more culturally appropriate foods on campus; 3) increasing funding for widely used food resources; 4) decreasing food prices of meals; 5) relocation for current and future food resources; and 5) increased financial support for undergraduate students. Due to the lack of respondents from Black and Indigenous representing students, future research should place an emphasis on exploring perceptions of food access from these groups. Moreover, food insecurity found among First Generation Students was two times higher than the overall UBC food insecurity rate, therefore, more research in ways to help alleviate the burdens of these students would be beneficial in helping UBC Wellbeing achieve its target of reducing food insecurity at UBC by 2025.

## TABLE OF CONTENTS

Executive Summary	0
List of Abbreviations	3
List of Figures	4
1. Introduction	5
1.1 Research topic	5
1.2 Research relevance	6
1.3 Project context	7
1.4 Project purpose, goals and objectives	8
2. Methodology and methods	9
2.1 Research methodology	9
2.2 Primary data collection research methods	10
2.3 Secondary data collection research methods	11
2.4 Methods of Administration	11
3. Results	12
3.1 Primary Data - Quantitative Survey Data Results	12
3.2 Primary Data - Short Answer, Focus Group, and Informal Interviews Result	14
3.2.1 Short Answer Responses	14
3.2.2 Focus Group and Informal Interview Responses	16
3.3 Secondary Research Results	18
4. Discussion	20
4.1 UBC's Definitions of Just, Equitable and Dignified Food Access	20
4.2 Effective Approaches Taken by UBC:	21
4.3 Student Recommendations on Ways to Improve Just, Equitable, and Dignified Food Access:	22
5. Recommendations	25
5.1 Recommendations for action and implementation	26
5.2 Limitations and Recommendations for future research	29
6. Conclusion	29
7. References	31
Appendices	34
Appendix A: Online Survey Questions	34
Appendix B: Optional Gift Card Entry Online Survey Question	<b>Error! Bookmark not defined.</b>
Appendix C: Focus Group/ Informal Interview Script	40
Appendix D: List of Contacts	42
Appendix E: Recruitment Material	43

LIST OF ABBREVIATIONS

1. **AFI** = Alternative Food Initiatives
2. **BIPoC** = Black, Indigenous, People of Color
3. **CBAR** = Community-Based Action Research
4. **FGSU** = First Generation Student Union
5. **FGS**= First Generation Students
6. **FSI** = Food Insecurity Initiative
7. **LFS** = Land and Food Systems
8. **LFS WND** = Land and Food Systems Wednesday Night Dinner
9. **LGBTQ+** = Lesbian, gay, bisexual, transgender and queer or questioning (+)
10. **SFU** - Simon Fraser University
11. **UBC** = University of British Columbia
12. **UBCV** = University of British Columbia Vancouver
13. **UBCO** = University of British Columbia Okanagan

LIST OF FIGURES

Survey Participant Community Identification

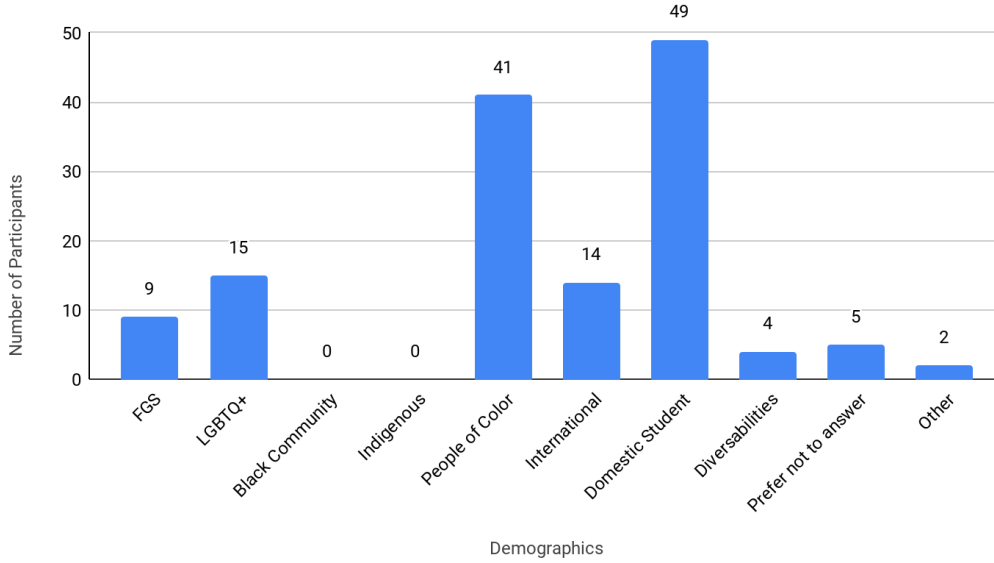


Figure 1: Survey Participant Community Identification

Campus Food Resources Students Have Used Before

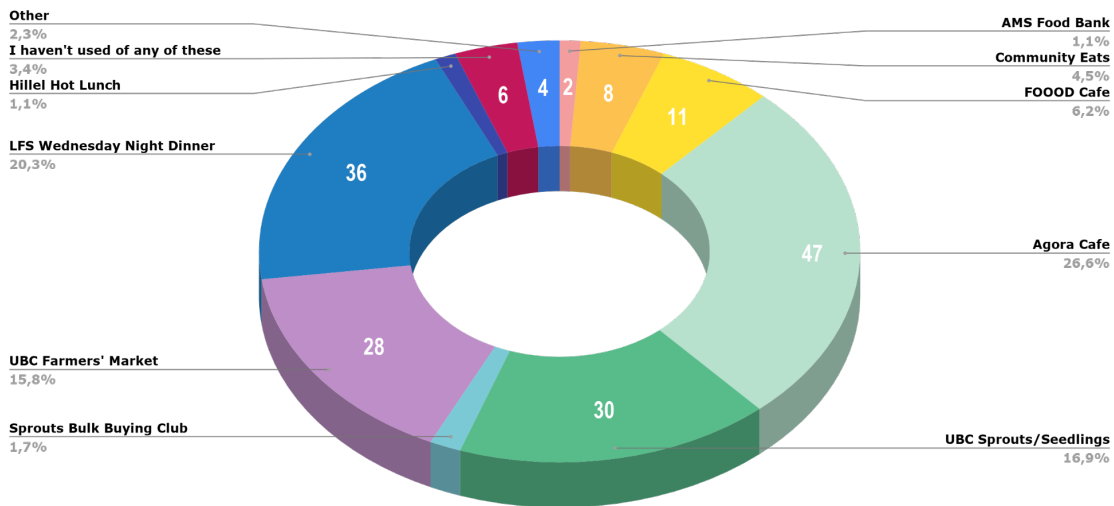


Figure 2: Pie Chart illustrating the distribution of students (number) who have used campus food resources

## 1. INTRODUCTION

### 1.1 RESEARCH TOPIC

Food insecurity currently affects 14.6% of Canadian households and numbers are expected to rise with the onset of COVID-19 (Polsky & Gilmour, 2020). For this research project, Food Insecurity is based on the Health Canada definition: “the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so” (Health Canada, 2018). In addition, Food Access according to the United Nations Food and Agriculture Organization is: “access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet” (FAO, 2016). This research project will focus on student perceptions on “just, equitable, and dignified food access” at the UBCV campus by collaborating with students and collecting their opinions on current UBC food resources and services. This project will allow students to form their own definition on “just, equitable and dignified food access”.

This project is important because food insecurity can negatively impact a student’s mental health, physical and social wellbeing. It was found that university students and recent graduates who are food insecure were shown to be more prone to mental health issues (anxiety, depression etc.), poor physical health and low school/work performance due to stress and inadequate diets (Maynard et al., 2018; Li et al., 2016; Weaver et al., 2020). Furthermore, underlying stigmas associated with food insecurity, such as labeling, stereotyping and the perceived loss of status or power, may discourage individuals to seek out food resources and services. A study on understanding food insecurity among American college students done by Henry (2017) mentioned that student participants felt more comfortable and “less guilty” receiving free food from university events on campus when asked why they were not utilizing food resources.

By allowing students to express their opinions on current UBC food resources and providing insight on anticipated future initiatives will not only allow UBC to increase their knowledge of what is currently working but also to unveil what areas need more work. Therefore, it should be a priority for UBC to collect student feedback and future envisions in order to destigmatize and tackle food insecurity. This research team hopes that this project will be a step towards providing more inclusive and accessible food spaces for students.

## 1.2 RESEARCH RELEVANCE

The issue of food insecurity is prevalent across Canada, with a 2016 survey showing that almost two in five post-secondary students experience food insecurity (Silverthorn, 2016). More specifically according to UBC Wellbeing, food insecurity affects 37% of students at UBC (UBC Wellbeing, n.d.,a). To tackle the prevalence of food insecurity, UBC's Vancouver campus offers an abundance of food resources aimed for food insecure students to use. For example, there are a variety of food resources that allow students to eat food at more affordable prices ranging from "by donation" to \$5 such as LFS WND, and Sprouts' Community Eats (University of British Columbia, 2016).

Despite UBC's efforts to support students who are food insecure through offering a variety of food resources, there is still a high prevalence of food insecurity among students. Being food insecure can negatively impact students' life physically, mentally and economically due to mental health issues, micro and macro-nutrient deficiencies as well as overall performance issues during school and/or at work (Gunderson and Ziliak, 2015).

The starving student ideology is the normalized thought that students are supposed to eat poor-quality foods and experience food shortages due to the economic burdens of university including tuition, textbooks and rent (Maynard et al., 2018). Food insecure students conveyed that they fear being seen walking through the food bank doors, or they feel that they are not worthy of getting food despite being hungry (El Zein, A., 2018). However, this view and downplay of 'student life' can be harmful as it encourages students to adapt to these financial burdens without seeking support. Additionally, the normalization of the starving student ideology could imply that one should not need to seek food resources because it is a common student struggle.

On top of feeling guilt or shame, a study conducted by Meza et al. (2018; 2019) found that food insecure students can also feel anger directed towards their academic institutions as a result of lack of support. These students believed that their universities should be offering nutritious food aimed towards those who need it more and when this is not reciprocated, can lead to feelings of anger and frustration.

On a micro-level, the value of this project aims to help alleviate the knowledge gaps between UBC and their students regarding perceptions of food access, food resources, and food insecurity. Furthermore, the

research team hopes that the project findings will be useful in gaining a better understanding of existing food security strategies at a macro-level throughout the City of Vancouver and beyond. This research will set the foundation for future work that will provide all UBC students with just, equitable, and dignified food access and perhaps inspire similar studies at other universities facing similar issues.

### 1.3 PROJECT CONTEXT

UBC strives to improve the health and wellbeing for students through UBC's Wellbeing Strategic Framework. This framework has a specific section surrounding Food and Nutrition, and the wellbeing of students. The goals in this section aim to reduce food insecurity and its negative effects on the UBC community by 2025 (UBC Wellbeing, n.d.,a).

The UBC Food Security Initiative (FSI) was formed in February 2020 to alleviate food insecurity and meet its targets from the Wellbeing Strategic Framework (Board of Governors, 2020; UBC Wellbeing, n.d.). Since its launch, the FSI has acted on the immediate needs of the UBC community such as the UBC MealShare program, which provides students food dollars on their UBC campus card in the event of a food emergency, and the Digital Food Hub to provide information about food resources available on campus (Board of Governors, 2020). In the long term, the FSI plans to establish a Physical Food Hub on the Vancouver Campus which will include community kitchens, food education programs, food banks and consulting, in partnership with local organizations (Board of Governors, 2020). Using an intersectional and social approach, according to Nelson et al. (2013), may be a more sustainable way to address food insecurity by integrating expertise, adopting new ideas, and strengthening social ties.

A past student project explored students' lived experiences with food insecurity and found that 60% of student participants (55% who were food insecure) had not made use of any UBC food resources (Dela Cruz et al., 2020). When asked why they were not utilizing the food resources, guilt was a recurring response and the fact that the term "food insecurity" comes with negative connotations (Dela Cruz et al., 2020). These stigmatizations can be correlated to the normalization of the "starving student" ideology and can have a negative impact on a university student's decision to seek food resources. Recommendations from this study include increasing



awareness of food insecurity to destigmatize the negative connotations, lowering food prices on campus, and building stronger connections amongst students in underrepresented communities (Dela Cruz et al., 2020).

Although previous research has provided valuable information on the background and lived experiences of food insecure students, little work has been done to explore what students define and perceive just, equitable and dignified food resources to be (Dela Cruz et al., 2020). Additionally, addressing the gaps of knowledge in marginalized demographics such as BiPoC, diversabilities, and LGBTQ+, and FGS who have a higher prevalence of food insecurity is also of importance (Flores and Amiri, 2019; Davidson and Morell, 2018). UBC has also not done research into FGS and food insecurity. Thus, this research team wants to build on the current knowledge and continue to allow students to shape their food system. Furthermore, since marginalized communities are observed to have a higher prevalence of food insecurity, more research and a greater emphasis on their perceptions will be conducted in this project (see Section 1.4). Aligning with UBC's Wellbeing Strategic Framework, FSI and previous student research, this research aims to provide a platform for students to define what just, equitable and dignified food access means and looks like to them.

#### 1.4 PROJECT PURPOSE, GOALS AND OBJECTIVES

The main purpose for this research is to gain more knowledge and understanding within the UBC community to establish a food secure, just and equitable environment by educating individuals regarding new policies, initiatives and/or advocacy opportunities.

The goal for this research is to understand the perspectives of marginalized communities on what just, equitable and dignified food access means to them in comparison to the UBC community, investigating similarities, differences and overlapping themes that arise to determine if UBC needs to address food insecurity in a more targeted way. Most research around food insecurity has focused on specific demographics such as LGBTQ+, Black, Indigenous and People of Color (BIPOC), and international students. Throughout Canada, including UBC, there is little to no research on FGS. This research study provides the opportunity for participants to self-identify as one or more of these demographics, with the recognition that these identities both can intersect and carry their own unique experiences. The aim of this research is to analyze data obtained from surveys, focus

groups, informal interviews and secondary research to develop and provide strategies that increase just, equitable and dignified access to food resources on the UBC Vancouver (UBCV) campus. The information analyzed and the knowledge gathered will provide insight for the FSI to develop new policies, initiatives and/or advocacy opportunities and create strategies that will continue to support food insecure students. This paper will help fill existing gaps within food insecurity among post-secondary institutions and provide recommendations for future research.

The objectives for this project are in line with the UBC FSI goals of better understanding UBCV student perceptions on just, equitable and dignified forms of food access, how these perspectives look in action, and provide recommendations to help expand on established FSI strategies.

**The objectives of this project include:**

- 1) Deepen knowledge on how food justice is understood and experienced within the UBC community through primary and secondary research.
- 2) Provide a platform for students to voice their perceptions and/or experiences in the growing conversation about food (in)security in post-secondary environments through focus groups and surveys.
- 3) Co-inform the development of UBC's "Community Food Security Framework".
- 4) Provide recommendations on opportunities for policies and/or advocacy efforts to advance food justice and community food security.

## 2. METHODOLOGY AND METHODS

### 2.1 RESEARCH METHODOLOGY

This project will follow the framework of CBAR which uses an interdisciplinary-systematic approach developed by Ernest T. Stringer (Nasrollahi, 2015). This action-based approach allows active collaborative processes between the researchers and participants which will be grounded through qualitative research. CBAR is composed of 3 research steps: "Look, Think & Act" - which allows researchers to examine everyday lives to understand the purpose of the study, thoroughly acknowledge stakeholders that are affected by problems, communicate with each other on why/how did these problems arise, and include stakeholders in the creative

process of finding solutions (Nasrollahi, 2015). Not only does this allow a deeper professional connection between the researcher and participants, but it also allows participants to engage in research to shape solutions that may be more meaningful and useful compared to other systematic methodologies (Nasrollahi, 2015). Therefore, it was concluded that CBAR was a good approach to engage with the UBC community to not only encompass student voices in a food security context, but also to allow them to envision and shape their food system into recommendations in order to help UBC advance in food justice and community food security.

## 2.2 PRIMARY DATA COLLECTION RESEARCH METHODS

Primary data was collected through a Qualtrics Survey that the research team and their client, Sarah Kozicky, created together. The Qualtrics platform was chosen to collect data because surveys are one of the most effective ways to obtain a large quantity of qualitative and quantitative data, as well as one of the safest methods in response to Covid-19 guidelines (See Appendix A). Marginalized communities were the main focus of this research study because previous research has proven that these demographics tend to be at a higher risk of being food insecure (Flores and Amiri, 2019). The marginalized communities included in this study were FGS, BIPOC, LGBTQ+, international students and students with mental and/or physical disabilities (identified as Diversabilities). Survey participation from the UBC community as a whole was also important because the research team was interested in comparing marginalized communities' perceptions with the perception of the representative population of UBC. The Qualtrics survey enabled the research team to examine students' perceptions and knowledge of food insecurity and the food resources offered at UBC, in addition to the rate of food insecurity among various demographics. Students were able to create their own definitions for “just,” “equitable,” and “dignified” food access and were able to provide feedback on UBC’s efforts in addressing food insecurity on campus through short answer responses. The sample size obtained from the Qualtrics survey was  $n = 94$  responses, however, seven responses were removed because the entire survey was left blank; therefore, the overall sample size of this research study was  $n = 87$ .

To recruit participants into a focus group, there was a section in the survey to gauge any interest for an opportunity to expand on their short answer survey responses. Focus groups were conducted via Zoom due to

COVID-19 restrictions and guidelines. This method was chosen as the research team believed that focus groups would provide more comprehensive answers and allowed participants to provide more detailed feedback to help guide recommendations for the UBC community to achieve more just, equitable and dignified food access. 15 participants initially signed up for the focus group through the survey, however, only six participants committed to a date and time but only four attended their designated time. Due to a low turnout of focus group participants being available all in one day, the research team pivoted to providing informal interviews as another method to gain student perceptions. Two informal interviews were then conducted (both with n = 1 participant) and one focus group was conducted with n = 2 participants.

### 2.3 SECONDARY DATA COLLECTION RESEARCH METHODS

The research method used to collect secondary data was a literature review. Various practices at universities across Canada were taken into account and compared with current UBC practices. In order to determine what methods are the most effective at UBC, looking at the current rates of food insecurity on campus and the financial situation of students are essential. The literature review conducted has helped identify and fill knowledge gaps as well as further provide insight on new methods to alleviate food insecurity on UBCV campus. This is essential for this research project because it helped inform the research team on previous measures that have been taken to reduce food insecurity at a local, regional and national level, that in turn helped further deepen the team's knowledge of food insecurity.

### 2.4 METHODS OF ADMINISTRATION

To help recruit participants for the survey and focus groups, the research team developed a spreadsheet of contacts that included clubs, faculty members, and other UBC resources (Figure 4 in Appendix D). Contact was initiated via email with the request that they help the research team by forwarding the survey link to their contacts. Various social media platforms, such as Facebook and Instagram, were also used to recruit participants. The research team created a graphic that explained the purpose of the research and offered a raffle prize of \$25 gift cards to select grocery stores and UBC food services (Figure 5 in Appendix E). The graphic was shared on Facebook through the UBC Graduating Year pages as well as on Global Resource Systems', FGSU's and UBC

Exchange Residence’s Facebook pages. Additionally, the graphics were also shared through the Sprouts Instagram page, class announcements and to other UBC clubs by their contact boards. Sarah Kozicky also shared the survey link with her connections. Other networks were contacted including the AMS Food Bank, UBC Graduate Society, Center for Accessibility, Residence Hall Association, UBC Climate Hub, and others, however, there was no response from these groups. The Survey was open from March 9th through April 5th, informal interviews were held on March 23rd and 24th, and the focus group was held on March 25th (both informal interviews and focus groups were both conducted over Zoom). Before the informal interviews or focus group date, one research team member sent a reminder email that contained the Zoom link and the questions that were going to be discussed to allow participants to prepare their ideas.

### 3. RESULTS

#### 3.1 PRIMARY DATA - QUANTITATIVE SURVEY DATA RESULTS

Figure 1, represents the communities that participants self-identified with. Out of the 87 survey responses, 56.3% of the participants classified themselves as domestic students. The next largest demographic was 47.1% of students who identified themselves as people of color. 17.2% identified with the LGBTQ+ community, 16.1% identified as an International Student, 10.3% identified as a FGS, 4.6% identified with diversabilities, 2.3% identified with another community, 5.7% of the individuals preferred not to answer this question and there were no students who identified with the black or Indigenous communities. It's worth noting that participants were free to self-identify with as many groups as they chose, therefore some answers were examined several times.

Figure 2, depicts student responses to one of the survey’s questions: “Which resources from the following have you used in the past/or are currently?”. The resources listed included: the AMS Food Bank, Community Eats, FOOOOD Cafe, Agora Cafe, UBC Sprouts/Seedlings, Sprouts Bulk Buying Club, UBC Farmers Market, LFS WND, Hillel Hot Lunch, UBC Meal Share Service, Prefer Not to Answer, I have not used any of these resources, and Other. The most used campus food resource is Agora Cafe, which is expected due to the high response rate of LFS student responses. Then LFS WND, UBC Sprouts/Seedlings Cafe, UBC Farmers Market, FOOOOD Cafe, Community

Eats, Sprouts Bulk Buying, Hillel Hot Lunch and AMS Food Bank. Four individuals have used other food resources on campus; however, nobody typed a response. Six students said they have not used any of these resources.

The USDA’s 2012 Household Food Security Survey Model (US Department of Agriculture, 2012) was used to code survey responses and assess the food security status of students. Only five of the six questions from this USDA model were used in the Qualtrics survey, therefore the research team adjusted how the severity of food security status was assigned. If students answered “often, sometimes, almost every month, or some months but not every month”, they were coded as affirmative and were given a score of 1 for each time. If students answered “never true, prefer not to answer, only 1 or 2 months, not sure, or never”, received a score of 0. For each answer, the research team summed all of the affirmative responses to get a raw score for that individual. A raw score of 0 had high or marginal food security, 1-3 were considered to have low food security, and 4-5 were considered to have very low food security.

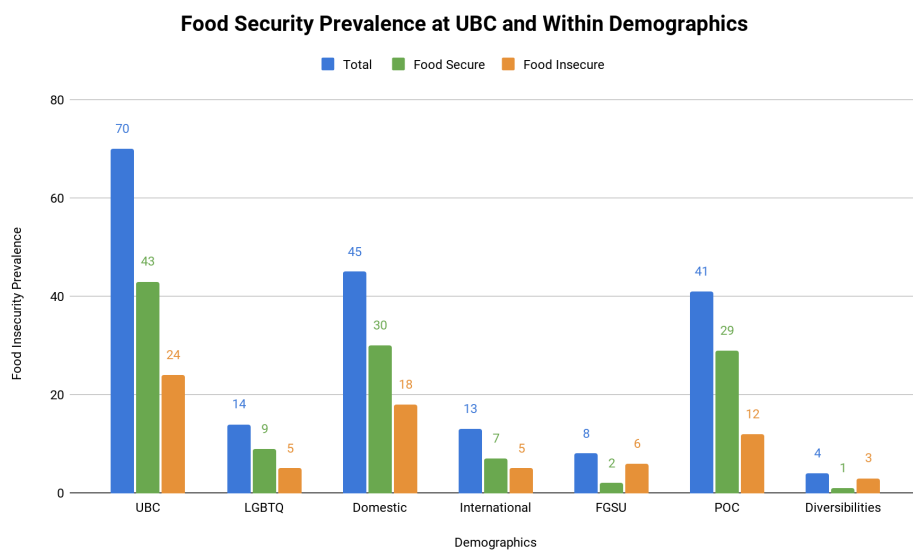


Figure 3: Bar chart illustrating the prevalence of food (in)security among different demographics and within the UBC community as a whole (a representative sample). The blue bar shows the total response rate (n); the green bar represents of the total responses who identified as food secure and the orange shows who identified as food insecure.

Of the 87 responses, only 70 individuals completed the food security questions and three individuals reported prefer not to answer for each food insecurity screening question. As a result, the responses of  $n = 67$  people were used to measure the prevalence of food insecurity among UBC students. The research team classified 24 of the 67 students (35.8%) as having low or very low food security, indicating that they were food insecure. Figure 3 shows the prevalence of food security among each community; however, since certain populations have a very small sample size (i.e., diversabilities), the results for such demographics are not statistically significant, as  $n > 5$ . The communities with the highest prevalence of food insecurity include Domestic students (40%) and students of color (29.3%). Food insecurity affects 35.7% of LGBTQ+ students, 38.5% of international students, and 75% of FGS (however, keep in mind that these sample sizes are relatively small).

## 3.2 PRIMARY DATA - SHORT ANSWER, FOCUS GROUP, AND INFORMAL INTERVIEWS RESULT

### 3.2.1 SHORT ANSWER RESPONSES

The research team separated survey responses based on what communities' students identified with and looked for common themes in the short answer responses. When asked "What do you believe UBC does to support those who are food insecure?", all communities mentioned that UBC offers emergency relief through the AMS Food Bank and that there are a variety of food initiatives on campus that provide affordable options. Most of the demographics recognized that UBC helps fund student led initiatives as well.

When answering the question, "If you have used any of these food resources, would you change anything about them? Please explain", all communities mentioned that there needs to be an increase in awareness and advertisement around existing resources. Almost all communities mentioned that many of the existing initiatives are not located in high traffic areas, and that the existing initiatives serve too many Westernized dishes. diversabilities, FGS and international students noted that the AMS Food Bank's current set up needs amendments to increase anonymity.

Table 1 illustrates the common themes that the research team found when participants were asked to define "just, equitable and dignified" food access and created community definitions.

Community Definitions	diversabilities	POC	FGS	International	Domestic	LGBTQ+
How would you define " <b>JUST</b> " food access?	Culturally appropriate, nutritious, quality food options while also improving students' financial situations.	Affordable, fresh, safe, healthy food options that respect and cater to different cultures, identities and relationships with food. Everyone has the right to access and choose these types of foods.	Affordable, healthy, culturally appropriate and nutritious food that everyone has access to.	Affordable, sufficient, fair, de-stigmatized, and easy access to culturally appropriate food.	Everyone has easy access (physical and economic) to affordable, unstigmatized, nutritious, safe, culturally and dietary appropriate food that is sourced sustainably and ethically. Food also accommodates dietary restrictions and allergies.	Everyone has equal and unstigmatized access to affordable, healthy, culturally and personally appropriate foods
How would you define " <b>EQUITABLE</b> " food access?	Everyone can access food regardless of socio-economic backgrounds, especially to those who may be part of marginalized communities/backgrounds.	Everyone has access to diverse, healthy food options no matter their circumstance (including background, demographic, community belonging, financial stability); with an emphasis on the most vulnerable communities and individuals.	Everyone has access to healthy, culturally appropriate and nutritious food and are able to receive help based on their needs.	Equal access to affordable food for all while also reaching out to marginalized groups.	Sufficient, nutritious, and culturally appropriate, affordable food access available to all students regardless of their background with an emphasis on providing more aid to those in need.	Access to quality food that is inclusive, affordable and healthy regardless of socio-economic background with an emphasis on providing more to those in [greater] need.
How would you define " <b>DIGNIFIED</b> " food access?	Culturally and personally acceptable food access that meets all nutrient requirements and does not cause personal or social shame.	Unstigmatized, respectful access to healthy and proper food (not food scraps/charity food) where people do not feel ashamed, embarrassed or judged.	Even if an individual cannot afford food, they are still able to access healthy, nutritious and safe while feeling respected.	Greater anonymity and non-discriminatory access to culturally appropriate, ethical, sustainable and healthy food.	Everyone has destigmatized and anonymous access to culturally appropriate and affordable food in a respected manner. Access that doesn't function on charity-based lenses.	A system that provides quality food resources in an ethical, sustainable, culturally and personally appropriate and respectful way.

Table 1: Community definitions of "just," "equitable," and "dignified" created by the research team.

When answering the question: "Do you believe UBC provides "just, equitable and dignified" food access?", a handful of students said that UBC does provide access to adequate food resources and services. They noted the variety of student run initiatives provide healthy and affordable food. However, the majority of responses think that UBC can improve on achieving just, equitable and dignified food access on campus - recommendations provided by students will be talked about in Section 4.3. Students in the diversabilities and



LGBTQ+ communities feel like responsibility is placed on students to do all the work to seek out food resources. Domestic students are interested in more funding and longer hours for certain food programs (i.e., FOOD Cafe). Domestic and POC would like UBC to offer more online options for food resources during COVID-19.

Student responses regarding “How can UBC improve to meet YOUR definitions of “just, equitable, and dignified” food access?” were also combed through and analyzed to identify the most recurring themes. Improvements that communities would like to see on campus will be expanded further in Section 4.3.

---

### 3.2.2 FOCUS GROUP AND INFORMAL INTERVIEW RESPONSES

The focus group and informal interviews provided more in-depth feedback that allowed participants to expand on their survey answers (See Appendix C) for script used during focus groups/interviews). Responses to the focus group and informal interviews will be further discussed in Section 4.3 as well, as participants brought insightful opinions and feedback on what UBC is doing well and how UBC can improve. Common themes that were brought up in the focus group include:

**Increased education on food security:** Food security knowledge is a niche subject, but given the prevalence of food insecurity, it is critical that other faculties raise awareness of food security and the impacts it has on the community.

*“I have only taken one seminar class on food justice and one of my Geography classes had a small section on food insecurity and food sovereignty. The UBC community needs to be more aware about these things and what food security is.” - Informal Interview Participant*

**Food banks are helpful but UBC needs more long-term initiatives:** Food banks have been shown to be effective for immediate aid, however they do not solve the root of the problem of food insecurity.

*“I know some people who have used the food bank and they’ve said that it has really helped them a lot. I think the food bank is great, but again it’s not a solution to food insecurity. I think initiatives on campus do help but I feel like students shouldn’t have to rely on these things.” - Informal Interview Participant*

**FOOOOD Cafe is a great initiative, however, is it sustainable?** Participants mentioned that FOOOOD Cafe has great tasting food, however, they are worried about the integrity of students - will students pay it forward or take advantage of the subsidized option? Also, the location and anonymity of how one chooses to pay were concerns that were brought up.

*“Yes, I have had the food there and the food is really good. I would go back if it was closer to the Nest [...]. I think the price is reasonable and it depends on the student [...]. For me, I can pay that \$15 so I see it as an investment to the food program on UBC. But in the long run, I don’t think that it’s a legit business model because I don’t think many people have as much integrity as me [...]. I guess people would take advantage of that situation and only pay the \$5.” - Informal Interview Participant*

**Student run clubs are seen as the forefront in tackling food insecurity on UBCV campus:** Participants noted how student run clubs (i.e., Sprouts, Agora, Roots on the Roof) bring value to the campus and support students who are food insecure.

*“I think initiatives like Roots on the Roof, Sprouts and other clubs that work around food justice definitely spread awareness and educate people, especially those who are involved.” - Informal Interview Participant*

*“Putting these food cafes in more popular places [can make accessing affordable food become] more normalized” - Focus Group Participant*

**Normalizing food access is important:** All of the participants noted that seeking help is stigmatized, whether that be asking for help academically or seeking support from food relief programs. They all believe that providing more dignified ways to get food is an essential aspect that UBC needs to take into account when addressing food access.

*“Make marginalized students look like the majority instead of the minority to reduce stigma [...]. This can be seen through creating partnerships with small food initiatives, like LFS Wednesday Night Dinners, can help [UBC] reach out to marginalized groups without targeting them directly.” - Focus Group Participant*

### 3.3 SECONDARY RESEARCH RESULTS

There are a variety of factors that contribute to food security. Financial restrictions, insufficient time, limited access to culturally appropriate food, and the normalization of the "starving student lifestyle" are all notable barriers to achieving food security at a university (Hattangadi et al., 2019). Food is generally a low priority for university students due to their busy academic schedules, and if they have a job, their priority for food could be even lower, resulting in a decline in their food security (Hattangadi et al., 2019). Post-secondary institutions are attempting to help solve the "the starving student lifestyle" at the local, regional, and national levels, however food insecurity is a recurring and prevalent problem.

Interventions reviewed at post-secondary institutions at the local level include UBCV and Simon Fraser University (SFU). To combat food insecurity on the UBCV campus, initiatives that have taken place include the FSI, AMS Food Bank, UBC Meal Share Program, and various other initiatives (Figure 2). The AMS food bank provides students with one bag of groceries 16 times per term, while the UBC Meal Share Program provides students with up to \$200 directly to their UBC card, however, this program ran out of funds (AMS of UBC, 2021; UBC Wellbeing, n.d.). At SFU, Food that does not meet stores' standards are redistributed to other locations, with the aim of reducing food insecurity and waste (Embark Sustainability, 2020; SFU, n.d.)

The city of Vancouver is attempting to alleviate food insecurity through various initiatives and programs. It charts monthly costs of food and has various resources for residents. The general food insecurity levels are above the world average of 8.9% at 11% in Vancouver (FAO et al., 2020; Li et al., 2016). Vancouver currently has 73 low cost/free food programs, 90 community gardens, and about 124,713 individuals visit food banks yearly (City of Vancouver, 2021; Food Banks Canada, 2019). These services are easy to locate, with maps of various municipalities indicating where to look, what locations have to offer, and when they are accessible to the public. (Vancouver Coastal Health, 2020). These strategies aim to alleviate food insecurity in the short and long term, but they fail to resolve the root cause of poverty, which is one of the leading causes of food insecurity.

At the regional level, in British Columbia, males from age 19-30 spend \$316 per month on food while females spend \$246 per month on average (BC Centre for Disease Control, 2017). Assuming that half the

population is male and half is female the average expenditure for a university aged student would be \$281 per month or \$3.12 per meal (BC Centre for Disease Control, 2017). Food insecure students are likely to spend under \$3.12 per meal. Many of the low-cost options at UBC exceed the average cost per meal.

The UBCO campus offers a good comparison to UBCV. UBCO has a 42% food insecurity prevalence among students, which is 5% higher than UBCV. At UBCO, the Student's Union Okanagan of UBC's Pantry is a program that allows UBCO students to apply for a hamper on Thursdays at 3:00 PM. Each application form allows the applicant to check off certain items they need under each food category provided, then the organizers will try to fulfill those requests depending on what is available (UBCSUO, n.d). The applicant will receive their hampers the following day (UBCSUO, n.d).

At the national level, The Public Health Agency of Canada (PHAC) oversees federal interventions to combat food insecurity in Canada, including the creation of healthy eating initiatives and the integration of food protection into provincial policy frameworks (Martorell, 2017). The Community Food Action Initiative (CFAI) was launched in 2005 as one of British Columbia's healthy eating initiatives to promote health and assist communities in improving their food security (Lederer, 2008). The success of CFAI was determined by its community-based approach, which took several forms as the program was tailored to specific needs and goals of communities (Lederer, 2008). Initiatives through community-based approaches facilitate community engagements, decision making, and partnerships which resulted in increased community support (Lederer, 2008).

Canadian universities lack consistent policies on food security and rely largely on food banks to support food insecure citizens (Roncarolo et al., 2016). Food bank dependency is a result of rising living costs and long-term issues with food access for which there are no clear solutions. In Canada, food banks are seen as emergency aid, however, they are being used as a long-term solution and Canada's primary method of addressing food insecurity (Holmes et al., 2018). In recent years, alternative food initiatives (AFIs) have been appearing, and they include community kitchens, gardens, and educational programs (Pegg and Stapleton, 2015). AFIs are oriented around educating people on how to cook and manage their food and money as a proactive approach to

preventing food insecurity. Although AFIs are new that target problems with food banks and propose a long-term solution, they are criticized for failing to reach all marginalized communities (Guthman, 2008).

A university in Ontario created the Food Resource and Education for Student Health (FRESH) peer nutrition education. Here, they focus on improving the campus food and nutrition environment while encouraging healthy behaviors (Matthews, et al., 2014). These behaviors are promoted through cooking classes which helps develop skills and knowledge around food (Matthews, et al., 2014). They also raise awareness about food-related issues, develop supportive environments through incentive programs to help improve the food atmosphere on campus, and use point of purchase labels to highlight healthy menu options (Matthews, et al., 2014).

The University of Alberta uses food banks and 90% of their clientele are food insecure people who are able to receive some aid (Farahbakhsh et al., 2015). The food bank was used alongside loans, employment, and purchasing food on a credit card (Farahbakhsh et al., 2015). In general, the food bank was found to aid in reducing stress levels, however, it does not act as a good practice on its own as it only offers immediate aid (Farahbakhsh et al., 2015). A rural Canadian university requires students who live on campus to purchase meal plans (Reynolds et al., 2018). Reynolds et al. found that students who live off campus were found to be more food insecure, even though on campus housing and food were more expensive than off campus options (2018).

## 4. DISCUSSION

### 4.1 UBC'S DEFINITIONS OF JUST, EQUITABLE AND DIGNIFIED FOOD ACCESS

Understanding food access is essential to improving the food security of students in university. Across Canada food insecurity at universities ranges from 30-46% (Entz et. al., 2017). The short answer responses provided many ideas and general opinions on UBC, while the focus groups provided a more in depth understanding regarding key questions.

The research team combined the community definitions to create one unanimous definition of just, dignified, and equitable food access at UBCV. This involved taking into account varying perspectives while pairing these ideas with food insecurity ratings to identify notable differences. Groups with higher levels of food insecurity would have needs and definitions that show what UBC needs to do to improve food security and food

access. Although groups with a smaller food insecurity prevalence still had valid definitions, it is important to distinguish differences in order to address the key issues that directly affect communities with higher levels of food security. Additionally, identifying communities with high food insecurity can be used in future research as a focus group. These communities can be observed to see whether or not a food resource is effective in reducing the food insecurity prevalence. One prime example is FGS, who have a food insecurity rate of 75%. There were not enough responses from this demographic to have statistical significance or to represent the entire population of FGS, therefore more research in this community must be done in future studies.

Students' definitions for just, equitable, and dignified food access is important in understanding what UBC needs to do to meet students' needs. As a whole, just food access would be defined as “access to culturally appropriate, affordable, healthy, and nutritious food”. It involves destigmatizing food access, accommodating dietary needs, and providing access to food resources. Providing just food access is essential in supporting student needs in relation to direct, quantitative desires around food.

Many students had trouble differentiating between just and equitable food access, however based on the community definitions, equitable food access is defined as “everyone having access to healthy and affordable food”. It involves providing students with equal, affordable access to students of any background regardless of socio-economic needs. This is essential in understanding how to reach everyone on campus with food that is appropriate to them and is affordable.

Dignified food access is defined as “unstigmatized, anonymous food access that ensures that students are respected”. It involves providing students with anonymity, normalizing food access, and providing respectful relations with participants and program organizers, and ethical food. This aids in understanding how to ensure students feel safe and respected when using food resources and ensures that students will be willing to reach out for help.

#### 4.2 EFFECTIVE APPROACHES TAKEN BY UBC:

In the short answers there were a few students who mentioned that UBC is doing well in supporting its students by providing numerous resources with various price ranges, however they did not go into detail as to

what aspects of UBC are good. The focus group and informal interviews provided more in-depth responses and revealed some positives about what UBC is doing as well. UBC is starting to offer more pay-what-you-can services such as the FOOOD Cafe, which pulls from Community Eats by donation method of payment. Community Eats, Sprouts, Agora, the FOOOD cafe, and Roots on the Roof are some examples of organizations that students believe show great initiative, but need more support and funding. Some praise of the FOOOD cafe is that food tastes good, however there were issues brought up by participants on anonymity in the payment method and how it might not run on long-term as some food secure students may take advantage of the system. As newer food initiatives are underway, it is important to take into these conditions to allow these programs to be sustainable and effective.

One focus group participant found that the AMS Food Bank is providing food insecure students much needed help. They did clarify that food banks are not long-term solutions; however, they know many people that were helped through hard times by the food provided. Community Eats is a similar program that the participant praised as well, as it offers students with groceries for the week and a cooked meal. The participant was clear that Community Eats would not have a huge impact on food insecurity at UBCV, however this program can act as an inspiration for future initiatives. UBC can collaborate with student-run clubs to see what works well and what needs improvements to help develop more effective long-term food relief programs. Collaboration with student clubs can also make students feel like they are being heard and that UBC is actively trying to support their wellbeing.

UBC could also aid in normalizing food access by providing greater advocacy. Students do feel that UBC is trying to help and they understand that preventing food insecurity is hard, however they also believe that UBC has a lot more work to do. Many students have clear suggestions as to where UBC can improve. But overall, the majority of students feel that UBC is not providing just, equitable, or dignified food access.

#### 4.3 STUDENT RECOMMENDATIONS ON WAYS TO IMPROVE JUST, EQUITABLE, AND DIGNIFIED FOOD ACCESS:

Students across various communities gave suggestions as to what UBC could do to improve food access and meet their community definitions. Students feel that UBC needs to address systemic causes of food insecurity

rather than using band aid solutions that offer temporary relief. Long term solutions are highly sought after as students want to have support for years to come. This would relieve stress and improve mental health while making UBC seem like a good choice for new students. If UBC were to show that their food insecurity levels are decreasing, more students may be more inclined to attend.

Food security has a social, economic, and ecological aspect. UBC lacks in social and economic sustainability, however it is doing well with its ecological sustainability. Socially, UBC could help normalize food access and reduce stigma related to seeking help as the AMS Food Bank was only used by two survey respondents. Even though the food bank provides anonymity with its secluded location, some participants found using the food bank to be prying and felt uncomfortable when asked why they were using the service. Instead of directly asking students, the AMS Food Bank could ask students if they are willing to spend five minutes to take an anonymous survey. Though the AMS Food Bank has critiques, some students find that it is providing effective emergency aid. If UBC were to incorporate AFIs to help educate students, in conjunction with the food bank, they could address many food insecurity problems, including innate financial restrictions linked to housing and food prices, as well as temporal constraints and knowledge gaps. UBC is currently working on a physical Food Hub, however implementing AFIs into Jumpstart and other orientation activities could help reduce food insecurity and promote effective usage of the costly first year meal plan. For now, AFIs could be provided via online resources, though it may be hard to advertise.

In order to ensure students can reach food resources, increased advocacy is important. One promising practice carried out by Vancouver is a map of available resources with what they offer and the times that they are open. This would be effective for UBC as it provides students with an easy-to-access and easy-to-read resource to find aid. This is especially important for food insecure students as they are more likely to have less time and more stressors. UBC must also improve education around food security, food resources, and how to use them in order to make advertisement and use of food resources more effective. By providing more centralized locations for food access, such as in the Nest, using food resources would be brought out into the open and people would see that many other students use them. Food resources should still be available across campus and in more obscure



locations as not everyone is able to make the trek to high traffic areas from classes and even with more normalized food access, many students may still desire anonymity.

Another social aspect that is important is providing culturally appropriate foods and foods that cater to dietary needs, such as gluten free and halal food. Many students voiced their need for greater availability of plant-based food options and culturally diverse foods as food resources at UBC are highly Westernized. Students realize that there are a variety of cultural foods on campus, but the way that they are cooked are highly Westernized.

Economically, UBC can freeze tuition costs, provide more financial aid, or reduce the cost of food on campus, especially in dining halls. First year students in residence have a required meal plan, which in theory, could mitigate food insecurity; however as seen at UBC, food plans are expensive and in many cases are not enough for the term. Students would like to see a decrease in residence hall meal prices. There are also problems with various caloric and dietary needs, including, expensive vegan and vegetarian options, and a lack of allergy aware options. This, paired with a lack of education on money management for first year students leads to many food insecurity issues. Additionally, many food options exceed the \$3.12 average meal cost (BC Centre for Disease Control, 2017). Food insecure students would not be able to afford the \$5 meals offered at food resources such as LFS WND and the FOOOD Cafe. In response to financial burdens students face on campus, they may move off campus for cheaper residence and food prices and may attempt to combat their financial struggles by finding a job or getting loans (Farahbakhsh et al., 2015). By improving education on food security while also providing financial aid and reducing the cost to use food resources, these temporal and financial stressors could be diminished. This can be tied into the ecological aspect as UBC has put an emphasis on sourcing sustainable and local products which has caused food prices to be higher.

Ecologically, UBC is aiming to provide sustainable and local food to students. If UBC wants to provide low-cost meals that food insecure students can afford they need to look into low-cost foods. This could involve meals made with bulk bought rice, beans, and frozen vegetables, which are cheaper even though they may not be local. This may reduce overall ecological sustainability; however, it would improve the social and economic

sustainability of students' wellbeing. Food initiatives could collaborate with food providers who are interested in improving the food security of students. UBC could ask for reduced prices from local, sustainable providers in exchange for being listed as supporters of the food resources. UBC would need to mention they would be limiting the ecological sustainability of these resources but still state that they are aiming for overall sustainability at UBC as a whole. The research team believes that the wellbeing of the students is important enough for this to occur.

Though there are overarching themes and general consistency in ideals, there are also groups that need more support and need to be heard. Even though the food insecurity prevalence was statistically insignificant for most communities, more research into each community is needed. FGS, as well as other communities that are shown or suspected to be food insecure, must be looked into in more depth for both overall levels of food insecurity, as well as their needs as they represent groups of people who are more inclined to be food insecure. For instance, FGS feel unheard and are asking for lowered food prices and inclusivity for all demographics to achieve their definition of just, equitable, and dignified food access. Another recommendation was to integrate existing food resources into the UBC administration (i.e., the UBC SSC) to allow all students to have access to a list of food resources. Direct support and interaction with initiatives and the student body, along with transparency and clear progress with food resources, is important in improving student-university relations.

## 5. RECOMMENDATIONS

The following recommendations were developed based on the information received from the online Qualtrics Survey, focus group and informal interviews, as well as information retrieved through literature-based research. The research team hopes that this will help UBC Wellbeing in their goals outlined in the UBC Wellbeing Strategic Framework as well as help FSI in implementing their Physical Food Hub on campus.

### **Immediate Recommendations (1-2 years):**

- Reduce the negative stigma regarding the use of food resources
- Promote and normalize the use of food resources
- Educate more individuals regarding the increasing problem of food insecurity and who is most vulnerable to experiencing this

- Increase funding for food resources like Spouts, LFS WNDs, etc. to gain the ability to provide more low-cost meals

#### **Mid Recommendations (3-4 years):**

- Establish food resources in more accessible and well-known locations Create more diet diversity by incorporating various diverse foods including more culturally appropriate options
- Increase access to affordable food prices for healthier food options

#### **Long term Recommendations (5+ years):**

- Using students' opinions and needs, design sustainable long-term solution that will continuously decrease the level of food insecurity

## 5.1 RECOMMENDATIONS FOR ACTION AND IMPLEMENTATION

### **Promote and Normalize the Use of Food Resources**

Food insecurity affects marginalized communities such as FGS, LGBTQ+, and people with diversabilities. Instead of directing advocacy exclusively to these communities, it could be more beneficial to address the entire student body. By doing so, not only does this increase awareness of this issue to students who are not a part of these communities, but it also allows food insecure students that are not a part of marginalized communities to feel included and overall, it normalizes food access. Additionally, by increasing awareness and normalizing food access, it helps ensure that all students are able to easily access the food resources that UBC provides by destigmatizing food access and increasing the ability of students to seek help.

### **Action 1: Education Through Campus-wide and Class Announcements**

In order to raise awareness of food insecurity, student participants expressed the need for campus-wide and in-class announcements in all courses throughout all faculties. Taking a few minutes once a week before the start of lecture to address the prevalence of food insecurity, food resource updates and encouraging the use of low-cost student initiatives, such as LFS WND and Sprouts Community Eats. By doing so, food insecure students can feel more at ease that announcements are more generalized and can facilitate a sense of community by peers possibly becoming more interested in attending community-led meals. The research team believes this is a

feasible and a reasonable approach as in-class announcements are already widely used for third-party student resources such as exam prep courses and event promotion.

Additionally, making use of campus-wide emails for food resource updates and promotion can be a more efficient way to spread awareness without the cost of class time. However, this method raises a few disadvantages as some students may not actively read emails as often as they attend in-person class. Furthermore, having emails sent personally may discourage the facilitation of conversation among peers which could reduce the impact of increasing the use of food resources.

### **Action 2: Provide More Culturally Appropriate Foods on Campus**

Student participants have recognized the lack of cultural diversity among UBC food services and food resources. Because UBC is recognized as an academic institution with a diverse cultural background, it is important to provide students meals that are more appropriate in relation to their cultural background. In order to increase dignified food access at UBC, the research team suggests collaborating with chefs, dietitians and other stakeholders of UBC food services to create a menu that reflects the many backgrounds of UBC students. Additionally, frequent feedback from students on meals to ensure that dishes are culturally appropriate can help facilitate an inclusive community at UBC that cherishes the diverse backgrounds of its students.

Insights taken from one informal interview, an undergraduate student suggested establishing annual international food fairs funded by UBC to further enable a sense of community among the student population and increase the exposure of new foods. Students can explore different cuisines from all around the world while UBC food services staff can gain insight on which dishes are doing well and may consider permanently implementing them on their permanent menu. The research team believes this is a great start in trying to increase exposure to culturally appropriate food as it not only facilitates community through a campus-wide event but also students of marginalized communities (BiPoC specifically) can feel more dignified and represented.

## **Increasing Physical and Economic Food Access Through Food Resources on Campus**

### **Action 1: Increase Funding for Widely Used Food Resources**

Student-led initiatives such as Agora Cafe, LFS WND and Sprouts Community Eats are a few of the most widely used food resources based on the research results. Funding for new, more efficient equipment, as well as possible funding for students working for these initiatives can help alleviate the stress and burden that can come with an increased usage capacity. Additionally, an increased budget can help students experiment with new food ingredients and facilitate the exposure of cultural recipes. Therefore, it should be a priority for UBC to increase funding in order to expand the capacity that reflects the use of these food resources.

### **Action 2: Decreasing Food Prices of Meals**

Students commonly cited that both the first-year meal plan and food in general on campus is too expensive. Reducing the prices of food to be affordable for students is required for UBC to offer a food secure campus. Currently, many students decide to live off campus in order to save money, however, first year students in first year residence are required to have a meal plan that does not match every student's financial needs. By offering reduced prices, or by having an option for students to apply for a discount on food purchased in first year residence this could be ameliorated.

### **Action 3: Relocation for Current and Future Resources on Campus**

Food resources such as the AMS Food Bank, and Agora Cafe are located in more hidden and less accessible areas. Furthermore, with the future implementation of a physical Food Hub, plans to (re)locate these resources in an accessible, high traffic and visible area is important for facilitating continued use. The research team believes that placing these food resources in a more centrally located area with heavier traffic will help students feel more at ease and feel less shame compared to resources located in more secluded areas. Additionally, placing food resources in a more visible area can help increase awareness of resources as passerby-students would see the food resources out in the open and not have to search for them if they are in need. By increasing overall traffic and exposure, this can ultimately encourage a higher sense of community among students and help to further the narrative that seeking food resources should not be something to hide, which would normalize food access.

### **Action 4: Increased Financial Support for Undergraduate Students**

In order to tackle one of the underlying causes of food insecurity, providing students that have a financial burden (which can lead to food insecurity) with scholarships and bursaries can help reduce the pressures of funding academic expenses (tuition, textbooks etc.). Creating these scholarships and bursaries however, is a challenge in itself. The research team acknowledges the possible difficulty it can be to fund these scholarships/bursaries, but by reaching out to alumni, organizations, and allocating a specified budget within UBC's finances it can help further enable students to excel in their studies and reduce their physical and mental stress during their time at UBC.

## 5.2 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

This research project had many limitations in both research scope and depth, as well as a lack of understanding of food insecurity in a context not related to COVID-19 as data on resource usage prior to COVID-19 is based on year old memories. More up-to-date research on food resources would provide a better picture as to what is currently being used, however the lack of knowledge on food resources in general was noteworthy. Research into how students found out about food resources would be an effective method to increase the efficacy of any advocacy done by UBC. There is a lack of research into the food insecurity rates and perceptions of Black and Indigenous students as we received no responses from either community. Graduate students and students with diversabilities both received low response rates as well and need more research to gain a better understanding of their perceptions and levels of food security. FGS had a low response rate, however their rates of food insecurity were found to be 75 percent, double the UBC overall food insecurity rate. This needs to be looked into as our findings suggest that a large portion of food insecure students are part of the first-generation community. By learning what this community needs and implementing it across the university food insecurity levels could be decreased.

## 6. CONCLUSION

This research project examined student perceptions on what just, equitable and dignified food access means to them through analysis of qualitative and quantitative survey responses, a focus group, and informal interviews. Students provided valuable feedback and recommendations on how they believe UBC can improve

food access to meet their definitions. Students also noted that UBC does support their students with various initiatives, however, they believe that UBC can improve on existing initiatives. By actively listening to students and collaborating with them to bring in new ideas, UBC can better meet the needs of their students. In order to provide students with just, equitable, and dignified food access, UBC needs to do more research based on these research findings to determine which initiatives are the most effective, and on communities that this research project failed to reach. Participants noted that they were happy to see research being done and for providing a platform for student voices to be heard, however they have found many clear points where UBC needs to ameliorate food insecurity.

In order to achieve the goal of reducing food insecurity on campus by 2025 as indicated by the UBC Wellbeing Strategic Framework, it should be a priority that UBC takes into consideration the feedback that is obtained from students in this project. Incorporating the recommendations outlined, through increasing education on food insecurity, relocation of food resources to higher traffic areas, as well as providing funding for student initiatives and students under financial burdens, will not only inevitably decrease mental and physical stress found among food insecure students but also foster a higher sense of community among the UBCV campus as a whole through de-stigmatization of food access.

## 7. REFERENCES

- AMS of UBC. (2021). Food bank. AMS of UBC. <https://www.ams.ubc.ca/student-services/food-banke/>
- BC Centre for Disease Control. (2018). Food Costing in BC 2017: Assessing the affordability of healthy eating. Vancouver, B.C.: BC Centre for Disease Control, Population and Public Health Program.
- City of Vancouver. (2021). Free and low cost food programs in Vancouver. <https://vancouver.ca/files/cov/emergency-meal-program-map.pdf>
- Davidson, A., & Morrell, J. (2018). Food insecurity prevalence among university students in New Hampshire. *Journal of Hunger & Environmental Nutrition*, 15(1), 118-127. doi:10.1080/19320248.2018.1512928
- Dela Cruz, L., Vela, M., Udeze, O., Ahmed, H. (2020). Giving food insecurity a voice: students lived experiences. University of British Columbia. [https://sustain.ubc.ca/sites/default/files/seedslibrary/LFS\\_450\\_Giving%20Food%20Insecurity%20a%20Voice%20Student%20Lived%20Experiences\\_Final%20Report.pdf](https://sustain.ubc.ca/sites/default/files/seedslibrary/LFS_450_Giving%20Food%20Insecurity%20a%20Voice%20Student%20Lived%20Experiences_Final%20Report.pdf)
- Embark Sustainability, (2020, December 18) Food Rescue: Produce redistribution at SFU. <https://www.embarksustainability.org/programs/food-rescue/>
- Entz, M., Slater, J., & Desmarais, A. A. (2017). Student food insecurity at the University of Manitoba. *Canadian Food Studies/La Revue canadienne des études sur l'alimentation*, 4(1), 139-159.
- FAO. (2006). Policy brief food security changing policy concepts of food security. [http://www.fao.org/fileadmin/templates/faoitally/documents/pdf/pdf\\_Food\\_Security\\_Cocept\\_Note.pdf](http://www.fao.org/fileadmin/templates/faoitally/documents/pdf/pdf_Food_Security_Cocept_Note.pdf)
- FAO, IFAD, UNICEF, WFP and WHO. (2020). The state of food security and nutrition in the world 2020. Transforming food systems for affordable healthy diets. Food and Agriculture Organization. <https://doi.org/10.4060/ca9692en>
- Farahbakhsh, J., Ball, G. D., Farmer, A. P., Maximova, K., Hanbazaza, M., & Willows, N. D. (2015). How do student clients of a university-based food bank cope with food insecurity?. *Canadian Journal of Dietetic Practice and Research*, 76(4), 200-203.
- Food Banks Canada. (2019). 2019 Report hunger count. [https://hungercount.foodbankscanada.ca/assets/docs/FoodBanks\\_HungerCount\\_EN\\_2019.pdf](https://hungercount.foodbankscanada.ca/assets/docs/FoodBanks_HungerCount_EN_2019.pdf)
- Flores, H. L., & Amiri, A. (2019). CE: Addressing Food Insecurity in Vulnerable Populations. *AJN, American Journal of Nursing*, 119(1), 38-45. doi:10.1097/01.naj.0000552585.15471.a7
- Guthman, J. (2008). Bringing good food to others: Investigating the subjects of alternative food practice. *Cultural geographies*, 15(4), 431-447.
- Hattangadi, N., Vogel, E., Carroll, L. J., & Côté, P. (2019). "Everybody I Know Is Always Hungry... But Nobody Asks Why": University Students, Food Insecurity and Mental Health. *Sustainability*, 11(6), 1571.
- Health Canada. (2018). Household food insecurity in Canada: Overview - Canada.ca. Canada.ca. <https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/household-food-insecurity-canada-overview.html>
- Henry, L. (2017). Understanding food insecurity among college students: Experience, motivation, and local solutions. *Annals of Anthropological Practice*, 41(1), 6-19. <https://doi.org/10.1111/napa.12108>
- Holmes, E., Black, J. L., Heckelman, A., Lear, S. A., Seto, D., Fowokan, A., & Wittman, H. (2018). "Nothing is going to change three months from now": A mixed methods characterization of food bank use in Greater Vancouver. *Social Science & Medicine*, 200, 129-136.



- Lederer, J. (2008). Taking action on food security: Overview of the Community Food Action Initiative evaluation. Provincial Health Services Authority. Retrieved from <http://www.bccdc.ca/pop-publichealth/Documents/takingactiononfoodsecurityoverviewofthecommunityfo.pdf>
- Li, N., Dachner, N., Tarasuk, V., Zhang, R., Kurrein, M., Harris, T., Gustin, S., Rasali, D. (2016). Priority health equity indicators for British Columbia: Household food insecurity indicator report. [http://www.bccdc.ca/pop-public-health/Documents/Household%20food%20insecurity%20in%20BC\\_full%20report.pdf](http://www.bccdc.ca/pop-public-health/Documents/Household%20food%20insecurity%20in%20BC_full%20report.pdf)
- Martorell, H. (2017). Policy Responses to Food Insecurity in Canada. Food: Locally Embedded Globally Engaged and Food Secure Canada. Retrieved from [https://foodsecurecanada.org/sites/foodsecurecanada.org/files/files/discussion\\_paper\\_policy\\_responses\\_to\\_food\\_insecurity\\_in\\_canada\\_2017.pdf](https://foodsecurecanada.org/sites/foodsecurecanada.org/files/files/discussion_paper_policy_responses_to_food_insecurity_in_canada_2017.pdf)
- Matthews, J. I., Zok, A. V., Quenneville, E. P. M., & Dworatzek, P. D. N. (2014). Development and implementation of FRESH – a post-secondary nutrition education program incorporating population strategies, experiential learning and intersectoral partnerships. *Canadian Journal of Public Health, 105*(4), e306-e311. doi:10.17269/cjph.105.4481
- Maynard, M., Meyer, S. B., Perlman, C. M., & Kirkpatrick, S. I. (2018). Experiences of food insecurity among undergraduate students: "you can't starve yourself through school". *The Canadian Journal of Higher Education, 48*(2), 130-148.
- Meza, A., Altman, E., Martinez, S., & Leung, C. W. (2018;2019;). "It's a feeling that one is not worth food": A qualitative study exploring the psychosocial experience and academic consequences of food insecurity among college students. *Journal of the Academy of Nutrition and Dietetics, 119*(10), 1713. doi: 10.1016/j.jand.2018.09.006
- Nasrollahi, M. (2014). A closer look at using Stringer's action research model in improving students' learning.
- Nelson, E., Knezevic, I., & Landman, K. (2013). The uneven geographies of community food initiatives in southwestern Ontario. *Local Environment, 18*(5), 567-577. <https://doi.org/10.1080/13549839.2013.788489>
- Pegg, S., & Stapleton, D. (2015). Hunger Count 2014: A Comprehensive Report on Hunger and Food Bank Use in Canada, and Recommendations for Change. Food Banks Canada.
- Polsky, J. Y., & Gilmour, H. (2020). Food insecurity and mental health during the COVID-19 pandemic. *Health Reports, 31*(12), 3-11. <https://doi.org/10.25318/82-003-x202001200001-eng>
- Reynolds, E., Johnson, C., Jamieson, J. A., & Mawhinney, H. (2018). Prevalence and correlates of food insecurity among students attending a small, rural Canadian university. *Canadian Journal of Dietetic Practice and Research, 79*(3), 125-128.
- Roncarolo, F., Adam, C., Bisset, S., & Potvin, L. (2016). Food capacities and satisfaction in participants in food security community interventions in Montreal, Canada. *Health promotion international, 31*(4), 879-887.
- Silverthorn, D. (2016). Hungry for knowledge: Assessing the prevalence of student food insecurity on five Canadian campuses. Toronto, ON: Meal Exchange. <http://mealexchange.com>
- SFU (n.d.) Embark sustainability's food rescue program wins a 2019 city of Burnaby environmental star award sustainability. <https://www.sfu.ca/sustainability/stories/2019/Embark-sustainabilitys-food-rescue-program-wins-a-2019-city-of-burnaby-environmental-star-award.html>
- University of British Columbia. (2016, December). Food and nutrition. Student Services. <https://students.ubc.ca/health/health-topics/food-nutrition>

- UBC Wellbeing. (n.d.,a) Campus food insecurity. University of British Columbia. <https://wellbeing.ubc.ca/campus-food-insecurity>
- UBC Wellbeing. (n.d.,b) Wellbeing strategic framework: Food-nutrition. University of British Columbia. <https://wellbeing.ubc.ca/food-nutrition>
- UBC Wellbeing. (n.d.) UBC Meal Share Program. University of British Columbia. <https://wellbeing.ubc.ca/ubc-meal-share-program>
- UBCSUO. (n.d.) Pantry: A Student Food Bank. <https://www.ubcsuo.ca/pantry>
- U.S. Department of Agriculture. (2012) U.S. Household food security survey module: *Six-item short form economic research service*. [www.ers.usda.gov/media/8282/short2012.pdf](http://www.ers.usda.gov/media/8282/short2012.pdf).
- Vancouver Coastal Health. (2020). Food Asset Map. <http://www.vch.ca/public-health/nutrition/food-asset-map>
- Wan, S. (2020). Sheep Scale 1-9 Meme:Wool for every day. wool for every day. Samantha Wan. <https://samanthawan.com.au/2020/08/22/sheep-scale-meme/>
- Weaver, R. R., Vaughn, N. A., Hendricks, S. P., McPherson-Myers, P. E., Jia, Q., Willis, S. L., & Rescigno, K. P. (2020). University student food insecurity and academic performance. *Journal of American College Health : J of ACH*, 68(7), 727–733.

## APPENDICES

## APPENDIX A: ONLINE SURVEY QUESTIONS

This survey should take around 10 minutes to complete and once completed you will be entered to win 1 of 3 \$25 gift cards to UBC food services or select grocery stores.

This survey is part of a SEEDS sustainability program project covering student perceptions on just, equitable, and dignified food access at the University of British Columbia Vancouver campus. It focuses on food insecurity, the inability and uncertainty in acquiring or consuming an adequate diet quality or sufficient quantity of food in socially acceptable ways. We are researching how food security impacts various campus communities and how UBCV is working to prevent food insecurity.

Thank you for your time!

Confidentiality Note: We will ensure that the responses to the survey questions are safely stored on one of the members computers.

---

The following 4 (four) questions will ask you about your knowledge and use of on-campus food resources.

Disclaimer: You do not need to answer any of these questions (if you feel uncomfortable, you can select "prefer not answer")

Have you heard of any of the following food resources programs on campus? (Please check all that apply)

- AMS Food Bank
- Community Eats
- FOOOD Cafe
- Agora Cafe
- UBC Sprouts/ Seedlings
- Sprouts Bulk Buying Club
- UBC Farmers' Market
- LFS Wednesday Night Dinner
- Hillel Hot Lunch
- UBC Meal Share Program
- Prefer Not to Answer
- I have not heard of any of these resources
- Other \_\_\_\_\_

Which resources from the following have you used in the past/or are currently?

- AMS Food Bank
- Community Eats
- FOOOD Cafe
- Agora Cafe
- UBC Sprouts/ Seedlings
- Sprouts Bulk Buying Club
- UBC Farmers' Market
- LFS Wednesday Night Dinner
- Hillel Hot Lunch

- UBC Meal Share Service
- Prefer Not to Answer
- I have not used any of these resources
- Other \_\_\_\_\_
- Never

How often have you used food resources on campus **before** COVID? (number of times per week)

	Never Used	Less than once a week	1-2 times a week	3-4 times a week	More than 5 times a week	Prefer Not to Answer
AMS Food Bank	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Eats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FOOOD Cafe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agora Cafe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UBC Sprouts/Seedlings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sprouts Bulk Buying Club	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UBC Farmer's Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LFS Wednesday Night Dinner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hillel Hot Lunch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

UBC Meal Share Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often have you used food resources on campus **during** COVID? (number of times per week)

	Never Used	Less than once a week	1-2 times a week	3-4 times a week	More than 5 times a week	Prefer Not to Answer
AMS Food Bank	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Eats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FOOOD Cafe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agora Cafe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UBC Sprouts/Seedlings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sprouts Bulk Buying Club	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UBC Farmer's Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LFS Wednesday Night Dinner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hillel Hot Lunch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

UBC Meal Share Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What do you believe UBC does to support those who are food insecure?

---



---

If you have used any of these food resources, would you change anything about them? Please explain your answer.

---



---

The following 5 questions will ask you to describe your perceptions on food access.

How would you define "JUST" food access? (if you can, provide examples about what you envision a just food system at UBC)

---



---



---

How would you define "EQUITABLE" food access? (if you can, provide examples about what you envision a equitable food system at UBC)

---



---

How would you define "DIGNIFIED" food access? (if you can, provide examples about what you envision a dignified food system at UBC)

---



---

Do you believe UBC provides "just, equitable and dignified" food access? Please briefly explain your answer.

---



---

How can UBC improve to meet YOUR definitions of "just, equitable and dignified" food access?

---



---

The following 5 questions ask you about your food situation in the last 12 months.

"The food that (I/we) bought just didn't last, and (I/we) didn't have money to get more."

Was that often, sometimes, or never true for (you/your household) in the last 12 months?

- Often
- Sometimes
- Never true
- Prefer not to answer

“(I/we) couldn’t afford to eat nutritionally balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

\*Note: according to the Canadian Food Guide, a balanced meal consists of having a variety of fruits and vegetables, eating protein foods, choosing whole grain foods, and making water your drink of choice.

- Often
- Sometimes
- Never true
- Prefer not to answer

In the last 12 months, how often did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- Not sure
- Never True
- Prefer not to answer

In the last 12 months, how often were you hungry but didn't eat because there wasn't enough money for food?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- Not sure
- Never
- Prefer not to answer

In the last 12 months, how often did you eat less than you felt you should because there wasn't enough money for food?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- Not sure
- Never
- Prefer not to answer

---

This last section will ask you about your demographics.

What faculty are you in? (can type "Prefer not to answer" if needed)

---

What is your age

- under 18
- 18 - 21
- 22-25
- 25+
- Prefer not to answer

What is your gender?

- Male
- Female
- Non-binary / third gender
- Trans man
- Trans woman
- Intersex
- Gender fluid
- Prefer to self-describe \_\_\_\_\_
- Prefer not to answer

Which of the following best describes your current living condition?

- Living alone on campus
- Living with roommate(s) on campus
- Living alone off campus
- Living with roommate(s) off campus
- Living with family members
- Temporarily living with a family member/friend
- Living in a shelter/homeless
- Temporarily living in a shelter/homeless
- Living in a vehicle
- Other \_\_\_\_\_
- Prefer not to answer

Which of the following communities are you a part of?

- First Generation University Student
- LGBTQ+
- Black Community
- Indigenous
- People of Color \_\_\_\_\_
- International Student
- Domestic Student
- Exchange Student (from where) \_\_\_\_\_
- Diversabilities (mental and/or physical) \_\_\_\_\_
- Other \_\_\_\_\_
- Prefer not to answer

Please select your level of education:



- Undergraduate
- Graduate
- Recent Graduate
- Prefer not to answer

Thank you for participating in our survey! There are three additional questions regarding focus groups.

**If this does not interest you, please proceed to finish this survey- there, you can have the option to enter to win 1 of 3 \$25 gift cards to UBC food services or select grocery stores**

Confidentiality Note: We will ensure that the responses to the survey questions are safely stored on one of the members computers.

Disclaimer: You do not need to answer any of these questions, however it is an anonymous survey and it is important for us to know demographics. By providing your email you are not breaking that anonymity and your email will not be linked to any results. If you are not comfortable with providing an email linked to the survey you can contact us at (ellagerlach3@gmail.com.)

If you have anything else you would like to share please write it in the following textbox.

\_\_\_\_\_

\_\_\_\_\_

If you are interested in participating in a focus group (30-45 minute group interview, week of March 22) please provide us with your contact information in the following text box.

We will be giving away 2 x \$25 gift cards to select grocery stores for those participating in focus groups.

**NOTE: IF YOU PUT YOUR NAME AND EMAIL DOWN, THIS MEANS YOU WANT TO PARTICIPATE IN THE FOCUS GROUPS**

Our group will reach out after **March 17th** with more information regarding focus groups if you choose to participate.

**This will not impair the anonymity of the survey. If you do not want your email linked to the survey you can contact us at (ellagerlach3@gmail.com)**

- Preferred name \_\_\_\_\_
- Email \_\_\_\_\_

**APPENDIX B: OPTIONAL GIFT CARD ENTRY ONLINE SURVEY QUESTION**

If you are interested in being entered in a chance to win 1 of 3 \$25 gift cards to UBC food services or select grocery stores, please add your email.

## APPENDIX C: FOCUS GROUP/ INFORMAL INTERVIEW SCRIPT

**Introduction - Nadia**

N: Hello, my name is Nadia and I will be leading this focus group today.

**Team Introductions**

- **Nadia - faculty, year, major/what you're studying, favorite fruit, sheep emotion,**
- **Courtney - " "**
- **Chiron - " "**
- **Ella - " "**

If you're comfortable could you share your year, what you are studying, favorite food/fruit, and what sheep you feel like today?

You don't have to answer every question, but the more you participate the more information we will have. We're not looking for specific answers. We just want to hear your own thoughts and opinions on these topics so there is no right or wrong answer. We want to emphasize that this focus group is supposed to be fun and informative to support the Food Initiative Program and to help better support you as UBC students

We want to make you feel as comfortable as possible and if you have any concerns, please speak up or send a direct message to Chiron.

Icebreaker: (Show pictures of sheep mood board (Wan, 2020)) and what sheep you are feeling like today and why.

"We would like to give you another reminder, as mentioned in the consent form, that the responses and discussion will be voice recorded and team members will be taking notes throughout the discussion."

These questions don't have any right answers. We want to know your opinions on the matter.

1. In your own words, describe what food security means or looks like to you?
  - What kinds of foods would an individual have if they were food secure?
  - How does quality/quantity of food impact food security?
2. How/What does just food access mean to you? (lead to a group definition)
  - Beyond physical and economic access to food are there any other factors that come into play when we think about just food?
  - How does cultural access to food play into food resources at UBC?
3. How/What does equitable food access mean to you? (lead to a group definition)
  - How/why would everyone have equal access to food resources?
  - When would it be necessary for someone to get extra help from food resources and how can we see this on campus?
4. How/What does dignified food access mean to you? (lead to a group definition)
  - How does cultural food relate to food resources on campus?
  - How can we alleviate the stigma if people are afraid to use food resources?
5. In relation to the groups definition above, how would just, equitable and dignified food access look like on campus?
  - What changes would you like to see on campus to achieve just, equitable, and dignified food access on campus?
6. Is there anything else you would like to discuss in more detail or discuss in general?

## APPENDIX D: LIST OF CONTACTS

Contact Person Name	Organization	Group Member Affiliation	Email/ Method of Contact	Contacted	Helped Distribute Survey
Candice Rideout	UBC	Ella	candice.rideout@ubc.ca	x	x
Roxana Quinde	GRS	Ella	roxana.quinde@ubc.ca	x	x
Cole Evans	AMS	Courtney	president@ams.ubc.ca	x	Unable to help
Zahra Fazal	First Generation Student Union (FGSU)	Courtney	ubc.fgsu@gmail.com	x	x
Dr. Shelly Reid	UBC	Courtney	CLST.301@ubc.ca	x	x
Mark	Sprouts Club	Chiron/Ella	Facebook	x	x
Ali Nakajima Inglis	Sprouts Club	Chiron/Ella	communityeats@ubcsprouts.ca	x	x
Jamie	Pride Collective	Chiron	prideubc@gmail.com	x	x
Stefan	Personal Connection			x	x
Alex	Improve Club	Chiron	Facebook	x	
	LFS US	Courtney	Slack	x	x
Mahy	ADG Sorority	Ella	Facebook	x	No response
Ashwini	One for the World UBC	Ella	Instagram	x	No response
	Graduate Studies	Courtney	info@gss.ubc.ca	x	x
Parisa Kabir	Meal Exchange	Ella	parisakabir0519@gmail.com	x	x
	UBC Climate Hub	Ella	climate.hub@ubc.ca	x	No response
	Residence Hall Association (RHA)	Ella	rha@mail.housing.ubc.ca	x	No response
	SDG Alliance	Ella	usi.office@ubc.ca	x	No response
Cali Snarr	AMS Food Bank	Multiple people	FOODBANK@AMS.UBC.CA	x	No response
	Centre for Accessibility	Ella	info.accessibility@ubc.ca	x	No response
	Graduate Student Society	Ella	Facebook/email	x	No response
Tamasha Hussein	Exchange Residence Facebook Admin	Ella	Facebook	x	x
Kelleen Wiseman	FRE 302 Professor	Ella	Class Piazza	x	x
Sara Kozicky Contact List					
Contact Person Name	Organization	Email		Contacted	Helped Distribute Survey
Adam Dobrer	Jewish Students Association, Hillel House, Israeli Student Club	adobrer99@gmail.com		x	

Figure 4: List of contacts used to promote participation of Qualtrics survey

APPENDIX E: RECRUITMENT MATERIAL



**Figure 5:** Recruitment piece used for electronic announcements and social media