

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program  
Student Research Report

**Healthy Beverage Initiative**

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## Executive Summary

The University of British Columbia (UBC) aimed to explore opportunity for a Healthy Beverage Initiative (HBI) to promote tap water consumption and limit the sales of sugar-sweetened beverages (SSBs) (Parr and Toor 2). SSBs are defined as any drink that has various forms of sugar added in, including, but not limited to sodas, fruit drinks, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars (Centers for Disease Control and Prevention n.p.). The hope was that implementing a HBI at UBC would create a more sustainable and supportive environment to make informed decisions around beverage consumption on campus. The University of California San Francisco (UCSF) implemented a HBI where they eliminated all sales of SSBs and created a video to promote their HBI (“UCSF Healthy Beverage Initiative”). Our research goal was to obtain student feedback from a minimum of 50 UBC students by watching the HBI promotional video conducted by the UCSF.

Our first objective was to identify student attitudes and perceptions towards the UCSF HBI video. Our second objective was to develop recommendations to inform the implementation of a HBI at UBC. To meet our project objectives, we conducted a literature review to address specific issues related to a HBI. We also used secondary data sources to better understand planned or implemented strategies to reduce consumption of unhealthy beverages and/or increase consumption of healthy beverages. Lastly, we conducted randomized interviews at the following 10 locations on campus: AMS Student Nest, Agora Café, Henry Angus Building, Forest Sciences Centre, Buchanan B, Wayne and William White Engineering Design Centre, Neville Scarfe Building, Place Vanier Residence Commonsblock, Acadia Park Residence Commons block and UBC Life Building. Our interviews were 10 minutes in length and we had an interview success rate of 52.08%. Thus, we conducted 50 interviews with undergraduate and graduate UBC students of various programs and year levels. Following their written consent, we recorded qualitative data on their perspectives, reactions and opinions on both the UCSF HBI and video in an Excel spreadsheet. Each participant was entered to win one of two \$25 UBC Bookstore gift cards provided they gave their email. We did our interview data analysis manually and used the results of that and our literature review to inform our recommendations.

74% of the participants found the UCSF video format an effective way to spread the awareness of the health effects of SSBs and were influenced to reflect on their own consumption habits. They liked the clarity, length, statistics/facts, animations/visual appeal of the video and 32% reported wanting to change their consumption habits after watching it. Also, 56% of UBC students said they liked UCSF replacing SSBs with healthier beverage options and 62% of all participants said they would support a HBI at UBC. Therefore, we suggest using a video for UBC’s HBI, but making the following changes: adding subtitles, changing the information context for Canada and UBC, and involving media experts in its creation. In addition to the video, we suggest adding other formats to more efficiently and effectively educate students on the HBI. Finally, involving community members in the implementation process and partnering with UBC Building Operations and Sustainable Engineering to install filtered water fountains would best support a HBI at UBC.

## **Introduction**

The healthy beverage initiative (HBI) video produced by the University of California San Francisco (UCSF) mentioned high intakes of sugar in sugar-sweetened beverages (SSBs) is a worldwide concern (UCSF Healthy Beverage Initiative n.p.). According to Centers for Disease Control and Prevention, SSBs include any liquids sweetened “with added sugars of various forms such as brown sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high-fructose corn syrup, honey, lactose, malt syrup, maltose, molasses, raw sugar, and sucrose” (n.p.). Examples of SSBs include regular sodas, fruit drinks, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars (Centers for Disease Control n.p.). Excess SSBs consumption increases the risk of obesity and diseases (National Academies of Sciences, Engineering, and Medicine 1) and is negatively associated with the intake of important micronutrients (Euna and Powell 43). Also, since excess consumption of SSBs can lead to dental caries, type 2 diabetes, and cardiovascular disease, the National Academies of Sciences, Engineering, and Medicine suggested that one method to decrease SSBs consumption is to promote water consumption (2). The University of British Columbia (UBC) can encourage healthier beverage decisions among students by providing an environment that can help guide them towards healthier habits for life. Young adults are impressionable and UBC is a community in which many students are learning to live on their own for the first time (Parr and Toor 2). Therefore, UBC aims to carry out a HBI that limits the sales of SSBs and promotes both tap water consumption and sociocultural, environmental and economic sustainability.

Firstly, the sociocultural sustainability benefits of a HBI at UBC align with the goals of the 2017 UBC Action Framework for a Nutritionally Sound Campus in working towards becoming a health promoting university (UBC Wellbeing 4). A HBI at UBC follows the action plan by

making healthier choices available in food outlets, at events, and in vending machines across campus, thereby improving the short and long-term health and well-being of the community (UBC Wellbeing 4). Secondly, by promoting tap water over the use of plastic bottles, UBC can lower their plastic bottle usage, reducing environmental waste and greenhouse gas emissions for an environmentally sustainable campus (UBC Wellbeing 7). Thirdly, UBC is in a high-cost community, which has contributed to food insecurity for some members (UBC Wellbeing 8). In just the Faculty of Land and Food Systems at UBC alone, just over half (55%) of students are food secure, with the rest experiencing varying levels of food insecurity, ranging from mildly insecure to severely insecure (James and Rideout 4). Thus, it is important to have healthy and affordable options available to promote a diet able to fuel UBC's academic and professional demands. The economic sustainability of UBC campus is also important. After removing SSBs, campus food and beverage establishment sales at UCSF fully recovered just two years after implementing their HBI (Parr and Toor 7). Lastly, a HBI at UBC could create opportunities for grants related to health promotion from the government, health authorities, or foundations, as well as research/campus living lab opportunities (Parr and Toor 2). This positive exposure of UBC as a sustainable and health-promoting campus and could have massive impacts regionally, provincially, nationally and internationally.

UBC can lead as an example of a successful health-promoting and sustainable campus for other campuses and institutions at the regional, provincial, national and international levels (Parr and Toor 2). Regionally, the HBI directly affects UBC community members as the UBC campus will no longer sell SSBs and instead promote the consumption of healthier beverage options. In Canada, high intakes of SSBs is a large dietary contributor to an increased rate of obesity and chronic disease (Vanderlee et al. 168). The Ministry of Education has found SSBs to play a role

in this major public health concern (5). The HBI video produced by UCSF emphasized reducing SSBs as a way to mitigate the impact of excess sugar consumption (UCSF Healthy Beverage Initiative n.p.).

Our research goal was to obtain student feedback from a minimum of 50 UBC students by watching the HBI promotional video conducted by UCSF. Our first project objective was to identify student attitudes and perceptions towards a HBI video produced by UCSF (“UCSF Healthy Beverage Initiative”) and SSBs in general. Our second project objective was to develop recommendations to inform a HBI for UBC.

## **Methodology and Methods**

### *Research Methodology*

We implemented a Community-Based Action Research Methodology by conducting interviews for feedback from community members on UBC Vancouver Campus. Community-Based Action Research seeks to change issues that are critical to a community by focusing on engaging community members and having the participants, researchers, and all other representative equally involved and voiced (Burns et al. 5). To implement Community-Based Action Research, we aimed to include all UBC student participants interviewed and equally considered each of their opinions. We were responsible for addressing the concerns of any participants, researchers, and representatives and worked to come up with the best possible solutions that would benefit as many people involved as possible. Also, we consulted our community partners Student Housing and Hospitality Services (SHHS), UBC Wellbeing Office and SEEDS Sustainability Program throughout our research.

*Research Methods***Secondary Data Collection Research Methods***Literature Review*

We each conducted a literature review to address a specific issue related to healthy beverage initiatives. We did this by searching keywords in the online UBC library database. One member researched tap water safety and used keywords such as “tap water”, “safety” and “tap water consumption” to search for peer-reviewed articles. Another did research on the prevalence of excess sugar consumption and obesity rates by searching keywords such as “health”, “obesity” and “sugar consumption”. Lastly, our third group member looked into habit development and behavior of students by searching keywords “children”, “students”, “sugar consumption”, “school” and “habit forming”. Literature was selected on its relevance to our community context and healthy beverage initiatives in general.

*Other Secondary Data Source*

In addition, our literature review, we used the HBI video that UCSF produced, as well as the UCSF HBI website and UBC HBI proposal provided to us, to review and gain a better understanding of the HBI. Accessing and watching the UCSF HBI video allowed us to develop relevant interview questions and notes on any missing or important information that was crucial for the participant to understand. Knowing the video well also provided us with enough context to understand the specific parts of the video the participants referred to and provide more specific answers when we received questions regarding the video. Also, the Healthy Beverage Initiative page on the UCSF website provided information that the video did not mention. This supplemented our understanding of the UCSF HBI and was helpful when we answered questions from participants that were beyond the scope of the video (UCSF Campus Life Services n.p.).



Finally, reading and understanding the proposal for the UBC HBI helped us compare it to the UCSF HBI.

## **Primary Data Collection Research Methods**

### *Primary Data*

We collected our primary data by conducting 50 face-to-face interviews of 10 minutes in length. We reduced our interview goal to 50 from 100 due to our time constraints. Additionally, we had response rate of 52.08% and conducted approximately 3 interviews per hour. Eligible participants were any undergraduate or graduate students currently enrolled at UBC Vancouver Campus since our research objectives required us to garner the opinion of UBC students specifically. We developed a list of 16 interview questions (Appendix A) and each question was designed to give insight on the participants' views of either the UCSF HBI video or UCSF HBI and to make finding themes easier. Prior to administering our interviews, we tested the interview on our family and friends and made wording adjustments based on their feedback.

### *Methods of Administration*

We administered our interviews through random sampling. Individually, we approached every 5<sup>th</sup> person who walked through the entrance doors closest to each of the following locations: Honour Roll in AMS Student Nest, Agora Café in MacMillan Building, gift shop in Henry Angus Building, Tim Hortons in Forest Sciences Centre, cafeteria lounge in Buchanan B, Starbucks in Wayne and William White Engineering Building, library in Neville Scarfe Building, cafeteria in Place Vanier Residence Commonsblock, gym in Acadia Park Residence Commonsblock, and Starbucks in UBC Life Building (Appendix B). We picked these locations based on how busy they were and their likelihood to provide a varied student sample. We also

interviewed during the mornings, afternoons and evenings of at least one Monday, Tuesday, Wednesday, Thursday, Saturday and Sunday between March 7th and March 21st to provide a random sample (Appendix C). We approached every person following an interview script (Appendix D) and asked them to sign a consent form if they agreed to participate in our interview (Appendix E). We also asked the participants to put their email on the consent form if they wanted to be entered in a raffle draw for one of two \$25 UBC Bookstore gift cards provided by SEEDS at the end of our research. The point of including the raffle in the interview process was to provide an incentive for them participating in our research.

After they signed the consent form, we asked a series of demographic questions to better understand them as a student at UBC. Then we asked them to watch the UCSF HBI video and asked questions about their thoughts and opinions of both the UCSF HBI video and UCSF HBI the video talked about. We also asked about their opinions on a HBI at UBC based on the information from the UCSF HBI video. There was an opportunity at the end of the interview for participants to make additional comments not embodied by our previous questions. Throughout the interview, we projected ourselves as friendly and non judgemental. Notes on the body language and/or other observations of the participant were sometimes made throughout the interview to provide additional context. Lastly, all raw data was recorded on an Excel spreadsheet on our personal computers (Appendix F). We did not record any distinguishing information that would affect the confidentiality of our participants and avoided using Google Drive or any other online methods to record data due to privacy and storage issues.

Following the interview, we manually analyzed our data by combining our Excel data on one computer and coded/themed them based on participant demographic, UCSF HBI video opinions, UCSF HBI opinions, and UBC HBI opinions. We used the preliminary questions

regarding participants' backgrounds to determine our participant demographic and used our literature review to inform important areas to analyze.

We chose face-to-face interviews as our method of gathering feedback so we as interviewers could record any other observations or notes beyond the questions themselves, or that would be difficult to get electronically. Doing so guaranteed that the participants were able to ask any immediate questions or areas they needed clarification on and allowed us to ask them to elaborate on their responses. The ability to ask follow-up questions enhanced our responses. Furthermore, the ability to visually see reactions to the video provided us with an opportunity to record body language for a better context of student opinions.

## **Results**

### *Literature Review*

We found literary support to show that excess sugar consumption has negative health effects such as dental caries (Marshall 57) and type 2 diabetes (Hidayat, Khairunnis and Madanijah 441). In addition, there is evidence that overweight and obesity rates are rising worldwide - especially among youth (Raine 3). These rising rates relate to excess calorie consumption from sugars, wherein SSBs are a common source (Dietitians of Canada 3). The National Academies of Sciences, Engineering, and Medicine suggests that reducing or eliminating SSBs consumption by replacing them with water can result in a reduced risk of diseases later in life (2). Also, community members will be more motivated to adopt water consumption if there are safe water sources located on campus (Centers for Disease Control and Prevention n.p.).

## Interviews

### Description of Demographic

Based on interview results, a diverse demographic of respondents was obtained. Success rates of number people interviewed compared to number people approached at different locations ranged from 26.67% at Acadia to 75% at UBC Life Building, with an overall interview success rate of 52.08% (Appendix G).

The first years represented 24% of our sample (see fig. 1), with 42% of them being international and 58% being domestic (Appendix H). Only one participant was a graduate student, with the remaining 49 students being undergraduate students.

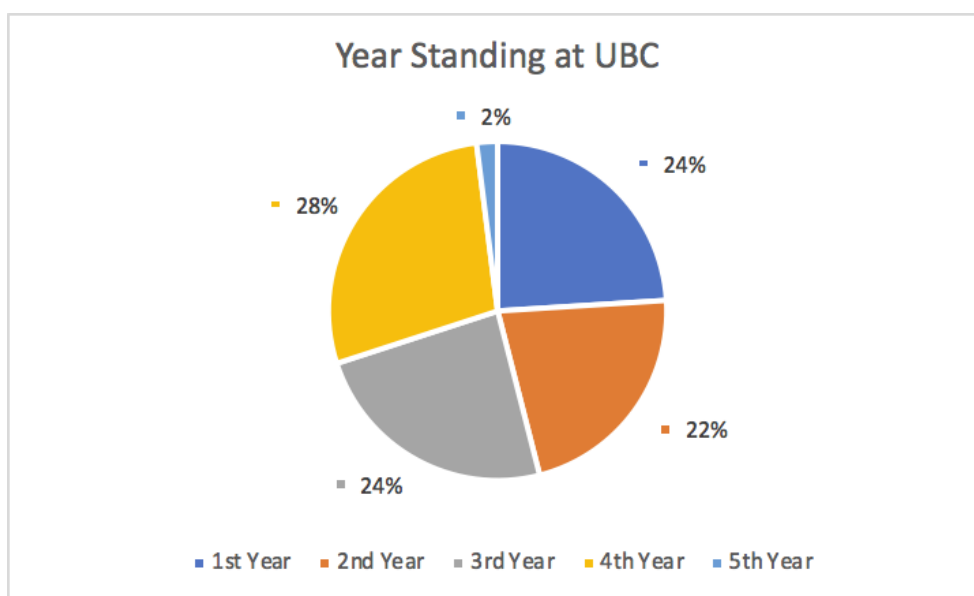


Fig. 1. Distribution of students' year standing at UBC.

Most participants represented the Faculties of Arts or Science at 28% and 24% respectively, while a smaller number of students came from Sauder School of Business, Land and Food Systems, and Applied Science (see fig. 2). Forestry and Kinesiology were most underrepresented at only 2% compared to the other faculties.

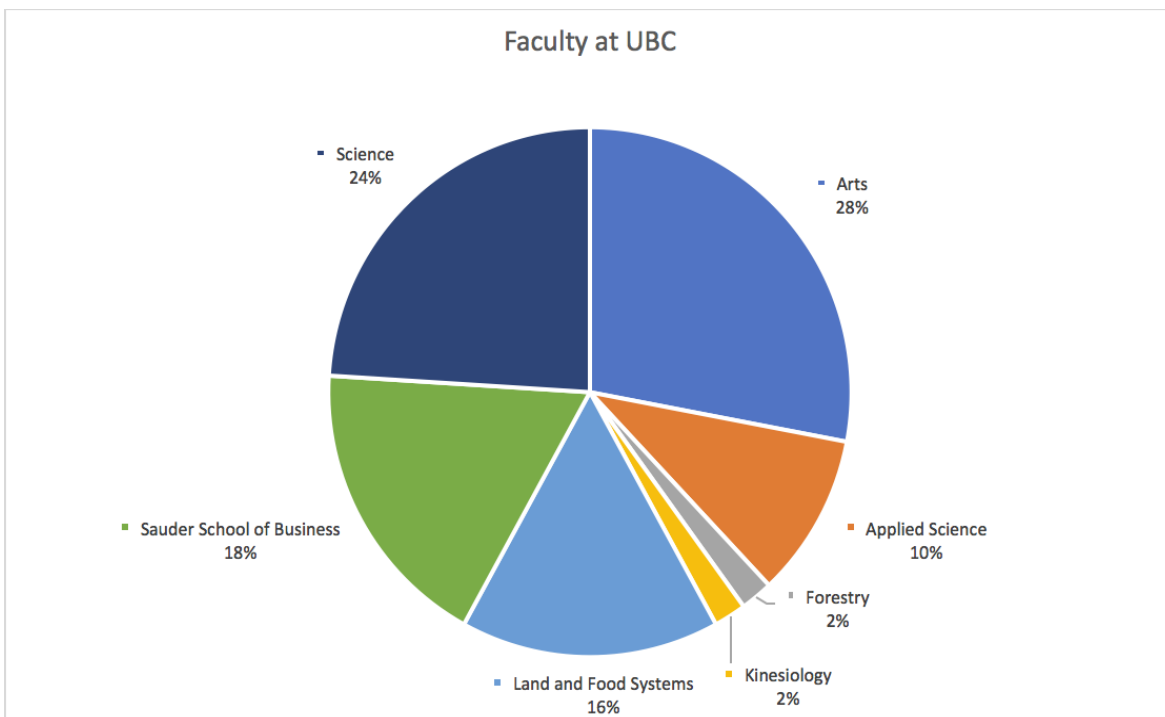


Fig. 2. The proportion of students from various faculties at UBC.

A wide range of programs were mentioned by participants within the Faculty of Arts, Applied Science, Forestry, Kinesiology, Land and Food Systems, Sauder School of Business, and Science (Appendix H).

Our UBC student sample was 34% international and 66% domestic (see figure 3). Furthermore, 24% of all participants had a preferred language other than English (see fig. 4). The other languages mentioned as preferred were Mandarin, Cantonese, and Japanese.

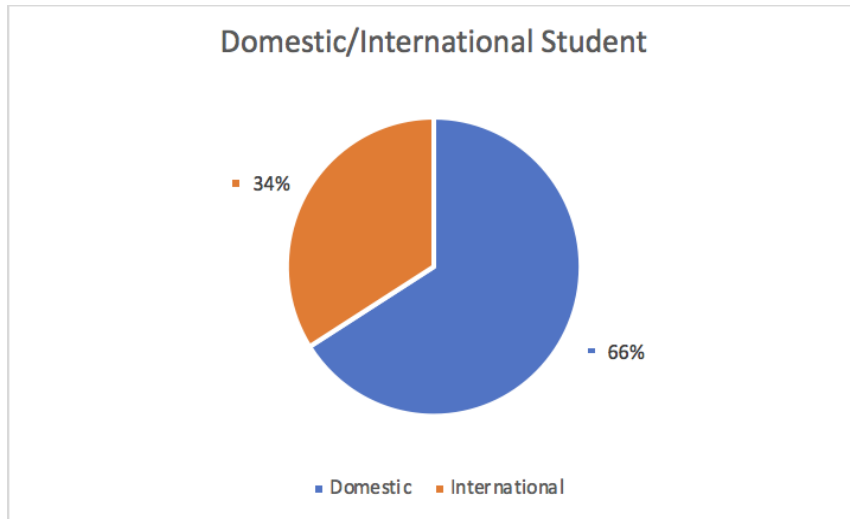


Fig. 3. Proportion of domestic students interviewed compared to international students.

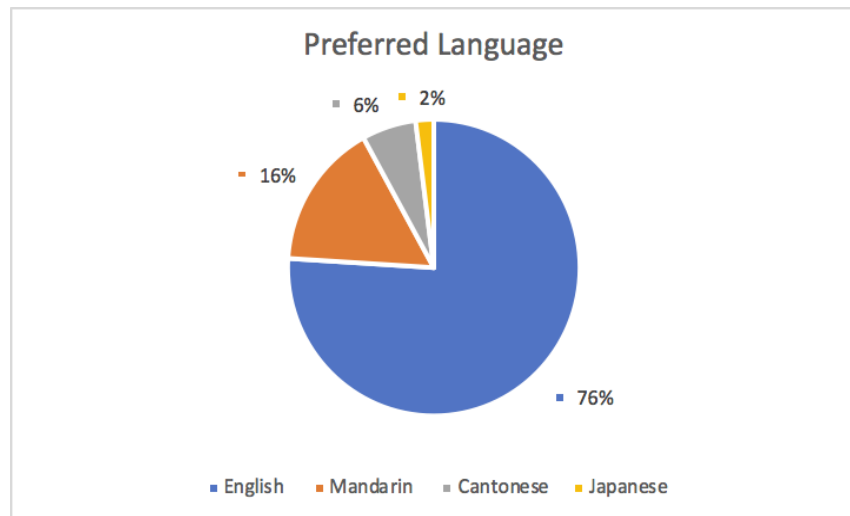


Fig. 4. The proportion of reported preferred languages.

### Questions Regarding UCSF HBI Video

“Good” was the word most often used in response to interview question 8 (Appendix A) with the smallest fonts representing the least often mentioned words (see fig. 5).



Fig. 5. A word cloud of the initial thoughts of participants after watching the UCSF HBI video. The size of the word is representative of the number of times it was mentioned in the answer, where the larger words were mentioned more.

We found that 11 participants thought the UCSF HBI video had a clear message, 7 participants said the video was a good length, 19 participants said they enjoyed the statistics and facts provided, and 19 participants enjoyed the animations and visual appeal of the video (see fig. 6).

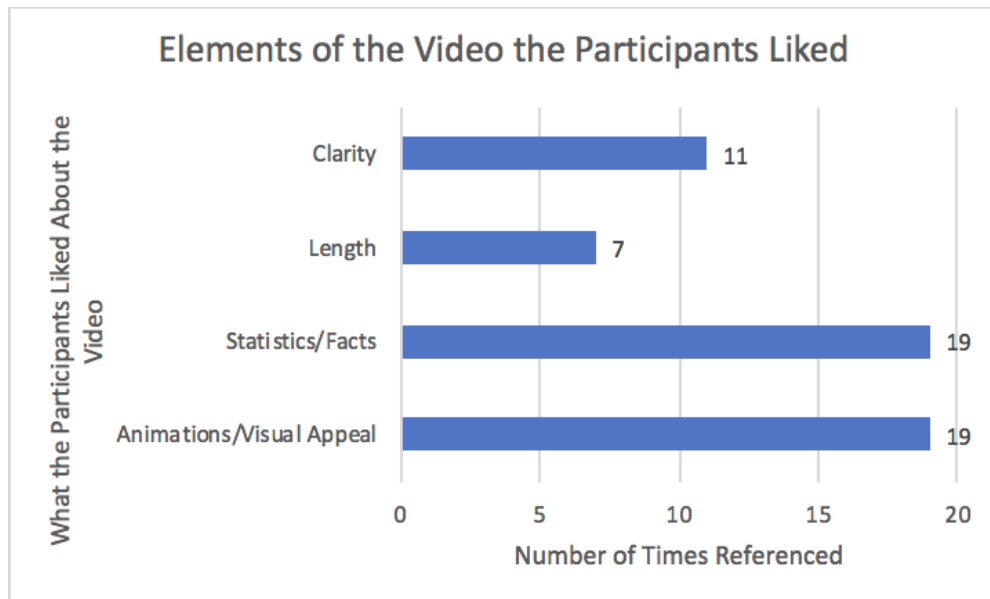


Fig. 6. The parts of the video participants liked and the amount of times each element they liked was mentioned overall.

Only 17 of the 50 participants found areas of the HBI video they disliked (see fig. 7). The areas of dislike included the information provided, length and pacing, video “feel”, context, or other.

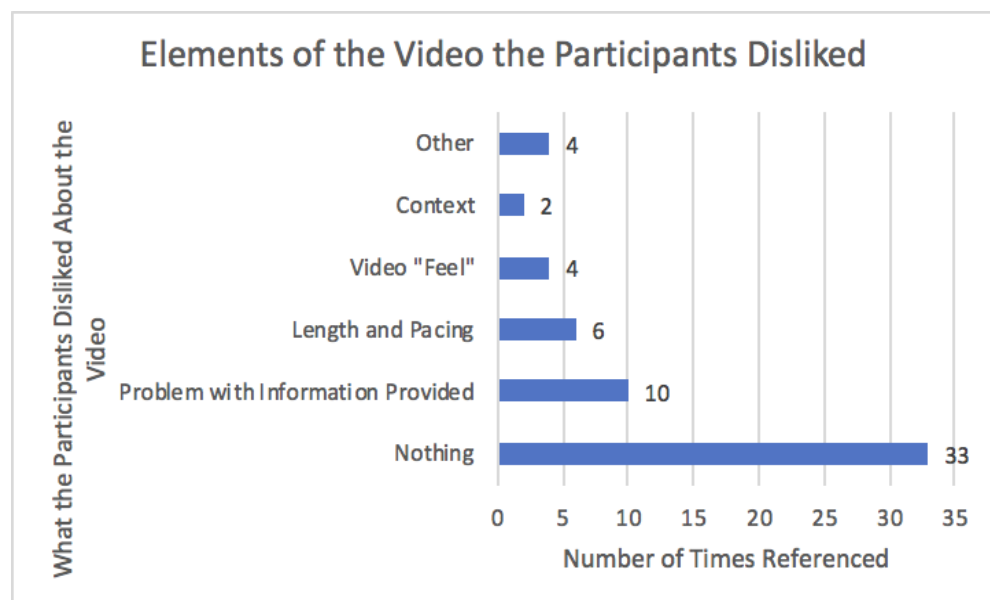


Fig. 7. The parts of the video participants disliked and the amount of times each element they disliked was mentioned overall.



We looked at the effectiveness of the video format as a way to influence thought on consumption habits, a change in consumption habits, and also the ability to spread awareness of the health effects of SSBs. 74% of participants said the video made them reflect on their own consumption habits (Appendix H). Of the 26% who said the video didn't make them reflect on their own consumption habits, 92% said it was because they already knew the health effects of SSBs consumption and 8% said they liked SSBs too much to care. 60% of participants would not change their consumption habits after watching the video (Appendix H). Of these people, 40% said it's because they already don't consume SSBs, 13.3% said the video wasn't enough to change their consumption habits, and the remaining participants didn't expand on why. 74% of the participants found the video format an effective format to spread the awareness of the health effects of SSBs. 18% found that a video format is only partially effective, and 8% of the participants said a video format is not an effective format to spread awareness of health effects of SSBs (see fig. 8).

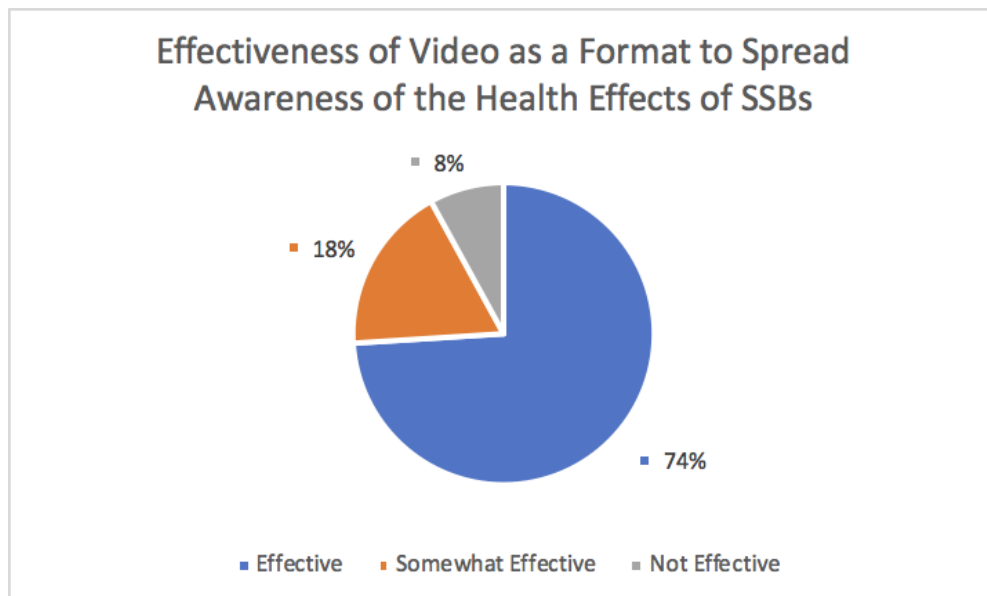


Fig. 8. The effectiveness of the UCSF HBI video as a format to spread awareness of the health effects of SSBs.

Several suggestions were made by participants to improve on the video format exemplified by UCSF HBI video. Other formats were also suggested to be used complementary to a video format (see table 1).

Table 1

Suggestions for video and other formats to promote a HBI at UBC.

Format	Suggestions
Video	<ul style="list-style-type: none"> <li>- More text to accompany visuals</li> <li>- Add subtitles</li> <li>- More clarity and conciseness of main points</li> <li>- More graphs</li> <li>- More facts contextualized to students in Canada (better yet, UBC students)</li> <li>- Include data from other countries</li> <li>- Real-life examples on a more individualized level in addition to federal level statistics (such as case studies)</li> <li>- More sound effects</li> <li>- List different kinds of sugars</li> <li>- More positive outlook (promoting healthy beverages instead of villainizing sugar and SSBs)</li> <li>- Use celebrities</li> <li>- Make it more entertaining so people don't zone out</li> </ul>
Face-To-Face Interactions	<ul style="list-style-type: none"> <li>- In-class presentations</li> <li>- Give leaflets/handouts to students</li> <li>- Events/workshops</li> </ul>
Posters/Infographics	<ul style="list-style-type: none"> <li>- Supplementing video with all the information in visual format (so people can refer to it and process the information at their own pace)</li> </ul>
Social Media Advertisements	<ul style="list-style-type: none"> <li>- PSAs</li> <li>- Advertisements on campus (such as frat parties) and social media (such as Facebook)</li> <li>- Memes as a humorous way to share health effects of SSBs</li> <li>- Compare with other schools in BC</li> </ul>

### Questions Regarding UCSF HBI

28/50 (56%) of UBC students said they liked UCSF replacing SSBs with healthier beverage options, whereas 3/50 (6%) disliked this idea, 17/50 (34%) had speculations, and 2/50 (4%) didn't know how they felt about it (see fig. 9). Of the people who had speculations, 10/17 (59%) still mentioned they liked the idea.

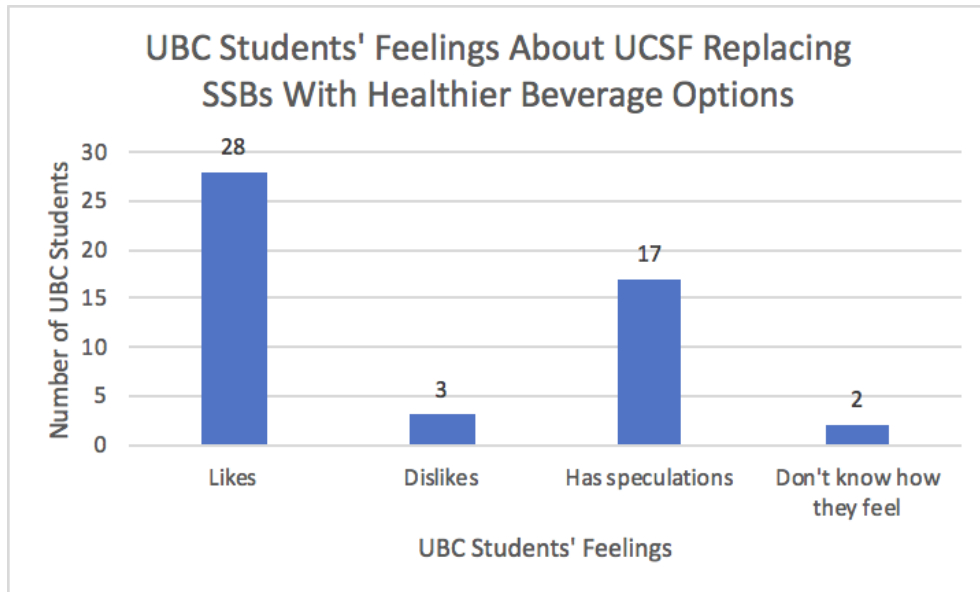


Fig. 9. The categorized responses of UBC students regarding their feelings on UCSF replacing SSBs with healthier beverage options.

### Questions Regarding a HBI at UBC

62% of all participants said they would support a HBI at UBC, 18% of all participants would partially support a HBI at UBC, and 20% of all participants would not support a HBI at UBC (see fig. 10). Of the people that said they would support a HBI at UBC, 77.4% were not LFS students and 22.6% were LFS students.

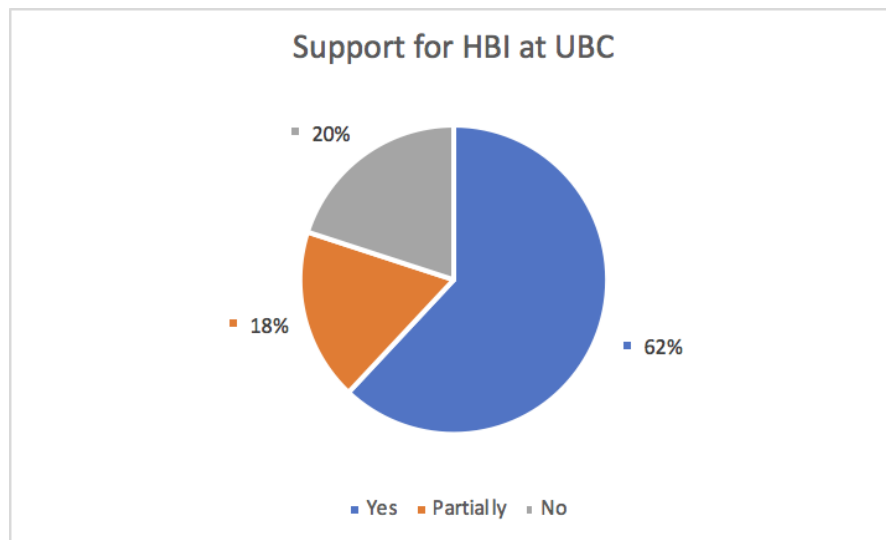


Fig. 10. Proportion of students who would either support, partially support, or not support a HBI at UBC.

Of the 30% of people that do consume SSBs, 54.29% of students would support a HBI at UBC, 21.71% would partially support it and 24% would not support it (see fig. 11). Also, of the 70% of people who did not mention they don't consume SSBs, 80% would support a HBI at UBC where 20% would not. 92% of the first years consume SSBs and of these first years, 64% would support a HBI at UBC (Appendix H).

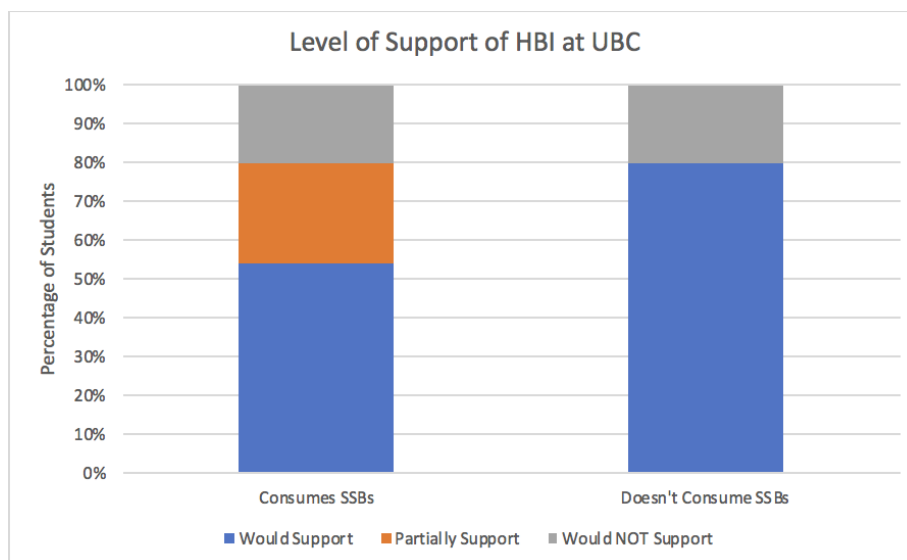


Fig. 11. The relationship between level of support of HBI at UBC and consumption of SSBs.

## Discussion

### *Interpretation of Demographic*

We attribute the variety of demographic to our random sampling at multiple locations on campus. Firstly, there was a fairly balanced proportion of students representing each year standing from 1st and 4th year standing (see fig. 3). The one anomaly was an undergraduate student claiming 5th year standing at UBC. The interview question of “What year standing are you at UBC?” likely caused confusion among the participant since a student could spend more years at UBC than their year standing. Regardless, our balanced proportions of 22%-28% in 2nd and 4th year standing respectively were helpful in providing balanced feedback from students with varying time remaining at UBC. We looked more deeply into the opinions of students with

1st year standing as they were most eager to be interviewed, have the most time remaining at UBC, and have likely the least amount of campus familiarity. Of our 1st year standing sample, we had a nearly halved proportion of international and domestic students (Appendix H). This was favorable in our hope to have as much of an international and domestic student representation as possible.

We looked into the proportion of all domestic to international students we interviewed and compared it to the overall proportion of domestic to international students at UBC Vancouver. The proportion of international students that we interviewed was 34% (see fig. 3) compared to the approximately 19% at UBC's Vancouver campus in 2016/17 (Mathieson and Redish 7). The high international student representation likely related to the preferred languages of our participants (see fig. 4).

Lastly, we looked into the faculties and programs of our participants. We found the percentage of participants in each faculty was closely representative of the actual size of the faculty on campus. For example, science and arts are two of the largest faculties on campus, and made up 24% and 28% of our sample respectively (Appendix H). We also had students from 23 different programs (Appendix H) in addition to the 12 undeclared first year students. Although this is not representative of all programs on campus, we found this to be a high variety of student representation for the sample size.

### *Opinions of UCSF HBI Video*

#### **Likes of UCSF HBI Video**

Many participants found the video “interesting” and “clear”, and were left having made the connection that “intake” of “SSBs” was “bad” (see fig. 5). A noticeable amount of participants also mentioned they “already” knew the risks of excess sugar consumption through

SSBs intake. Several mentioned they already “don’t” consume SSBs after being exposed to the risks prior to having watched the video. Additionally, a liking to the animations/visual appeal was mentioned 19 times by participants (see fig. 6). They liked how colourful the animations were, the visual representations of the quantities of sugar the video spoke to, and the diverse cultural representation. A liking to the statistics and facts provided was also mentioned 19 times by participants. The facts on sugar and SSBs consumption, the impact of excess sugar consumption on health, body composition, and disease, were all elements that participants remembered after having watched the video. 11 participants also found the video had a clear message and was easy to listen to and stay engaged in watching. Lastly, 7 participants found the length appropriate to express the UCSF HBI context and initiative. However, some of the same elements that participants liked about the video, others disliked.

### **Dislikes of UCSF HBI Video**

17 participants (34%) disliked certain elements of the UCSF HBI video compared to 33 participants (66%) that expressed zero dislikes. The dislikes in descending order of frequency were a problem with the information provided, length and pacing, video “feel”, other, and context (see fig. 7). Problems with the information provided meant there was either too much or too little information provided in the video, not enough statistics or graphs or not enough of an explanation on the research studies providing the facts. Problems with the length and pacing were contradictory to the likes of other participants. Some found the length and pacing of the video too long and slow, others too short and fast-paced. The video “feel” was alluded to as either boring, over-dramatic, scary, or musically distasteful. Other dislikes included an unclear message and lack of captions. Lastly, it was mentioned twice that the US context of the video reduced its relevance and validity to them as Canadian students.

### **Influence on Consumption Habits**

The video made 74% of participants reflect on their own consumption habits, but failed to influence the remaining 26% (Appendix H). The reasons the video didn't make them reflect on their own consumption habits were because 92% had already heard of the health effects of SSBs consumption the video talked about, and 8% said their love for consuming SSBs outweighed its health effects. Furthermore, 60% of participants wouldn't change their consumption habits despite the video influencing an extra 14% to reflect on them (Appendix H). Fortunately, 40% of the people who wouldn't change their consumption habits already don't consume SSBs. 13.3% said it was because the video itself wasn't enough to change their consumption habits. Therefore, changes would need to be made to the video itself, or the format in which the message is spread, for them to make a lifestyle change. Further emphasizing that excess sugar consumption has negative health effects could intensify their understanding of SSBs (Euna and Powell 43). The remaining participants didn't expand on why they wouldn't change their consumption habits - expressing that they simply just felt that way. Understanding how effective the video format was as a way to spread the awareness of the health effects of SSBs was helpful in further understanding the ability of the UCSF's HBI video to influence consumption habits.

### **Effectiveness of Video Format**

Directly after watching the UCSF HBI video we asked the participants "Are there any points of the video you need clarification on?" to see how sufficient the video was in providing a clear message. The overwhelming response was "no", with 9 participants mentioning they needed clarification on the definitions of SSBs, healthy beverages or specifics of the initiative (Appendix F). In other words, the video was unclear in informing all participants with a clear

message. We then asked “What are your initial thoughts about this video?” This question was asked to garner immediate impressions of the video and a generalized interpretation of the video. The intention of asking this question early was to see the initial impact the video had on participants if used as a way to promote the HBI.

The video was an effective format to spread the awareness of the health effects of SSBs to 74% of the participants. The remaining 18% found it was only partially effective and 8% found it not at all effective (see fig. 8). Therefore, there were several suggestions from participants to both adapt the video format, or the format style entirely. The suggestions from the 26% who didn't find the video an effective format listed their video suggestions and also suggested face-to-face interactions, posters/infographics, and/or social media advertisements as alternative or additional format options (see table 1). These suggestions were used to guide our recommendations for a HBI at UBC.

### *Opinions of UCSF HBI*

Overall, over half of the participants (56%) liked how UCSF replaced SSBs with healthier beverage options (see fig 9). One claimed it was “a big step for universities...” and others noted it as an effective way to promote a healthier lifestyle in students (Appendix F). Some participants acknowledged it would be a reluctant adjustment, but good for the long-term health of students, thus liking the overall aim of the UCSF HBI.

On the other hand, 6% of students did not like UCSF replacing SSBs with healthier beverage options (see fig. 9). These students said they were pro-choice, expanding that having the opportunity to make the healthy choice themselves was better than the complete removal of SSBs. These people were both students who claimed they either regularly consumed SSBs or didn't often drink SSBs but still enjoyed the ability to “treat” themselves occasionally (Appendix



F). The low number of students that did not like the actions of the HBI at UCSF was worth mentioning as it showed that most students were not opposed to the idea of eliminating sales of sugar-sweetened beverages for the betterment of their health. However, there were some notable speculations on the UCSF HBI.

34% of the participants had speculations regarding the HBI at UCSF (see fig. 9). Several had concerns on how they themselves or other students would respond to the complete removal of beverages that students so frequently depend on. Some wondered why diet sodas would still be sold at outlets when they should be considered unhealthy. Others questioned the revenue of sales, brought up environmental concerns regarding plastic water bottles, and found it inapplicable to their geographical context insufficient. It is important to note these speculations were based on only having watched a two minute video regarding the UCSF HBI. Thus, such speculations could likely be resolved with further education on the UCSF HBI. Despite speculations, 58% of these participants still mentioned that they liked the idea of the HBI, which helped us understand that by addressing their concerns mentioned above, we could potentially garner full support from them.

#### *Support for a HBI at UBC*

When asked if the HBI was something the participants would support at UBC, 62% of them answered “yes” (see fig. 10). It was important that of these 62%, 77.4% of them were from a faculty other than Land and Food Systems (LFS). Since LFS students were likely more educated on the effects of sugar and SSBs consumption, having most of the participants from a faculty other than LFS support an HBI at UBC was positive. It showed that students of various educational backgrounds value the goal of a HBI and are willing to support its outcomes.

We also looked more specifically into people who claimed they consumed SSBs. We were less concerned with the participants who don't consume SSBs, as a HBI would not have as large of an effect on them. Of the people who consume SSBs, 54.29% would support a HBI at UBC (see fig. 11). Although these participants were consumers of SSBs, they were still willing to change their consumption habits. Therefore, they would support the initiative on campus on the basis of just having watched the UCSF HBI video. Also, we were impressed that 64% of the 92% of first years that consume SSBs would support a HBI at UBC. The students interviewed gave reasons to support a HBI at UBC as an opportunity for themselves or others to form healthier lifestyle habits.

As for the 20% of students who would not support the HBI at UBC, they valued choice and moderation over complete elimination of SSBs. One participant found the HBI too extreme, others were simply worried about the negative outcry of students. Also, the effectiveness of the initiative was questioned, namely, the dietary changes could only be made to campus and not other locations the students may frequent. Finally, the 18% of participants who said they would partially support a HBI at UBC provided conditions which could render complete support. These conditions included changes to the initiative that will be discussed further in our recommendations. The level of support could be improved by addressing major participant concerns and misconceptions.

### *Major Concerns and Misconceptions*

The exposure of participants to the UCSF HBI video was short and prompted several questions regarding its purpose, context and outcomes. One concern was the lack of choice if implemented at UBC, where the misconception was that students couldn't still consume SSBs. However, the UCSF HBI video clarified that students could still bring SSBs to campus and was

the example made for a HBI at UBC (Healthy Schools BC n.p.). Another concern surrounded plastic bottle usage and its effect on the environment. Although not a direct aim of the UCSF HBI, the video did clarify its support of tap water over any other beverage type. Thus, the misconception was that reducing plastic bottle waste would not be addressed by implementing a HBI at UBC. However, providing safe water sources will address this issue by providing a safe and accessible alternative to water bottles (Centers for Disease Control and Prevention n.p.). Finally, there were concerns on keeping diet sodas as a beverage option. The misconception was that they thought by diet sodas not being eliminated, they were then promoted as a healthy beverage options on campus. However, the initiative aimed to promote tap water over all other beverage options and diet sodas were not a source of added sugar like the SSBs. In other words, SSBs are targeted due to their sugar content, which diet drinks do not contain (Dietitians of Canada 3). The nature of the study likely influenced other concerns and misconceptions that were only mentioned once.

### *Interview Limitations*

Since participants were only given the information provided in the UCSF HBI video, there may be some information that did not properly get across to the participants - leading to concerns and misconceptions of the HBI. Although participants did have the opportunity to ask questions throughout and following the interview, most of the participants noted that they did not require any further clarifications. This could be due to the several factors such as the participant's willingness to have a discussion, misunderstanding of the purpose of our study, timeliness of the interview, or comfort level. More importantly, the questions themselves could have influenced participant responses.

We didn't ask certain questions in our interview, that if included, could have improved our qualitative results. Firstly, we didn't ask the participants specifically if they consumed SSBs or didn't consume SSBs prior to the interview. Therefore, we could only generate an understanding about their consuming of SSBs if they explicitly offered that information in their interview responses. If we had asked this question, we could have better interpreted how influential the video itself was in spreading the message of the health effects of SSBs to change consumption habits by decreasing their consumption. Secondly, we also didn't ask a question pertaining to whether the student lived on or off campus. This would have been helpful in better understanding the breadth of potential influence a HBI at UBC would have. In our interviews, a point was made by a participant that they commute to UBC. They don't consume SSBs on campus, but consume a lot when they go home. Therefore, they exposed the question of how influential an HBI at UBC would be to ultimately change lifestyle habits if only the campus itself lacks access to SSBs. Additionally, the initiative could have a greater effect on those students who live on campus. This is why we looked into the opinions of first years more deeply and targeted on-campus residences for interviews. Despite targeting multiple locations, we still could have gathered a more representative UBC student sample.

We could have improved on our sample variation by increasing the number of interviews, thereby increasing the likelihood that our random sample encompassed more of the UBC student body. The time spent approaching potential participants at random was longer than expected. Also, the success of interviews influenced the number of people we were able to include in our study. For these reasons, we had to limit the number of interviews we did to 50 instead of the originally anticipated 100. Given more time and a higher number of success interviews, we could

have gathered more of a representative sample of other faculties, programs, and graduate students specifically. Our data analysis process added to our time constraints.

We also spent a lot of time on data analysis since all themes and relationships were found manually. In face-to-face interviews, we generated a lot of qualitative results that required a lot of interpretation. These interpretations were also made by us as researchers and may have had an influence on the results we concluded. The rejection rate was relatively high (48%), which may have influenced how random our sample truly was since the people who we interviewed were those most interested in the research topic. However, the fact that all of our interviews were face-to-face added quality to the results that other methods may not have encompassed.

## **Recommendations and Conclusion**

### *Recommendations for Future Research*

#### **Format for HBI Awareness**

Many aspects of the UCSF video could be adapted for a HBI at UBC. Changes could include the pacing, amount of information provided, and overall tone. From our interviews, we found these aspects were of the biggest problems participants had regarding the UCSF HBI video. Having a variety of videos that vary in length, style, and content would cater to the feedback. Further research could be done by experts in marketing to effectively and efficiently relay the details of the HBI through a video a compelling manner. Ultimately, the video should refer to a resource whereby students could learn more information on the HBI.

#### **A HBI at UBC**

As an initiative that plans to eliminate the sales of SSBs, further research needs to be done to investigate how sugar can be targeted and perceived by others. It was discovered from

our interviews that the statistics in the UCSF HBI video scared some students into wanting to cut back sugar, but they were unclear on how. More specifically, the video referenced overall sugar consumption and one participant thought this meant she also needed to cut back on her fruit intake. We recommend nutrition students from the Food, Nutrition, and Health program or future LFS 450 students at UBC to do some research on how other dietary changes could support the overall goal of the HBI. As participants questioned whether sugar should be villainized, methods on how sugar should be portrayed in the initiative is important in addition to other healthy lifestyle changes.

Methods on effectively providing ample information to the UBC students, staff, and faculty members needs to be looked at for HBI support. Since many of the participants responded that they would not support the initiative for their concerns and misconceptions, providing clarity regarding some points of the UCSF HBI video is an important consideration for the stakeholders to address.

### *Recommendations for Action and Implementation*

#### **Wellbeing and Student Housing and Hospitality Services Stakeholders**

As mentioned previously, a video format is an effective method to promote an HBI at UBC. Therefore, we recommend our stakeholders find a team to produce a video while considering the attributes of a video previously mentioned and working in partnership with media experts. In addition, adding multi-language subtitles to the UBC HBI video is recommended to quickly and directly spread the awareness of HBI. As 24% of our participants had a preferred language that was not English, adding the subtitles could engage all students to watch it and make it easier for them to understand the initiative. Other formats could support this understanding of a HBI, especially if used complementary to a video format.

Using some additional methods such as social media advertisements, posters, infographics and face-to-face interactions were suggestions of the participants (see table 1). These complementary methods could also be used as a way to reference the video and other information online.

Given the concerns and misconceptions on the HBI and the number of participants who wouldn't fully support a HBI at UBC, we also recommend having educators and students hold face-to-face workshops or events that could educate other students and members. Workshops and events can elaborate on the adverse health effects of excessive sugar consumption, the benefits of tap water consumption and the HBI itself to help them become more capable of choosing healthy beverage options and familiarize them to the initiative. An important objective of the workshops or events should be to provide definitions of SSBs and healthier beverage options. Differentiating between sodas and diet sodas, and milk and 100% fruit juices versus water would also be helpful. Involving all members of the community in the initiative process could prevent the negative student outcry mentioned in our interviews. Also, further consultation of students would help in supporting our research findings.

### **UBC Building Operations and Sustainable + Engineering**

To create a healthy campus environment, we suggest the UBC Building Operations works with Sustainable Engineering to implement sustainable water sources. The objective of implementing a HBI is to reduce sugar consumption and encourage healthy beverage options that do not contain added sugar. Therefore, water is the healthiest choice for this initiative. Since SSBs are removed, promoting tap water would be more successful if students had a safe and convenient source to access it. Based on our literature review, there are many ways for students to access water, such as using disposable cups, refillable bottles and also purchasing water

(“Understanding Provision” 4). If the UBC Building Operations builds more filtered water fountains with the support of Sustainable Engineering, the usage of disposable plastic bottles would also be reduced. Water fountains are currently hard to find around the campus and so adding more convenient healthy beverage options would increase the likelihood that all community members make the healthier choice (Campus + Community Planning).

### *Conclusion*

- We gathered opinions of UCSF HBI and their promotional video by interviewing 50 random UBC students for 10 minutes each
- The majority of students interviewed would support a HBI at UBC
- A video format is effective in spreading the awareness of the health effects of SSBs
- Clear initiative outcomes should be outlined to best inform decision making
  - Having nutrition students or future LFS 450 students research sugar as the target for a HBI and other potential dietary changes could empower healthy lifestyle changes beyond just SSBs
  - Framing the initiative in a positive manner (i.e. promoting tap water consumption instead of reducing sugar consumption) could aid in clarifying the concerns and misconceptions of UBC students
- Those implementing the HBI at UBC should partner with UBC Building Operations and Sustainable Engineering to install more filtered water fountains on campus
  - Doing this will make the healthier choice more convenient and more likely
- Stakeholders should create a HBI video with the support of marketing and media experts and consider the suggestions of interview participants when creating a HBI at UBC



- Adding subtitles is important for video clarity and to cater to UBC's cultural diversity
- The video should inform key elements of the HBI, while maintaining the attention of UBC students as the main audience and directing them to further information online
- Use a complementary method to the video to best support a HBI at UBC
  - Social media advertisements, posters, infographics, and face-to-face interactions were suggested by interview participants
  - It is important to refer to a location, preferably online, where community members can access more information on the HBI
- Pre-initiative is important for HBI success at UBC
  - Educating community members prior to complete implementation can provide them with another opportunity to share their opinions and suggestions
  - Involve students in the process
  - Have educators and students hold face-to-face workshops or events to educate community members on the effects of excessive sugar consumption, the benefits of tap water consumption and specifics of the HBI
    - Clarify HBI objectives and definitions such as SSBs and healthier beverage options - making it clear that water is the best choice
    - Ensure students understand the university doesn't wish to profit from the sales of SSBs and their tuition will not be affected

## Appendices

### Appendix A: Interview Questions

1. Are you a graduate or undergraduate student?
2. What year standing are you at UBC?
3. Which faculty are you primarily associated with?
4. What program are you in at UBC?
5. Are you a domestic or international student?
6. What language do you prefer to communicate in?

[watched UCSF HBI video]

7. Are there any points of the video you need clarification on?
8. What are your initial thoughts about this video?
9. Was there something in the video in particular that you liked?
10. Was there something in the video in particular that you disliked?
11. Was there a part of the video that made you reflect on your own consumption habits?
12.
  - a. Is there something you would change about your consumption habits after watching the video?
  - b. What is the change and what prompted the change?
13. How do you feel about UCSF replacing SSBs with healthier beverage options?
14.
  - a. How effective was the video format as a way to spread the awareness of the health effects of SSBs?
  - b. What other formats do you see as being more effective?
15.
  - a. Would this be an initiative that you'd support at UBC?  
(YES) What specifically about this initiative do you support?
  - b. (NO) What concerns do you have about this initiative?
16. Do you have any other thoughts or comments or questions about the video?

[space for additional notes]

Appendix B: Map of Interview Locations on UBC Vancouver Campus



Fig. 1. The interview locations are starred in red.

## Appendix C: Recorded Location, Date and Time of Interviews

locations	Day and time
Agora Café	March 7 @ 3:45pm
Agora Café	March 7 @ 4:00pm
Agora Café	March 7 @ 4:15pm
Agora Café	March 7 @ 4:30pm
Agora Café	March 13 @ 2:15pm
UBC Life Building	March 14 @ 3:25pm
UBC Life Building	March 14 @ 3:30pm
UBC Life Building	March 14 @ 3:50pm
UBC Life Building	March 14 @ 4:15pm
UBC Life Building	March 14 @ 4:30pm
UBC Life Building	March 14 @ 4:50pm
Acadia	March 17 @ 11:30am
Acadia	March 18 @ 8:30pm
Acadia	March 18 @ 9:30pm
Acadia	March 18 @ 9:50pm
Agora Cafe	Mar 7, 4:20pm
Forest Sciences Centre	Mar 7, 4:36pm
Forest Sciences Centre	Mar 12, 3:22pm
Forest Sciences Centre	Mar 12, 3:39pm
Buchanan B	Mar 13, 2:15pm
Buchanan B	Mar 13, 2:30pm
Buchanan B	Mar 13, 3:05pm
Buchanan B	Mar 13, 3:23pm
Buchanan B	Mar 13, 3:49pm
Buchanan B	Mar 13, 4:26pm
Forest Sciences Centre	Mar 14, 3:15pm
Forest Sciences Centre	Mar 14, 3:36pm
Place Vanier Residence	Mar 14, 3:45pm
Place Vanier Residence	Mar 14, 3:58pm
Place Vanier Residence	Mar 14, 4:18pm
Place Vanier Residence	Mar 14, 4:29pm
Henry Angus Building	Mar 15, 1:06pm
Henry Angus Building	Mar 15, 1:20pm
Henry Angus Building	Mar 15, 1:42pm
Henry Angus Building	Mar 20, 2:15pm
Henry Angus Building	Mar 20, 2:30pm
Wayne	2018-03-07 4:28
Wayne	2018-03-07 4:34
nest	2018-03-14 11:30
nest	2018-03-14 11:41
nest	2018-03-14 11:53
nest	2018-03-14 12:07
neville scarfe	2018-03-14 3:23
neville scarfe	2018-03-14 3:44
neville scarfe	2018-03-14 4:11
nest	2018-03-14 4:43
neville scarfe	2018-03-19 1:54
Wayne	2018-03-19 2:22
Wayne	2018-03-19 2:35
neville scarfe	2018-03-21

Fig. 1. Recorded dates and times at each interview location.

## Appendix D: Interview Script

<p>hi there, are you a student at UBC?</p> <p>I am from LFS450 and I am conducting an interview asking for opinions on sugar sweetened beverages.</p> <p>Do you have time to watch a 2 minute video and answering some questions regarding the video for a chance to win one of two \$25 UBC bookstore gift cards?</p>
<p>Before starting the interview, I would like to ask you to sign this consent form for ethical purposes. Please read the form over and sign your name at the bottom. If you would like a chance to win one of two \$25 UBC bookstore gift cards, please write your email next to your name</p>
<p>(If they ask about the consent form): the consent form is a course-based research project procedure to ensure confidentiality on your answers and to ensure you stay anonymous.</p> <p>I will need your consent before proceeding with the interview.</p>

Fig. 1. Script used when we conducted interviews.

## Appendix E: Consent Form

THE UNIVERSITY OF BRITISH COLUMBIA



**Liska Richer**  
**Faculty of Land and Food Systems**  
223-2357 Main Mall  
Vancouver, BC, Canada V6T 1Z4

Tel: 604-822-3270  
Email: [liska.richer@ubc.ca](mailto:liska.richer@ubc.ca)

### **Class Project: The Food System Sustainability Initiative INFORMED CONSENT**

**STUDY TEAM:** *Who is conducting the study?*

**Principal Investigator:**

Liska Richer, Instructor, Land and Food Systems 450 class, Faculty of Land and Food Systems  
E-mail: [liska.richer@ubc.ca](mailto:liska.richer@ubc.ca)  
Tel: 604.822.3270

**INVITATION AND STUDY PURPOSE**

You are being invited to take part in this research study because you are affiliated with the UBC food system. We want to learn more about the sustainability of the campus of the food system. This study will help us advance our knowledge and learn more about ways to enhance the sustainability of the campus food system.

**STUDY PROCEDURES:** *How is the study done?*

This study is being carried out by students within their course on "Land, Food and Community III" (LFS 450) in the Faculty of Land and Food Systems. If you agree to participate, you are being asked to participate in an interview, focus group or questionnaire, and your time commitment will vary depending on which one you are participating in. It is estimated that your time commitment will range from 5 minutes to 1 hour. You will be given either a form to answer or be asked verbally a set of questions.

**STUDY RESULTS**

The results of this study will be reported in course based undergraduate reports and will be published in the SEEDS Sustainability Library and UBC cIRcle Digital repository.

**POTENTIAL RISKS OF THE STUDY**

*Version December 13, 2017*

*Page 1 of 3*

Fig. 1. Page one of three of the consent form given to all participants.

## THE UNIVERSITY OF BRITISH COLUMBIA

We do not think there is anything in this study that could harm you or be bad for you. Some of the questions we ask might upset you or seem sensitive or personal. Please let one of the study staff know if you have any concerns. You do not have to answer any question if you do not want to.

### POTENTIAL BENEFITS OF THE STUDY

You may be helped in this study by findings contributing to the advancement of a more ecological, economic and social sustainable food system. In the future, others may benefit from what we learn in this study.

### CONFIDENTIALITY

Your answers will remain anonymous unless you provide written permission (below) to the UBC student conducting the interview or survey, to disclose your name, working position or any other information revealing your identity in any possible future use of the information you provide. If you are participating in a focus group, please note that only limited confidentiality can be offered and we encourage participants not to discuss the content of the focus group to people outside the group; however, we can't control what participants do with the information discussed. All documents will be identified only by code number and kept in a locked filing cabinet. Subjects will not be identified by name in any reports of the completed study.

### PAYMENT

We will not pay you for the time you take to be in this study.

### CONTACT FOR INFORMATION ABOUT THE STUDY

If you have any questions or concerns about what we are asking of you, please contact the Principal Investigator.

#### **Principal Investigator:**

Liska Richer, Instructor, Land and Food Systems 450 class, Faculty of Land and Food Systems

E-mail: [liska.richer@ubc.ca](mailto:liska.richer@ubc.ca) Tel: 604.822.3270



Liska Richer

Principal Investigator

January, 2018

*Version December 13, 2017*

*Page 2 of 3*

Fig. 2. Page two of three of the consent form given to all participants.

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**CONTACT FOR COMPLAINTS:** *Who can you contact if you have complaints or concerns about the study?*

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

**PARTICIPANT CONSENT AND SIGNATURE PAGE**

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on your employment, or class standing.

*Your signature below indicates that you have received a copy of this consent form for your own records. Your signature indicates that you consent to participate in this study.*

---

Participant Signature \_\_\_\_\_ Date \_\_\_\_\_

---

Printed Name of the Participant signing above \_\_\_\_\_

Fig. 3. Page three of three of the consent form given to all participants.



## Appendix F: Raw Interview Data

1. Are you a graduate or undergraduate student?	2. What year standing are you in at UBC?	3. Which faculty are you primarily associated with?	4. What program are you in at UBC?	5. Are you a domestic or international student?	6. What language do you prefer to communicate in?
under		4 ifs	nutritional sciences	domestic	english
under		4 ifs	grs	international	english
under		3 ifs	grs	domestic	english
			applied animal biology		
under		3 ifs	grs	domestic	english
under		1 sauder	undeclared	international	english
			honours animal biology		
under		4 science	undeclared	domestic	english
under		1 science	undeclared	domestic	english
			anthropology		
under		4 arts	undeclared	domestic	english
under		1 science	undeclared	domestic	english
			applied geological engineering		
under		4 science	geological sciences	domestic	english
under		4 ifs	fnh	domestic	english
under		4 arts	psychology	domestic	english
under		4 arts	psychology	domestic	english
under		2 ifs	grs	domestic	english
			chinese literature		
under		4 arts	computer science	domestic	mandarin
under		2 science	asian study	domestic	english
under		3 arts	human geography	international	mandarin
under		4 arts	marketing	international	mandarin
under		3 sauder	undeclared	domestic	english
under		3 arts	asian study	international	mandarin
under		1 arts	undeclared	international	mandarin
under		4 arts	psychology	international	mandarin
			cognitive systems		
under		2 science	master of forestry	domestic	english
grad		2 forestry	undeclared	international	english
under		1 science	undeclared	domestic	english
under		1 ifs	undeclared	domestic	english
under		1 science	undeclared	international	english
under		1 science	undeclared	international	english
under		2 sauder	commerce	international	cantonese
under		3 sauder	commerce	international	mandarin
under		2 sauder	commerce	international	cantonese
under		2 sauder	commerce	international	cantonese
under		3 arts	asian study	international	cantonese
under		1 sauder	undeclared	domestic	english
			applied engineering		
under		2 science	electrical engineering	international	english
under		3 science	exchange	domestic	english
under		3 arts	human geography and psychology	international	japanese
			undeclared		
under		3 arts	sociology	domestic	english
under		1 science	undeclared	domestic	english
under		4 arts	geology	domestic	english
under		2 science	intergrated science	domestic	english
under		3 science	undeclared	domestic	english
under		2 arts	undeclared	domestic	english
under		1 sauder	undeclared	domestic	english
under		5 kinesiology	kinesiology	domestic	english
			applied electrical engineering		
under		2 science	engineering	domestic	english
			applied physics		
under		4 science	finance	domestic	english
under		1 sauder	undeclared	domestic	english

Fig. 2. Raw data from interview questions asked before participants watched the UCSF HBI video.

7. Are there any points of the video you need clarification on?
no
no
no
no
yes - what is a ssb again
no
no
no
no
no
no
no
no
no
no
any sugar in the beverages considered ssb?
no
example on healthy food that campus provides
healthy beverage
no
no
no
no
no
no
no
no
no
no
no
no
what is added cork sweeteners
why people with normal weight would suffer from diseases induced by overconsuming sugar
no
no
no
no
no
no
no
no
no
no
"was this about university of san francisco?"
"Is this happening at UBC?"
no
no
no
did they count aspartame as added sugars?
no
so did they ban all sugared drinks there?
What about coffee, do they only sell it black?
no

Fig. 3. Raw data from interview question 7.

**8. What are your initial thoughts about this video?**

targeting to people who aren't nutritional students, simplistic information, general public - would  
 initial response to initiative, people can make whatever choices they want - but the video was  
 was watching a video on Japan (so many choices, and provided healthy choices), UCSF are a  
 cool the university doesn't want to profit on SSBs, don't really pay attention to SSBs  
 cool idea, they don't take away the choice, just trying to improve the environment - nice to still  
 similar to any other "watch your sugar intake video" - but mentioned smartchoice program was a  
 seems informative, likes colours of animations  
 quite agree with the video, but don't agree to stop selling, I drink SSBs a lot - but don't on  
 information was informant and easy to follow, supported their movement  
 I know it is an ongoing problem, soda has a ridiculous amount of sugar - I don't drink soda  
 interesting statistics but overly simplified, a lot of numbers with little basis to compare it too,  
 cute video, ran through it quickly without going in too much detail, wasn't informative (seemed like  
 an ad), wasn't enough to make any key decisions on it, weakness is they didn't define healthy  
 I don't know  
 american context - interesting we are using this, made me think I like pop  
 patting myself on the back for having cut out sugars already - I'm doing good  
 more like an american style, don't know if I fit with this video  
 a good video to warn people about health  
 sugar consumption is a major problem especially around teenagers as a majority of them choose  
 clear and straight forward  
 the video is good, clear and concise  
 it is good to bring sugar over-consumption as the major concern  
 sweetened beverages are bad for our health  
 I don't have any thoughts  
 2 mins long video but bring out big message  
 not a bad idea  
 good and clear  
 seems actually the sugar main cause in ppl  
 I knew that ssb bad for your health, try to limit my intake  
 I like pop but I don't know the high amount sugar in it  
 the video makes me think of my usual consume of energy drinking  
 the message was clear and educational  
 the animation is colorful  
 clear and educational  
 the animation is colourful and easy to understand  
 good video and easy to understand  
 good warning to people's health  
 sugar is big concern but not selling those beverages might be a big step because people  
 generally prefer sweets and people don't pay attention to sweets and they should draw more  
 common knowledge that sugar is bad, people understand that there is hidden sugar, but people  
 shocked, I really like sweet stuff, but I don't drink sweet beverages  
 interesting, [UCSF] implemented the initiative in 2015, ubc is just starting to think about this. Also,  
 informative, its really building on basic knowledge that people already have  
 it reaffirms what I already know from the mass media about sweetened drinks  
 not surprising, I guess I think it's good that they're taking initiative to reduce sugar intake  
 I think it's a good idea, personally I don't drink any ssbs, so I wouldn't hace a prob;ime if we did it  
 I think its very true, I already try to cut down on ssbs so I think it's a good decision their university  
 put me to sleep, I think there was no dynamic, I wasn't interested at all. Also, the statistic for 45  
 really cool initiative  
 informative, I already know about sugars being main culprits for obesity and unhealthy, seems like  
 I think it's a cool initiative, I initially thought if you were caught you would get in trouble but if  
 I think it was a good video

Fig. 4. Raw data from interview question 8.

**9. Was there something in the video in particular that you liked?**

design, animations

can still bring your own sugary drinks

images they used, quantitative sugar visualization good and clear

simple and easy to watch, facts and visuals are helpful in understanding what they are trying to convey

digestible, anybody can understand it, clear message, teaspoons was a good way to visualize it

animations fun

colours, visual appealing, straightforward

statistics, animations, eye-catching

easy to follow and grasp the message

they said that they stopped serving sugary drinks on campus, only healthy choices, app that helped people understand was good idea

showed the recommended amount for each demographic

showing the portions with teaspoons for recommended intake, pinwheel visual of beverages was good

graphics, appealing music

colourful, used good graphics, entertaining to watch, short, gets to the point with the facts - I want to know the point fast and interesting

engaging, especially the portions, found the healthy labels interesting - shouldn't have to label apples

clear, short, concise

the anime that showing organisms of human body

the video listed out the average consumption of sugar that a person need

short and concise video

animation brings our clear message, easy to understand, the point is concise

the use of cartoons and statistics data to clarify the risk of sugar over-consumption makes the video more attractive for audience

the fact that a bottle of soda contains 16 teaspoons of sugar, which far exceeds everyone's daily limit

the animation is cool and the design is nice

animation is cute and easy to follow

whole the idea is seems a good idea

I like the animation

point out the healthy benefit

it is good to see the campus is taking action to this issue

the video listed the scary point in high amount of sugar intake

clear and concise

Animation keeps the content interesting to me

it reminds me there is a limit of sugar intake

short video length kept me watch till the end

start with the most attention-grabbing content, which is the sugar amount in a soda

animation is good and video is short

clear and concise

gave specific examples ie sugar content in the coke, good idea

the best thing was when they said that you may get health problems even when not gaining weight

drawings, which made it easier to understand

the part they were saying sugar can be put into many different names, and having a list of sugar names is helpful

visuals

it was shocking to find the average american consumes 45 gallons of sweetened drinks per year

infographic of 45 gallons per year for american was a good thing to put

I liked that they talked about why its important and how the avg person is having significant;y more than they should

I think the part where they talked about how they decided to change their campus to help students make healthy decisions was good

cant think of anything

I liked how they equated amount of sugar you should be having and then how much is in the drinks, like some people have so much

without realizing

the initiative

it had funny animation and visuals, the voice was soothing

nothing in particular

Fig. 5. Raw data from interview question 9.

<b>10. Was there something in the video in particular that you disliked?</b>
any health campaign generally has one message - don't talk about multiple sides or contexts, I would never tell people to not have something, "everything in moderation better" - also the context was USA not Canada
hard to grasp all the information in a short amount of time, forgot the information directly after watching it, would have liked captions
a lot of information, and long - if saw it on social media would likely not watch it all
not really
not really
not really
not really
more statistics and graphs of data would make the video better
no
no
statistics given with no basis for comparison, no proof of research or results of this initiative (proof of concept)
not defining what a healthy beverage is, oversimplification of stats that don't mean anything to me because I'm not educated enough on the subject, thought bringing your own beverages to school is counter-productive of video goal, having the option to access more information online about this was good but maybe not a good thing to say in the video where you are trying to promote healthy consumption
not enough words
no
no
no
no
no
only showing data in US
no
maybe include how to select "smart choices" food by the university
no
no
no
not really
no
no
no
no
no
no
no
no
spending unnecessary time on introducing HBI
no
no
no
scary-- cant imagine if campus stopped selling all these drinks
no, its to the point
the music, a little too serious
no
facts were given in a very fast paced
no
no I think [the initiative] is a good thing
the fact that they said this is gonna fix the problame but they made it sound like its gonna be a huge thing but in reality they can easily get ssbs and its not gonna reduce what theyre dtink. It helps with split second decisions, in general it wont actually as much as they said in the videdo
no
it was very boring
not dislike, but its good that theyre taking away the option but there needs to be education because people can just go get it themselves so they need to know why they should stop sugar consumption
no
I feel like it wouldve been nice if they put up very defined set of rules for the campus, "we are banning _____" in words and numbers, including stores
some of the visuals looked funny

Fig. 6. Raw data from interview question 10.

11. Was there a part of the video that made you reflect on your own consumption habits?
no, I think about this all the time, I don't drink pop or juice, and take coffee with milk, don't have a sweet tooth, salt is more of a personal issue, if general public I think it would be different
made me think about how what is around has an impact on what people consume (vending machines), even if you don't consume it, it is around and influences what we think is healthy, if all choices around are healthy then it is considered the new normal
consumers should have choice, but could be good or bad and changes consumption habits, whatever the choice, choice is important, ownership
no, don't consume SSBs, if I did I think seeing the amount of teaspoons of sugar in pop would alarm me
not really, I don't drink a lot of pop so doesn't really apply to me
statistics made me feel bad about my consumption
kinda, the numbers were alarming
yeah, I drink a lot of coke during dinner time, don't normally think of coffee or tea of being a key source of sugar but now that I think about it I do add a lot of sugar to my coffee, also at school I really don't drink SSBs (I drink water) but at home I drink a lot
yes, the amount of sugar they said they have daily and yearly - how much sugar my coffee has
yeah, last year I would drink a bottle of soda a day (unhealthy) - saw a video and found out how much sugar I was consuming and so I stopped
yup, recommended per day of sugar
yes, SSBs definition, risk for heart disease and cardiovascular disease despite being healthy weight, and teaspoons of sugar
no, doesn't apply to me because I don't drink vert many sugary drinks
the portions of consumption was alarming
the teaspoons
yes, the statistic part in the vedio influence me
no, cuz I love to drink soft drinks such as coco cola
yes, it reflects my habit of drinking only sweetened water
no I don't like energy drink
yes, because I like to drink SSBs, I think I over-consume the sugar level mention in the video
daily beverage consumption contains too much sugar
the part about how sweeteners can negatively affect people's health
no, high intake of soda is my life
no, I think I on a good diet
probably drink too much sugar drink
yes, I like drinking bubble tea and soft drink
different opition make reflect on what you think
not excatilly, I knew that already
the 16 teaspoon of sugar that good to show how high amount of sugar in the drink
I like to drink pop and I am drinking it right now, maybe need to reduce
Yes, I thought of how much sugar I consumed daily
yes, I now think I should drink less SSBs
yes, I drink a lot pop
yes, I thought of how many SSBs I consumed in the previous week
yes, the 16 teaspoons makes me scared
no, I know the bad things already
yes because I often drink a lot of coffee, I know its not very healthy but sometimes you just cant reject it
yeah, definitely, sports drinks
yeah
yes, I drink milk tea and I don't consider that as having sugar, but it does
yes
yes, mentioning that juice counted as sweetened drinks made me consider my habits because even though I try to stay away from pop I still drink juice
no, I just don't drink a lot of pop at all
not really cuz I don't drink anything besides water
not really, my mom does that for me, she's a nutritionist
yes, when they started listing all the dtinks including coffee and tea
yes when they said energy drinks and I drink energy drinks from time to time
yes, the amount of sugar in soft drinks in teaspoons made me rethink some of my choices
yeah, I like gatorade from time to time but ive known for a while that sugar is bad, so I already limit myself but the video makes me think about it again
veah, 16 teaspoons of sugar in one soda

Fig. 7. Raw data from interview question 11.

<p><b>12a. Is there something you would change about your consumption habits after watching the video? what is the change?</b>  <b>(if yes, proceed to 12b. If no, skip 12b)</b></p>
no already don't consume SSB
no already don't consume SSB, but do add sugar to coffee and like it, made me think about sports drinks
no don't consume SSB, made me think about friends that do
no, already don't consume them
no, already don't consume them
yes, I consume a lot of fruit which is also a source of sugar and the video talked about overall sugar consumption
yes, I do consume SSBs so it may make me think twice or feel guilty to buy it knowing the statistics
yes, I add a lot of sugar to my coffee and drink a lot of coke at dinner time, so I should probably cut back
nothing drastic no, don't overconsume sugar
already did after watching a similar video last year
no, wasn't leading enough
no, video wouldn't make me change my ways, but did make me think about things so if I learned more about it, maybe - consumption of sweets is driven by stress at school
no already don't consume them
maybe, reminded me I shouldn't drink pop
no, because we've already made that conscious choice in the family - but it did increase awareness
no.my habits not that bad and I am not drink ssb lot
no
yes, I will drink more water instead of soft drink
no
no, because living in the moment, but I will drink more water to concentrate the sugar level
I will look at the nutrition label before purchasing any beverage
I will drink less energy drinks, fruit drinks, and sports drink
I wouldn't change my consumption
no
maybe not
yes, I want to keep fit and stay healthy
less sugar in my coffee
no
maybe not
no
yes, Intake less sweetened beverage like soft drinks and fruit juice
yes, buy the beverage with less sugar content
no
yes, drink less beverage and make my own drinks at home
no
no
probably drink less of these drinks
drink less juice
I don't really drink sweet beverages, but I still eat cookies, brownies etc, so I will change my eating habits
I don't really drink those so no
n/a
the fact that juice is a sweetened
n/a
n/a
n/a
no, I just feel like I didn't really connect with the information. All they said was diabetes and even though it is horrible, I don't feel like it is something immediately threatening. They only talk about what we shouldn't do but didn't provide alternatives
probably not, I don't have anything except water, or I have juice every once in a while and its only half a serving
probably drink less pop
I wish there were more information on research, and consequences. I don't know how much sugar I have to eat to get sick
drink more water. limit sodas. I don't really drink any other ssbs so I guess limit on soda and bubble tea

Fig. 8. Raw data from interview question 12a.

12b. Is there something you would change about your consumption habits after watching the video? what prompted this change?
N/A
N/A
N/A
N/A
N/A
eat less fruit - eat too much sugar, need to watch out for all kinds of sugar to moderate overall intake - knowing how much sugar I do eat overall made me think I might be overdoing it
try to reduce consumption of SSBs, but still treat myself here and there - knowing how it affects my body makes me feel like I need to be more aware
might consider trying less sugar in coffee, like having it black - statistics were alarming
nope
N/A
N/A
N/A
N/A
no
nope
N/A
N/A
yes, because too much sugar consumption can severely damage health
N/A
N/A
no, but I know the risk of sugar over-consumption such as heart disease, obesity
it is not obvious that these drinks contain lots of sugar
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A
The suggested daily limit in teaspoons of sugars
my worry on the risk of suffering diseases
N/A
the amount of sugar in doda far exceeds the daily limit
N/A
N/A
the specific examples
the health problems they talked about ie diabetes
nothing in general
nothing in general
yeah probably, the fact that people have a large amount of sugar intake, the fact that people drinking in gallons, listing all the different drinks
seeing that juice is also listed as a sweetened drink
n/a
n/a
n/a
n/a
n/a
the fact about the amount of sugar in pop
it wasn't a part of the video that made the change, but the fact that theyre banning sugar makes you think why 16 teaspoons of sugar in one can of soda, and the diabetes and heart disease fact

Fig. 9. Raw data from interview question 12b.



13. How do you feel about UCSF replacing SSBs with healthier beverage options?
big fan, but they need to consider if that is what their students want, instead of imposing right away, getting "YES" feedback is important, convenience and access are influencing factors on whether it would work
I like it, the issue for me is the use of plastic bottle usage, better to have an initiative that promotes reusable beverage containers
I like it, still a way for the university to make money, better focus would be to implement water fountains
don't like how diet is still allowed, should tell people why they are replacing, should address the key issue to SSBs not just remove it without explaining how to make better choices
great idea, long overdue
not against it because I'm not going to buy other beverages, so what is provided people will get used to
could be controversial, but good idea in the long run
don't think it would help to target SSBs, but the awareness of sugar consumption and a healthy lifestyle is a good idea
best to educate so people can make changes outside of campus (I don't feel people consume much on campus)
great idea, concern about diet drinks - also would like to those be eliminated
liked it, supportive of promoting healthy lifestyle
having variety of healthier beverage options (not just water) will maintain variety, but still give you options - never actually taught how to differentiate in the variety
sugar-free things (diet) aren't necessarily healthy, the video didn't define healthy beverages - having water and milk aren't equivalent in health, the emphasis shouldn't be on sugar, should be on water - water bottle usage a concern
infringement of rights
great idea, if healthier beverages are available you'd buy them - but wouldn't stop people from bringing it, people will get it if they want it, if it's not there you won't buy it
I understand their trying to do a good thing, but controlling consumption and choice may be unethical - not pro-choice and free-agency
good.
I don't know
it is an brilliant idea for school to sell healthy beverages on campus in order to promote the idea of a healthier life to students
good option help people change their habit
healthy beverage is good but taste not good
it is a good start to remind people to eat and drink more healthier
it is a good idea to promote healthy life style
it doesn't matter to me, so I don't know
good, but is it suitable for other location?
good idea, benefit to students
that's a good idea
good idea
really good idea since it is an issue in the community
not much examples inside, no shocking moment
it is a good idea, but it doesn't matter to me
It is a good start to advocate intaking less sugar so that there will be less people suffering from diabetes and other similar diseases.
they should gradually reduce the numbers of SSB vendor, not eliminating it at once
a university campus is a great place to start the campaign to educate the public
the campus operator might lose a stream of revenue
it is good
good, but kind of not represent Canadian
big step for universities – it is a big community and they should have discussions about it and im not too sure how they annouced the idea at UCSF
it's a pretty good idea, it might be difficult to implememnt throughout entire school
I think it's a good idea but not having sweet beverages at all is weird
I'm fine with that
it's a decent idea, you can still bring your own so its not limiting anyone
I think the option should still be available so people can choose, but they can have informed decisions rather than other people making the decision for them
it's great
I think its good, it definitely helps putting money towards products that are more healthy imporatrnt cuz it shows consumers want that
I think it's a really good option, especially for people who commute, you're limited to having either ssbs or paying ridiculous prices for healthier ooptions so giving students opportunities to purchase healthy drinks is a good thing
im sure a lot of places make good money off their sweetened drinka so I am impressed they are able to get on board with it
I think it's a cool initiative and they should do it here
it's a smart initiative
I don't have a problem with that. Maybe they could have more water fountains and buy water bottles
I think its pretty smart to do but for some of the drinks theyre replacing like coffee, I cant drink coffee witouth having sugar so some students might relate to that everything else being removed is fine but I don't think I can do coffee

Fig. 10. Raw data from interview question 13.

**14a. How effective was the video format as a way to spread the awareness of the health effects of SSBs?**

two minutes a good length, animations good, could be forgettable method

a lot of information in a short amount of time, illustrations were informative, couldn't echo what they were saying, less information more helpful, should be more clear, adding context to the facts should be added and more exhaustive

too much information in that amount of time, but video format good

visually helpful to see how much teaspoons in drinks, and knowing the overall consumption in a year, visuals with numbers are helpful

good, simple, discussing nutrition labeling is helpful - video applied to USA, which is a good way to relate directly to the population it is targetting

good, short, clear, easy language - don't need to be well versed in english

effective, a lot of people don't like reading

yeah animations for sure, more focus on content than visuals only

effective, easy to follow - cartoons and different ages and races - applicable to UBC's diversity

yeah, I liked the graphics - numbers and visuals and colours made it easy to understand

most effective because people aren't going to read, passive way to transfer information

video effective to watch because short and sweet and to the point

too disracting, easy to zone out in

effective, good to have it visualized to remind you of how much you are actually eating - otherwise easy to ignore

good

good. Other platform, international trend and the platform maybe can more international

clear message and easy to follow

video is good, but maybe to use a person for example

kind of good

not much, because not many people watch it

the video is easy to understand for any age level population

I think the video is an effective format, because people nowadays prefer watching short videos than reaing articles

short video and large information

need to encourage people to watch it

engaging

very effective, stright forward video

prefect effective

the visual is good, the way they present was clear

I think is good

easy to understand, but need people to watch

clear message

somehow effective

very effective, easy to understand

kind of effective

I think is effective because video is a preferable choice for morden people

somehow effective

format is good-- had good examples, good visuals

visual and audio better than ppt

pictures made it easier to understand and it's great because kids would be able to understand and people who speak English as a second language can understand it easier

I liked it it was short and quick and visuals were nice

video is a good way, visuals were good

I like the facts but visuals didn't add much

I didn't think it was impactful at all, it was short, didn't go in depth, and I know there are crazy statistics so the video didn't shock me

I think it was pretty effective, they used facts and entertaning and short. It was kinda too happy, it can be considered hard to take seriously

I think it was good, I liked the graphics they used, it draws attention and was easy to follow

pretty effective

really good, well done, colourful and to the point

not sure, idk how good or how well it got across the health effects as much as highlighting how much we do consume

it was good but they couldve made it more contrevsarial it would be bigger -- celebrities. Nothing entertaining. They couldve shown animation over 10 years how body changes

it was pretty effective

Fig. 11. Raw data from interview question 14a.

14b. What other formats do you see as being more effective?
something with face-to-face contact better
modifying the video format would be best
text overtop super important in video form, modifying the video would be best (short and condensed version better, but then the amount of information might be less - therefore clarity and choice of what to talk about important)
infographic
/ video was sufficient
infographic - video put on paper, easy to display info and can look back on it - zone out on videos
/ video was sufficient
/ more graphs in videos or animations in videos
/ video was sufficient
/ video was good - maybe add words for audience to follow along
in class presentation would be most effective
in person conversation might be good, having a shorter video that has a link or something to more information might be good (with subtitles so you can still read it)
infographic or video whiteboard style
more than watching a video once, more different ways to spread awareness always helpful
videos are forgettable, you would need to really want to make the change yourself - more scary facts would make it more serious and show stronger health effects
I don't know, image poster, video is nice and short
poster?
to make the video more effective, I suggest to provide live example of a person who consume too much sugar in order to make it more persuasive to its audience
have clear and easy slogan for ad
find some public figure to represent and spread out the information
don't know
don't know
leaflet or handout
don't know
I don't know
perhaps add more sound effect
video is good , poster would be good online
poster
poster
don't know
More real-life example
more data
the list of different kinds of sugars
include data from other countries
poster
don't know
none
presentation along with effective video aids
facebook
posters,
ads
interview style or case study, talk to one person that's diabetic and focus on them, instead of numbers, talk to people individually
can't think of anything, so video's the best format I can think of
social media, people spend a lot of time online, I think ive seen stuff at train stations and bus stops, like posters
poster advertisements, advertisements in general
none
this is the best way
none
memes - compare with other schools, frat parties
psa, ads

Fig. 12. Raw data from interview question 14b.

**15a. Would this be an initiative that you'd support at UBC? (YES) - what specifically about this initiative do you support?**

yeah, gives push and incentive to have a healthier diet, our faculty is in a bubble so we aren't representative of average student, could prompt other students to reflect more

yes, universities shouldn't profit on our purchasing of SSBs

yes, I would rather be surrounded with more healthy options

yeah, getting rid of SSBs good, and having better options available is important

yes, all of it

I would support smart choice, but a lot of negative outcry if soda is completely taken away

maybe, I would support get everybody to get healthy, but its nice to have the choice to have a ssbs

not the cutting of SSBs necessarily, but the idea of a healthier lifestyle and cutting sugar consumption overall - it isn't that I wouldn't support it, I just don't see how it would be effective

yes, I don't buy pop much - but it's a good idea for UBC as we try to be "green" - good to take away plastic bottles overall; also important not to replace SSBs with diet drinks that would be artificial

yeah, all of it I would support

indifferent because I don't buy pop, but if it changes tuition I wouldn't be happy

not necessarily because diet drinks aren't healthy options, plastic water bottles are a huge issue, I would support an initiative where they brought back more filtered water bottle kiosks instead of vending machines - spreading awareness is better than taking options from people

no

yeah, spreading healthiness is important - but I don't think it will truly stop people from getting it

no, I think pro choice is best

yes, healthy choice, international student need to be infor more, not a big fan on ssb

maybe not

I definitely would support this initiative at UBC because it is a problem we all should aware of

maybe

no

I would supportive it at UBC

yes, to make students care about their own health

yes, sure

yes

probably

no

yes

yes

no

no

no

no

Yes. UBC is international so spreading the message to our students can let other people (i.e. family members of students) know the detrimental health effect of intaking too much sugar

no

Yes. Because USA is the top country in overconsuming sugar, starting a activity like that would be a nice public deucation

yes, making campus healthier

no

partially agree to this idea in a different way- reducing not eliminating -its extreme

yes -- better health for all the students not a lot people realize how much sugar they are intaking

no - I know its bad but still I would like to have bubble tea or sodas, maybe they can provide zero calorie coke instead of normal coke

yeah, removal of sugars or replacement is good

sure, it is promoting health

sure, I think the campus' overall goal is to promote health and this is a good step to take

yes, you can just drink water, people are spending too much on pop, which is tied to money, they're just supporting a crappy business that makes bad drinks that arent good for the health

yes, if it was a referendum I would vote yes, but I wont be an advocate for it because I don't think It would change much. I would support

yes, I communte a lot and I have very limited options for healthy foods at a fair price, so if we had only specific options that are healthier on campus, the decision is gone, and it promotes healthier options

sure -- "you are what you surround urself". Easier to get my hands on it if its around, so eliminating it would essentially drop my consumption to nearly 0 because my way of getting somethingis not directly in front of me

yes -- I think lowering people's consumption is a big thing -- some people have 3 coffees a day and add a lot of sugar

yes - replacing pop that they sell on campus with healthier options

yes - people being healthy, you cant stop them but awareness is important because a lot of people just don't know about the effects

of course, but coffee. I support the health aspect of it

Fig. 13. Raw data from interview question 15a.

**15b. Would this be an initiative that you'd support at UBC? (NO) - what concerns do you have about this initiative?**

yes, but concerns about funding from companies (food service programs marketing Coke because of contracts)

yes, but more water fountains more priority and more activism on bringing own water bottle, promoting safe water (lead-free), SSBs second priority to safe water, long-term, rather coke than diet maintenance of water important consideration

yes, but I am critical of types of SSBs eliminated - aspartame should be considered as something to eliminate, I don't think it is good for you, if sugar is the problem then they should be wary of how much sugar are in 100% juices (despite them being natural sugars)

yes, but not by replacing with diet drinks

N/A

no (mentioned before)

spread education, but not eliminate ssbs completely

concerns about cutting down only drinks, wouldn't be overall effective in cutting sugar consumption at times not at school

plastic bottle usage, diet drinks

/

as someone who doesn't stay up to date on policies at UBC, pre-initiative would be important so we aren't blindsided by dictative policy

unhealthy population will still find a way to access it if they don't shift the goal of the initiative, encouraging younger people to make healthier decisions earlier

issue isn't teaching or educating as it is enforcing a lifestyle, lacks longterm change for students when they graduate

/

keeping the options still there, but making healthy options more affordable

N/A

cuz I like soda drink

N/A

N/A

because I cannot buy what I want to drink

N/A

N/A

N/A

N/A

N/A

time-consuming

N/A

N/A

I want to buy want I want

I like pop

The measure would take away the choices of drinks from a large part of the students or people working at UBC

N/A

the visitor will spend unnecessary time to search for regular SSBs if they want to purchase

N/A

N/A

I don't want to change my usual consumption

students wont agree to this 100% and campus isnt good cuz we cant always drink tap water, we still need others

difficulty of implementing -- revenue wise is a concern, budget

its difficult, I know its bad for your health but still I would still like the option

a lot of people like getting energy drinks here so getting rid of them might be a concern

nothing

that even if I maintained a healthy lifestyle, if I wanted to treat myself to a "sometimes drink", I wouldn't have the choice to do so

not sure, I wouldn't be really cocermed. Maybe money coming in from sales of people buying sugary drinks might become a problem but I don't know much about that

ubc food services couldn't make enough money, people just boycott

whoevers running the initiative has a lot on their plate like determining what is healthy and what is not -- brands make health claims and sometimes they're not actually healthy. Whoever is in charge needs to decide what to give to the university to sell

getting all of the sellers on board

the initiative is not changing the habits, it doesn't stop them so we need to educate them so they can know why they shouldn't consume so much

people being unhappy about not being able to get drinks that they want anymore

if youre not selling sugar, are you making less money -- tuition raising? How does it affect me. Would I have to pay more if I already don't drink ssbs and it doesn't really benefit me that much more

coffee, energy drinks

Fig. 14. Raw data from interview question 15b.





## Appendix G: Interview Success

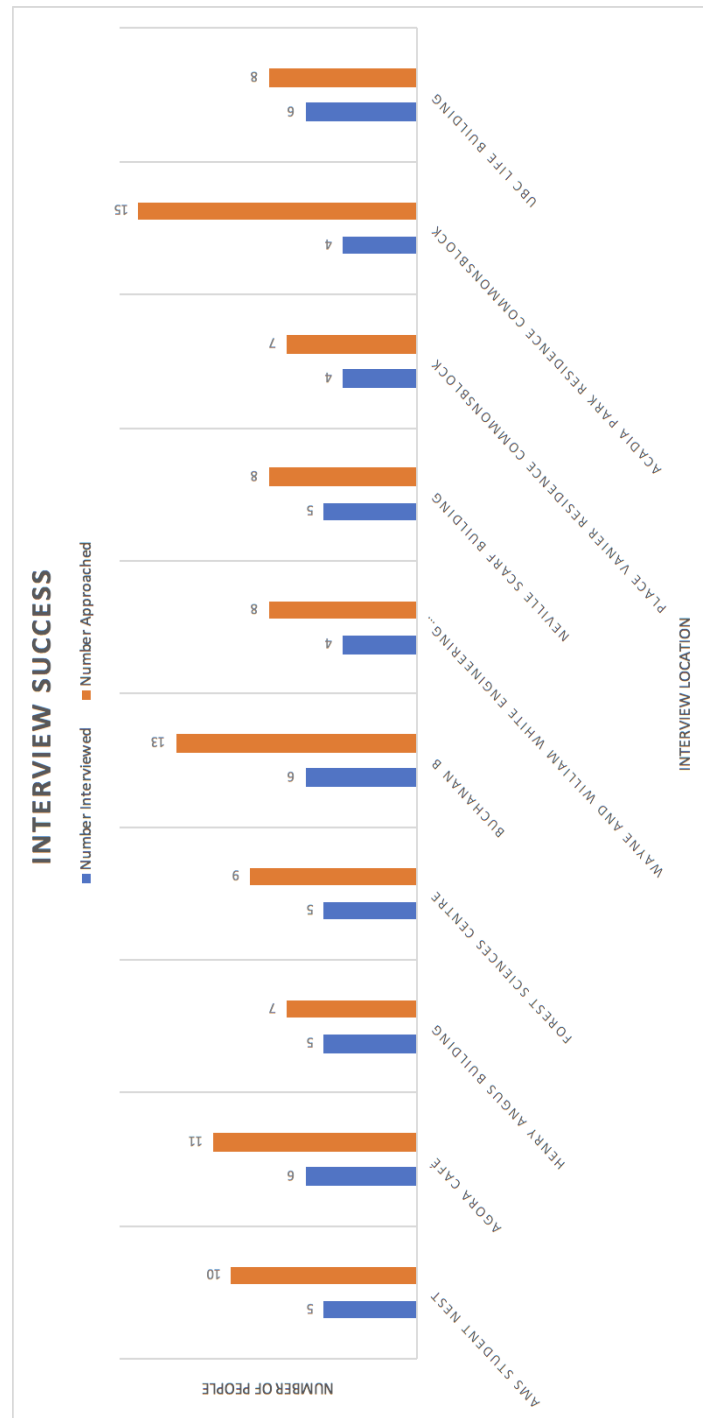


Fig. 1. The number of people approached at each interview location versus the number of people successfully interviewed.



Table 1

The count and success rate of interviews conducted at each location on UBC campus.

<b>Interview Location</b>	<b>Number Approached</b>	<b>Number Interviewed</b>	<b>Success Rate (%)</b>
AMS Student Nest	10	5	50.00
Agora Café	11	6	54.55
Henry Angus Building	7	5	71.43
Forest Sciences Centre	9	5	55.56
Buchanan B	13	6	46.15
Wayne and William White Engineering Design Centre	8	4	50.00
Neville Scarfe Building	8	5	62.50
Place Vanier Residence Commonsblock	7	4	57.14
Acadia Park Residence Commonsblock	15	4	26.67
UBC Life Building	8	6	75.00
<b>Total</b>	96	50	52.08

## Appendix H: Additional Interview Data

Table 1

Amount of international and domestic students with first year standing at UBC.

First Years (n=12)	Count	Frequency	Frequency Percentage
International	5	5/12	42%
Domestic	7	7/12	58%

Table 2

The number of students in their self-reported faculty and program at UBC.

Faculty	Program	Count	Frequency	Frequency Percentage
Arts (n=14)	Undeclared	2	2/14	14.286%
	Exchange Student	1	1/14	7.143%
	Anthropology	1	1/14	7.143%
	Psychology	3	3/14	21.429%
	Chinese Literature	1	1/14	7.143%
	Asian Studies	3	3/14	21.429%
	Human Geography	1	1/14	7.143%
	Sociology	1	1/14	7.143%
	Human Geography and Psychology	1	1/14	7.143%
Applied Science (n=5)	Engineering	5	5/5	100%
Forestry (n=1)	Master of Forestry	1	1/1	100%
Kinesiology (n=1)	Kinesiology	1	1/1	100%
	Undeclared	1	1/8	12.5%

Land and Food Systems (n=8)	Nutritional Sciences	1	1/8	12.5%
	Global Resource Systems	4	4/8	50%
	Applied Animal Biology	1	1/8	12.5%
	Food Nutrition and Health	1	1/8	12.5%
Sauder School of Business (n=9)	Undeclared	3	3/9	33.333%
	Marketing	1	1/9	11.111%
	Commerce	4	4/9	44.444%
	Finance	1	1/9	11.111%
Science (n=12)	Undeclared	6	6/12	50%
	Honours Animal Biology	1	1/12	8.333%
	Geological Sciences	2	2/12	16.667
	Computer Science	1	1/12	8.333%
	Cognitive Systems	1	1/12	8.333%
	Integrated Sciences	1	1/12	8.333%

Table 3

Number of participants that reflected on their own consumption habits after watching the UCSF HBI video.

Reflect on Consumption Habits	Count	Frequency	Frequency Percentage
Yes	37	37/50	74%
No	13	13/50	26%

Table 4

Number of participants that said the UCSF HBI video prompted them to change their consumption habits.

<b>Would Change Consumption Habits</b>	<b>Count</b>	<b>Frequency</b>	<b>Frequency Percentage</b>
Yes	16	16/50	32%
Maybe	4	4/50	8%
No	30	30/50	60%

## Works Cited

- Campus + Community Planning. *Bottled Water-Free UBC?* 2013. Web. 10 Apr. 2018.
- Centers for Disease Control and Prevention. "Get the Facts: Sugar-Sweetened Beverages and Consumption." *Nutrition*. 2017. Web. 28 Jan. 2018.
- Dietitians of Canada. *Position Paper*. DC, 2016. PDF. 10 Feb. 2018
- Euna, Han, Powell, Lisa M. "Consumption Pattern of Sugar-Sweetened Beverages in the United States." *Journal of the Academy of Nutrition and Dietetics*, vol. 113, no.1, 2013, pp. 43-53.
- Healthy Schools BC. *Comprehensive School Health Knowledge Guide*. n.d. British Columbia.
- Heart and Stroke Foundation. *Position Statement*. HSF, 2017. PDF. 07 Apr. 2018.
- James, Carrie, Rideout, Candice. "Sociodemographic Predictors of University Students' Food Insecurity: Insights from a Large University in Canada." *UBC Social Ecological Economic Development Studies (SEEDS) Student Report*. 2017. PDF. 28 Jan. 2018.
- Hidayat Syarief, Khairunnis, Nova, and Siti Madaniyah. "Association between Smoking Habits, Physical Activity, Added Sugar Consumption and Nutritional Status with Malondialdehyde (MDA) and Glucose Levels in Adults." *Pakistan Journal of Nutrition*, vol. 15, no. 5, 2016, pp. 439-445.
- Marshall, Teresa A. "Low Intake of Sugars May Reduce Risk of Dental Caries." *The Journal of Evidence-Based Dental Practice*, vol. 14, no. 2, 2014, pp. 56-58.
- Ministry of Education. *Guidelines for Food and Beverage Sales in BC Schools*. 2013, [http://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/healthyschools/2013\\_food\\_guidelines.pdf](http://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/healthyschools/2013_food_guidelines.pdf).
- National Academies of Sciences, Engineering, and Medicine. "Strategies to Limit

- Sugar-Sweetened Beverage Consumption in Young Children: Proceedings of a workshop -- In Brief." *The National Academy Press*, 2017. Web. 28 Jan. 2018.
- Parr, Andrew, Toor, Kavie. "Proposal: UBC Healthy Beverage Initiative." *University of British Columbia*. 2017. PDF. 28 Jan. 2018.
- Raine, Kim D. *Overweight and Obesity in Canada: A Population Health Perspective*. Ottawa: Canadian Institute for Health Information, 2004. *UBC Summon*. Web. 10 Feb. 2018.
- Mathieson, Cynthia, Redish, Angela. "2016/17 Annual Report on Enrolment". *University of British Columbia*. 2017. PDF. 1 Apr. 2018.
- UBC Wellbeing. "UBC Action Framework for a Nutritionally Sound Campus". 2017. PDF. 28 Jan. 2018
- UC San Francisco (UCSF). "UCSF Healthy Beverage Initiative." Youtube, 28, May 2015. Web. 28 Jan. 2018.
- UCSF Campus Life Service. "Healthy Beverage Initiative FAQ" n.d. Web. 31 Mar. 2018.
- "Understanding Provision, Usage and Perceptions of Free Drinking Water to the Public in the UK." *Centre for Social Innovation*. 2017. PDF. 10 Apr. 2018.
- Vanderlee, Lana, et al. "Sugar-Sweetened Beverage Consumption among a Subset of Canadian Youth." *Journal of School Health*, vol. 84, no. 3, 2014, pp. 168-176.