

The Mississauga Sustainable Urban Agriculture (MSURA) Project

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Abstract

The focus of our project, Mississauga Sustainable Urban Agriculture (MSURA), is to better understand the food needs of clientele utilizing the services at the Eden Community Food Bank (ECFB). As part of our research, we reached out to the participants of this specific food bank by conducting a survey. From the data collected, we examined whether or not the development of a community garden will aid in meeting the clientele's food needs and assist in establishing food security. According to the United Nations, the definition of food security is "at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." (The State of Food Insecurity, 2001) We will make suggestions and offer insight into possible alternatives for future development. This research marks the commencement of a 5-year project operated by EcoSource, a non-profit organization in the City of Mississauga. Our results have indicated that the vegetables being provided are congruent with the vegetables preferred. The clientele suggested that they would also like more vegetables and fruits. The proposed community garden would assist in establishing the food needs of the people.

Context

A food bank is one of the community-based charitable food assistance solutions, where public or private organizations acquires, stores, and distributes food to relieve the short-term or long-term food insecurity faced by the people at local community (Food Bank Canada, 2010). Food banks are supported by community food drives, umbrella organizations, as well as grocery stores, local agriculture, food manufacturers and other distributors (Food Bank Canada, 2010). The purpose of community food garden is to provide another layer support to food banks. The proponents promotes the establishment of alternative food systems started in community scales; where all people should have “adequate amount of safe, nutritious, and culturally appropriate food, that is produced in environmentally sustainable way.” (Levkoe, 2006) Some of the reasons for planting community food gardens and creating partnerships with nearby food banks include concerns such as food security and sustainable urban agriculture. The economic recessions in the 1980s linked the issues of food scarcity and deprivation to the origin of food banks in Canada (Tarasuk and Eakin, 2003). However, the studies by Tarasuk and Eakin (1999) identified the issue of unmet needs of clientele. The majority of food bank resources in Ontario come from industry and public donations to collective central stations. The collective stations have been criticized for its warehouse operations in which the stations would store the donations instead of delivering them upon acceptance (Tarasuk and Eakin, 1999). This is due to the issue concerning the uncontrollable and inconsistent nature of food bank donations. In addition, critics further argue that much of the corporate food donations are essentially cost-effective solutions to dispose of overproductions and waste, while building the corporate image to the public at the same time (Tarasuk and Eakin, 2003).

Food deprivation is another aspect driving the development of community food gardens. The Ontario Hunger Report by Adam Spence (2009) found that the median age for individuals

relying on food banks in 2009 was 28.7 years old, compared to the 38.2 year average of the other provinces. There are also indications that imply the increase of food bank usage in Ontario.

Within the same report, 33.4% of households are identified to have at least one member within the family who regularly misses a day's worth of food in a period of one week. In addition, there were 375,000 people who turned to food banks in 2009, which was a 19% increase from data obtained in 2008. These individuals, on average, have access to the food banks once a month in order to receive approximately three days worth of food (Adam Spence, 2009).

Sustainable urban agriculture is another reason for the establishment of community gardens. In Vancouver, 44% of residents produced their own food through community gardens (Brown, 2008). Globally, the U.N Food and Agriculture Organization Report (2005) shows that 700 million urban residents assist in meeting their food needs by means of growing food in small plots such as vacant lots, yards and even rooftops (Brown, 2008). As the concept of food miles becomes more apparent, eating locally grown fresh produce has gained popularity in Canada and the United States (Brown, 2008).

Furthermore, community garden experiences in Nova Scotia promote grassroots initiatives on raising awareness of alternative food systems (Adrienne and Tarasuk, 1999). Experience in Nova Scotia identified by the work of Adrienne and Tarasuk (1999) also emphasizes the importance of producing fresh, local, and environmentally sustainable food. Community garden can offer citizens visiting food banks healthy and tasty food choices by having weekly organic food boxes and workshops (Adrienne and Tarasuk, 1999). In Toronto, The Stop Food Community Food Centre, for example, possesses an 8,000 square foot community garden, which provides their food bank with 2,400 organically grown produce per year (Anonymous, 2010). Hence, Brown (2008) suggests that if just a portion of the manicured

lawns in cities and plant gardens could be converted to community food gardens, it would increase the amount of fresh food available to food banks, even to the preference of food bank clientele. (Brown, 2008)

Methodology

Our research involved the administration of a survey formed in association with Carolyn Bailey, who is a member of EcoSource (the sponsor of this project). Our aim was to survey the food bank clientele in order to determine: a) the types of produce clientele prefer, b) possible barriers they face that prevent their own food production, and c) how the food they receive from the food bank helps address food security. We also included questions regarding cooking and various recipes for future references, as building a kitchen is anticipated in the near future.

The MSURA Project conducted two survey sessions to ensure a balanced representation of the overall sample. Both sessions were administered at the Unity location of the Eden Community Food Bank (ECFB) under the supervision of Carolyn Bailey (EcoSource). They were scheduled during the daytime operating hours (12:00-2:00 PM EST) on October 19, 2010 and October 26, 2010. The two events proceeded as scheduled and were initiated by our arrival at the food bank (prior to opening to the general public) in order to prepare and to have the opportunity to familiarize ourselves with the operations of the food bank. The ECFB provided us with a table to prepare our station consisting of a visual display of current community gardens created by EcoSource, possessing significant similarity to the community garden associated with the MSURA project.

As part of our recruitment strategy, we supplied Tim Horton's coffee and snacks to survey respondents. In addition, EcoSource sponsored two gift \$50 baskets for a prize draw that participants of the survey could enter to win. Once both sessions were completed, two winners were drawn from the total participants and the prizes were distributed accordingly. This is part of Carolyn's strategy to encourage clientele to participate in a focus group or interview in the future (each member was encouraged to contact Carolyn should they want to pursue further participation in the program). As this strategy has proven to be successful through positive

feedback from the participants and staff, we used the same recruitment method for session two as well.

Prior to participating in the survey, all clientele were provided with an informed consent form which they had sufficient time to read and sign. This was to ensure participants that the information they provided to us will remain confidential and used solely for the purposes of this project. A copy of the informed consent form with Carolyn Bailey's information was also provided to the participant if they had additional questions or comments regarding the survey.

Following the completion of both survey sessions, we considered the feedback received from participants and identified possible areas of improvement for our future recommendations.

Results

Of the 87 individuals (adults and seniors) whom attended the food bank on October 19, 2010 (12:00-2:30 pm EST) and October 26, 2010 (12:00-2:30 pm EST), 35 people participated in the survey (see Graph 1). This represents a 40.2% participation of the entire morning slot sample size. The survey was developed for the MSURA Food Bank Project in association with Carolyn Bailey (EcoSource) and A. Daniere and A. Iwaniw (University of Toronto at Mississauga), consisting of both quantitative and qualitative questions (including a combination multiple choice, yes/no, and open-ended questions). While some participants declined to participate in the surveys (i.e. new client to the food bank), the data suggests that the majority of clientele have been attending the food bank for a period of 6 months-1 year (see Graph 2).

The cumulative findings from the survey suggest that participants are generally satisfied with the current selection of produce available at the food bank with 48% of participants being very satisfied and 40% of participants being somewhat satisfied (see Graph 3). There was also a significant overlap between the produce received and produce of preference (see Graph 4 and Chart 1). Ninety one percent of participants identified the availability of fresh food being very important to them, with the remaining 9% stating that it was only somewhat important (see Graph 5). Furthermore, the majority of food bank users, 86% believed that they were consuming enough fruits and vegetables in their diet (see Graph 6). The majority of participants, 77%, reported the lack of a home garden to supplement fresh food needs (see Graph 7). The primary reason for this is due to limited space from living in an apartment (see Graph 8 for additional barriers). In addition, 69% of participants stated that they, or their immediate family, participate in outdoor sports activities (see Graph 9). The dominant means of exercise were identified as biking, hiking, and walking. Thus a healthy diet is another scope that had consensus among the clientele.

When asked about the frequency of cooking, it was determined that 19 participants cooked 7 times a week, with only 1 individual cooking 1-2 times a week (see Graph 10). Thirteen individuals identified themselves as utilizing fresh ingredients 3-4 times a week during cooking activities (see Graph 11). A large portion of participants, 71%, felt that receiving recipes from the ECFB would be beneficial, while 26% disagreed (see Graph 12). Furthermore, the majority of participants are very comfortable preparing meals with fresh vegetables (see Graph 13). In general, the surveyed individuals identified almost no difficulty using the provided vegetables to prepare meals (see Graph 14).

Overall, a great deal of positive feedback was received pertaining to our project from participants, volunteers and administrators. However, a number of difficulties arose with certain participants partaking in the survey such as language, gender, and cultural restrictions. Specifically, a woman of Middle Eastern background was reluctant to speak with an unfamiliar male surveyor, but was comfortable with speaking to an unfamiliar female surveyor. Observations of non-participants indicated that some individuals exhibited nervousness and uncomfortable behaviour with being approached, perhaps to the stigma attached of using food banks. We also noticed that many people expressed health concerns (such as diabetes) and required greater amounts of vegetables in their diet. These factors must be taken into consideration in the future continuation of this project.

Recommendations

1. We recommend that Carolyn Bailey follow up the survey with a focus group involving all stakeholders. Possible stakeholders include: Carolyn Bailey, an administrator of the food bank, two food bank clients, the manager of the community garden, as well as a moderator. Possible areas of discussion include the possibility of food bank clientele using the community garden to grow their own vegetables (barriers).
2. We recommend that Carolyn Bailey, in the future development of this project, contact other local food banks to compare strategies of producing a community garden. The possibility of constructing a greenhouse or implementing organic farming can be suggested to promote a healthier lifestyle.
3. We recommend that Carolyn Bailey include in her presentation to the Eden Community food bank the fact that they will be saving money on purchasing vegetables if they can be grown locally and contributed by community gardens. Currently, the food bank is purchasing vegetables to supplement deficiencies from farmer's market donations. Therefore, growing vegetables in a community garden, they can divert funds to other areas of need.
4. We recommend that the community garden include the following vegetables: tomatoes, carrots, peppers, lettuce and onions. It will be more efficient to grow what the clients want as opposed to a variety of vegetables that could end up being thrown away.
5. We recommend that Carolyn Bailey consider growing fruits in the community garden. Even though we made it clear in the survey that only vegetables were being discussed, many people suggested that they wanted more fruits. We commend the following fruits as they are easy to grow in Ontario and have a short timeframe to start producing fruit: strawberries, raspberries and blueberries.

Conclusion

In conclusion, the Mississauga Sustainable Urban Agriculture (MSURA) Project reflects its initial approach: to better understand the food necessities of clientele utilizing the services at the Eden Community Food Bank (ECFB). The results revealed a fundamental difference with our preliminary perception; that the ECFB clientele may not receive enough fresh vegetables. In fact, the surveys proved that the majority of food bank users feel that they are satisfied with the current selection of produce available at the food bank. Therefore, the concerns over food security and potential health issues of the food bank clients are not as relevant in the case of the ECFB.

By means of two survey sessions, the MSURA project has gathered relevant information to better understand the food needs of the ECFB clientele. The results identified tomatoes, lettuce, carrots, peppers, and onions as the vegetables of choice for the majority of individuals. Many participants expressed strong preferences for receiving fruits from the food bank. Thus, this result should be taken into consideration during the development of the community garden. In addition, there was a consensus among participants over the accessibility of home gardening, as most individuals faced a multitude of barriers, including: limited space, time, cost, and skill. In short, the MSURA project now has a better understanding on the food preferences of the ECFB clientele. We are confident in our findings and recommendations, which potentially serve as constructive feedback that can be taken into account for the future development of the community garden.

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Appendices

Survey Introduction to Participants (Informal)

Hi, my name is _____ and I am a student from the University of Toronto. We are conducting a survey here today about fresh produce preferences at the food bank. Your participation will only take 5 minutes during your visit here today. Also, while you are completing the survey please enjoy the refreshments from Tim Horton's provided by us today. Once you are ready, _____ will give you the survey and a consent form. The consent form is to ensure that your rights to privacy and confidentiality are made aware to you, including your right to refuse to participate, and to ensure that the University has verification showing we went over those rights with you. You will meet _____ at the end and we would appreciate should you take the time to help with our project.

If you think you have time now without losing your place in line, you can fill out the survey. Or you still have the option of filling the survey out at the end. We have also included an additional raffle prize pending your participation in the survey that can be entered by filling out your name and contact information on the raffle tickets provided.

Thank you and we appreciate your participation in our survey.

Fresh Food Survey

1. How satisfied are you with the current selection of fresh produce?
 - Very satisfied
 - Somewhat satisfied
 - Not satisfied at all

2. Having fresh vegetables available to me is:
 - Very important
 - Somewhat important
 - Not at all important
 - I do not know

3. I believe that my diet does not contain enough fruits and vegetables.
 - Yes
 - No

4. What type of fresh vegetables do you most enjoy receiving when you visit the Eden Community Food Bank?
 -
 -
 -
 -

5. What type of fresh vegetables would you like to see more often when you visit the Eden Community Food Bank?
 -
 -
 -
 -

6. I have been a client at Eden Community Food Bank for the following length of time:
 - 0-3 months
 - 3-6 months
 - 6 months – 1 year
 - 1-3 years
 - 3+ years

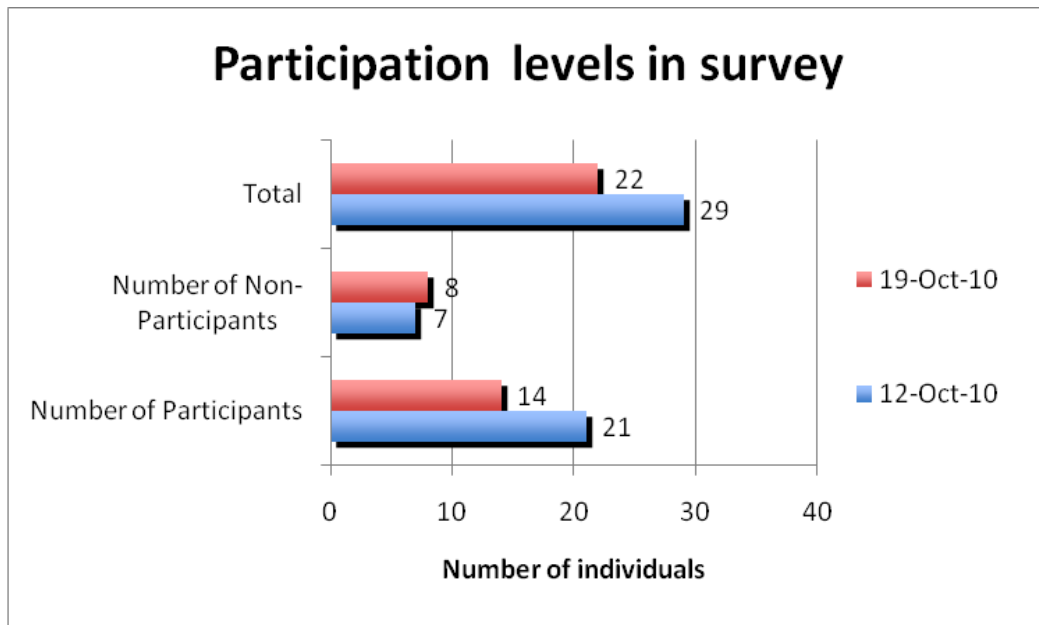
7. How often do you cook for yourself and/or for your family?
 - 1-2 days a week
 - 3-4 days a week
 - 5-6 days a week
 - 7 days a week

8. How comfortable you are with cooking?
- Very comfortable
 - Moderately comfortable
 - Not comfortable at all
 - I do not know how to cook
9. How often do you cook using fresh ingredients?
- 1-2 days a week
 - 3-4 days a week
 - 5-6 days a week
 - 7 days a week
 - Never
10. How difficult do you find it to prepare meals with fresh vegetables?
- Very
 - Somewhat
 - Not at all
 - I do not cook myself
11. Would you like the Eden Community Food Bank to provide you with various recipe suggestions for home cooking (using food provided from the Bank on a regular basis)?
- Yes
 - No
12. Do you currently have a garden at home?
- a. If you answered YES, what kind of fruits and/or vegetables do you grow?

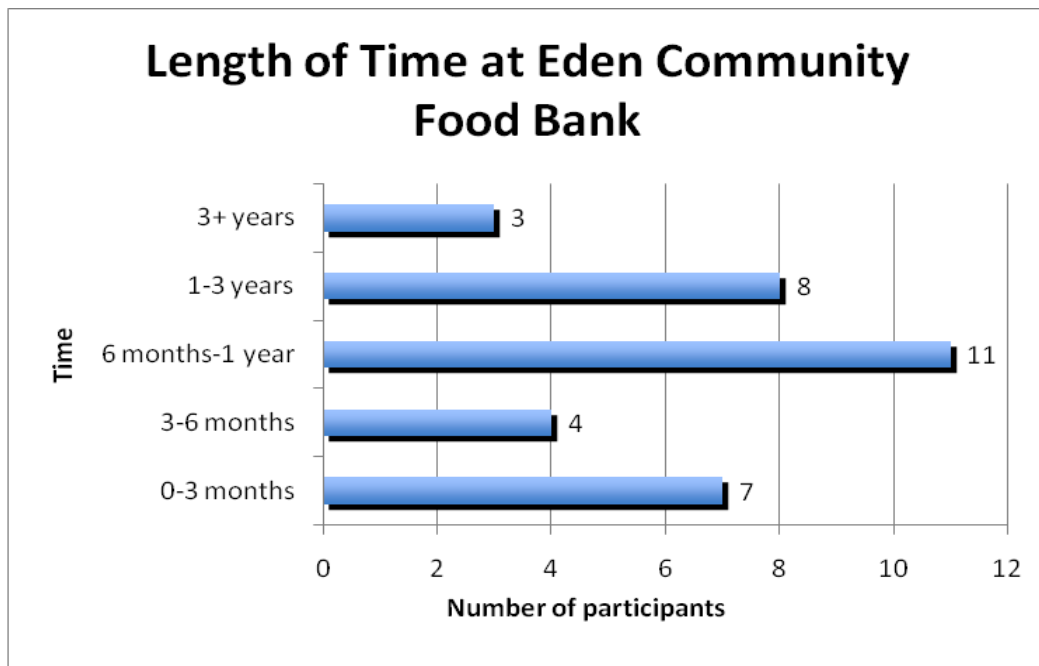
 - b. If you answered NO, what barriers do you face to having your own garden or participating in a community garden?
13. Do you/your family currently participate in any outdoor activities (gardening, sports, hiking etc?)
- Yes (if yes, please specify what kind: _____)
 - No (if no, why not? _____)

Survey Results

Graph 1 – Participation Levels from Survey Session One and Two



Graph 2 – Length of Time Attending the Eden Community Food Bank



Graph 3 – Satisfaction with the Current Selection of Fresh Produce



Graph 4 – Comparison Between Produce Received and Produce Preferred

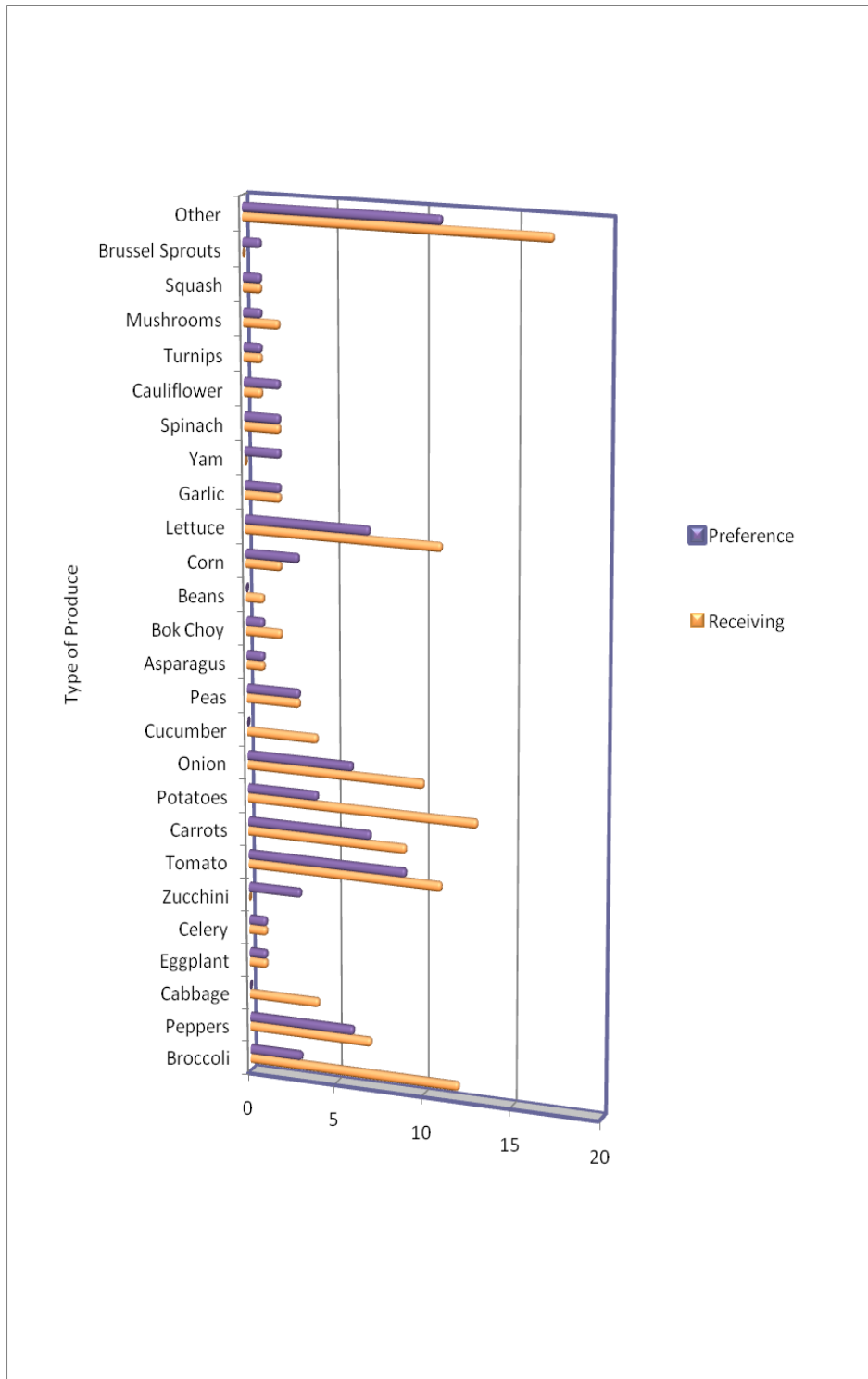


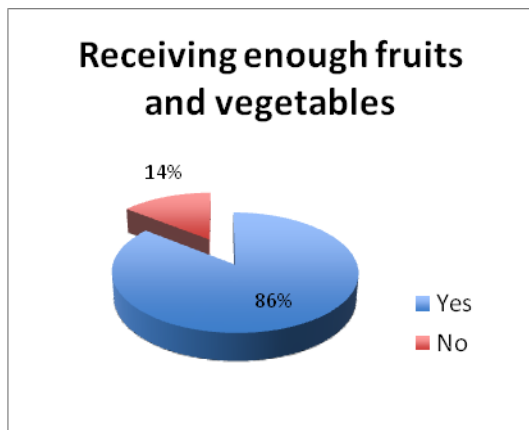
Chart 1 – Comparison Between Produce Received and Produce Preferred

Vegetable	Receiving	Preference
Broccoli	12	3
Peppers	7	6
Cabbage	4	0
Eggplant	1	1
Celery	1	1
Zucchini	0	3
Tomato	11	9
Carrots	9	7
Potatoes	13	4
Onion	10	6
Cucumber	4	0
Peas	3	3
Asparagus	1	1
Bok Choy	2	1
Beans	1	0
Corn	2	3
Lettuce	11	7
Garlic	2	2
Yam	0	2
Spinach	2	2
Cauliflower	1	2
Turnips	1	1
Mushrooms	2	1
Squash	1	1
Brussel Sprouts	0	1
Other	17	11

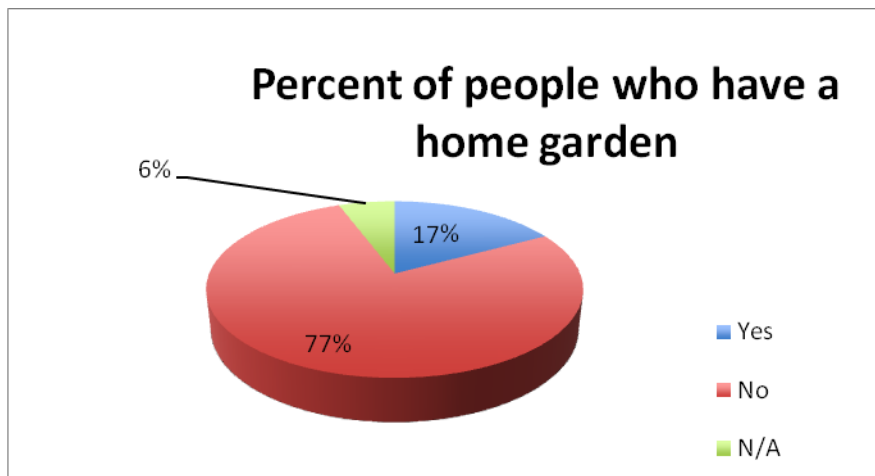
Graph 5 – Importance of Having Fresh Produce



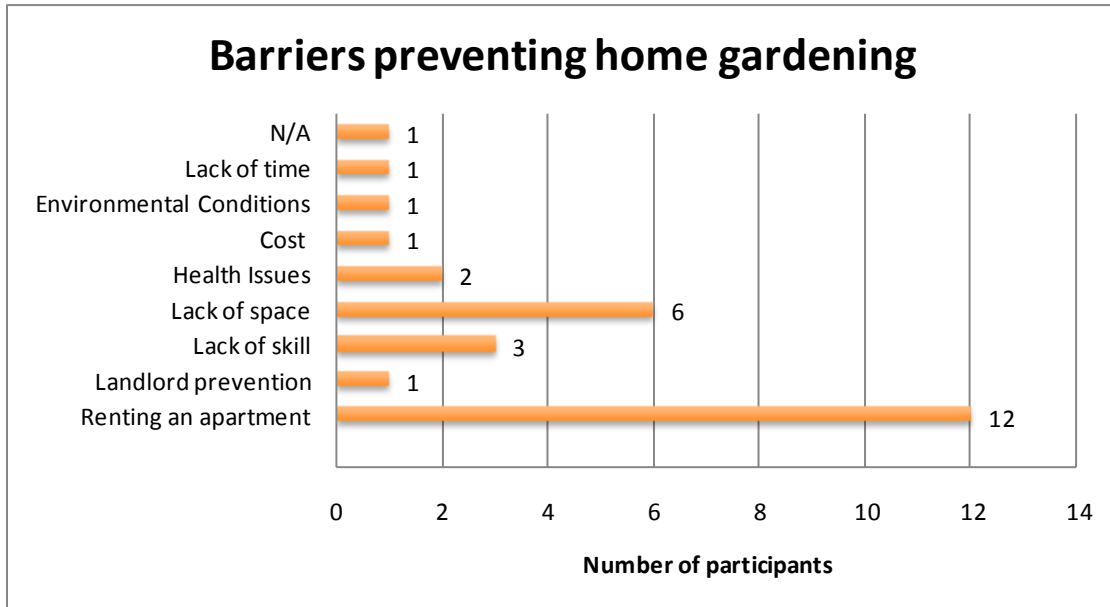
Graph 6 – Percentage of People Receiving Enough Fruits and Vegetations



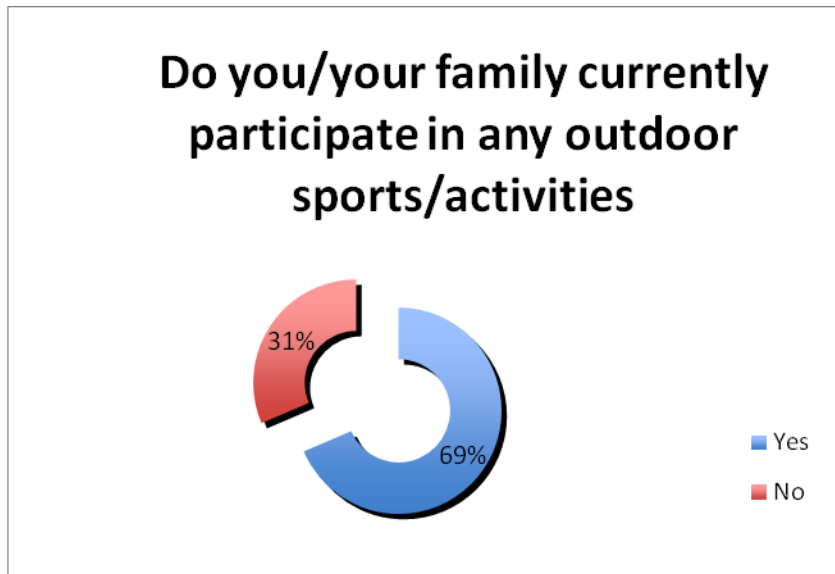
Graph 7 – Percentage of People with a Home Garden



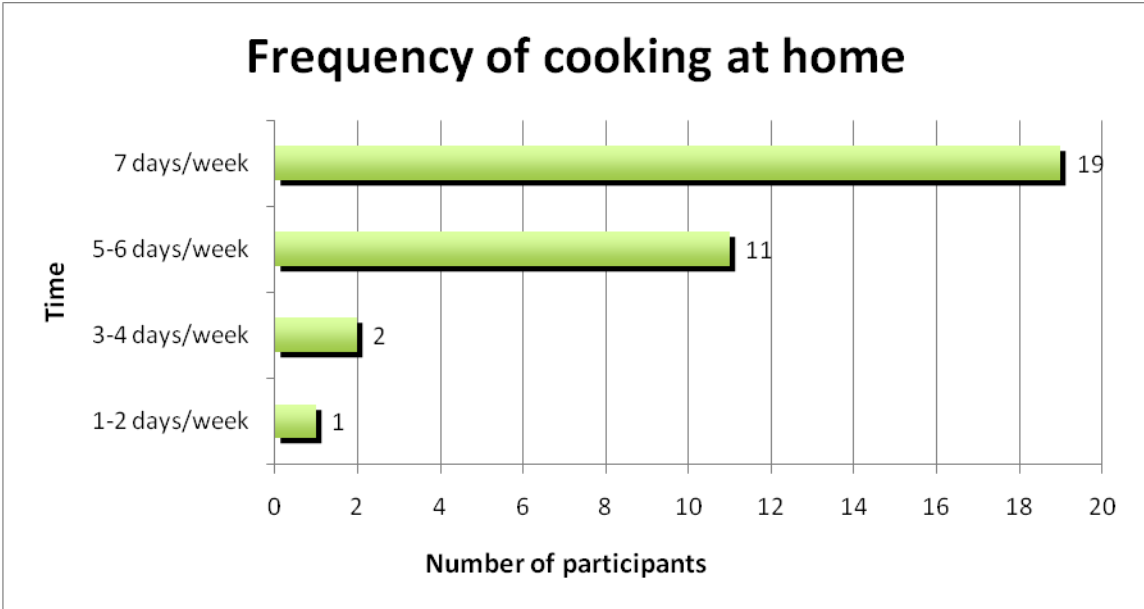
Graph 8 – Barriers Preventing Home Gardening



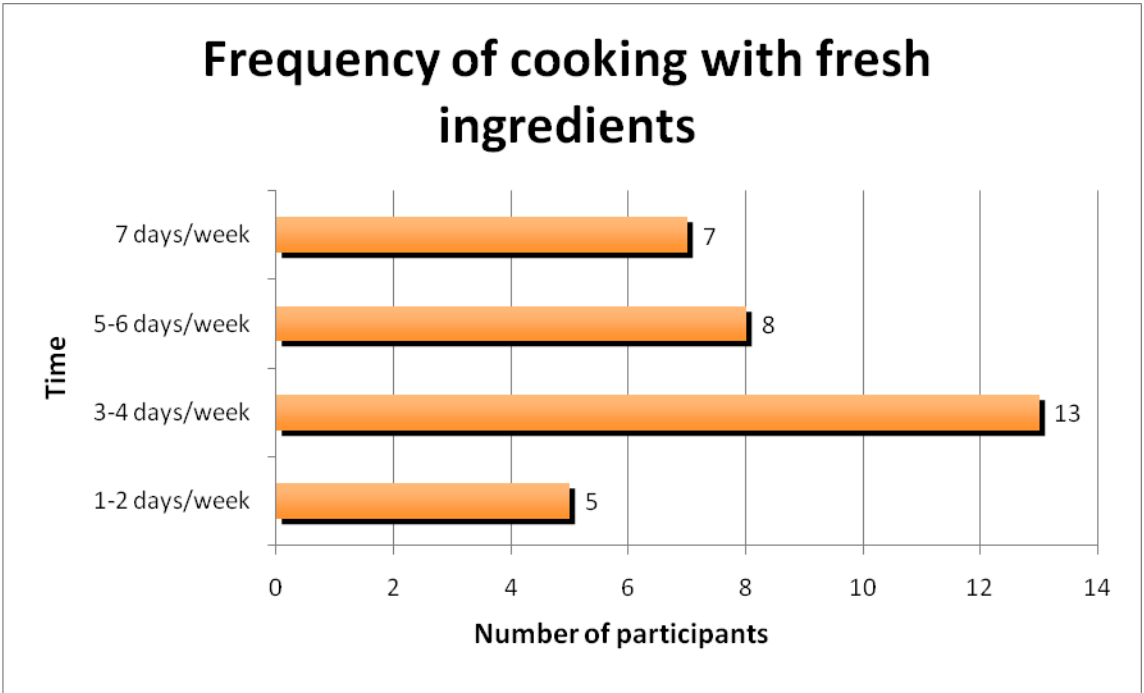
Graph 9 – Participation in Outdoor Activities



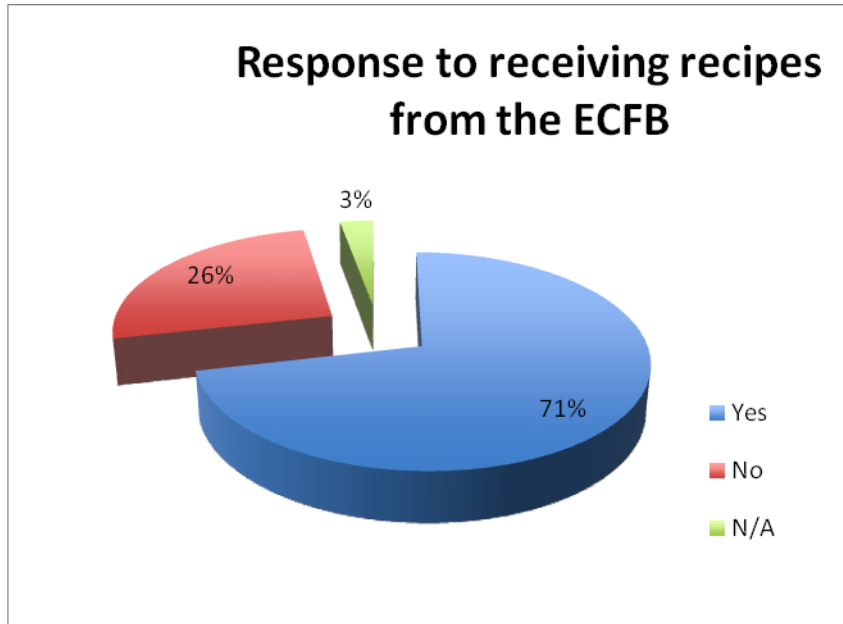
Graph 10 – Frequency of Cooking at Home



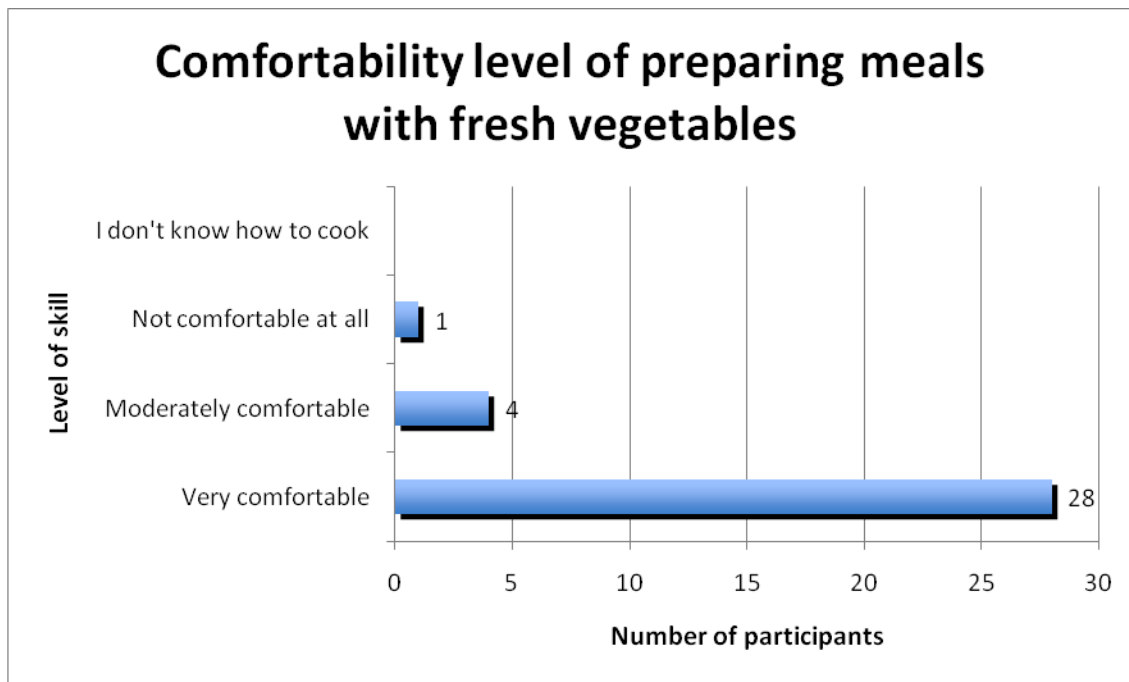
Graph 11 – Frequency of Cooking Using Fresh Vegetables



Graph 12 – Response to ECFB Providing Recipes for Cooking



Graph 13 – Level of Comfort Associated with Cooking



Graph 14 – Reported Difficulty Preparing Meals with Fresh Vegetables

