

Food for thought

A look at food insecurity at the University of Minnesota



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INTRODUCTION

Food insecurity affects a variety of populations and can impact both physical and mental health. This project looked at addressing food insecurity at the University of Minnesota (U of M) by piloting an on campus food bank as a solution. Food insecurity falls on a spectrum and is a term used to encompass people who have concerns about procuring enough food on a regular basis. Many students are unaware that they qualify as food insecure. Identifying at risk students and implementing resources can help address the problem. This project evaluated the effectiveness of two pilot food pantries at addressing food insecurity at the U of M.



DESIGN + METHODS

In the fall of 2016, two pilot pantries were organized to be held in February and March of 2017. Each pantry would consist of food options from four categories; grains, protein, vegetables and fruit. While there were guidelines as to how much food a participant could take, the design was meant to mimic a grocery store experience. There were options within each category and an emphasis on fresh fruits and vegetables instead of canned goods. This design was meant to create a positive experience.

After going through the pantry, each student would be given the option to fill out an anonymous survey on an iPad. The purpose of the survey was to gather information in order to assess whether food insecure students were utilizing this resource. Data on the status of participants was essential in evaluating the ability of the pantry to serve students' needs and establishing it as a permanent resource.

The survey was designed to gather information on demographics, education, work history, and evaluate food insecurity risk. Two screening questions to measure food insecurity risk were utilized from the United States Department of Agriculture (USDA) Household Food Security Survey Module. Survey information provided attendance information and identified at-risk students.

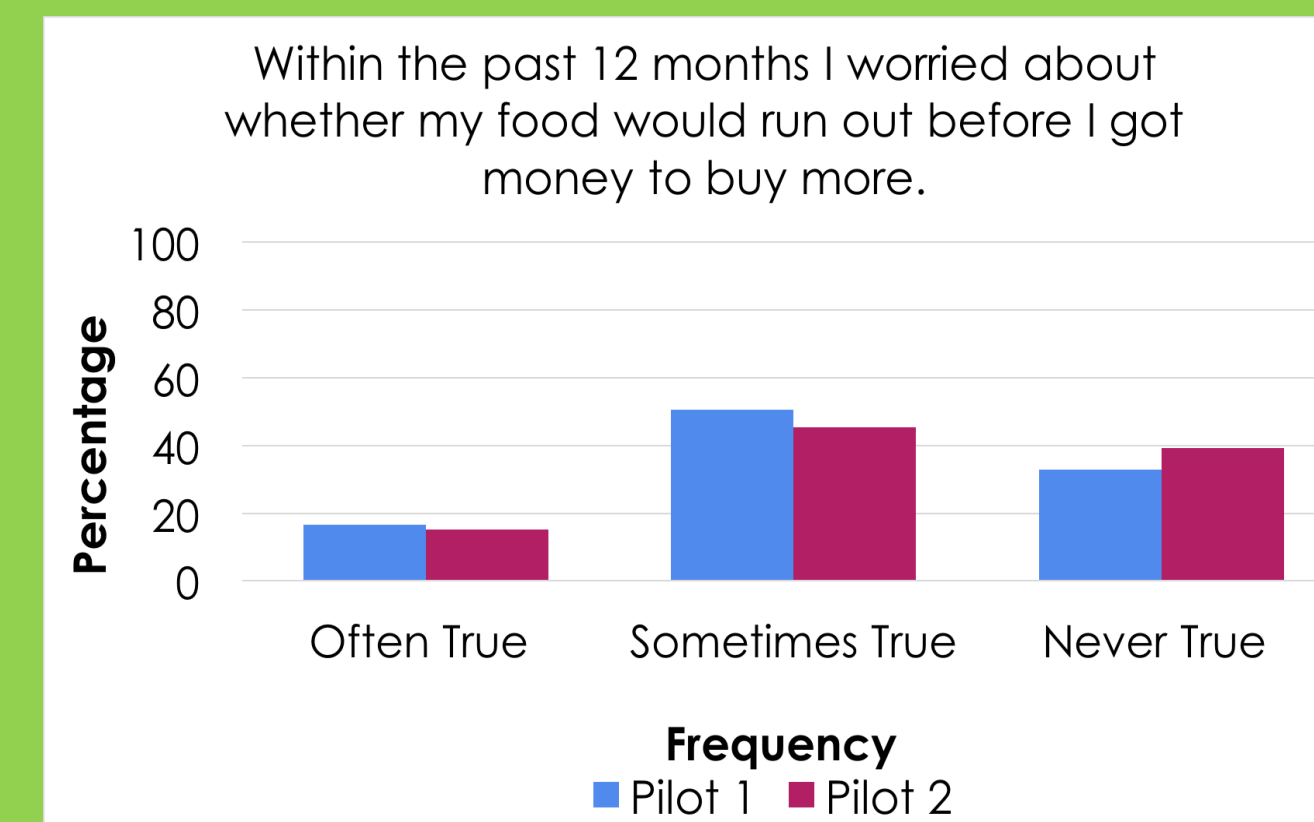
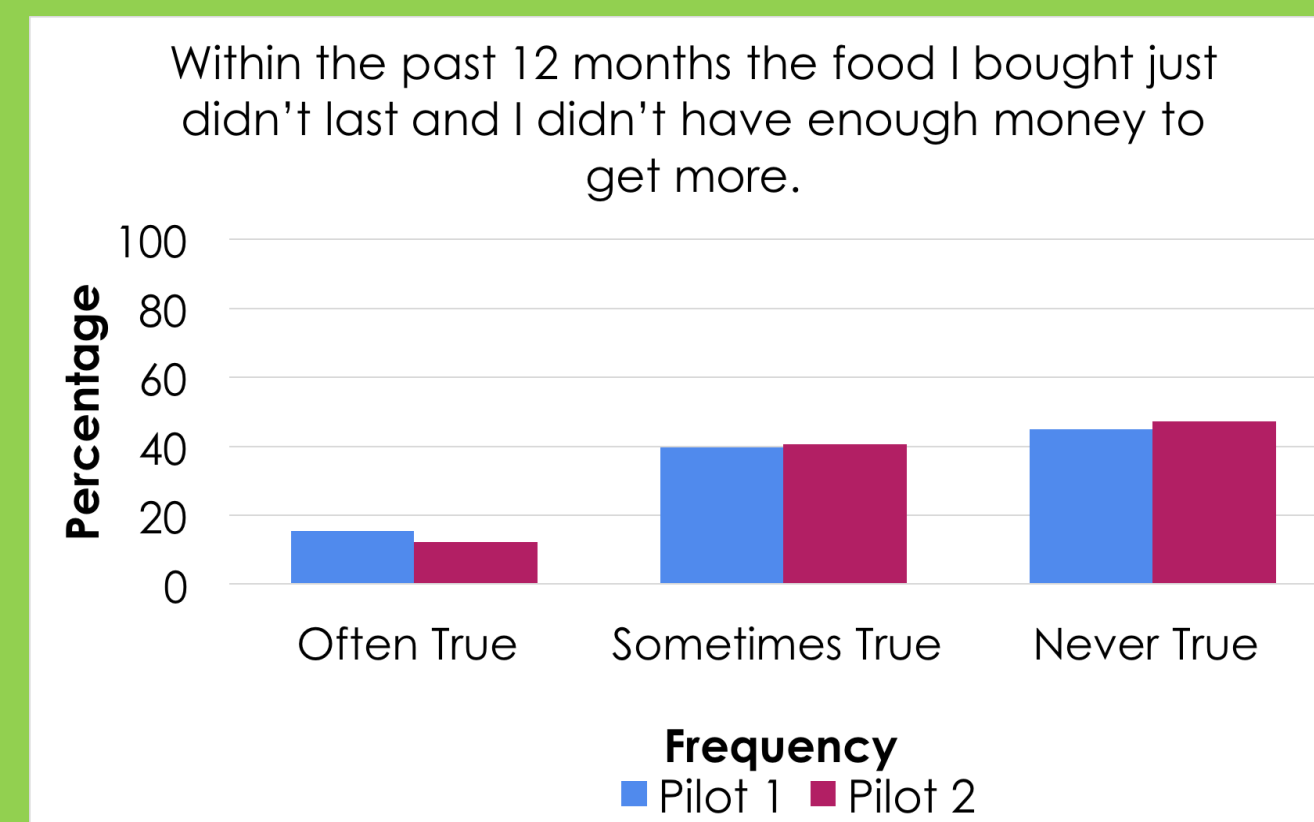
PILOT INFORMATION

Pilot	Length (days)	Hours Total	Participants	Food (lbs)
Pilot 1 February 2017	1	8 hrs	555	3,155
Pilot 2 March 2017	3	24 hrs (8hrs/day)	927	6,186



Pictured: Anam Hasan, Ashely Hussein, Rebecca Leighton, Elayna Shapiro

USDA Screening Questions



Results from questions on both surveys

Work (hr/wk)	Pilot 1 (%)	Pilot 2 (%)
0	24.56	26.54
1-9	25.22	23.52
10-19	33.55	29.92
20-29	12.72	14.32
30-39	2.41	3.38
40	0.88	1.28
>40	0.66	1.05

Housing*	Pilot 1 (%)	Pilot 2 (%)
Rent/ Shared Rent	58.72	66.47
Residential Hall	26.93	24.56
Parent's House	7.28	4.07

*Additional percentages include: Greek housing, subsidized housing, homeowner, homeless

Results from questions on survey 2

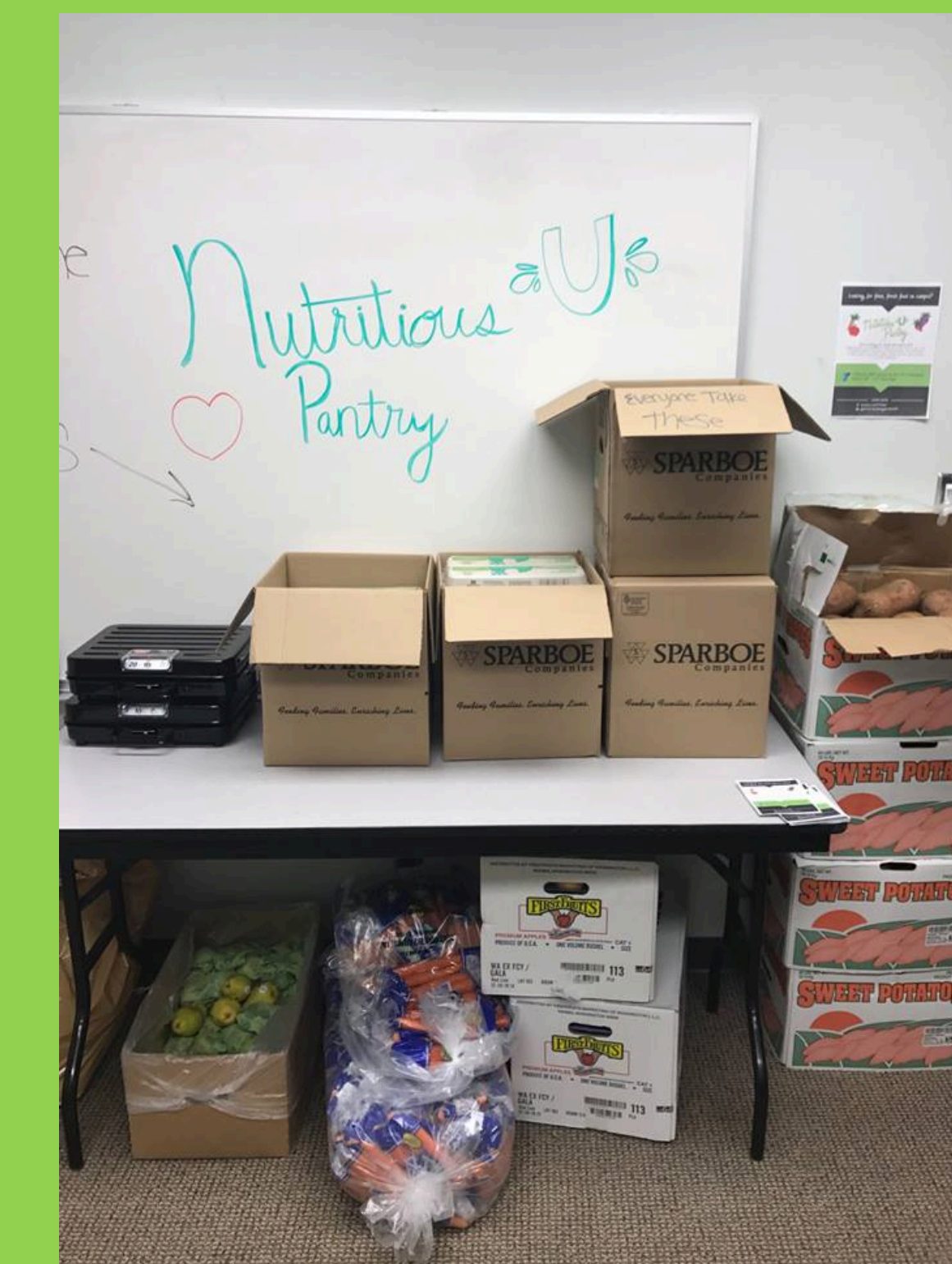
Transportation methods to pick up food	Pilot 2 (%) *
Walk or Bike	28.53
Roommate/Friend/Family's Vehicle	25.38
Public Transit	24.26

*Total did equal 100% with additional percentages including the following: food delivery service, campus bus, own vehicle, other

Difficulties in Accessing Food	Pilot 2 (%) *
Healthy food is not affordable	25.17
Transportation to a store	21.15
Amount of time to prepare food	20.37
Amount of time to make list and go shopping	15.47

*Total did equal 100% with additional percentages including the following: meal plan is too small, meal plan doesn't meet dietary needs, other, none of the above

DISCUSSION



Analysis found that the majority (76%) of participants who utilized the food pantry qualified as food insecure according to the USDA screening questions. This represents students that indicated some form of yes to one or both screening questions. The survey information indicates that participants are working in addition to school. Inadequate shopping time, restricted income, and transportation limitations are all factors that can contribute to food insecurity.

The two main obstacles to accessing food for the U of M population was transportation and income. Without consistent access to nutritious food, students may see a decrease in their physical and mental health.¹ Therefore, improving their access to fresh fruits and vegetables, grains, and protein can have widespread benefits for students' health.



CONCLUSION

After conducting two pilot pantries, there was enough evidence to implement a permanent pantry as a resource on campus. Since October 2017, the pantry has been open once a month for 3 days. Data will continue to be collected, as well as efforts to expand the pantry's hours and resources. Information from the pantry helped determine the type of student who would utilize a food pantry, as well as provide facts on the causes for food insecurity at the U of M. Currently, the major limitation for students are transportation and income. This project brought awareness to food insecurity at the University of Minnesota and led a permanent food pantry to address access to nutritious food on campus.



RESOURCES

1. McLaughlin KA, Green JG, Alegria M, et al. Food Insecurity and Mental Disorders in a National Sample of U.S. Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2012;51(12):1293-1303. doi:10.1016/j.jaac.2012.09.009.