

Empowering Freestore Foodbank Clients to Establish Diabetes-Friendly Diets

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Background

The Freestore Foodbank started in 1971 with the goal of providing necessary fresh and canned goods, clothing, as well as toiletries to disadvantaged families. Today, the Freestore has grown to one of Ohio's largest food banks, providing 24 million meals annually in conjunction with 400 community partners in 20 counties across Ohio, Northern Kentucky, and Southeast Indiana. Unlike many food banks across the state, the Freestore is a free-choice pantry, providing families with a grocery-store like experience so that they can tailor their monthly food allowance to meet their dietary needs.

Mr. Robert Littman, Associate Director of Client Services for the Freestore Foodbank's Customer Connection Center, approached our learning community at the beginning of our service learning project with the challenge to address diabetes education at the Freestore Foodbank. The Freestore Foodbank is not alone in struggling to address this healthcare concern. According to the Centers for Disease Control, diabetes is a pressing health issue across the United States. More than 100 million Americans have diabetes or prediabetes, or roughly 30% of the population. This is significant, because diabetes is a chronic illness with significant morbidity and mortality associated with it as well as significant monetary costs, which in 2012 were well over \$200 billion dollars.

As a result, Learning Community 5 has developed a dual-arm Diabetes Education Program to attack the problem from the side of prevention, which will educate clients about healthy food choices at the food bank. This multifaceted program has two main parts: 1) Freestore education and volunteer training and 2) client empowerment to enable them to make healthy food choices at the clinic with their diabetes or prediabetes in mind. The Freestore Foodbank provides a unique opportunity to have maximum impact, 1) by reaching a large proportion of the underserved populations of Greater Cincinnati and 2) in providing us the opportunity to change the dietary choices of this population in a way that can be employed in their food choices at the food bank.

However, without a means of analyzing and quantitatively identifying problems with our plan or existing barriers in the Freestore foodbank organization, we knew that we would need to have a means of evaluating both the strengths and weaknesses of the Freestore's current practices, the education level of food bank clients, and the effectiveness of our training material and implementation. As a result, the rest of this document details the surveys and feedback we have received to provide an effective and long-lasting diabetes education program at the Freestore Foodbank.

Specific aims

- 1.To better understand the the barriers individuals in the Greater Cincinnati Area face in maintaining good health.
- 2.Develop an intervention that is sustainable and that will help empower clients to make healthy food choices

PROJECT DEVELOPMENT

Methods

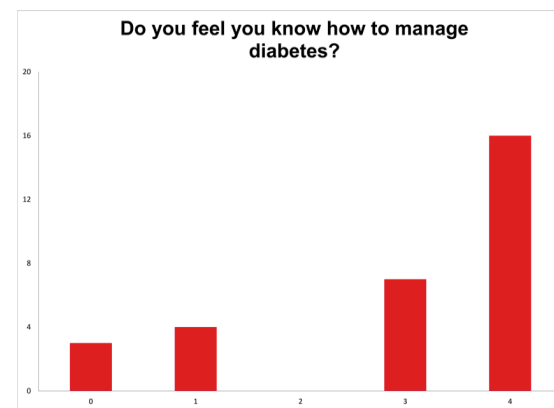
- We assessed average health literacy of Freestore clients with regard to diabetes and nutrition
- We assessed level of food insecurity clients experienced & barriers that prevented healthy eating
- We administered at OTR Community Health Fair which was co-sponsored by Freestore Foodbank
- The responders included people with diabetes or prediabetse or caretakes of people with prediabetse or diabetes

Results

- Clients at the foodbank spent a median of \$171 per month on food (\$68-\$428)
- 76.6% were purchasing groceries for only one individual
- 84.6% of clients knew and utilized SNAP (Supplemental Nutrition Assistance Program) 93.5% of clients either were unaware or did not use the Produce Perks through SNAP
- Barriers to managing a diabetes-related diet included trouble affording appropriate food (45.5%), food going bad quickly (22.7%), and disliking produce (13.6%)
- When answering what diabetes is and it is acquired, clients attributed it primarily to issues with sugar (66%), diet changes (50%), genetics (47%), obesity (43%), taking oral medication (43%), and taking insulin shots (43%).
- For management of diabetes, 76.6% of clients rated a 3 out of 4 or greater on being able to manage their diabetes.
- Further, 80% of clients believed they were confident in their ability to cater a diabetes-conscious meal.

Discussion

- Survey data suggest that cost is the largest barrier faced by food bank clients in developing a diabetes-friendly diet.
- Most food bank clients possess some knowledge about diabetes, but others could benefit from diabetes education.
- We designed our intervention to provide Freestore clients with affordable and healthy food options alongside basic information about diabetes, prediabetes and nutrition.
- The intervention was targeted at volunteers and employees in order to create a sustainable program that can reach a large number of clients.



PROJECT IMPLEMENTATION

Methods

- Stage one of our intervention involved teaching Freestore staff members and volunteers how to assist diabetic clients with food selection in the food bank
- To assess the effectiveness of our class we administered a pre and post class survey
- We assessed the classes comfort-level providing diabetes-friendly advice to clients and confidence in their own knowledge of diabetes
- We also assessed the role of our participants in the food bank, the number of clients they interact with each day and the materials they use to assist clients
- Following the class, we hung traffic light signs in the food bank ranking food choices in terms of a diabetic diet
- We also provided the volunteers with flyers to hand out to clients

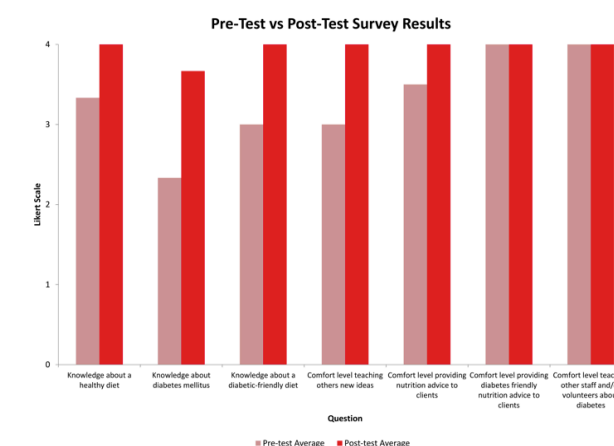
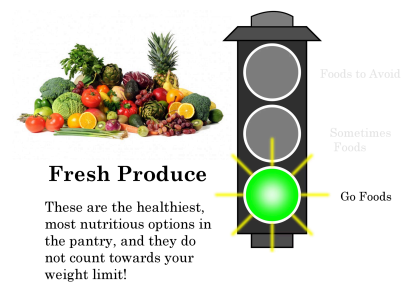
Results

- All three participants stated that they had been diagnosed as either diabetic or pre-diabetic by a physician.
- The pre-test results reflect that the participants felt comfortable teaching other volunteers about diabetes and providing clients diabetes-friendly nutrition advice.
- However, most of the participants did not feel as confident concerning their knowledge about diabetes or their knowledge about a diabetic-friendly diet prior to the class.
- The greatest improvement as a result of our intervention is reflected in the “knowledge about diabetes mellitus” criteria (from 2.33 to 3.67).
- The volunteers also felt that the class improved their knowledge about a diabetes-friendly diet, as well as increased their confidence in teaching others new ideas.
- Two of the participants stated that our class should have included more information concerning “types of sugars.”
- One volunteer suggested we implement a visual aid in order to help differentiate between simple sugars and complex sugars.
- Another suggestion was to include more “hands-on” aspects to our presentation.

Discussion

- The Diabetes Pro-Tips Flyers and Traffic Light Signage were able to reach hundreds of clients.
- Patient education is meaningless unless it is paired with patient compliance. We hope that our system of education, reinforcement, and support leads to better patient outcomes.
- The feedback from our training session was very helpful in determining common confusions when it comes to diabetic nutrition and can help inform our video development or continuation of the project in future years.

Diabetic Health Stoplight



Limitations

- Seasonal use of the food bank made it difficult to target our population of interest (Food-Insecure Diabetics)
- Transient volunteer workforce required low labor, easy to implement interventions to be sustainable
- Transient volunteer workforce and clientele affects the ability to assess the success of our interventions over time, turned our focus to key informants

Next steps

1. Make a video that is available on Youtube to train future volunteers
2. Provide FreeStore volunteers with the sign template so they can continue to make signs that match the food available
3. Evaluate the effectiveness of the project from both volunteer and client point of view and make necessary adjustments

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