

2-2-2009

What is the Value of Group Nutrition Education for Older Adults with Diabetes?

Patrick Hackett

Elizabeth Lagana


Metasebia Munie

Sinan Ozgur

Heather Provencher

See next page for additional authors

Follow this and additional works at: http://scholarworks.uvm.edu/comphp_gallery

 Part of the [Community Health and Preventive Medicine Commons](#), and the [Health Services Research Commons](#)

Recommended Citation

Hackett, Patrick; Lagana, Elizabeth; Munie, Metasebia; Ozgur, Sinan; Provencher, Heather; Taplin, AmiLyn; Ware, James; Russell, Sarah; and Kennedy, Amanda, "What is the Value of Group Nutrition Education for Older Adults with Diabetes?" (2009). *Public Health Projects, 2008-present*. Book 10.

http://scholarworks.uvm.edu/comphp_gallery/10

This Article is brought to you for free and open access by the Public Health Projects, University of Vermont College of Medicine at ScholarWorks @ UVM. It has been accepted for inclusion in Public Health Projects, 2008-present by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.

Authors

Patrick Hackett, Elizabeth Lagana, Metasebia Munie, Sinan Ozgur, Heather Provencher, AmiLyn Taplin, James Ware, Sarah Russell, and Amanda Kennedy

What is the Value of Group Nutrition Education for Older Adults with Diabetes?

Hackett, Patrick; Lagana, Elizabeth; Munie, Metasebia; Ozgur, Sinan; Provencher, Heather; Taplin, AmiLyn; Ware, Kristopher; Russell, Sarah; Kennedy, Amanda

Background

- 23.6 million people or 7.8% of the US population have diabetes
- Type 2 diabetes can cause many serious problems that affect the heart, nerves, eyes, and kidneys
- Lifestyle choices, including diet management, can be used to control or help supplement medical care used in minimizing the risk factors associated with diabetes

Objective

Teach senior citizens the benefits of healthy eating to prevent or maintain diabetes with a focus on increasing fruit and vegetable intake

Methods

- Teaching Clinic*
- Residents at Burlington Housing Authority were taught the benefits of healthy eating and the importance of increasing fruits and vegetables.
 - Cost effective measures to increase fruit and vegetable intake
 - A recipe book with nutritional information, resources, and recipes was given to residents
 - Important topics covered: variety, appropriate serving sizes, strive for five servings, differences between fresh, frozen, and canned
- Survey Design and Receipt Analysis*
- Questions focused on eating habits, current state of health, knowledge of American Diabetes Association guidelines, healthy eating habits
 - Grocery receipts were collected from three weeks pre-intervention and post-intervention
 - Fruit and vegetable serving sizes were quantified from the receipts



Results

Table 1. Participant Post-Survey Data

Subject #	Age	Sex	How important are vegetables in diabetes prevention?	How expensive is it to prepare a meal using fruits?	How expensive is it to prepare a meal using vegetables?	How many servings of fruits and vegetables does the USDA recommend per day?
5	72	F	Very Unimportant	Inexpensive	Inexpensive	3
7	68	F	Very Important	Same as a meal without fruit	Same as a meal without vegetables	6
12	75	M	Very Important	Inexpensive	Inexpensive	4
22	69	F	Very Important	Inexpensive	Very Inexpensive	5
23	95	F	Very Important	Same as a meal without fruit	Inexpensive	4
24	82	F	Very Important	Same as a meal without fruit	Very Inexpensive	4
25	74	F	Very Important	Same as a meal without fruit	Same as a meal without vegetables	5

Table 2. Total Number of Serving Sizes Purchased

	Pre Intervention	Post Intervention
Subject 5	85	28
Subject 7	29	57

Conclusion

- Participants were highly engaged in the presentation and the small group size provided an intimate learning experience.
- Limitations of this study include small sample size, selection bias, data collection difficulties, limited study time, and low ceiling of our primary outcome measure.
- A small sample size prevented more sophisticated statistical analyses.
- Survey results indicated that senior citizens realized the importance of a diet high in fruits and vegetables.
- Despite the limitations of our project, a focused nutrition intervention for diabetes prevention holds promise for improving the health behaviors of at-risk populations.

Lessons Learned

- Grocery store receipts provide limited information, so they present a number of challenges when they are used for determining the outcomes of an intervention
 - If produce is purchased in bulk, we cannot determine when it will be consumed
 - Some grocery store receipts do not include the weights of fruits and vegetables, so the quantity of produce purchased has to be estimated by price
- Using weights from the grocery store receipt does not account for unconsumed waste from fruits and vegetables
- Despite high pre-intervention knowledge about fruits and vegetable, participants' actual purchase of fruits and vegetables remained low. This study reinforces the need to target interventions aimed at knowledge application

References

- http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf
- <http://www.diabetes.org/food-nutrition-lifestyle/nutrition/meal-planning/diabetes-food-pyramid.jsp>
- <http://fruitsandveggiesmorematters.org>
- <http://www.nutritiondata.com/facts/fruits-and-fruit-juices/1954/2>
- Rigby, P.M., and Tommis, Y. (2008). Improving food purchasing choices through increased understanding of food labels, using itemized till receipts to measure these changes. *Journal of Human Nutrition and Dietetics*, 21(4): 400 – 401