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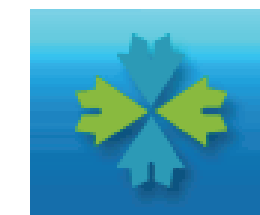
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# Nutrition and Exercise Education Initiatives in a Community Setting



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## Introduction

Maintaining a nutritious diet and physical activity is a challenge for many people, but especially for those with limited financial and social resources. Barriers to adequate exercise and healthy food include prohibitive costs of gym membership and high-quality foods, lack of time during the day in which to exercise or prepare meals, and lack of access or transportation to exercise facilities or grocery stores. We assessed whether adoption of healthy exercise and eating habits could be established and sustained by educating participants on healthy diet guidelines and on non-traditional exercise forms. We encouraged family-centered activities such as walking, gardening, cleaning, dancing, and playing with children. We quantified changes in participants' pre- and post-educational diets and exercise habits with 3-day dietary recall logs and pedometer-measured daily steps.

## Methods

**Study population:** 15 adults of different ethnicities and socioeconomic standing living in Chittenden County, Vermont.

**Baseline Data:** A 12 question survey was administered to obtain each participant's height, weight, age, living and working conditions and basic information on diet and exercise. Each participant was then given a pedometer and three food diaries and was instructed to record the number steps they took each day as well



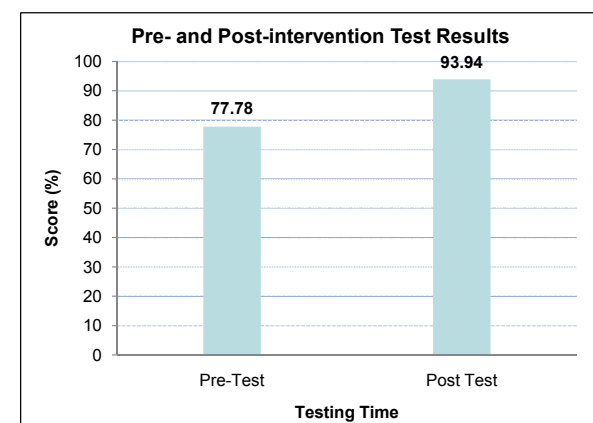
as the amounts and kinds of food they ate for each meal and snacks. The participants recorded this data for three consecutive days.

**Intervention:** Two weeks after collecting the baseline data, our group spent 45 minutes giving three 15 minute educational sessions to the NeighborKeepers group. In these sessions we presented information on the benefits of eating a low fat, low sodium diet filled with fruits, vegetables and whole grains. We also emphasized the benefits of exercise and activity and supplied lists of local resources and ideas for fun, healthy, family-oriented activities. A simple, six question pre- and post-test were administered before and after each discussion.

**Activity:** One week after the talks we accompanied a group of our study participants and other NeighborKeepers to the South Hero Applefest as a way of demonstrating a good way in which to incorporating both exercise and healthy foods into fun activities.

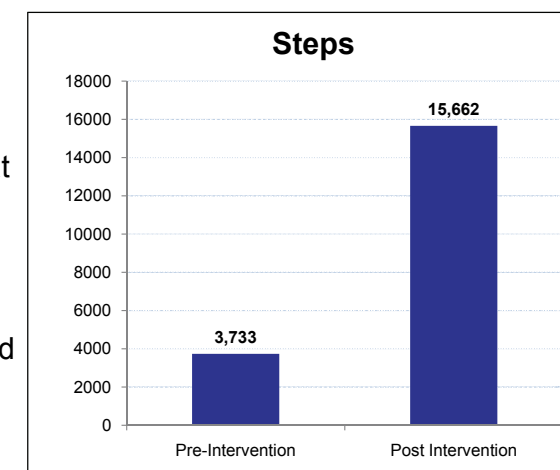
**Follow Up:** Four weeks after the educational intervention and apple picking, we distributed another set of three food logs as well as a follow-up post-test.

## Results

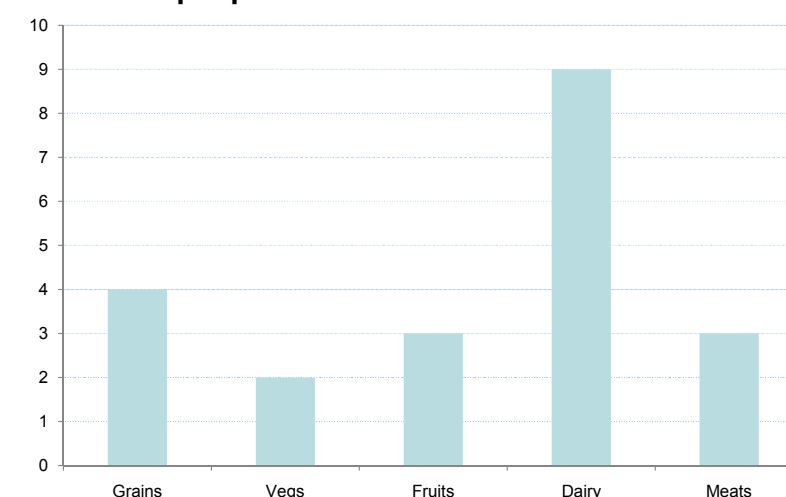


"We would like to thank you for all the information that you have given us."

"I really appreciated that [the medical students] made an effort to become a part of our group and community."



## Improvement in numbers of days on which people attained at least 50% RDA



## Conclusion

Due to a small sample size and inconsistent or absent survey responses, we could not statistically prove that the use of didactic sessions, food logs, pedometers, and organized community activities improved the exercise and eating habits of participants. However, we did observe distinctly positive testimonial responses among participants, who noted that our methods promoted an increased awareness and inspiration to maintain healthy lifestyles through exercise and nutrition. In addition, participants also commented on an improved sense of community that stemmed from attending didactic health talks and participating in activities like apple-picking. Limitations to our study included pedometer malfunction, a communication barrier due to language differences, a limited survey size, and inconsistent attendance of educational meetings. We recommend that future research focus on a smaller group of participants that can be more consistently and conveniently followed over time. We also believe that incorporating a system of incentives and/or rewards for achieving exercise and nutrition goals would favorably influence the results and could be investigated in future studies.

## References

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- [ii] Yancey AK, McCarthy WJ, Harrison GG, Wong WK, Siegel JM, Leslie J. Challenges in improving fitness: results of a community-based, randomized, controlled lifestyle change intervention. *Womens Health*. 2006; 15(4): 412-29.

