



### **Integrating Diet and Physical Activity to Improve Health of Older Adults**

Wellman, N.S., Kamp, B., Kirk-Sanchez, N.J., Johnson, P.M. (2007) Eat Better and Move More: A Community-Based program Designed to Improve Diets and Increase Physical Activity Among Older Americans. *American Journal of Public Health* Volume 97, No. 4, 710-7.

#### **Why is Developing Diet and Activity Programs Important?**

Aging is associated with increased chronic disease risk in older adults for a variety of reasons. Good nutrition in older adults typically decreases with time, leading to malnutrition, as well as physical and mental deterioration. The need to implement programs that combine both diet and exercise is critical to successful aging in older adults. The Eat Better and Move More program was developed to promote healthful behaviours in aging adults by increasing physical activity levels and improving nutrient-poor diets.

#### **What Was Done?**

The study was conducted at ten different locations that were selected against various criteria such as ability to recruit participants and ability to collect and submit data. The sites were based in dining centers, neighbourhood recreation centers, housing complexes, and one Native American reservation. Nine hundred ninety nine individuals participated in the study. Pre-intervention and post-intervention measures were taken and compared. These measures included: self-assessment of physical activity, functional mobility related to risk of falling, stage of change in modifying lifestyle behaviours, changes in fruit and vegetable consumption, and changes in number of steps walked. The intervention included 12 weekly sessions that incorporated mini-talks based on educating the participants on the benefits of eating more fruits and vegetables and calcium-rich foods, sensible portion sizes, diet deficiencies or excesses, and the benefits of physical activity. The participants filled out a "Tips and Tasks" form to check off food choices and record number of steps walked daily.

#### **What Was Found?**

The mean age of participants was 74.6 years old. Of the 41% of participants who were not at the maintenance stage of change, 73% made a significant advance of one or more stages towards maintenance. Thirty-one percent of participants increased and only 18% decreased their servings of fruit by one or more; 37% increased and 13% decreased their vegetable intake by one or more; 33% increased and 16% decreased their dietary fibre by one or more serving; and 31% increased their fluid intake by one to three glasses. Regarding physical activity, 75% of participants made an advance of one or more stages towards maintenance for regular physical activity and 38% made an advance of two or more stages. The number of steps taken per day increased by 35%. On the Timed Up and Go (measures functional mobility by measuring the time it takes for an individual to stand up from sitting) average time decreased from 11.7 seconds to 10.6 seconds post-intervention. In addition, participants rated a 24% increase in their self-assessment of health conditions and 99% of participants would recommend the program to others.

#### **Importance of Research**

Various nutrition problems such as malnutrition, physical deterioration, and social isolation are common in aging adults. Many intervention programs are designed to improve one aspect of overall health instead of combining various approaches and messages to improve the health of

older adults in a broader sense. This study tested the effectiveness of the Eat Better & Move More initiative for successful aging and found that an integrated approach to healthy living would be beneficial if offered in local centers.

### **Applying What Was Found**

Many older adults are not aware of simple steps they can take to age successfully and improve their overall well-being. An integrated approach to successful aging emphasizing the combination of both dietary education and physical activity interventions was the main focus of this study. The Eat Better and Move More program was easy to implement and cost-effective. In addition, the ability of the program to be personalized for each individual is helpful in encouraging individuals to achieve manageable goals and track their progress.

**Written by Andrea Brennan, 2010**