Physical Activity among Older Adults: Results from a Community-Based Walking Program

Benjamin T. Pope¹, Mieko Shimada², Linda B. Houtkooper³, Patrick J. Gallaway⁴, Nobuko Hongu³

¹University of Arizona, Mel and Enid Zuckerman College of Public Health, Epidemiology and Biostatistics, ²Chiba Prefectural University of Health Sciences, ³University of Arizona, Department of Nutritional Sciences, ⁴University of Arizona, Department of Psychology,

Purpose: There is extensive evidence that physical activity has many benefits for older adults. The University of Arizona Cooperative Extension developed Walk Across Arizona (WAAZ), a statewide, community team-based walking promotion program. This study explores motivators and barriers to WAAZ program participation among older adults (aged >65 years old).

Methods: In 2013, WAAZ participants were recruited by word of mouth and community newspapers. Participants enrolled in the program by completing an on-line registration form and brief survey including demographic characteristics, usual physical activity behaviors, and fruits and vegetable intakes. During the eight-week program the participants self-reported the steps or miles they walked and amount of other physical activities. Some participants used pedometers to track their steps or used a time-mile conversion. The total miles walked by the teams were posted on the WAAZ Web site (http://cals.arizona.edu/walkacrossaz/). The effect of covariates on walking miles and the change in walking miles was assessed using generalized estimating equations, and simple and multiple linear regression, respectively.

Results: The mean age of the participants (n= 46) was 76.4 (SD = 9.6) years old. There was no change in fruit consumption over the length of the study, as the median consumption was 1 cup both before and after the study. The number of miles walked significantly increased with time (week 1 to week 8 of the program) (95% CI = 0.93, 2.95); and the number of walking miles significantly decreased with age (95% CI = -0.94, -0.09). The number of miles walked was significantly associated with the number of bicycling minutes (95% CI = -0.1, 1.39); fruit consumption before the study began was marginally significantly associated with miles walked (95% CI = -1.69, 44.6).

Conclusion: These results suggest that participation by older adults in a community team-based walking program tends to appeal to those who are relatively younger, who bicycle regularly, those who eat fruit, and who already walked for exercise when they entered the WAAZ. Further research is needed to identify other strategies to motivate continued physical activity among older adults, specifically targeting those who have not been physically active, and to assess sustainability of model walking programs.