

RESISTANCE TRAINING IMPROVES QUALITY OF LIFE IN OLDER CANCER SURVIVORS

Study Points to Benefits in Independence, Daily Function

INDIANAPOLIS— Older cancer survivors showed greater strength and ability to perform daily tasks after resistance training, according to research presented today at the 55th [American College of Sports Medicine](#) (ACSM) Annual Meeting in Indianapolis. One of few studies to involve cancer patients beyond their mid-50s, it tests ways to fight the loss of function that can limit the independence of seniors—particularly those who have undergone cancer therapies.

Catherine Jankowski, Ph.D., led a team that studied eight men and women aged 65 or over who completed a circuit of exercise machines three days weekly for four months. A control group of nine other seniors continued their daily routines without added exercise. All wore step counters to monitor their walking activity; none were regular exercisers before the study.

Following training, those who exercised were significantly stronger in the leg press and chest press than the control group. They also measured significantly higher in physical functioning performance, showing a greater ability to perform daily tasks such as dressing, carrying groceries, walking up stairs or vacuuming.

“What study participants did in the gym had a significant effect on their ability to do day-to-day things,” said Jankowski. “It’s clear that exercise can help seniors live independently as long as possible.” She also notes that as baby boomers age, many more people will move into the demographic group represented by those in the study.

The research team monitored participants’ daily walking levels to confirm that strength training didn’t fatigue exercisers and cause them to restrict other daily activities. There were no significant differences in step counts between the exercise and control groups, either before or after the exercise intervention. Nor did researchers measure significant differences in fat and fat-free mass, though exercising women tended to retain or gain fat-free mass and exercising men tended to lose body fat. Self-reported physical function tended to be greater among exercisers compared with controls following training.

Jankowski hopes to repeat the basic design of this study on larger numbers of subjects over a longer period of time. Cancer survivors would participate sooner after completing treatments, whereas those in this study averaged seven years since diagnosis. A larger sample would yield meaningful data on additional factors such as depression, which can correlate to ill health and aging and on which exercise has been shown to have beneficial effects.

Jankowski pointed out that, while more Americans are successfully treated for cancer and are living longer, the disease and treatments can combine with aging to limit physical functioning. The demonstrated results of strength training, she said, have clear implications: “People are surviving cancer and living into older age—but how do we prepare to help them with quality of life?”

[ACSM recommends](#) at least 30 minutes of moderate-intensity daily physical activity for older adults, including aerobic activity and muscle-strengthening activity, both of which are essential for healthy aging. The benefits associated with regular exercise and physical activity contribute to a more healthy, independent lifestyle, improving functional capacity and quality of life by reducing risk of chronic disease, premature mortality, and overall limitations in ability to perform activities of daily life.

“[Exercise is Medicine](#)™”, a program of ACSM with the support of the American Medical Association, advocates planning a physical activity program with input from a healthcare professional, which is especially important for older adults.

The [American College of Sports Medicine](#) is the largest sports medicine and exercise science organization in the world. More than 20,000 international, national, and regional members are dedicated to advancing and integrating scientific research to provide educational and practical applications of exercise science and sports medicine.