



Mid Atlantic Regional Chapter of the American College of Sports Medicine

Annual Scientific Meeting, November 4th- 5th, 2017
Conference Proceedings

International Journal of Exercise Science, Issue 9, Volume 6



The Effectiveness of Individualized Exercise Programs on the Physical Fitness of Rural Cancer Survivors

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The race to determine the ultimate exercise program for cancer survivors continues, but is there only one answer? **PURPOSE:** To examine the benefits of individualized exercise prescriptions for cancer survivors in rural Pennsylvania. **METHODS:** Three female cancer survivors with an average age of 64.0 ± 1.5 years from various cancer backgrounds were recruited to participate in a four-week program of 90-minute sessions twice per week. The program consisted of individually tailored resistance, aerobic, and flexibility training. Health and fitness testing occurred on a pre-test, post-test basis and included information on demographics, balance, body composition, cardiorespiratory fitness (CRF), muscular fitness, functional ability, and flexibility. **RESULTS:** Paired sample t-tests compared pre- versus post- testing results. CRF [peak VO_2 ($p=.042$), peak power output ($p=.020$)], and muscular strength [handgrip ($p=.044$)] significantly improved following the individualized training program. Changes in % body fat (-2.1%), fat free weight (+1.3%), ventilatory threshold (VT) (+45.0%), Timed up and go (-17.2%), 30-second chair stand (+62.9%), and flexibility (+21.7%) also improved, but were not statistically significant ($p > .05$). **CONCLUSIONS:** The results suggest that individualized exercise programs benefitted survivors in CRF and muscular strength. Improvements also were observed in body composition, VT, functional ability, and flexibility. Thus, regardless of the stage of diagnosis, type of cancer, or number of recurrences of cancer, individualized exercise programs are highly beneficial to enhancing the physical fitness of rural cancer survivors.