Older cancer survivors present with unique challenges that may impact quality of life and increase physical dysfunction if not properly managed. Regular physical activity (PA) can help mitigate these effects. Silver Sneakers (SS), a free exercise program available to Medicare beneficiaries, has more than 16,000 US locations. To understand capacity of SS to serve older adults in our mixed rural/urban catchment area of Central Pennsylvania, we 1) identified all registered SS program locations in our 28-county catchment area and; 2) conducted phone questionnaires with SS program staff. Approximately 18 gyms closed during the pandemic, leaving a sample of 121 participating gyms. We talked to 80 gyms (66% response rate) to understand member and programming characteristics, training of staff and program marketing. Geographic locations of SS were mixed – 39% in rural and 61% in urban counties; the majority (43%) were located in private gyms or YMCAs. The majority of gyms reported membership was equally mixed by gender and described ages of members as 65-80 years (94%). Program staff said that many members exercised several times per week with friends/family. Program staff also reported that social opportunities (35%) were a primary reason participants remained active in SS. Most (89%) of the facilities were still able to offer SS during the pandemic, with the majority (60%) adapting format to Zoom and other video platforms to conduct classes. Overall, SS programs offer a sustainable option to facilitate access to exercise programs and reduce barriers to PA among older adults in our catchment area.

**THE ASSOCIATION BETWEEN LEISURE AND PHYSICAL ACTIVITY LEVEL WITH DEPRESSIVE SYMPTOMS AFTER 5-YEARS OF FOLLOW-UP**

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**Background:** Depressive symptoms in older adults are associated with socioeconomic status (SES), medical care, and physical activity. However, there is little evidence on the longitudinal association between level of leisure activity (LA) and physical activity (PA) with depressive symptoms among community-dwelling older adults in Iceland. The study examined an association of LA and PA at baseline with high depressive symptoms (HGDS) assessed after 5 years of follow-up among community-dwelling older adults.

**Methods:** A large community-based population residing in Reykjavik, Iceland participated in a longitudinal study with 5 years of follow-up (n=2957, 58% women, 74.9±4.8 yrs). Those with HGDS or dementia at baseline were excluded from the analysis. The reported activity was categorized into 2 groups as no-activity versus any-activity. Depressive symptoms were assessed by the 15-item Geriatric Depression Scale (GDS) on average 5 years later.

**Results:** After adjusting for demographic and health-related risk factors, those who reported having any LA had significantly fewer HGDS after the follow-up of 5 years (6 or higher GDS scores, Odds Ratio (OR) = 0.46, 95% Confidence Interval (CI): 0.27 – 0.76, P = 0.003). However, reporting any PA at baseline was not significantly associated with HGDS (OR = 0.71, 95% CI: 0.51 – 1.00, P = 0.053).

**Conclusion:** Our study shows that any LA among older adults is associated with having less depressive symptoms 5 years later among community-dwelling older adults while having any PA was not associated with depressive symptoms after 5 years of follow-up.

**THE EFFECT OF LOW-INTENSITY DAILY WALKING ACTIVITY ON COGNITIVE AND BRAIN FUNCTION IN OLDER ADULTS**

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Physical activity is an effective intervention to prevent or delay cognitive decline and dementia in older adults; however, many have difficulty achieving recommended moderate- to vigorous-intensity guidelines. This study examined the impact of low-intensity daily walking activity on executive cognitive and brain function in 66 older adults (mean age=67.26 ; SD=6.04). Daily walking activity was measured using a step activity monitor and brain function was assessed using functional magnetic resonance imaging during the Flanker task. Analyses included whole and region of interest (ROI) in the right middle frontal gyrus (RMFG), occipital cortex (OCC) and anterior cingulate (ACC). Partial correlations were performed between step activity, behavioral performance, and ROI activation, adjusting for age and education. Most of the step activity was in the low-intensity range. No associations were observed between step activity and task performance (P<.05). Task-related activation occurred in the RMFG, lateral OCC and paracingulate (P<.01). Increased activation in the RMFG was associated with greater amount of step activity and RMFG activation in women r(44)= .360, p=.014, and frequency r(62)=.327, p=.007 of step activity. Stratification by sex revealed a positive association between amount of step activity and RMFG activation in women r(44)= .360, p=.014, but not men. Whole brain correlation revealed that amount of step activity was positively associated with precuneus activation (P<.01), an area impacted early in Alzheimer’s disease. These results support the benefits of low intensity daily walking activity on prefrontal function in older adults and suggest the importance of designing attainable and sustainable physical activity interventions to promote brain health in older adults.

**THE EFFECTS OF EXERCISE ON COGNITIVE FUNCTION IN OLDER ADULTS WITH DIFFERENT TYPES OF DEMENTIA: A META-ANALYSIS**

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In this meta-analysis, we examined the impact of different types of exercise interventions on cognitive function in older adults with different types of dementia.