Exercising the elderly heart: no value in overexertion

Frequent and diverse exercises without high intensity is best for older people

The more, the merrier, but don’t sweat too much. That’s the basics from an analysis about the value of physical activity and exercise in helping to prevent heart disease related deaths among senior citizens. It highlighted the protective value that participating frequently in more than one type of activity has, but without doing so to the extreme. The study, led by Ying Kuen Cheung of Columbia University in the US, and conducted in collaboration with investigators at the University of Miami, is published by Springer in the Journal of General Internal Medicine.

It examined some of the many advantages of physical activity that people participate in during their leisure time, and how it relates to cardiovascular health. Cheung’s team hopes that the findings will help provide more specific counselling to older people on how to stay active and healthy.

The researchers analyzed data from the population-based Northern Manhattan Study (NOMAS), which includes information on 3,298 stroke-free people from different ethnic groups. NOMAS was designed to evaluate medical, socio-economic and other risk factors that come into play with regards to heart health among a stroke-free group of people. The participants were on average 69 years old when they were recruited to the study between 1993 and 2001, and were subsequently telephonically interviewed annually thereafter. The analysis took into account participants’ general health, how often they were active during the course of a week, how many different pursuits they had, and how much energy they spent this way (the so-called energy-to-duration ratio, or EDR). They were asked whether they walked, jogged, hiked, did gardening or yard work, participated in aerobics, cycled, played tennis, golf or squash, or did water sports.

The data provides evidence that frequent and regular participation in leisure time physical activity helps reduce heart-related deaths in elderly populations in particular. Participation in a high number of different types of activities was found to be beneficial across the board.

“Performing frequent and diverse exercise without high intensity in an elderly population such as ours is achievable and can reduce the risk of death,” says Cheung.

Cheung elaborates further on the finding about the value of participating in as many different types of activities as possible: “Having the ability to engage in a large number of different activities can be more strongly associated with cardio-respiratory fitness, which may explain why we found a protective effect for all our outcomes.”

A high heart-related death rate was found among the group of seniors who frequently exerted themselves too much through intense bouts of physical activity.

“Our findings thus suggest that high frequency of high intensity exercise may undo the benefits of frequent exercise in terms of cardiovascular mortality,” highlights Cheung. “Given the ease of participating in low intensity but daily leisure time physical activity, our findings suggest that this can be incorporated in current recommendations provided to older people.”

References:
2. The *Journal of General Internal Medicine* is the official journal of the Society of General Internal Medicine.

**The full-text article is available to journalists on request.**

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