Elders' ability to walk predicts future health outcomes

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As people age into their 70s, their ability to walk a quarter mile becomes an important predictor of overall health and even how long they might live, according to study findings published in this week's *Journal of the American Medical Association*.

Of nearly 3,000 healthy seniors studied, those who were able to complete a quarter-mile extended walking test were three times as likely to live longer and were less likely to suffer from cardiovascular disease and physical infirmity as they aged, said Dr. Marco Pahor, director of University of Florida's Institute on Aging and the multi-institutional study's co-principal investigator at its Memphis site.

Decreasing mobility, along with lack of muscle strength and a decline in aerobic ability, are common aspects of aging that can diminish quality of life, Pahor said. Understanding the mechanisms of how people lose mobility can keep people functioning independently longer, he added.

"This shows the predictive value of a simple performance task," Pahor said. "This will help us develop a testable standard for fitness, which is the first step toward creating a strategy for maintaining independence in older people."

Existing means of assessing aerobic fitness, such as an exercise treadmill test, are more arduous than walking and are difficult to apply to elders because old age causes a decline in physical abilities. The study supports the use of the extended walking test as a baseline for human fitness for

elders, Pahor said.

Men and women in the study ranged in age from 70 to 79 and were chosen from a random sample of white and black Medicare recipients residing in Pittsburgh and Memphis, Tenn. Their performance on the walking test was recorded every six months and they were periodically evaluated for an average of 4.9 years.

Older adults who reported no difficulty walking had a wide range of performance on the test.

Among people who completed the test, those who ranked in the bottom fourth of functional capacity — those who walked the slowest — had a three times higher risk of death than those who performed in the top fourth. Those in the lower group also had a higher risk of heart disease, limited mobility and disability.

People who completed the walk and those who finished faster — on average a little more than a minute ahead of the slowest participants — were slightly younger and were more often white men who were more physically active and less likely to have a health condition.

Pahor said a key to successful aging is finding out how to prevent people from becoming unable to perform common daily activities, such as walking.

“The most promising intervention is regular physical activity; those who do more are more likely to live longer and be healthier,” said Pahor, a professor and chairman of the College of Medicine’s department of aging and geriatric research. “This research is one step toward developing an intervention.”

Dr. Thomas M. Gill, an associate professor of medicine at the Yale

University School of Medicine, said the research shows the walking test is an important health indicator.

“The findings from this study demonstrate that older persons who are unable to walk 400 meters (or a quarter mile) and those who walk this distance slowly are at increased risk for mortality, cardiovascular disease and significant disability,” Gill said. “Interventions designed to forestall the inability to walk 400 meters, therefore, have the potential to enhance longevity and improve the health and well-being of older persons, which are longstanding goals of physicians, patients, their families and society.”

Researchers from the University of Pittsburgh, Wake Forest University School of Medicine, the University of California San Francisco, the University of Tennessee and the National Institutes of Health’s National Institute on Aging collaborated on the study, which was funded by the National Institute on Aging.

Source: University of Florida