

Exercise Variety—Not Just Amount—Linked to Lower Risk of Premature Mortality

It may be important to consider not only how much physical activity people do, but also how many different types.

January 23, 2026 By Maya Brownstein and Harvard T.H. Chan School of Public Health

Boston, MA — Consistently engaging in a variety of types of exercises—from walking to weightlifting to gardening—was associated with a lower risk of premature mortality, even when total physical activity level was held constant, according to a new study by researchers at Harvard T.H. Chan School of Public Health.

The findings add a novel dimension to the well-established link between exercise and longevity, suggesting that it may be important to consider not only how much physical activity people do, but also how many different types.

The [study](#) was published Tuesday, January 20, 2026, in BMJ Medicine.

Few prior studies have specifically looked at how exercise variety impacts mortality. To investigate this relationship, the researchers used health and lifestyle data from more than 111,000 adult men and women over the course of more than 30 years, collected by the Nurses' Health Study and Health Professionals Follow-Up Study.

Participants reported how much time per week they spent walking; jogging; running; bicycling (including stationary); lap swimming; rowing or doing calisthenics; playing tennis, squash, or racquetball; lifting weights or doing other resistance exercises; doing lower intensity exercises such as yoga, stretching, and toning; doing moderate outdoor work, such as yardwork or gardening; doing heavy outdoor work, such as digging or chopping; and climbing stairs. The researchers scored participants according to activity variety and levels and examined those scores in the context of participants' health outcomes, adjusting for potential health and lifestyle confounders.

The study found that participants who engaged in the highest variety of exercises had a 19% lower risk of premature death compared to those who engaged in the lowest variety. This relationship between a high number of types of exercise and a lowered risk of early mortality held

true at every level of physical activity. In other words, exercise variety contributed to longevity regardless of how much total time participants spent exercising.

According to the researchers, the study findings provide an actionable takeaway for individuals hoping to extend their longevity.

“People naturally choose different activities over time based on their preferences and health conditions. When deciding how to exercise, keep in mind that there may be extra health benefits to engaging in multiple types of physical activity, rather than relying on a single type alone,” said corresponding author [Yang Hu](#), research scientist in the [Department of Nutrition](#).

The researchers noted that although the size of the cohorts and long follow-up periods make the study findings strong, there were limitations to the study, including the potential of errors in self-reported exercise data and the fact that the cohorts were made up primarily of white health professionals.

The study’s first authors were [Han Han](#) and Jinbo Hu.

Reference: “Physical Activity Types, Variety, and Mortality: Results from Two Prospective Cohort Studies,” Han Han, Jinbo Hu, Dong Hoon Lee, Yiwen Zhang, Edward Giovannucci, Meir J. Stampfer, Frank B. Hu, Yang Hu, Qi Sun, BMJ Medicine, January 20, 2025, doi: 10.1136/bmjmed-2025-001513

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