

Low Grip Strength Predicts Higher Mortality Rates

According to the Prospective Urban-Rural Epidemiology PURE Study, a large, lengthy study across 17 nations, people with low grip strength were found to have higher mortality rates. Four years after the study began, participants who had displayed relatively less power in a grip test had significantly higher rates of cardiovascular disease, cardiovascular mortality, and mortality from all tracked causes, which also included myocardial infection and strokes. In fact, the PURE study found that initial grip strength was an even stronger predictor of subsequent “all-cause” and cardiovascular mortality than was systolic blood pressure.

The results of this study are important because they show the predictive importance of muscular strength, as indicated by grip strength, in assessing heart and overall health. This assessment can measure elevated risks in a quick, easy manner and was based on data from over 140,000 people across cultures. However, it is also important to note that it does NOT indicate that reduced grip strength or even general muscular strength is the cause of cardiovascular mortality, but rather a risk indicator. Further research is needed to identify determinants of muscular strength and how it is linked to heart risks, as well as to determine whether improved strength can reduce mortality and cardiovascular disease. It is also important to note that other risks tracked in the PURE study were not predicted by low grip strength, including diabetes, hospital admissions for respiratory issues, injuries from falls, or fractures.

Editorial: Can the power in a handshake unfailingly predict how likely someone is to die from a range of causes? No, that is not the take away here. At best, grip strength is an indirect indicator of overall strength and vitality. Practically speaking, then, these results just add further evidence across national boundaries that poor physical conditioning increases health and mortality risks, particularly cardiovascular ones. Conversely, good overall strength and conditioning is generally beneficial, offering overall protection against heart disease and early death.

Bibliography

Leong DP, Teo KK, Rangarajan S, et al. Prognostic value of grip strength: findings from the Prospective Urban Rural Epidemiology (PURE) study. *Lancet*. 2015 May [epub ahead of print]
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