

Genetic mortality risk can be attenuated by lifestyle

November 8 2016



(HealthDay)—Genetic variations correlate with mortality in the elderly,

although their effect can be influenced by lifestyle behaviors, according to a study published online Nov. 2 in the *Journal of the American Geriatrics Society*.

Debora Rizzuto, Ph.D., from the Karolinska Institutet and Stockholm University, and colleagues conducted a 25-year population-based cohort study involving 1,229 individuals aged 75 years and older. The authors examined the correlations between single nucleotide variations in 14 genes, relevant lifestyle risk behaviors, and mortality.

The researchers found that the likelihood of dying was increased for individuals with allelic variation in four genes related to cardiovascular disease and metabolism (apolipoprotein [APO]C1 GG and AG carriers, APOE ε4 carriers, insulin-degrading enzyme [IDE] TC carriers, and phosphatidylinositol 3-kinase [PI3KCB] GG carriers). Compared to those with no adverse alleles, individuals with multiple adverse alleles had a 62 percent higher mortality rate. The mortality rate was 65 percent lower for people with no risk behaviors (low-risk profile) than for those with all [risk behaviors](#) (high-risk profile). Independent of [genetic risk](#) profile, mortality was up to 64 percent lower for individuals with a low-risk profile versus those with a moderate high- or high-risk profile and at least one [genetic risk factor](#).

"In conclusion, this study extends past observations that genetic background is related to survival, but [lifestyle behaviors](#) attenuated the genetic risk, suggesting that that a long life can be achieved even in the presence of unfavorable genes," the authors write.

More information: [Full Text](#)

Copyright © 2016 [HealthDay](#). All rights reserved.

Citation: Genetic mortality risk can be attenuated by lifestyle (2016, November 8) retrieved 17 April 2024 from

<https://medicalxpress.com/news/2016-11-genetic-mortality-attenuated-lifestyle.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.