

Does a healthy diet counter the ill-effects of obesity?

September 17 2020



Credit: CC0 Public Domain

A healthy quality Mediterranean-like diet partially modifies the association between obesity and cardiovascular mortality, according to a new study published this week in *PLOS Medicine* by Karl Michaëlsson of



Uppsala University, Sweden, and colleagues.

Higher body mass (BMI) accounted for 4.0 million deaths globally in 2015 and more than two-thirds of those deaths were due to cardiovascular disease (CVD). Studies have suggested that other factors, including healthy dietary patterns, might modify the higher risk of CVD associated with higher BMI. In the new study, researchers studied BMI, diet and mortality among 79,003 Swedish adults enrolled in the Swedish Mammography Cohort and Cohort of Swedish Men. Adherence to a Mediterranean-like diet (mMED) was assessed on a scale of 0 to 8, integrating information on intake of fruits and vegetables, legumes, nuts, unrefined or high-fiber grains, fish, red and processed meat, and olive oil. Information was also available on age, physical activity, smoking and socioeconomics of the cohort participants.

Over 21 years of follow-up, 30,389 (38% of participants) died. Among overweight individuals, the group with the lowest hazard ratio (HR) of all-cause mortality were those with high mMED (HR 0.94; 95% CI 0.90-0.98 compared with those with normal weight and high mMED). Obese individuals who also had high mMED did not have a significantly higher mortality compared with those with normal weight and high mMED (HR 1.03; 95%CI 0.96-1.11). Conversely, individuals with a normal BMI but low mMED had a higher mortality (HR 1.60; 95%CI 1.48-1.74) than those with normal weight and high mMED. For CVD mortality, which represented 12,064 of the deaths, the findings were broadly similar. However, while CVD morality associated with high BMI was reduced by adherence to a Mediterranean diet, it was not fully countered. Moreover, lower BMI did not counter the elevated CVD mortality associated with a low mMED.

"These results indicate that adherence to healthy diets such as a Mediterranean-like diet may be a more appropriate focus that avoidance of obesity for the prevention of overall mortality," the authors say.



"Nonetheless, a healthy diet may not completely counter higher CVD mortality related with obesity."

More information: Michaëlsson K, Baron JA, Byberg L, Höijer J, Larsson SC, Svennblad B, et al. (2020) Combined associations of body mass index and adherence to a Mediterranean-like diet with all-cause and cardiovascular mortality: A cohort study. *PLoS Med* 17(9): e1003331. doi.org/10.1371/journal.pmed.1003331

Provided by Public Library of Science

Citation: Does a healthy diet counter the ill-effects of obesity? (2020, September 17) retrieved 24 January 2023 from https://medicalxpress.com/news/2020-09-healthy-diet-counter-ill-effects-obesity.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.