

Mediterranean diet cuts women's cardiovascular disease and death risk by nearly 25%, finds study

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Sticking closely to a Mediterranean diet cuts a woman's risks of cardiovascular disease and death by nearly 25%, finds a pooled data analysis of the available evidence—the first of its kind—published

online in the journal *Heart*.

The findings prompt the researchers to call for more sex-specific research to guide clinical practice in heart health.

Cardiovascular disease accounts for more than a third of all deaths in women around the world. While a [healthy diet](#) is a key plank of prevention, most relevant clinical trials have included relatively few women or haven't reported the results by sex, say the researchers, and current guidelines on how best to lower [cardiovascular disease](#) risk don't differentiate by sex.

To build on the [evidence base](#) to inform sex specific guidance and clinical practice, the researchers trawled research databases for studies looking at the potential impact of eating a Mediterranean diet on women's cardiovascular health and their risk of death.

The Mediterranean diet is rich in whole grains, vegetables, fruit, legumes, nuts, and [extra virgin olive oil](#); moderate in fish/shellfish; low to moderate in wine; and low in red/processed meats, dairy products, animal fat, and processed foods.

From an initial haul of 190 relevant studies, the researchers included 16 published between 2003 and 2021 in their pooled data analysis.

The studies, which were mostly carried out in the US and Europe, involved more than 700,000 women aged 18 and above whose cardiovascular health was monitored for an average of 12.5 years.

The results of the analysis showed that sticking closely to a Mediterranean diet was associated with a 24% lower risk of cardiovascular disease, and a 23% lower risk of death from any cause in women.

The risk of coronary heart disease was 25% lower, while that of stroke was also lower, although not statistically significant, in those who most closely followed this diet compared with those who did so the least.

Excluding each of the studies one at a time from the analysis didn't materially affect the findings, "further supporting a strong inverse relationship for incident [cardiovascular disease] and total mortality with higher Mediterranean diet adherence in women," write the researchers.

They nevertheless acknowledge various limitations to their findings, including that all the studies analyzed were observational and relied on self-reported food frequency questionnaires. Additionally, adjustments for potentially influential factors varied across the included studies.

But the Mediterranean diet's antioxidant and gut microbiome effects on inflammation and cardiovascular risk factors are among the possible explanations for the observed associations, say the researchers.

And the diet's various components, such as polyphenols, nitrates, omega-3 [fatty acids](#), increased fiber intake and reduced glycemic load, may all separately contribute to a better cardiovascular risk profile, they suggest.

"However, mechanisms explaining the sex specific effect of the Mediterranean diet on [cardiovascular disease] and death remain unclear," they note, adding that the findings reinforce the need for more sex-specific research in cardiology.

"Female specific cardiovascular risk factors, including premature menopause, pre-eclampsia and [gestational diabetes](#), or female predominant risk factors, such as [systemic lupus](#), can all independently increase [cardiovascular disease] risk," they write.

"It is possible that [preventative measures](#), such as a Mediterranean diet, that targets inflammation and [cardiovascular disease] risk factors, impose differing effects in women compared with men," they add.

More information: Primary prevention of cardiovascular disease in women with a Mediterranean diet: systematic review and meta-analysis, *Heart* (2023). [DOI: 10.1136/heartjnl-2022-321930](https://doi.org/10.1136/heartjnl-2022-321930)

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