

Olive Oil For Life

Can olive oil consumption reduce mortality?

Can small changes in our diet really affect our mortality? This observational study of over 90,000 health professionals examined if a change in dietary intake of olive oil could be linked to lower mortality. We already know olive oil consumption lowers cardiovascular disease risk, but this study is looking at mortality from all causes. Should we increase our olive oil intake, and if so, how much olive oil do we need to lower our risk? Which diseases were found to be lower risk from more olive oil? If you have dementia concerns, you will want to read this study.



Abstract

BACKGROUND: Olive oil consumption has been shown to lower cardiovascular disease risk, but its associations with total and cause-specific mortality are unclear.

OBJECTIVES: The purpose of this study was to evaluate whether olive oil intake is associated with total and cause-specific mortality in 2 prospective cohorts of U.S. men and women.

METHODS: The authors used multivariable-adjusted Cox proportional-hazards models to estimate HRs for total and cause-specific mortality among 60,582 women (Nurses' Health Study, 1990-2018) and 31,801 men (Health Professionals Follow-up Study, 1990-2018) who were free of cardiovascular disease or cancer at baseline. Diet was assessed by a semiquantitative food frequency questionnaire every 4 years.

RESULTS: During 28 years of follow-up, 36,856 deaths occurred. The multivariable-adjusted pooled HR for all-cause mortality among participants who had the highest consumption of olive oil (>0.5 tablespoon/day or >7 g/d) was 0.81 (95% CI: 0.78-0.84) compared with those who never or rarely consumed olive oil. Higher olive oil intake was associated with 19% lower risk of cardiovascular disease mortality (HR: 0.81; 95% CI: 0.75-0.87), 17% lower risk of cancer mortality (HR: 0.83; 95% CI: 0.78-0.89), 29% lower risk of neurodegenerative disease mortality (HR: 0.71; 95% CI: 0.64-0.78), and 18% lower risk of respiratory disease mortality (HR: 0.82; 95% CI: 0.72-0.93). In substitution analyses, replacing 10 g/d of margarine, butter, mayonnaise, and dairy fat with the equivalent amount of olive oil was associated with 8%-34% lower risk of total and cause-specific mortality. No significant associations were observed when olive oil was compared with other vegetable oils combined.

CONCLUSIONS: Higher olive oil intake was associated with lower risk of total and cause-specific mortality. Replacing margarine, butter, mayonnaise, and dairy fat with olive oil was associated with lower risk of mortality.

The study group used for this analysis has been followed for over 28 years (starting from an average age of 56) so it can give us some interesting outcomes data. This study focused on olive oil consumption as a factor in all-cause mortality. We have earlier data from 4 years ago showing a 14% decrease in cardiovascular disease and an 18% decrease in coronary heart disease. This effect was especially notable for people with high blood pressure. The current study looked at all-cause mortality. The group consuming the most olive oil had a 19% decreased risk of mortality, with a 19% decrease in cardiovascular mortality, 17% decrease in cancer mortality, 29% decrease in neurodegenerative disease mortality (including dementia), and 18% decrease in lower respiratory disease mortality. When people replaced animal fats (butter, margarine, dairy fat) with olive oil an additional 8%-34% lowered risk of total and cause-specific mortality was seen.

Olive oil has been shown to reduce inflammation, lower blood pressure, improve endothelial function (lining of arteries), improve insulin sensitivity, and raise HDL cholesterol. Olive oil is also a source of phenolic compounds that could confer cardiovascular benefits and have been shown to possess anticarcinogenic properties. In this study ½-1 Tbsp was found to

be enough to make a difference. Substituting olive oil for animal fats in cooking, salad dressings, and baking are easy ways to increase intake.

As I reviewed this study, I have to say I find it hard to believe that simply adding a couple of teaspoons of olive oil daily will make that big a difference. It can't prove causality, but when we incorporate a more plant-based nutrition plan including olive oil and nuts as healthy fats, we can likely see significant differences. Regardless, it does suggest that substituting olive oil for animal fats where we can makes sense and is easy to do. The statistic that really jumped out at me was the 29% reduction in neurodegenerative disease. This is huge! We have no good treatments so anything that shows potential to reduce neurodegenerative disease risk has to be taken seriously. I see no downside to this intervention so be generous with the olive oil!

Consumption of Olive Oil and Risk of Total and Cause-Specific Mortality Among U.S. Adults. *J Am Coll Cardiol* 2022 Jan 18;79(2)101-112.