



769 - EFFECT OF LOW-TO-MODERATE ALCOHOL CONSUMPTION ON ALL-CAUSE MORTALITY: SYSTEMATIC REVIEW AND META-ANALYSIS

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Resumen

Background/Objectives: Alcohol has been the most widely consumed toxic substance by humans for millennia. Although some observational studies have suggested that low-to-moderate intake compared to lifetime abstainers may be associated with lower all-cause mortality, there is no conclusive evidence from observational studies or high-quality meta-analyses. The aim of this study was to conduct a systematic review and meta-analysis of prospective evidence on the association between low-to-moderate alcohol consumption and all-cause mortality.

Methods: A systematic review of PubMed and Web of Science was conducted to identify all prospective cohort studies published on this topic up to December 2025. Studies published in English, Spanish, Italian, French, or Portuguese were included. We used Covidence software to manage most review activities. We extracted the relative risks, odds ratios, or hazard ratios from each individual study to generate combined results using a random-effects meta-analysis to calculate relative risks and their 95% confidence intervals. The Newcastle-Ottawa scale was applied to assess the quality of the included studies. Several subgroup and sensitivity analyses were performed. Publication bias were tested.

Results: Forty-four independent cohorts with a total of 2 216 263 participants and 251 534 all-cause deaths were included in this meta-analysis. The combined adjusted relative risk for the association between low-to-moderate alcohol consumption (> 5 to < 20 g/day) and all-cause mortality was 0.86 (95% confidence interval, 95%CI 0.82-0.91) compared with lifetime abstainers. This association was stronger in the subgroup of women RR = 0.80 (95%CI 0.72-0.89) and in studies published in Europe RR = 0.75 (95%CI 0.64-0.88). There was no evidence of publication bias (Egger's test $p = 0.592$).

Conclusions/Recommendations: This meta-analysis shows a beneficial association between low-to-moderate alcohol consumption and all-cause mortality when compared to never drinkers.