

Dietary Fiber Intake and Mortality in the NIH-AARP Diet and Health Study

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Background Dietary fiber has been hypothesized to lower the risk of coronary heart disease, diabetes, and some cancers. However, little is known of the effect of dietary fiber intake on total death and cause-specific deaths.

Methods We examined dietary fiber intake in relation to total mortality and death from specific causes in the NIH (National Institutes of Health)-AARP Diet and Health Study, a prospective cohort study. Diet was assessed using a food-frequency questionnaire at baseline. Cause of death was identified using the National Death Index Plus. Cox proportional hazard models were used to estimate relative risks and 2-sided 95% confidence intervals (CIs).

Results During an average of 9 years of follow-up, we identified 20, 126 deaths in men and 11,330 deaths in women. Dietary fiber intake was associated with a significantly lowered risk of total death in both men and women (multivariate relative risk comparing the highest with the lowest quintile, 0.78 [95% CI, 0.73-0.82; *P* for trend, <.001] in men and 0.78 [95% CI, 0.73-0.85; *P* for trend, <.001] in women). Dietary fiber intake also lowered the risk of death from cardiovascular, infectious, and respiratory diseases by 24% to 56% in men and by 34% to 59% in women. Inverse association between dietary fiber intake and cancer death was observed in men but not in women. Dietary fiber from grains, but not from other sources, was significantly inversely related to total and cause-specific death in both men and women.

Conclusions Dietary fiber may reduce the risk of death from cardiovascular, infectious, and respiratory diseases. Making fiber-rich food choices more often may provide significant health benefits.