

## Nut consumption and protection against coronary heart disease death in the European Prospective Investigation into Cancer and Nutrition (EPIC)

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**Purpose:** Nuts have been suggested to be protective of coronary heart disease. However, all epidemiologic information to date is derived from cohorts based on American populations, which may have different dietary backgrounds and nut intake patterns than other populations.

**Methods:** The association of nut intake and coronary heart disease mortality was examined in 399,633 subjects, including 1158 cases, enrolled in the EPIC study, a large prospective cohort of subjects recruited from 23 centres in 10 different European countries. Nut intake was assessed by country-specific validated dietary questionnaires completed by all subjects and was corrected for measurement errors across countries with standardized 24-hour recalls obtained from a subset of 36,900. Hazard ratios (HR) were obtained from four categories of nut intake and from linear models estimating the risk for 8g/day increments in intake.

**Results:** When comparing the highest (>13g/d) and the lowest (<1g/d) nut intake categories, the HR was 0.60, (95% CI, 0.43-0.83) and after adjustments for coronary risk factors and dietary variables the HR was 0.71 (95% CI, 0.51-0.98). A HR of 0.74 (0.57-0.96) was estimated for every 8g/day of increased nut intake, and after adjustments the HR was 0.89 (0.74-1.08).

**Conclusions:** Nut intake is associated with a decreased risk of coronary heart disease mortality. In a population where approximately half rarely consume nuts, an intake of only two servings of nuts per week (8g/d) may reduce coronary heart disease mortality by 11%.