Association between consumption of beer, wine, and liquor and plasma concentration of high-sensitivity C-reactive protein in women aged 39 to 89 years.

Although cross-sectional studies have shown an inverse or U-shaped relation between alcohol consumption and plasma concentration of high-sensitivity C-reactive protein (hs-CRP), the associations between specific types of alcoholic beverages--beer, wine, and liquor--and hs-CRP concentrations are less clear. Plasma concentrations of hs-CRP were measured in 11,815 participants in the Women's Health Study who had never used postmenopausal hormones. Alcohol intake was measured using a semiquantitative food-frequency questionnaire. Alcohol consumption had an inverse association with geometric mean hs-CRP concentrations (nondrinkers 1.43 mg/L, 0.1 to 6 g alcohol/day 1.37 mg/L, 6.1 to 12 g alcohol/day 1.29 mg/L, >12 g alcohol/day 1.28 mg/L, p for trend = 0.003). In age-adjusted analyses, beverage preference was a significant predictor of geometric mean hs-CRP concentration. However, after adjustment for body mass index (BMI), beer drinkers who consumed 6.1 to 12 g alcohol/day had a geometric mean hs-CRP concentration of 1.03 mg/L, wine drinkers 1.09 mg/L, liquor drinkers 1.28 mg/L, and combination drinkers 1.09 mg/L (p = 0.43). The association between alcohol and hs-CRP concentration appears to be mediated primarily by ethanol and was independent of the type of alcoholic beverage consumed once BMI was taken into account.

DOI
10.1016/j.amjcard.2005.03.031

Alternate Journal
Am. J. Cardiol.
Association between consumption of beer, wine, and liquor and plasma concentration of high-sensitivity C-reactive protein in women aged 39 to 89 years.

PubMed ID 15979440
Grant List
CA47988 / CA / NCI NIH HHS / United States
HL43851 / HL / NHLBI NIH HHS / United States