Alcohol consumption, diet, coronary risk factors, and prevalent coronary heart disease in men and women in the Scottish heart health study.

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STUDY OBJECTIVE--TO measure the relationship between reported alcohol consumption and prevalent diagnosed and undiagnosed coronary heart disease (CHD) in men and women to see how much could be explained by covariation with diet, lifestyle, and biomedical factors. DESIGN AND SETTING--This was a cross sectional, random population survey covering 22 districts of Scotland and using general practitioner patient lists as the sampling frame. Odds ratios for prevalent CHD at different levels of alcohol consumption taken from a seven day recall were analysed. These ratios were then adjusted for lifestyle and biomedical factors. PARTICIPANTS--Male and female responders aged 40-59 years who completed the survey questionnaire and attended the survey clinic. MAIN RESULTS--The participation rate of those invited was 74%. Of the 10,359 responders, 658 were excluded because of missing alcohol data or ambiguous cardiovascular status. The questionnaire was used to designate 7058 drinkers and 2643 non-drinkers, who were then classified as having diagnosed or undiagnosed CHD, or who were controls. The prevalence of diagnosed CHD decreased with increasing alcohol consumption while undiagnosed CI-ID had a "U" shaped relationship. Patterns were similar in men and women if allowance was made for the lower alcohol consumption in women. Adjustment for several diet and lifestyle factors and for additional biomedical factors reduced the apparent protective effect of alcohol, leaving a modest but statistically insignificant (p > 0.05) reduction in CHD prevalence among light to moderate consumers compared with those who drank no alcohol. Wine drinkers seemed to be at lower risk than beer drinkers in both sexes. CONCLUSIONS--These results tend to confirm that intermediate alcohol consumption is a component and contributor to a low coronary risk lifestyle. Its effects are largely explained by adjusting for both confounding lifestyle associations and for biomedical effects but the remaining effect, and the lower risk with wine drinking compared with beer, are intriguing. Advice on alcohol habits should not be determined solely by the moderate apparent benefit to risk of CHD, however, as other disease risks cannot be ignored.

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