Alcohol intake and blood pressure in young adults: the CARDIA Study.

Associations between self-reported average daily alcohol intake and blood pressure were assessed in 5031 black and white men and women ages 18-30 from the Coronary Artery Risk Development in Young Adults Study (CARDIA). In general, intake was positively but weakly related to both systolic and diastolic blood pressure. Associations with systolic pressure were generally stronger than those with diastolic pressure. With average daily alcohol intake categorized as none, 0.1-9.9 ml, 10.0-19.9 ml, 20.0-29.9 ml, and 30.0+ ml, mean systolic pressure, adjusted for age, body mass index, education, smoking, and physical activity, increased progressively with increasing intake in black and white men and in white women. Mean diastolic pressure increased progressively with increasing intake only in white men and women, but was highest for those averaging 30.0+ ml per day in black women as well as white men and women. Mean pressures were also compared for those averaging 75.0+ ml per day (men) or 50.0+ ml per day (women) vs those reporting no intake. Differences in adjusted mean pressures for white men were 3.2 mmHg (95% confidence limits (CL) -0.3, 6.8) for systolic pressure and 1.7 mmHg (-1.6, 5.0) for diastolic pressure. In black men differences were 4.4 mmHg (1.4, 7.4) and 3.4 mmHg (0.6, 6.3), respectively. Differences in white women were 1.4 mmHg (-2.5, 5.3) for systolic pressure and 0.9 mmHg (-2.7, 4.5) for diastolic pressure and for black women, -0.2 mmHg (-4.3, 3.8) and 1.9 mmHg (-1.9, 5.8). Separate analyses in smokers and nonsmokers of the associations between alcohol intake and blood pressure suggested that associations may differ by smoking status in
some sex-race groups. (ABSTRACT TRUNCATED AT 250 WORDS)