

Coffee consumption and decreased serum gamma-glutamyltransferase: a study of middle-aged Japanese men.

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Abstract

The potential inverse association between coffee intake and serum gamma-glutamyltransferase (GGT) was examined in a cross-sectional study involving 1353 Japanese male office workers aged 35-59 years in Osaka, Japan. Those who had serum aminotransferases exceeding the normal range and/or who had been administered medical care for, or had a past history of, liver disease were excluded. Multiple linear regression analysis and analysis of covariance were used to control for confounding variables (age, body mass index, alcohol use, and cigarette smoking) and to examine possible interactions. From the linear regression analysis, coffee intake was inversely related to serum GGT levels independently of age, body mass index, alcohol intake, and cigarette smoking. All of the latter variables were also independently and positively associated with serum GGT levels. When the interactions between coffee and each of four covariates on serum GGT were evaluated by adding each interaction term to the above regression model, significant negative interactions were observed for age and cigarette smoking. From the analysis of covariance, lower levels of serum GGT associated with coffee consumption were more evident in the older age group and at the higher levels of cigarette smoking. These findings suggest that coffee consumption is inversely related to serum GGT and that coffee may inhibit the inducing effects of aging and possibly of smoking on serum GGT in the liver.