

## Association between Dietary Intakes of Tea, Coffee, and Soft Drinks in Patients Undergoing Coronary Angiography with Coronary Artery Stenosis

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### Abstract

**Background:** Coronary artery disease (CAD) is one of the major causes of mortality that is related to the nutritional habits and lifestyle. The aim of this study was to examine the association between tea, coffee, and soft drink consumption and coronary artery stenosis in patients undergoing coronary angiography.

**Methods:** Out of all the patients, 208 cases (101 Female) with  $57.81 \pm 12.18$  (mean  $\pm$  SD) were assigned to participate in this cross-sectional study. In total, 168-items, semi-quantitative food frequency questionnaire collected for assessments of dietary intakes of black tea, coffee, caffeine, and soft drinks and record demographic and clinical questionnaire.

**Results:** There were negative association between arteries with stenosis of more than 50% number with dietary intakes of tea ( $P = 0.011$ ,  $r = -0.187$ ), coffee ( $P = 0.069$ ,  $r = -0.098$ ) intakes, and dietary caffeine intake ( $P = 0.043$ ,  $r = -0.118$ ). The high consumptions of soft drinks ( $P = 0.005$ ,  $r = 0.387$ ) were associated with an enhancement in arteries with stenosis of more than 50% number. In addition, dietary consumption of black tea have a negatively significant association with the history of previous angiography ( $P = 0.044$ ,  $r = -0.121$ ), the history of previous Stanton ( $P = 0.035$ ,  $r = -0.132$ ), and coronary artery bypass graft surgery nomination ( $P = 0.008$ ,  $r = -0.216$ ). Coffee consumption showed a significant negative relationship with engagement for coronary artery bypass graft surgery ( $P = 0.004$ ,  $r = -0.598$ ).

**Conclusions:** Dietary intakes of tea, coffee, and caffeine may have a negative relationship with CAD and cardio vascular diseases. Healthy dietary lifestyle is an important issue for the prevention of chronic diseases.

**Keywords:** Caffeine, carbonated beverages, coffee, coronary stenosis, tea