Coffee Consumption and Risk of Cardiovascular Disease in Thai Population

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Background: Cardiovascular disease (CVD) including incidence of Coronary Heart Disease, stroke, heart failure, and CVD mortality is a major cause of death worldwide. Besides unhealthy diet, physical inactivity, and smoking, it is unclear if coffee consumption can increase CVD risk. The study on coffee consumption and risk of CVD may be helpful.

Objective: To evaluate the association of coffee consumption with cardiovascular disease, all-cause mortality, and associated factors.

Methods: The study was designed as a retrospective cohort in 4,545 subjects from population-based cohort study; The Electricity Generating Authority of Thailand Study (EGAT) from 1985 to 2015, excluding participants aged below 35 years with history of myocardial infarction and cerebrovascular disease. Coffee consumption was assessed at baseline using self-recorded FFQ. Over 30 years of follow up, the examination was divided into three frequency categorization: never, sometimes, and everyday. Each subject was categorized into three groups by incident of cardiovascular event and death using Logistic regression analysis.

Results: During 30 years of follow-up, 437 incident cases of cardiovascular disease, 284 cases of ischemic heart disease, and 153 cases of stroke were identified. This preliminary study showed that the multivariable HR (95%CI) in the everyday coffee consumption was significantly associated with death from stroke <0.47 (0.248, 0.91, P-trend 0.03)> and stroke plus myocardial infarction <0.76 (0.56, 1.03, P-trend 0.02)>.

Conclusion: Coffee consumption is associated with development stroke and stroke plus myocardial infarction death.

Keywords: Coffee, Cardiovascular, Risk