Coffee consumption does not affect insulin sensitivity

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(HealthDay)—Consumption of four cups of coffee daily does not impact insulin sensitivity, according to a study published online Dec. 31 in the *American Journal of Clinical Nutrition*.

Derrick Johnston Alperet, from the National University of Singapore, and colleagues conducted a 24-week trial involving 126 overweight, non-insulin-sensitive adults aged 35 to 69 years. Participants were randomly assigned to receive either four cups of instant regular coffee or four cups of a placebo beverage per day (62 and 64 in each group, respectively). The amount of glucose metabolized per kilogram of body weight per minute (M_{bw}) was measured as the primary outcome.

The researchers observed no significant change in insulin sensitivity with coffee consumption versus placebo (percentage mean difference in M_{bw}, 4.0 percent; 95 percent confidence interval [CI], ?8.3 to 18.0 percent; P = 0.53). In addition, there were no between-group differences during 24 weeks of the intervention in fasting plasma glucose or biological mediators of insulin resistance such as plasma adiponectin. Compared with participants in the placebo arm, those in the coffee arm experienced a loss of fat mass (?3.7 percent; 95 percent CI, ?6.3 to ?1.1 percent; P = 0.006) and a reduction in urinary creatinine concentrations (?21.2 percent; 95 percent CI, ?31.4 to ?9.5 percent; P = 0.001).

"Coffee consumption was associated with a modest loss in body fat mass compared with the placebo beverage, and this potential impact on adiposity warrants confirmation in additional trials," the authors write.

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More information: Abstract/Full Text