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Arabic Coffee Effect On Blood Pressure, Cytokines, And Lipid Profile Parameters In Jazan Women-Kingdom Of Saudi Arabia

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Background: The main type of coffee that is highly used in KSA is Arabian coffee. Arabian coffee is known to be rich in diterpenes that has the ability to elevate cholesterol level. Arabic coffee usually not prepared from the green coffee beans alone but usually mixed with other components such as cardamom. Cardamom was proven to be a potent antioxidant and possess controversial impacts to the green cof-fee beans. Subsequently, the objective of the current experiment is to investigate the influence of coffee consumption with and without cardamom on blood pressure, immunological parameters, and the level of lipid profile parameters in normotensive women from Jazan. **Materials and Methods:** Healthy adult female volunteers (age from 40-59 years, n=30) participated in this study. Volunteers with no previous record of blood pressure or dyslipidemia were allowed to volunteer. They were divided into 3 groups, each group was allowed for daily 500 ml of Arabic coffee without cardamom or Arabic coffee with cardamom in the ratios (3:1 and 3:2, Arabic coffee to cardamom respectively). The people were asked to drink 5 days per week for 4 weeks. The blood pressure was measured using a sphygmomanometer in all groups. Blood samples were taken under the supervision of a medical doc-tor at the faculty clinic and serum levels of NF-kB, interleukin-6 (IL-6), and tumor necrosis factor-α (TNF-α) were measured. Lipid profile analysis was also carried out. **Results:** A non-significant difference in blood pressure was observed after coffee intake without cardamom, while a significant change was found in blood pressure of volunteers following coffee drinking with cardamom in relation to before the intervention. Regarding inflammatory cytokines; IL-6 and NF-kB substantially increased but TNF-α slightly elevated in the first group. Meanwhile, all cytokines' level decreased after adding cardamom in group two and group three. Further-more, total cholesterol (TC) level in-creased after drinking coffee without cardamom, but low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol (HDL-C) were not changed. On the other hand, TC and LDL-C were substantially reduced after drinking coffee with cardamom for four weeks when compared with their levels at the beginning of the study. No variation was detected in HDL-C level in all groups. **Conclusion:** Blood pressure, inflammatory cytokines, and lipid profile parameters were affected by coffee consumption with variability among groups.