## Legume and Nuts Consumption in Relation to Depression and Anxiety in Iranian Adults

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Abstract: Background: Although considerable research has been devoted to the link between consumption of legume and nuts and metabolic abnormalities, few studies have examined legume and nuts consumption in relation to psychological disorders. Objective: The current study aimed to examine the association of legume and nuts consumption with depression, anxiety and psychological distress in Iranian adults. Methods: This cross-sectional study was carried out among 3172 adult participants aged 18-55 years. Assessment of legume and nuts consumption was conducted using a validated dish-based 106-item semiquantitative food frequency questionnaire. The Iranian validated version of Hospital Anxiety and Depression Scale (HADS) was used to examine psychological health. Scores of 8 or more on either subscale in the questionnaire were considered to indicate the presence of depression or anxiety. Data on psychological distress were collected through the use of General Health Questionnaire (GHQ), in which the score of 4 or more was considered as having psychological distress. Results: Mean age of participants was 36.5±7.9 years. Compared with the lowest quintile, men in the highest quintile of legume and nuts consumption had lower odds of anxiety; such that after adjusting for potential confounding variables, men in the top quintile of legume and nuts consumption were 66% less likely to be anxious than those in the bottom quintile (OR: 0.34; 95% CI: 0.14-0.82). Such relationship was not observed among women. We failed to find any significant association between legume plus nuts consumption and depression or psychological distress after adjustment for potential confounders. Conclusion: We found that consumption of legume and nuts was associated with lower odds of anxiety in men, but not in women. No significant association was seen between consumption of legume and nuts and odds of depression or psychological disorder. Further prospective studies are required to confirm these findings.

**Keywords:** anxiety, depression, legumes, nuts, psychological distress

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