Comparison of Nutritional Behaviors and Body Mass Index in Patients with and without Non-Alcoholic Fatty Liver Diseases

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Abstract

Background and Objective: The prevalence of non-alcoholic fatty liver Disease (NAFLD) and its complications in adults are increasing. Nutritional habits and its consequent obesity are major risk factors for developing the disease. The aim of this study was comparing nutritional habits and body mass index in two groups of participants with and without NAFLD.

Materials and Methods: This case control study was performed with participation of 170 people aged 20-55, who referred to the department of sonography in the Taleghani teaching hospital of Tehran. The sampling method was convenience sampling. Data collected by interview with the individuals. Socio-demographic characteristics, reason for referring, and nutritional habits were determined. Anthropometric measurements and liver ultrasound were also performed. Data were analyzed by using t-test for comparing the means between 2 groups and chi-square test for determining the relationship between the variables. P-values of 0.05 or less were considered statistically significant.

Results: The group with the disease significantly consumed more high-fat dairy products than the group without the disease (42% vs. 23%) (P=0.013). The mean (SD) for weekly consumption of fruits in the group with the disease was significantly higher than that in the group without the disease 11.6(6.7) vs. 8.2(5.5) unit (P=0.001). The mean (SD) for BMI of the group with the disease was higher than that of the group without the disease 32.8(6.6) vs. 24.4(3) respectively (P<0.001). Unexpectedly, the mean (SD) for weekly consumption of fast foods in the group without fatty liver with 0.8(0.9) was two times more than that in the affected group with 0.4(0.8) (P=0.012).

Conclusion: The prevalence of obesity and some unhealthy eating habits in patients with NAFLD and those at risk, requires designing and implementing educational interventions for increasing individuals’ awareness and improving their attitude towards healthy eating behaviors.

Keywords: Non-Alcoholic Fatty Liver Disease, Nutritional Behavior, Body Mass Index, Obesity