



# Relationship Between Healthy Eating Index and Depression among Female Students Living in the Shoushtar Faculty of Medical Sciences Dormitory

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## ABSTRACT

**Introduction:** Depression is one of the four major diseases in the world and the most common cause of disability caused by diseases. Old age, obesity, and overweight are important factors of depression. The prevalence of depression among students is 20% to 61%. Nutrition has a significant impact on people's physical and mental performance. The years of studying at university are the most stressful period of life for many people. Factors such as education expenses, distance from family, lifestyle changes, competition for grades, the amount of course material, and uncertainty about the financial future are involved in the occurrence of depression in students. Healthy Eating Index (HEI) is a tool to check the overall quality of one's diet. This index has 10 components and has an overall score range of 0-100.

**Methods and Materials:** A descriptive study was conducted on 100 female dormitory students of Shoushtar Faculty of Medical Sciences. A simple random sampling method was used to collect the sample and information from demographic and HEI questionnaires. The participants' height, weight, and body mass index were also measured [Healthy Anxiety Depression Scale (HADS)]. Data analysis was done using SPSS version 16 software. An independent sample t-test was used to examine the mean of normal data, and a Mann-Whitney U-Test was used to measure non-normal data. The Spearman Correlation test was used to check the relationship between variables. One-way ANOVA test was used to check and compare the mean of standard quantitative data, and Kruskal-Wallis's test was used for non-normal data.

**Results:** The prevalence of depression and anxiety in students was reported as 34% and 18%, respectively. HEI showed that 82% of students had average (38%) and poor (44%) nutritional status. There was a significant relationship between income level and depression ( $p = 0.045$ ), and there was a significant negative relationship between healthy eating index and depression score ( $p = 0.02$ ). Most of the people studied (73%) obtained a score of less than 5 in terms of fruit and vegetable intake, and 57% of people had a score higher than eight about cholesterol consumption, which indicates that more than 30% of their daily energy intake comes from the group It was fat that had a lower score in terms of the healthy eating index. The higher the consumption of fruits ( $p = 0.039$ ), vegetables ( $p = 0.012$ ), and grains ( $p = 0.038$ ), the less depression was among people.

**Conclusion and Discussion:** A healthy diet in students' daily schedule can reduce the risk of depression by about 50%. Including proper consumption of fruits, vegetables, and grains in students' diets is necessary.

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