



# 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 global diseases and the leading cause of disability worldwide. Factors such as old age, obesity, and overweight significantly contribute to the onset of depression. The prevalence of depression among students ranges from 20% to 61%. Nutrition plays a crucial role in influencing both physical and mental performance. For many individuals, the years spent studying at university represent the most stressful period of their lives. Various factors contribute to the development of depression in students, including educational expenses, distance from family, lifestyle changes, competition for grades, the volume of course material, and uncertainty regarding their financial future. The Healthy Eating Index (HEI) is a tool used to assess the overall quality of an individual's diet. This study aimed to explore the relationship between the mentioned index and depression among female students residing in the Shoushtar Faculty of Medical Sciences dormitory.

**Methods and Materials:** A descriptive study was conducted on 100 female dormitory students of Shoushtar Faculty of Medical Sciences, Khuzestan Province, Iran. 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 using Healthy Anxiety Depression Scale. Data analysis was conducted by employing SPSS version 16 software. An independent sample t-test, a Mann-Whitney U-Test, and the Spearman Correlation test were used to examine the mean of normal data, measure non-normal data, and check the relationship between variables, respectively. One-way ANOVA test was used to check and compare the mean of standard quantitative data, and Kruskal-Wallis's test was utilized 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 ( $p = 0.045$ ), as well as a significant negative correlation between HEI and depression scores ( $p = 0.02$ ). Most of the individuals (73%) received a score of less than five regarding their fruit and vegetable intake. Additionally, 57% of participants scored higher than eight in terms of cholesterol consumption, indicating that more than 30% of their daily energy intake comes from fats, which received a lower score on the HEI. The data suggest that higher consumption of fruits ( $p = 0.039$ ), vegetables ( $p = 0.012$ ), and grains ( $p = 0.038$ ) is associated with low levels of depression among individuals.

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

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