**The Study of Nutritional Behavior Patterns in High School Girls in Suburbs of Ardabil City in 2019-2020**

*Abstract*

**Background:** *Nutrition is one of the most basic and important needs of human society that promotes the health of society. Wrong eating habits can greatly affect a variety of diseases, including cardiovascular disease, diabetes, some cancers, gastrointestinal disorders, and bone and joint disease.*
**Aim***: to evaluate the nutritional behavior patterns in high school girls in suburbs of ardabil city in 2019-2020*
**meterials and Methods***: The study was a cross-sectional descriptive-analytical study. 303 high school girls in the suburbs of Ardabil were included in the study by cluster random sampling. Demographic information and height and weight of students were collected and height for age index and body mass index for age were calculated and classified based on the explanations of the World Health Organization. Data on nutrition and exercise were also collected using nutrition questionnaires (food frequency and 24-hour recall) and Godin-Shepherd exercise activity questionnaire, respectively. The results were analyzed using Kolmogorov-Smirnov, Wilcoxon one-sample, Kruskal-Wallis, and Mann-Whitney tests.*
**Results***: The mean age of students was 16.72±0.93 years. The mean score of weekly physical activity of students in Godin-Shepherd scale was 32.56±24.51. The level of weekly physical activity was sufficient in 53.5% of students, moderate in 28.1% and insufficient in 18.5%. The mean BMI of students was 21.51±3.36 kg/m$^2$. Based on the Z-score of body mass index for age, 1 student (0.4%) was extremely thin, 3 students (1.2%) were thin, 202 students (79.5%) were normal, 42 students (16.5%) were overweight, and 6 students (2.4%) were obese. According to Z-score of height for age, 1 student (0.4%) was severely short, 2 students (0.8%) were short, and 251 students (98.8%) were normal. Intake of protein, fiber, vitamin A, vitamin B6, vitamin C, vitamin D, calcium, iron, and zinc was significantly lower than recommended values (P<0.001).*
**Conclusion:** *The results of this study on high school girls in the suburbs of Ardabil showed that the level of physical activity in more than half of the female students was at the desired level. Body mass index for age was normal in most students and most girls were of normal height. Nearly one-fifth of the participants in the present study were obese and overweight based on BMI for age index. Compared to weight loss and severe weight loss, the rate of overweight and obesity was higher in girls. Most of the consumed food items belonged to the*

*cereals group and some macronutrients and micronutrients were less than the recommended daily allowance.*