



## Abdominal Obesity Prevalence in high school girls of Urmia city in 2014

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**Introduction:** Adolescence is one of the critical periods of growth which is increased the growth velocity. Overweight and abdominal obesity in adolescence increases the risk of metabolic syndrome, even independently from adulthood obesity. The aim of this study was to determine the abdominal obesity in high school girls in Urmia city in 2014.

**Methods:** This cross-sectional study was carried out in 2014 on 3359 primary and secondary high school students in Urmia city. The research questionnaire was approved by vice chancellor of research of UMSA and Office of Education. Data was collected through a multi-stage sampling, interviews and anthropometric measurements. Data were analyzed by SPSS V20 software and using independent t-test, one-way ANOVA and Pearson correlation. Waist-to-hip ratio (WHR) was calculated and WHR greater than or equal to 95th percentile were considered as abdominal obesity.

**Results:** In this research, (%30.4)1022 primary and (%69.6)2337 secondary high school students of Urmia city were studied. In this study the rate of abdominal obesity in high school girls of Urmia in first and second period was 6.3 and 8 percent, respectively. The analysis showed that with the increase of age, WHR was significantly reduced ( $p<0/001$ ). The WHR in primary high school students ( $SD=0/065$ ,  $Mean=0.85$ ), was significantly greater than the secondary schools ( $SD=0/063$ ,  $Mean=0.83$ ), ( $p<0/001$ ). WHR in Region2 ( $SD=0.052$ ,  $Mean=0.85$ ) was greater than region1 ( $SD=0.07$ ,  $Mean=0.82$ ). WHR had significant difference between fields of schooling, as in humanism students ( $SD=0.09$ ,  $Mean=0.83$ ) was significantly higher than mathematics ( $SD=0.06$  and  $Mean=0.81$ ) ( $p=0.13$ ).



Conclusion: According to findings of this study the rate of abdominal obesity was increased by age and was higher in humanism students and need to interventions to prevent.

Keywords: abdominal obesity, girls