

## High Dietary Diversity is Associated with Child Obesity in Iranian School Children: An Evaluation of Dietary Diversity Score

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**Objective:** The prevalence of overweight and obesity in Iranian children has increased considerably in the last decades. Obesity in children is a major concern. Higher variety score of diet may cause obesity among urban schoolchildren. The objective of this study was to measure dietary diversity score and obesity in child from Iran.

**Methods:** The present study examined Dietary Diversity Score (DDS) and weight status by calculating Body Mass Index (BMI) and the World Health Organization's (WHO) anthropometric indices of weight-for-age (WA) and weight-for-height. A cross-sectional study was performed on 2234 Iranian aged 6-9 years, attending primary schools residing in urban area from low and middle income categories. Dietary diversity scores were assessed based on frequency of consumption of individual food items categorized into 11 individual food groups.

**Results:** Overweight children showed the highest mean score for cereals ( $F=2.209$ ,  $P=0.005$ ), vegetables ( $F=5.234$ ,  $P=0.001$ ), non-vegetarian foods ( $F=12.3920$ ,  $P=0.000$ ), mixed dishes ( $F=9.899$ ,  $P=0.000$ ), beverages ( $F=9.654$ ,  $P=0.000$ ), sweets and sugar ( $F=5.122$ ,  $P=0.002$ ) and fats ( $F=10.263$ ,  $P=0.000$ ). Mean scores for vegetables, sweets, beverages and fat consumption increased with increasing weight. High scores for pulses and legumes consumption were observed in obese children. Scores for vegetable consumption were higher among overweight children.

**Conclusion:** Overweight and obese school children had high diversity scores in their diet.

### Biography:

Dr. Sahar Hooshmand is an academician and researcher in the field of epidemiological child nutrition. She had a practice career graduating from S.N.D.T. Women's University of Mumbai, India. She published and presented several papers in some congress and journals. She has written three educational nutrition books. She participated as lecturers at department of food science and nutrition in Iran and as trainer in Family education courses conducted by education and training organization. She is honored to get awards for child nutrition and dietary diversity papers by University of Hohenheim, Germany (2012) and International Nutrition Foundation (INF), USA (2013).