

**BODY COMPOSITION, BLOOD PRESSURE AND DIETARY HABITS AMONG YOUNG QATARI MALE ADULTS**

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Introduction: Due to a rapidly changing lifestyle in Qatar, determinants of non-communicable diseases and linked levels of risk factors have risen. These facts pose a national challenge (1). Information about Qatari adults' (19-30yr.) dietary habits is essential because of the increase in the incidence and prevalence of obesity in Qataris. In 2006, the percentage of Qatari boys who are overweight and obese is 28.6%, and 7.9%, respectively (3). Aim of this study was to determine body composition, blood pressure and dietary habits of the next cohort, those 18-29 yrs old. Methods: 80 Qatari male students, 18-29 yrs of age, from Qatar University (QU) participated. Blood pressure (BP) was measured by Omron HEM-780, body composition (body weight and percent of body fat (BF), were measured by OMRON BF-400. Dietary habits were evaluated using the NHANES Food Frequency Questionnaire. For data analysis, Chi-square test and univariate analyses of variance were conducted using SPSS version 20. Results: The mean systolic and diastolic BP was 128.6±1.42 mmHg, 73.32±1.1 mmHg, respectively. The mean arterial pressure (MAP) was 91.74±1.06 mmHg. The mean BF is 23.79±1.19%. 30.77% of the subjects were classified as overweight, 38.46% as obese. The crosstab statistical analyses yielded a difference between fast food (FF) vs. seafood (SF) consumptions ( $p=.007$ ). No statistical difference between vegetables consumption vs. pasta intake occur. However, the subjects' soda consumption was greater than fruit juices ( $p=.05$ ). The BF is expressed by an interaction between salad and SF consumption,  $p=.047$ ,  $\eta^2=.409$ , but these main effects are not qualified by a separate interaction on BF ( $p=.234$ ,  $\eta^2=.181$  vs.  $p=.34$ ,  $\eta^2=.149$ , respectively). No interaction was found between FF, SF or sweets and blood pressure values. Conclusion: Obesity is uniformly considered to be the most important factor in developing non-communicable diseases in Qatar (2). Our study supports the results. In our sample, the prevalence of overweight and obesity was higher compared to previously published studies. No correlation between dietary habits and MAP occurred though, due to the wide range of nutrients consumed. High caloric diets are prevalent among QU students. References: (1) Al-Thani, Hamad bin Jabor bin Jassim (2008). Qatar National Vision 2030: The Four Development Pillars. Retrieved on February 11, 2013 from [http://www.cna.nl.ca/Qatar/pdfs/qatar\\_vision\\_2030.pdf](http://www.cna.nl.ca/Qatar/pdfs/qatar_vision_2030.pdf). (2) Alwan, A.D. (1996). Prevention and Management of Hypertension. WHO Regional Office for Eastern Mediterranean. Retrieved on February 11, 2013 from <http://applications.emro.who.int/dsaf/dsa20.pdf> (3) Bener, A. (2006). Prevalence of obesity, overweight, and underweight in Qatari adolescents. Food and Nutrition Bulletin. 27(1): 39-45.

**FOUR-YEARS INCIDENCE OF YOUTH OVERWEIGHT-OBESE. ASSOCIATION WITH DEMOGRAPHIC AND LIFESTYLES FACTORS**

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Introduction Considering premature consequences of obesity, several studies appointed for the public health importance of understand obesity since childhood. Therefore, the aim of this study was to evaluate four-years incidence of youth overweight/obese (OW/OB) and to identify lifestyles and demographic outcomes of youth and their parents associated. Methods This is a longitudinal study comprised a randomized sample of 405 schoolchildren and adolescents for both genders aged 7-17 from Santa Cruz do Sul - Brazil. A previously trained research group measured baseline and 3 years after all variables at the University laboratory. Subjects were classified in OW/OB according of an international cut off point. Youth and their parent's lifestyles and demographic variables were measured by an adapted questionnaire. Cardiorespiratory fitness (CRF) was available by a nine minutes walking and run test. Subjects were categorized in CRF healthy and unhealthy zone in agreement with Brazilian parameters. Results The cumulative incidence of OW/OB was 23% over a period of four years. The prevalence of both OW/OB was two times more elevated on the second year compared with baseline values (OW: 16.8%-33.3%; OB: 6.7%-15.3%). By poisson regression test: CRF unhealthy youth on baseline and on the fourth year showed a higher risk for keeping and developing OW/OB (Baseline - OR: 2.03; 95% CI: 1.16; 3.55; fourth year - OR: 2.37; 95% CI: 1.52; 3.69); and, youth with mother categorized in OW/OB (OR: 2.92; 95% CI: 1.69; 5.05). Sex, age, birth weight, school localization and variation of CRF did not show significant association with develop our keep over four year on OW/OB group. Discussion Approximately half of our sample kept or became OW and OB over a four years period. Mother overweight/obesity and low levels of cardiorespiratory fitness seem important predictors that should be considerate for prevention and treatment of this pandemic disease. Promotion of health through modification of children and their parent's lifestyles could be an important approach. References Cole, T. J., Bellizzi, M. C., Flegal, K. M., & Dietz, W. H. (2000). BMJ, 320(7244), 1240-1243. Freedman, D. S., Goodman, A., Contreras, O. A., DasMahapatra, P., Srinivasan, S. R., & Berenson, G. S. (2012). Pediatrics, 130(1), e159-166. Gaya, A. PROJETO ESPORTE BRASIL. Porto Alegre - RS. 2009. [http://www.proesp.ufrgs.br/proesp/images/pdf/MANUALDOPROESP-BR\\_2012.pdf](http://www.proesp.ufrgs.br/proesp/images/pdf/MANUALDOPROESP-BR_2012.pdf) Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2012). JAMA : the journal of the American Medical Association, 307(5), 483-490.

**THE INFLUENCE OF DIETARY BEHAVIOR AND SEDENTARY LIFESTYLE ON BLOOD PRESSURE AND BODY COMPOSITION AMONG YOUNG QATARI FEMALE ADULTS**

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Introduction: Obesity is emerging as a major health problem due to recent dietary habits and sedentary lifestyles in Qatar. The prevalence of, overweight, and obesity was over 23%, among adolescents girls in the country. On the other hand, the adult Qatari population has a high prevalence of hypertension (32.1%)(1,2). The aim of the study was mapping the early signs of hypertension and its connection to the dietary habits, to the inactivity level, and to the body composition of young adult Qatari females. Methods: 70 Qatari female students were involved from Qatar University, age between 18-29 yr. Blood pressure was measured by Omron HEM-780, body composition (body weight (BW), % of body fat (BF), were measured by OMRON BF-400. The dietary habit was evaluated by NHANES Food Frequency Questionnaire (FFQ). To clarify the subjects actual physical activity International Physical Activity Questionnaire (IPAQ) was used. For data analyzes Chi-square test and univariate analyses of variance were used use by SPSS version 20. Results: The systolic (BPS) and diastolic (BPD) blood pressure mean values were in the normal range (BPS 114±1.44 mmHg and BPD 64±1.16 mmHg). Mean arterial pressure (MAP) was 87.71±1.15 mmHg. Mean BF was 28.82±1.44 and 39.65% of the subjects was overweight or obese. The crosstabs shown significant difference between the seafood vs. fast food (FF) consumption, however no difference was shown between the vegetables and pastas use. In the fluid uptake, soda and 100% fruit juice drinking did not differ from each other. There were qualified by an interaction between FF consumption and total weekly sitting hours (TWH) on BF,  $p=.16$ ,  $\eta^2=.164$ , where the main effects was FF vs. TWH ( $p=.01$ ,  $\eta^2=.245$  vs.  $p=.451$ ,  $\eta^2=.012$ ), but these effects did not qualified by an interaction on MAP ( $p=.256$ ,  $\eta^2=.055$ ). Conclusion: Qatar puts