Journals ON-LINE Publishers Since 1933
ISSN 0975-1270
JOURNAL OF LIFE SCIENCES

 J Life Sci, 1(1): 35-43 (2009)

Obesity and Blood Pressure Variations among the Bengali Kayastha Population of North Bengal, India

Debolina Sarkar, Nitish Mondal and Jaydip Sen

Department of Anthropology, University of North Bengal, Raja Rammohunpur, P.O., NBU, Darjeeling 734 013, West Bengal, India

KEYWORDS Kayastha. Blood Pressure. Anthropometry. Obesity. India

ABSTRACT Obesity is defined either by increased waist circumference (WC), waist-height ratio (WHtR), conicity index (CI) waist-hip ratio (WHR) and/or body mass index (BMI). As individuals from the developing countries consume more quantities of high-energy food and have less physical activity, the number of overweight and obese individuals increase. Obesity has a detrimental effect on blood pressure and increases cardiovascular events. One important issue that is currently assuming relevance in studies involving blood pressure and anthropometric parameters is the mean arterial pressure (MAP). There exists limited data on such issues among different Indian population and caste groups. This cross sectional study was carried out during the period October-December 2007 in four localities of Alipurduar town (Alipurduar sub-division, Jalpaiguri district, West Bengal, India). A total of 150 individuals (75 males and 75 females) agreed to take part in the same. Blood pressure (SBP and DBP) was measured on left arm by auscultatory method using a mercury sphygmomanometer. The anthropometric measurements have been recorded using standard procedures. The male individuals show higher means with respect to the anthropometric measurements and the blood pressure values, as compared to the females. The prevalence of hypertension was almost 50.00%. Obesity accounted for 80.00% of the individuals. Using step-wise regression analysis, it has been observed that all the anthropometric parameters play a role in blood pressure. It can be observed that the Bengali Kayastha population of Alipurduar town has a high prevalence of obesity. Moreover, BMI, WC and WHtR have strong correlations with DBP and MAP.