



Bone Health in Urban and Rural College-Going Young Adults of District Gurdaspur, Punjab

Manjula Uppal and Karamjeet Kaur

*S.L. Bawa D.A.V. College, Batala 143 505, Distt. Gurdaspur, Punjab, India
E-mail: slbdavc@yahoo.com*

KEYWORDS Bone Mineral Density. Nutritional Intake. BMI. Physical Activity. Quantitative Ultrasound Bone Densitometer

ABSTRACT Three hundred and ninety four (394) male (urban: 229; rural: 165) and 606 female (urban: 384; rural: 222) college students in 16-23 years of age were investigated to find out an impact of lifestyle variables like physical activity, exposure to sun and dietary intake along with anthropometric variables on bone health in urban and rural population. There was a significant difference in mean T-score and Z-score among urban and rural females. Bone mineral density was significantly better in rural males (normal, 60.6%; osteopenia, 37.6%; osteoporosis, 1.8%) compared to urban (normal, 54.6%, osteopenia, 38.0%; osteoporosis, 7.4%) males. Rural females (normal, 51.4%; osteopenia, 45.0%; osteoporosis, 3.6%) too had a better bone health than the urban (normal, 47.1%; osteopenia, 44.8%; osteoporosis, 8.1%) females. Physical activity was cited to have a significant correlation with T-score and Z-score. Protein and calcium intake could be significantly correlated with T-score in urban subjects, and with energy, carbohydrates and phosphorus in rural subjects. Z-score had positive correlation with calcium intake in urban individuals and with energy and carbohydrate in rural subjects. However height, weight and BMI had no impact on BMD.