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Chronic Energy Deficiency among Tribal Communities of Orissa, India

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ABSTRACT Orissa is one of the most backward states in India. Naturally it's reflection will be felt in the tribal communities also. To find the prevalence of chronic energy deficiency (CED) among seven tribal communities of Orissa, data on height, sitting height and weight from 655 adult males aged 18 to 62 years are taken for the present analyses. The data have been collected by Anthropological Survey of India. Body mass index (BMI) and cormic index (CI) have been computed and subjects have been classified on the basis of chronic energy deficiency (CED). ANOVA along with post hoc multiple range test, chi square test and linear regression have been carried out. The results reveal that within these seven tribal communities Gond males have tallest mean height (160.64 cm) and Bhuiya males have the shortest mean height (155.87 cm). But Bhuiyas are heavier in weight (47.18 kg) and with highest average BMI (19.41 kg/m²). On the other hand, Paroja have the lowest average value of BMI (17.31 kg/m²) leading to the highest prevalence of chronic energy deficiency (18.0% for CED III and 28.0% for CED II) compared to rest of the groups. The tribal communities are spread out at different regions in India. The national picture of leanness and thinness along with high prevalence of chronic energy deficiencies are similar in all the tribal communities and Orissa is no exception. Beside these, significant ($p < 0.01$) regression coefficient values of BMI on CI of the tribal males indicate the genetic predisposition of BMI. High prevalence of CED III and CED II among the tribal communities in Orissa may be due to their poor socioeconomic condition.