Sexual Dimorphism in Health and Nutritional Status of Three Communities of Darjeeling District in West Bengal and Comparison with Some Other Populations of Eastern India: An Anthropometric Appraisal

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KEYWORDS Body Mass Index, Rohrer Index, Community, Nutrition, Health.

ABSTRACT A cross-sectional study undertaken in three endogamous populations, viz. Dhimal, Mech and Rajbanshi reveal some significant results of high prevalence of undernutrition and poor health condition. An anthropometric appraisal of health and nutrition of the individuals of both the sexes show remarkable sex differences with respect to the rates of chronic energy deficiency (CED) and undernutrition measured by body mass index (BMI ≤18.49 kg/m²) and frequency of subnormal health condition measured by Rohrer Index / Index of Corpulence (RI ≤1.19 gm/cm³). Samples of both sexes combined exhibit Dhimals (37.45%), Mech (13.02%) and Rajbanshi (23.56%) suffer from variable degrees of undernutrition (BMI ≤18.49 kg/m²). State of health assessed by Rohrer Index records 28.80% of the people of these three communities (both sexes combined) are in below normal range. Dhimals show highest rates of undernutrition (CED 27.04% in males and 46.58% in females) followed by Rajbanshis (CED 17.33% in males and 29.32% in females) and the Meches (CED 9.93% in males and 16.91% in females). Likewise, below standard health (RI ≤1.19 gm/cm³) is prevalent highest among the Dhimals (51.57% males and 35.61% females) subsequently in Rajbanshi (28.67% males and 22.99% females) and Mech (19.86% males and 12.67% females) communities. Conditions of the females are worse compared to the male counterparts of these communities. Results have been compared with further recent reports from some other populations of eastern India.