Biology of the Tribal Groups of Rajasthan, India:
5. Pulmonary Functions: Their Relation with
Anthropometric Variables

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ABSTRACT The present study is based on a cross-sectional investigation on 2928 samples consisting of 1503 males and 1425 females. The study was carried out on the Scheduled Tribes, namely Minas, Bhils, Sahariyas, Garasias, Damors and Kathodis of Rajasthan. Samples were collected from the place of residence and schools. For the purpose of analysis, the subjects were classified into yearly intervals. Those subjects who had completed 8 years of age but were less than 9 years even by one day were grouped under 8+ age group. Similar pattern was followed for other age groups as well. Heights and weights were collected following the internationally accepted standards and assessment of physiological functions was made using an electronic spirometer. Standard techniques were employed to measure respiratory function. The results of lung functions (FEV₁, FVC, MVV) show a gradual increase with advancing age in boys as well as among the girls. Boys, generally tend to show higher mean values as compared to girl counterparts. Positive significant correlation is observed between lung functions (FEV₁, FVC, MVV) with height and body weight, thus indicating that development of pulmonary functions and growth of physical parameters go hand in hand in children and adolescents.