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Subcutaneous Fat and Lean Tissue Components in Rajput and Scheduled Caste Adolescents of a Part of Sirmour District, Himachal Pradesh

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ABSTRACT Subcutaneous fat and lean tissue components of a cross-sectional sample of 544 adolescent boys and girls of a part of the Sirmour District of Himachal Pradesh are described. The sample consisted of 269 Rajputs (128 boys and 141 girls) and 275 Scheduled Castes (140 boys and 135 girls) ranging in age from 11 to 17 years. Body composition was assessed by the anthropometric method using skinfolds. Anthropometric measurements, namely stature, weight, biceps, triceps, sub-scapular and suprailiac skinfolds, were taken using standard instruments and procedures. Body density was estimated from the sum of biceps, triceps, sub-scapular and suprailiac skinfolds using the equations of Durnin and Rehman (1967) for adolescent boys and girls. Percent body fat was calculated from body density. One-way ANOVA was used to evaluate the significance of gender and caste differences. On the average, the percent fat and fat mass increased from 11 to 17 years in girls as well boys, with girls showing more variations. The mean percent fat and fat mass were significantly higher ($P \leq 0.05$) in the Sirmour girls as compared to the boys, while the mean lean mass was significantly less ($P \leq 0.05$) in the girls. With the exception of triceps and biceps skinfolds in girls and suprailiac skinfold in boys, the caste differences in a majority of the skinfolds and calculated percent fat, fat mass and fat-free mass were not significant. It may be concluded that people exposed to same environmental situations over a prolonged period of time tend to develop similarity in body constitution.