

## **Arm Muscle and Fat Components in Adolescent Boys of Punjab**

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**ABSTRACT** The objective of the present study is to evaluate the association between Arm Fat and Muscle components in adolescent boys of Punjab. A cluster sampling of 829 boys from 12 to 18 years was drawn from various schools of Moga, Ludhiana, Bathinda and Ferozpur districts in Punjab during October 2000. Each subject was measured for two skinfolds, viz., Biceps and Triceps and one circumference of the Upper Arm employing standard techniques of Tanner et al. (1969). Areas of Arm Muscle and Arm Fat were calculated with the help of Upper Arm Circumference and respective skin folds assuming the limb to be a cylindrical entity. Arm Muscle Area shows high correlation with Upper Arm Circumference whereas Arm Fat Area is highly correlated with Triceps skin fold during the period under study. It may be concluded from the present study that the circumference of the Upper Arm is a good indicator of the Arm Muscle Area and hence later can be calculated from the former with lots of accuracy. Similarly the Arm Fat Area is better predicted with the help of Triceps skin folds. The associations and predictions of Arm Fat Area and Arm Muscle Area are generally stronger at the late adolescent years.