

Physical Fitness and Growth Performance of Menstruating Girls Belonging To Upper and Lower Socio-economic Status

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Abstract

The present investigation has been conducted on 327 subjects ranging in age from 11-15 years attending various schools of Patiala (Punjab) to evaluate the effect of socio-economic status on the physical fitness and growth performance of menstruating girls. Body weight, height, five skinfolds (biceps, triceps, subscapular, suprailiac and calf) and five physical fitness tests of AAHPER Youth Fitness test battery were measured. The information of their socio-economic status including their father's education, profession and the monthly income was collected and the subjects were divided into upper and lower socio-economic status (SES). A total of 224 subjects were included for upper and 103 were for lower socio-economic group. The retrospective method was used for collecting the information regarding their menarcheal status. Upper SES girls run significantly faster than the lower SES girls in shuttle run and 50m dash. The upper socio-economic girls perform better and jump longer distance in standing broad jump than the lower SES group. Only in case of flexed arm hang the lower SES girls could perform this feat for a significantly longer duration than the upper SES counterparts. The upper SES girls are significantly taller and heavier than their lower SES counterparts. The upper SES girls have shown significantly greater thickness of (biceps, triceps, subscapular, suprailiac and calf) skinfolds. The upper SES girls have significantly greater amount of body fat than their lower SES counterparts who in turn have significantly greater amount of LBM. The BMI is significantly greater in upper SES girls than lower SES girls.

Key Words: Socio-economic Status, Body Fat, Physical Fitness, Body Mass Index

Introduction

Physical fitness is generally considered to encompass three components viz. strength, stamina and flexibility. *World Health Organization (1947)* defines physical fitness as “a state of complete physical, mental and social well being...not merely the absence of disease”. The growth performance of children is influenced by a number of factors including the social stratification & family environment. The findings throughout the World have indicated a better growth performance of children belonging to upper social strata (*Bogin & Macvean 1981; Singh et al. 1987; Eveleth & Tanner 1990 and Prista et al. 1997*). The reason for the better growth performance of higher social strata

children include better family environment, good and nutritious diet, better hygiene, availability of the recreation and leisure activities. Studies on this aspect reveal that the children from affluent families tend to be heavier and taller in contrast to those from non-affluent families. But during adolescence, girls from lower SES from developed countries tend to be heavier than those belonging to upper SES (*Malina et al. 1985*). This change is reflected through their preferences for slenderness in the girls' belonging to upper SES families. It has also found that the larger families tend to put pressure on the growth of children.

Similarly the higher social class children generally performed better in