This study presents nutritional status, physical growth, sexual development and skeletal maturity of Punjabi adolescent girls of upper middle and lower middle socio-economic groups (UMSEG and LMSEG). Mixed longitudinal data on physical growth was obtained on 622 girls aged 6-16 years (312 girls of UMSEG and 310 girls of LMSEG) derived from the schools of Chandigarh and adjoining areas of Punjab. The results of physical growth were analysed according to Tanner (1951).

The salient features which emerged from this study are as follows:

1. Nutritional deficiency diseases were found to be present only among the girls of LMSEG and none among the girls of UMSEG. Anemia was the most prevalent feature, followed by atrophic lingual papillae and lack of lusture of head hair among the girls of LMSEG.

2. The protein calorie intake by girls of UMSEG was in tune with the recommended dietary allowances or at times even better while the girls of LMSEG fell far short of the RDA in most of the age groups.

3. The results of physical growth revealed an overall increase in the mean values of all anthropometric parameters with advancing age and the spurt in growth was recorded between 11-14 years of age for most of the body dimensions. All the skinfolds showed a slow and irregular increase with age upto pre-pubesence and a marked increase at puberty, however, the growth spurt was not pronounced.
4. The girls of UMSEG were found to be lighter by 3% but those of LMSEG were lighter by 21% than the reference group (well-to-do Indian girls) for equal heights.

5. The punjabi girls especially those of UMSEG of present series were found to have better growth of body height and weight when compared with other Indian populations.

6. The punjabi girls of UMSEG showed advanced sexual maturity with respect to breast development and onset of menarche, while those of LMSEG lagged behind by more than a year.

7. Girls of UMSEG were also found to be skeletally advanced over the girls of LMSEG, so that the difference between bone age and chronological age was positive throughout the growth period in the girls of UMSEG and it was negative for most of the ages in the girls of LMSEG.

8. Nutrition and generally better living conditions seem to be the most predominant factors in determining the differences in physical growth and sexual maturity between the two socio-economic groups of punjabi population.