ABSTRACT

The present research work deals with growth patterns and nutritional assessment among Garhwali and Jaunsari pre-adolescent and adolescent Rajput females of Dehradun district, Uttarakhand. The growth pattern and nutrition was compared to analyze the difference between a tribal and other non-tribal population on various parameters of growth. Both Jaunsari and Garhwali Rajput population groups share a common environment but they are genetically and socioeconomically diverse. The present study is conducted with following objectives:

1. To study differences in growth patterns between pre adolescent Rajput females of Jaunsar-Bawar and Dehradun, Uttarakhand.

2. To study differences in growth patterns between adolescent Rajput females of Jaunsar-Bawar and Dehradun, Uttarakhand.

3. To observe the age of adolescent spurt in the Rajput females of Jaunsar-Bawar and Dehradun, Uttarakhand.

4. To study differences in the nutritional status between the pre adolescent and adolescent Rajput females of the two hill populations.

Present study comprises of a total of 1319 Rajput females (664 Garhwali and 655 Jaunsari) in age range of 8 to 18 years. Data has been collected from door to door in residential location and from schools within fieldwork area. In order to accomplish the aims of the present study following measurements have been obtained on each subject using the standard techniques recommended by Weiner and Lourie, 1969. Different measurements included following body measurements: Body weight, height, sitting height, Upper Arm Length, Height Tibiale, Fore Arm Length, Height Iliospinale, Sitting Height, Height Spherion, Foot Length, Total Arm Length, Hand length, Bicristal Breadth, Biacromial Breadth, Waist Circumference, Calf Skin fold, Hip Circumference, Sub scapular Skin fold, Mid Upper Arm Circumference, Triceps Skin fold, Lower leg Length, Thigh Length and Total Lower Extremity Length.
Data were collected by following the random technique of sampling. Adequate care was taken to include apparently normal and unrelated individuals in the present study. Inclusion and exclusion criteria were also modulated for data collection, subjects who are inhabitants of Dehradun District (Uttarakhand) for the last 3 generations, without any apparent physical disability, and with proof of age (such as birth certificate or school record) considered under inclusion criteria and opposite to is considered under exclusion criteria.

After the data collection, the statistical analysis of the data was performed with the help of SPSS package for calculation of means, standard error of estimate, 't' test and correlation. Nutrition status of Garhwali and Jaunsari Rajput females has been assessed by considering BMI, WHR, Height and Body weight percentiles. The present study has highlighted that there is no such prevalence of obesity or overweight. Both populations are sharing same environment but still there are marked population difference.