

BODY COMPOSITION OF SCHOOL GOING STUDENTS IN KOKRAJHAR DISTRICT, ASSAM

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Abstract:

The purpose of the present study to check the body composition status of the school going students of Kokrajhar District, Assam. For the purpose of the study total ninety (N= 90) male students were randomly selected from Kokrajhar District of Assam. Age range of the subject was from 11 to 14 years. The selected Anthropometric variables were Age, Height, weight, Waist Circumference, Hip Circumference and Body Fat Percentage. Mean and Standard Deviation were used to analysis the data. The result of the study shows that BMI (Body Mass Index), WHR (Waist Hip Ratio), Body Fat Percentage is normal in Kokrajhar District, Assam.

Keywords: BMI (Body Mass Index), WHR (Waist Hip Ratio), BFP (Body Fat Percentage), Assam.

Introduction

It is a serious issue of student life causing their secondary life style now a day. Students are very much attending with digital world rather than ground. So today, it is a common problem of student life. Anthropometric measurement is a method to the assessment of their physique like Body Mass Index (BMI), Waist Hip Ratio (WHR), Body Fat Percentage (BF%). BMI method is used to check nutritional status of the students (The European Health Report, 2002). Waist-to-hip ratio (WHR) is the dimensionless ratio of the circumference of the waist to that of the hips. The WHR is used as an indicator or measure of health, and the risk of developing serious health conditions (Krebs, N. et. all, 2007). The BF% increase is in a direct relation to BMI values, especially among children and adolescents (Krebs, N. et. all, 2007). This study may be help to understand the health status of the school going students of Kokrajhar District, Assam. For this purpose of the study was to assess the body composition status of the school going students of Kokrajhar District, Assam.

Objective

The objective of the study was to assess the body composition status of the school students of Kokrajhar District, Assam. It was assessed in the form of Body Mass Index (BMI), Waist Hip Ratio (WHR), Body Fat Percentage (BF%).

Method

Subject

For the purpose of the study Ninety (N=90) male students were randomly selected. The subjects belong to different school of Kokrajhar District Assam. Age range of the subjects was 11 to 14 years. This may help to understand the health status of the school going students of Kokrajhar District, Assam.

Instrument for data collection

The data were collected following the standard data collection procedure.

Age: Recorded from Birth Certificate.

Height: Measured by Stadiometer.

Weight: Weight was measured by Weighing Machine.

Waist Circumference: It was measured by Anthropometric tape.

Hip Circumference: It was measured by Anthropometric tape.

Body Fat Percentage (BF%): The body fat calculation was based on the Jackson and Pollock 3-site calliper Method. All three site skinfold was measured by Harpenden skinfold calliper.

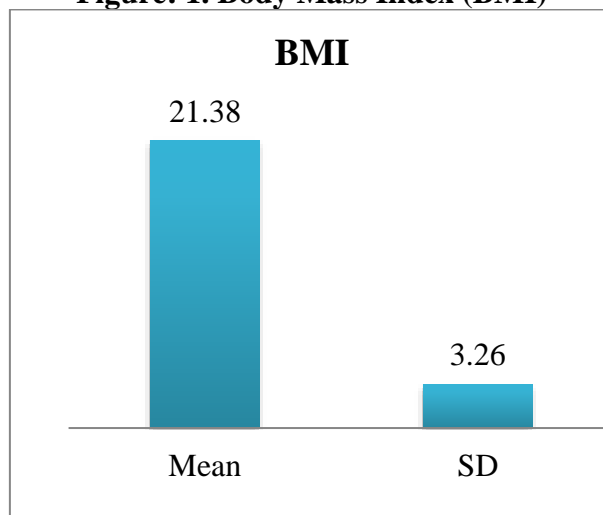
Statistical technique for analysis data:

For the purpose of the study to check the the body composition status of the school going students of Kokrajhar District . Descriptive statistics of Mean and SD was employed.

Results:

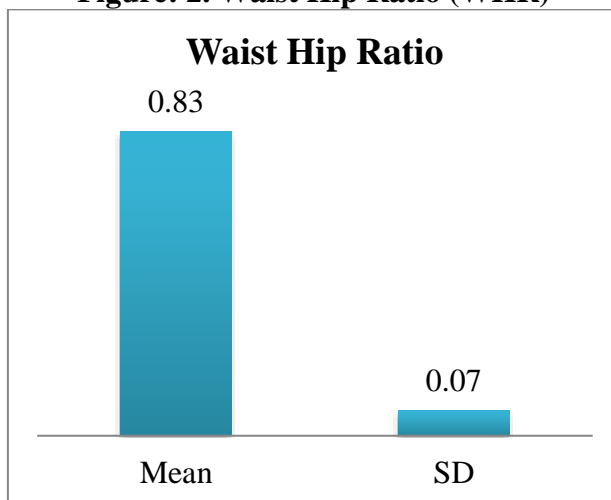
The mean and SD of Body Mass Index (BMI) on the school going students were presented in the figure- 1.

Figure: 1. Body Mass Index (BMI)



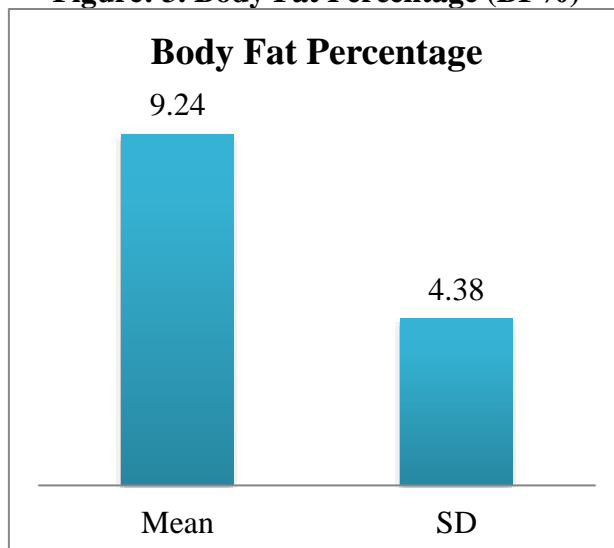
The mean and SD of Waist-to-hip ratio (WHR) on the school going students were presented in the figure- 2.

Figure: 2. Waist Hip Ratio (WHR)



The mean and SD of Body Fat Percentage (BF%) on the school going students were presented in the figure- 3.

Figure: 3. Body Fat Percentage (BF%)



Findings:

The Mean values of BMI on school going students were 21.38 ± 3.26 . The normal range of BMI is lying on 18.50-24.99 of school going students (WHO, 2008). Considering the mean value of the school going students of Kokrajhar Distric were in normal BMI level. The Mean values of Waist-to-hip ratio (WHR) on school going students were 0.83 ± 0.07 . The mean values were indicated that the health risk factors of school going students were low, because those values are lower than 0.95 which was set by WHO (2008). Again the Body Fat Percentage (BF%) on school going students were 9.24 ± 4.38 . According to American Council on Exercise, having 6-13% of body fat fall in athletic. The school going students were in good position considered the status of Body Fat Percentage (ACE Fit, 2017).

Conclusion

Considering the limitations of the study with some other related factor like food habit or daily routine, the following conclusion were drawn:

1. The Body Mass Index of all the students of Assam was Normal i.e. 18.50-24.99.
2. The Waist-to-hip ratio (WHR) or heart risk factor was in normal i.e. below from 0.95 (Standard level) of the school going students of Assam.
1. Again the Body Fat Percentage of the school going students of Assam was Normal i.e. 6-13%.

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