

Assessment of Nutritional Status Among the Adolescents: A Case Study

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Abstract

In India, the prevalence of under nutrition among adolescents is most common. Assessments of nutritional status play significant role in formulating developmental strategies of a country. The objectives of the present study is to assess the impact of nutritional supplementation in terms of nutritional grading and health status among student of age group of 19 to 21 years by the survey at University College Mangalore, Karnataka State.

The survey carried out among students having lunch under Mid-day meal scheme, college canteen and food from their home. Anthropometric measurements were used to assess nutritional status and BMI of each student were calculated. Among these students, getting lunch box from home are healthier than the student having lunch at college canteen and mid-day meal scheme. This may be due to, these students get more nutrient food prepared at their home. Therefore there should be nutrition education and awareness sessions for students to increase their knowledge and benefit regarding proper diet and its effect on their health.

Keywords: Anthropometry, BMI, Adolescent.

1. Introduction

Assessments of nutritional status play significant role in formulating developmental strategies of a country. Anthropometry is most universally applicable, inexpensive and non-invasive technique available to researchers for the assessment of body size and proportion. This technique has been widely utilized to assess the nutritional status of an individuals. In India, one of the important aims of nutritional research is to focus on the prevalence of under nutrition among adolescents. The adolescent period is the time when the nutrient requirements of the body are high. The nutritional status of adolescents needs to be monitored closely as they constitute the next generation of parents.

Anthropometric measurement are a series of quantitative measurement of the muscles, bone and adipose tissue used to assess the composition of the body. The core element of Anthropometry are height, weight, body mass index(BMI), body circumstancs (waist, hip, limbs) and skin fold thickness. These measurements are important because they represent diagnostic criteria for obesity, which is significantly increases the risk for condition such as cardiovascular diseases, diabetes, and many more. Additionally Anthropometric measurements can be used as base line for physical fitness and progress of fitness.

The objectives of the present study is to assess the impact of nutritional supplementation in terms of nutritional grading and health status among student of age group of 19 to 21 years by the survey at University College Mangalore, Karnataka State.

2. Materials and Methods

A survey based study was conducted in the month of March 2023, among the students of University College Mangalore under age group 19 to 21 years. The research approach adopted for the study was survey through self-structured questionnaire among students having lunch under Mid-day meal scheme, students having their lunch in college canteen and students getting food in lunch box from their home. The samples were selected by simple random sampling technique from selected degree students. Anthropometric measurements (height and weight) were used in assessing nutritional status of the student. A standard measuring tape was used to measure height of the student and weight was measured using weighing machine. Then BMI of each student were calculated. According to BMI the students were classified into normal weight, underweight, and overweight.

3. Results

Group	Food Pattern	% of Normal Weight	% of Underweight
1	Mid-day meal scheme	52	48
2	Canteen food	54	46
3	Lunch box from home	64	36

Table 1: Showing percentage of students with normal weight and underweight in three groups.

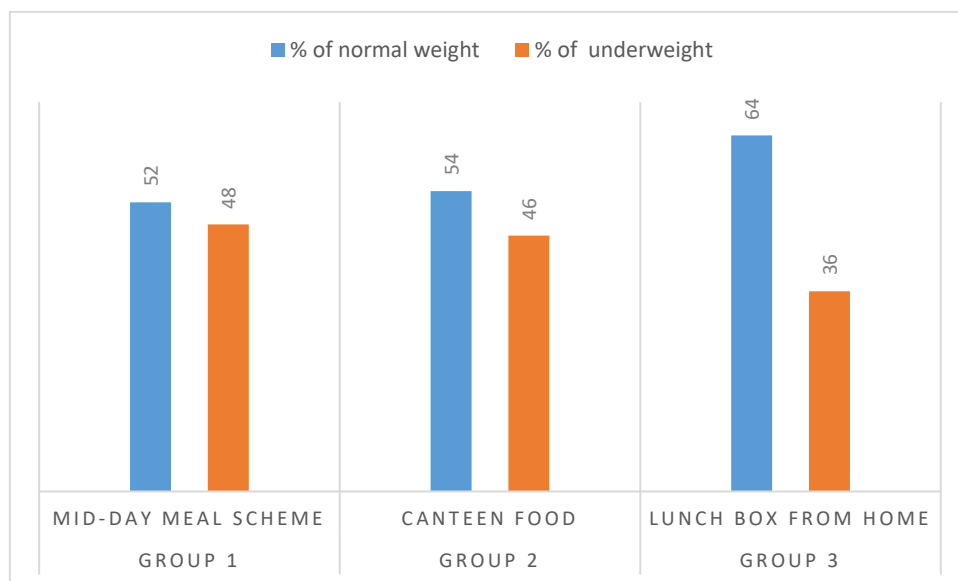


Figure1: Showing percentage of students with normal weight and underweight in three groups.

4. Discussion

The Group 3 students, getting lunch box from home are healthier than the student having lunch at canteen and mid-day meal scheme. This may be due to, group 1 students eat more healthy food. They intake variety of vegetables, chicken, fish, egg, fruits, curds etc. brought from home. So they get all types of nutrients which are required for the growth and development. The percentage of underweight is more among group 1 students, having food at mid-day meal scheme. This may be due to provided working lunch including limited rice, a type of curry and pickle. So they do not get proper nutrients. It is found in survey that most of the mid-day meal students even skip their breakfast as they are leaving home early morning or due to poverty. Among Group 2, students having food at canteen, percentage of underweight is more than the

Group 3 students. This may be due to student's food preference such as fried rice, pakoda, gobi manchouri, soft drinks and junk food during lunch hour. These foods are spicy but not a balanced diet to support BMI. Therefore there should be nutrition education awareness and sessions for students to increase their knowledge and benefit regarding proper diet and its effect on their health.

5. Acknowledgment

We would like to extend our heartfelt gratitude to the Principal, University College Mangalore, for granting us permission to conduct our survey among the students, the faculty members of the Department of Zoology, University College Mangalore, for their guidance, support, and encouragement throughout our research and the students of University College Mangalore, who willingly participated in our survey, shared their valuable opinions, and helped make our research a success. We are deeply grateful for their time, effort, and cooperation, which have contributed significantly to the completion of our research.

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