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BMI STATUS REPORT ON INTER COLLEGE MEN'S KABBADI PLAYER

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ABSTRACT

The purpose of the study was to investigate the data of Body Mass Index of Intercollege mens kabbadi player. The investigation was conducted on subject of twenty male inter college level Kabaddi players, ranging in age between 17 to 25 years. The findings and within the limitations of the study, it clearly reveals that 45% of subject were in normal zone whereas 35% of the subject were in obese grade 1.

INTRODUCTION

In order to maintain desired body composition (body fat percent and lean body mass)it is imperative to adjust energy expenditure with energy intake. Protein intake should also be neither too higher too low to maintain desired lean body mass. Lean body mass is directly related to the body strength, adequate amount of calcium intake, which is proportional to the bone density is required in adequate iron pool is also amount by the required players to maintain normal hemoglobin levels as work capacity of an individual is largely dependent on this iron status.

Higher fat intake in the diet may lead to higher risk of developing cardiovascular disorders later in life, hence fat intake needs to be controlled over at younger age groups particularly in players[2].

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Body Mass Index (BMI) is a person's weight in kilograms divided by the square of height in meters. A high BMI can be an indicator of high body fatness. BMI can be used to screen for weight categories that may lead to health problems but it is not diagnostic of the body fatness or health of an individual.

BMI does not measure body fat directly, but research has shown that BMI is moderately correlated with more direct measures of body fat obtained from skinfold thickness measurements, bioelectrical impedance, densitometry (underwater weighing), dual energy x-ray absorptiometry (DXA) and other methods[1,2,3]. Furthermore, BMI appears to be as strongly correlated with various metabolic and disease outcome as are these more direct measures of body fatness [4,5,6,7,8,9]. In general, BMI is an inexpensive and easy-to-perform method of screening for weight category, for example underweight, normal or healthy weight, overweight, and obesity.

For adults 20 years old and older, BMI is interpreted using standard weight status categories. These categories are the same for men and women of all body types and ages.

The standard weight status categories associated with BMI ranges for adults are shown in the following table.

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal or Healthy Weight
25.0 – 29.9	Overweight
30.0 and Above	Obese

Nuttall, Frank Q. MD, PhD The body mass index (BMI) is the metric currently in use for defining anthropometric height/weight characteristics in adults and for classifying (categorizing) them into

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groups. The common interpretation is that it represents an index of an individual's fatness. It also is widely used as a risk factor for the development of or the prevalence of several health issues. In addition, it is widely used in determining public health policies. The BMI has been useful in population-based studies by virtue of its wide acceptance in defining specific categories of body mass as a health issue. However, it is increasingly clear that BMI is a rather poor indicator of percent of body fat. Importantly, the BMI also does not capture information on the mass of fat in different body sites. The latter is related not only to untoward health issues but to social issues as well. Lastly, current evidence indicates there is a wide range of BMIs over which mortality risk is modest, and this is age related. All of these issues are discussed in this brief review.[10] **Dheer, 1989,** Nutrition is the process by which the body uses food for repair and growth of tissues and to carry on its other activities. The study of nutrition concerns foods which the body needs organs which digest it, blood which carries the digest food to the tissues and ways in which this is used by the body. Good nutrition is the basic component of health. It is of prime importance in the attainment of normal growth development and maintenance of the health throughout life. **Boisseau. et.al., 2006**, carried out a study to determine the nitrogen balance and protein intake in 8 healthy male non-active adolescents and 11 adolescent soccer players, both groups aged about 15 years. An assessment of nutrient intake was obtained by analyzing 7 day food records collected by a questionnaire. Nitrogen excretion rate was determined and nitrogen balance was calculated from the mean daily protein intake and the urinary excretion. The results showed that the nutritional status of the two groups was similar. Nevertheless, it was found that their diets were quite inappropriate in terms of the intakes of carbohydrate, some minerals (zinc, calcium, magnesium), vitamins (A, B6, D) and fibre. A positive nitrogen balance was observed from a mean protein intake of 1.57 $g \cdot kg^{-1}$ body $mass \cdot day^{-1}$ in these adolescents, whether they were non-active or athletes. Thus, this investigation indicated that the growth and development in non-active adolescents and in adolescent soccer-players give rise to a need for a higher protein intake than is usually recommended. However, the higher protein recommendations for the requirements for protein intake amount usually to 0.8–1.0 $g \cdot kg^{-1}$ body $mass \cdot day^{-1}$ in adolescents without any reference to the undertaking of acute exercise or to the training status.

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METHODS

For the present study the data was collected from the intercollege kabbadi players. The subjects were 20 intercollege mens in ranging between 17 to 25 years. The data of the players are as follows:

Table –1 Distribution of subjects according to BMI classification

BMI	Classification	No. of subjects	%
<18.5	Underweight	Nil	0
18.5-22.99	Normal	9	45
23.0- 24.99	Overweight	4	20
25-29.99	Obese grade 1	7	35
>30	Obese grade 2	Nil	0

Table no. 1 Indicates the BMI classification of the Kabaddi players' in which 45% of players were found in normal BMI category and 20% were overweight. However, 35% subjects were in the category of obese 1. It is imperative to know here that BMI is calculated using weight and height which includes fat as well as Lean Body Mass hence players with high muscular mass are sometimes falsely categorized into overweight or obese category of BMI classification. This is the limitation of BMI as indicator of obesity for sports persons.

Conclusion

For the purpose of this study the data were obtained from the intercollege mens kabaddi player. It clearly shows the classification of players, that the 0 % (Nil), 45%, 20%, 35% and 0% (Nil) are in

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underweight, normal, overweight, obese grade 1 and obese grade 2 category of Body Mass Index. It clearly reveals that majority of the subjects were in normal category of Body Mass Index.

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