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THE COMPARATIVE ANALYSIS OF BODY COMPOSITION BETWEEN WRESTLERS AND CRICKETERS AT UNIVERSITY LEVEL

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ABSTRACT

The purpose of the study is to make comparative analysis of body composition between wrestlers and cricketers. The subjects were 70 (35 wrestlers & 35 cricketers) male players of Dr. B.R.A.U. Agra teams, who had participated in university level competition. The age of subject were ranging between 18 to 25 years. selected body composition variables were body weight, height, triceps skinfold, subscapular skinfold, suprailliac skinfold and abdominal skinfold. The measurement were taken with the help of stadiometer, weighting machine & skinfold calliper & recorded in kg, cm & mm respectively. In order to determine the comparative analysis between the body composition of wrestlers and cricketers "t" test was applied within the limitation of the study. The finding reveals that there is significant difference on body composition between wrestlers.

KEYWORDS: Body Composition, wrestlers, cricketers.

INTRODUCTION

In the present modernized society the importance of sports is well understood and given a very high response. Research in sports sciences played an immense popularity due to Asian, world and Olympic Games, these apart it has become a worldwide phenomenon. The physique or body composition, including the size, shape of the muscle plays an important role in sports. Body composition makes an important contribution to an individual's level of performance and it will be facilitated by large proportion of active tissue muscle in relation to a small proportion of inactive tissues 'fat'. Body composition can be measured in several ways, through caliper to measure the thickness of subcutaneous fat in multiple places on the body. These measurements are then used to estimate total body fat. Body fat can be divided in to two parts, storage fat and essential fat. The essential fat is stored in lungs, heart, liver, kidney, spleen, intestine etc. This essential fat is important in normal functioning of the body. The storage fat is that which comprises the adipose tissues or adiposities which serves as energy reserves and protect internal organ from injury. Body composition data can be useful to determine competitive body weight for different games and sports.

OBJECTIVE

The objective of this study was to find out the difference between the body composition of wrestlers and cricketers.

METHODOLOGY

70 (35 wrestlers & 35 cricketers) male players who had participated at university level competition, were selected as subject for the study. The age of subject were ranging between 18 to 25 years. Body

weight, height, triceps skinfold, subscapular skinfold, suprailliac skinfold & abdominal skinfold were choosen as criterion measure for this study to test the hypothesis. To study the comparative analysis between body composition of wrestlers and cricketers, 't' test was employed. The data on selected variables were recorded with the help of standard procedure.

ANALYSIS OF RESULT

The statistical analysis of data collected on 70 (35 wrestlers & 35 cricketers) subjects of Dr. B.R.A.U. Agra teams at university level competition, on selected variables namely fat mass, fat free mass & percentage fat is presented below;

| Comparison of fat mass between wrestlers and cricketers | | | | | | |
|---|------|------|------|------|--|--|
| | Mean | S.D. | M.D. | t | | |
| Cricketers | 8.27 | 1.20 | 0.74 | 2.84 | | |
| Wrestlers | 9.01 | 0.94 | | | | |

| Table 1 |
|---|
| Comparison of fat mass between wrestlers and cricketers |

* Significant at 0.05 level of confidence, N = 70, t = 2.84

An examination of table 1 clearly reveals that wrestlers have more fat mass as compare to cricketers.

| Table 2 | | | | | | | |
|--|-------|------|------|------|--|--|--|
| Comparison of fat free mass between wrestlers and cricketers | | | | | | | |
| | Mean | S.D. | M.D. | t | | | |
| Cricketers | 52.01 | 7.60 | 6.31 | 4.74 | | | |
| Wrestlers | 45.70 | 5.80 | | | | | |

* Significant at 0.05 level of confidence, N = 70, t = 4.74

An examination of table 2 clearly reveals that cricketers have more fat free mass as compare to wrestlers.

CONCLUSION

Within the limitation of the study the following conclusions may be drawn;

- 1- Wrestlers show more fat mass as compare to Cricketers.
- 2- Cricketers are superior in fat free mass as compare to Wrestlers.
- 3- There is significant difference on body composition between Wrestlers and Cricketers.

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