



ISSN: 2456-0057
IJPNE 2016; 1(2): 231-233
© 2016 IJPESH
www.journalofsports.com
Received: 21-12-2015
Accepted: 20-03-2016

Dr. Surjeet Singh
Assistant Professor, Directorate
of Physical Education & Sports
University of Kashmir, Jammu
and Kashmir, India

Dietary patterns of inter-university level players of Kashmir University

Dr. Surjeet Singh

Abstract

Introduction: The nutritional status of athletes may differ widely with respect to the ideal pattern of a healthy and adequately nourished. Performance in different sports depends on the variety of Factors, especially the nutritional and physical status of the Participants.

Methodology: The study was conducted on 100 active players of Kashmir University who participated in inter college tournament in year 2015 and secured first position in team/ individual sports. These athletes were selected to participate in inter-university competition. The subjects were selected from 5 games that was Kabbadi, volleyball, football, badminton and cricket. To compare the dietary patterns of players, 3 day diet Performa was used and to measure body composition BMI was used.

Result: after data collection it was statistically analyzed which shows that the footballer s takes more calories than other groups of while as badminton consumed least calories. Significant difference was found between footballers with badminton volleyball players, it is assumed that Energy intake depends upon the duration of activity and intensity of exercise. High duration exercise needs high intake of energy.

Keywords: Dietary pattern, nutrition, calories

Introduction

The Nutritional status of an individual is significantly affected by age, sex and physique (Parizkova 1959, 1961 1963, 1968, Astrand 1970, Forbes and Reina 1970, Ferbes 1978). It is generally accepted that the evaluation of the nutritional status of Individuals or population can provide an objective standard for the assessment of the adequacy of dietary intakes Anon (1980). However, the available standard (ICMR 1984) of reference for the evaluation of the nutritional status in relation to age, sex and height seem to be inadequate. When applied to athletes participating in the different sports activities. The major variations in the energy needs of different individuals of same age. Sex and body weight are the due to differences in physical activity patterns. In sportsmen this factor is more important as there is wide variation in the energy needs between individuals due to different sports activities.

The nutritional status of athletes may differ widely with respect to the ideal pattern of a healthy and adequately nourished individual because of a number of factors related to the sports to the anthropometric. Characteristics peculiar to and conditioning for the performance of a specific sport and to the adaptive changes induced by training. To achieve the best performance from a functional and biomechanical point of view, the relationship between the fat free mass and the fat mass of the athletes for example, can undergo remarkable variations. (Depending on the anthropometric characteristics required in specific sports). As a very general rules, the ideal athlete is represented by low ponder index, low fat percentage and relative muscular hypertrophy Chandrasekhar 1988. However, there are certain exceptions to this rough rule. Middle and Long Distance Runners, for example have relatively a greater height and lesser weight Chen, J.D. 1998 on the average and an evaluation of their nutritional status would classify them as under nourished and as having a delicate constitution. (Ferro-Luzzi and Venerando 1978).

Methodology

100 active players of Kashmir University who participated in inter college tournament in the year 2015 and secured first position in team/individual sports were selected as subjects.

Correspondence
Dr. Surjeet Singh
Assistant Professor, Directorate
of Physical Education & Sports
University of Kashmir, Jammu
and Kashmir, India

The subjects were divided into 5 groups with 20 players in each that was kabbadi, volleyball, Football, Badminton and Cricket.

Food Questionnaire Johns 1984 will be used the method comprise will be comprised of a table in which the subject will record what he will taken in diet for three consecutive days. From the food intake data for three alternate days of the week, the average food intake/day is calculated. Gopalan C 1981 For the analysis of food intake data, the volume of cups and glasses, weight of curry, rice and weight of various types of bread are to be determined. ICMR. 1981 Protein, fat and carbohydrate of the average daily food intake of the individuals will be determined by using food composition tables (Goplan *et al.*, 1981; Khattak, 2002). The daily energy intake of the individuals is calculated by multiplying the daily average grams of protein, carbohydrate and fat intake with 4, 4 and 9 respectively to measure body composition BMI was applied.

Statistical Consideration

To obtain valuable results and further interpretations of study

data was analyzed and had been processed with the help of statistical measurements. The find out comparison of dietary patterns of different players descriptive statistic was used further ANOVA was also applied. The level of significance was set at 0.05 level of confidence.

Table 1: Mean and S.D. value of Calorie intake of different players

Group	Mean	S.D.
Volleyball	5043	82.87
Badminton	4570	81.24
Cricket	4840	511
Kabbadi	5449	108
Football	5225	188

The finding shows that mean and S.D. of calorie intake for Volleyball, Badminton, cricket kabbadi and football were 5045, 4570, 4840, 5449 and 5225 respectively. The results shows kabbadi player consumes more calories as compare to others groups result also shows badminton consume least calories. To check significant difference ANOVA test was applied

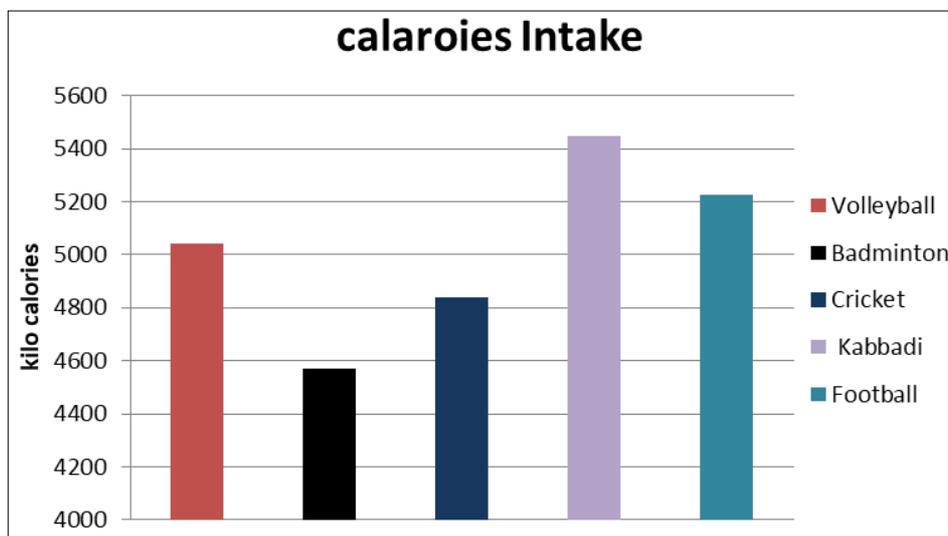


Fig 1: Graphical representation of calories intake

Table 2: Analysis of variance (ANOVA) of players of different games

		Sum of Squares	df	Mean Square	F	Sig.
Diet Intake	Between Groups	1.2956	4	647270.902	9.075	.000
	Within Groups	4.2587	95	71326.547		
	Total	4.3887	599			

To find interaction within and between groups, Analysis of variance was applied. The calculated F-Value (9.075) was higher than the tabulated value of 2.99 at 0.05 level and hence it was significant at 0.05. Therefore, there was significant

difference in diet intake of school of players. Further Scheffe’s Post Hoc was applied to find out the significant in the diet intake of players. The result of post hoc has been presented in table 3.

Table 3: Post-hoc Comparison of Means of all groups in relation to dietary intake

Groups	Groups	Mean Difference
Footballer	Kabbadi	-93.300*
	Volleyball	-78.12
	Badminton	-101.045*
	Cricket	96.12
Kabbadi	Volleyball	-93.300*
	Badminton	-109.045*
	Cricket	-107.045*
Volley ball	Badminton	-9.745
	Cricket	-87.045*
Badminton	Cricket	-103.045*

Post hoc test shows that there were significant difference in diet intake of footballer and badminton players (Mean difference=93.300*). There was significant difference between kabbadi and Badminton players Malhotra, N.S 1981 There was significant difference between kabbadi and cricket players. Significant difference was also found between Badminton and cricket players as shown in the table.

Results

- There was significant difference observed between footballer and Badminton.
- There was significant difference observed between kabbadi and badminton player.
- There was no significant difference observed between kabbadi and cricket.
- There was significant difference observed between badminton and cricket players.

Discussion

The mean value of badminton indicates that they consume less energy as compare to other sports may be due to less expenditure of energy. Kabbadi player intake highy calaroiies diet as compare to other may be due to more exertion during practice and to increase their body.

References

1. Anon. American dietetic association statement. Nutrition and Physical Fitness. Journal American Diet Association 1980;76:437-443.
2. Astrand PO. Diet and athletic performance. Feb Proc 1967;26:1722-1777.
3. Burke RF. Adolescent nutrition-sports and diet. Nutrition Abstract Review 1986;56(5).
4. Chandrasekhar U, Sakthivelmani A, Sujata R. Nutritional status of athletes and the impact of dietary modification on their athletic performance. Indian Journal Nutrition Diet 1988;25:176-181.
5. Chen JD, Wang JF, Li KJ, Zhao YW, Wang SW, Jiao Y *et al.* Nutritional problems and measures in elite and amateur athletes. American Journal Clinic Nutrition 1989;49(5):1084-1089.
6. Cho M, Fryer BA. What food do physical education majors and basic nutrition students recommended for athletes. Journal American Diet Association 1974;65:541-544.
7. Devadas PR, Sakthivelmani A, Kaveri R. Nutritional profile of selected adolescent and adult women athletes. Indian Journal Nutrition Diet 1979;16:435-439.
8. Gopalan C, Rameshastri BV, Balasubramaniam SC. Nutritive value of Indian Foods. ICMR, New Delhi 1971.
9. ICMR. Recommended Dietary intake for Indian. New Delhi 1981.
10. Keith RE, O'Keefe KA, Alt LA, Young KL. Dietary status of trained female cyclists. Journal American Diet Association 1989;89(11):1620-1623.
11. Mackawa M, Yaguramaki K, Murata T, Fukino Y, Morioka K. A nutritional survey and the daily living schedule of college girls. Cited from Nutrition Abstract Review 1977-1980, 50.
12. Malhotra NS. Food and nutritional requirements of an athlete during training. Cited from 10th Annual Conference of Sports Medicine Souvenir. Sponsored by Punjab State Association of Sports Medicine. Organisers Punjab Agricultural University, Ludhiana and C.M.C., Ludhiana 1981.

13. Nutrition and Physical Fitness - A statement by the *Am. Dietet. Association.* Journal American Diet Association 1980;76(5):437-442.