



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2019; 4(1): 120-124

© 2019 Yoga

www.theyogicjournal.com

Received: 05-11-2018

Accepted: 08-12-2018

**Basanti Bamaniya**

School of Physical Education  
Devi Ahilya University Indore,  
Madhya Pradesh, India

**Vivek B Sathe**

School of Physical Education  
Devi Ahilya University Indore,  
Madhya Pradesh, India

**Ajay Kumar Sahani**

School of Physical Education  
Devi Ahilya University Indore,  
Madhya Pradesh, India

## A comparative study of knowledge and practice of balanced diet among players of team game and individual game

**Basanti Bamaniya, Vivek B Sathe and Ajay Kumar Sahani**

### Abstract

A balanced diet knowledge and practice are two different sides of the same coin and also equally important either way whether to initiate or to spread the awareness.

**Aim:** This study was attempted to determine the knowledge and practice of balanced diet among players of team games and individual games. N= 500 players of team games and individual games. 250 players from team games such as Cricket, Kho-kho, Kabaddi, Basketball and Hockey players and 250 players from individual games such as Athletics, Badminton, Table-tennis, Tennis and Wrestling players. N= 50 players were selected from each game. Researcher was taken total ten games as the age of the players between 18-30 years. The sample size was reached out to the maximum team game and individual games players of India represented various levels domestically. Methodology data was collected through random sampling method (online mode), descriptive statistics were applied in M.S. Excel. ANOVA test was applied by using the SPSS 21 Version Software. Results of this paper, Knowledge of balanced diet the ANOVA and Descriptive statistics results show that there was no significant difference among team game and individual game players. The practice of balanced diet the ANOVA and Descriptive statistics results shows that there was a significant difference among team game players and there was no significant difference among practice of balanced diet of individual game players.

**Keywords:** Knowledge, practice, balanced diet, team games, individual games, players, nutrition

### Introduction

A balanced diet knowledge and practice are two different sides of the same coin and also equally important either way whether to initiate or to spread the awareness. The amount or the quantity of carbohydrate, protein and minerals do play a major role in shaping up an athlete be it an Individual or Team game players. Balanced diet knowledge and practice are very important for everyone in order to have a healthy lifestyle and free from any diseases. The lack of sports balanced diet knowledge often leads to poor diet practices which are turn affects athletic achievements. Good knowledge and practice of balanced diet have been recognized as important factors in improving the player's performance and health status. A balanced diet need of the sportspersons is higher than non-athletes. Balanced diet requirements are based on age, gender, total energy expenditure, type of sport played and environmental conditions <sup>[1]</sup>. Balanced diet goals and requirements are not permanent Athletes work in a standard program in which preparing for the most training in targeted competitions by collecting different types of workouts in different parts of the training calendar <sup>[2]</sup>. Carbohydrate provides enough energy to the body and a good source of many vitamins and minerals <sup>[3]</sup> Protein is important for muscle growth and body tissue improvement. Only power training and exercise will change muscle. Players and bodybuilders need a little extra protein for muscle development. Athletes can easily meet this increased need by eating more total calories (eating more food). Athletes eating high carbohydrate foods can increase your glycogen stores. If carbohydrate is limited to diet, then the ability of a person to exercise is compromised because the body does not have enough glucagon in the storage reservoir. Healthy carbohydrate diet sources include fruits, vegetables, cereal grains, bread and pasta. Dietary Fat plays an important role in supporting healthier people as well as healthy hormone levels. Healthy sources of fat include nuts, fennel, avocado, olive and coconut oil.

**Correspondence**

**Basanti Bamaniya**

School of Physical Education  
Devi Ahilya University Indore,  
Madhya Pradesh, India

Athletes should be eaten in the nutritious-balanced diet so that they can be sure that they can get enough vitamin and mineral content for exposure to vitamins, vitamins B, C, D, E, Iron and Magnesium. It is important during exercise because it affects your body and your muscles function [4].

**Methodology**

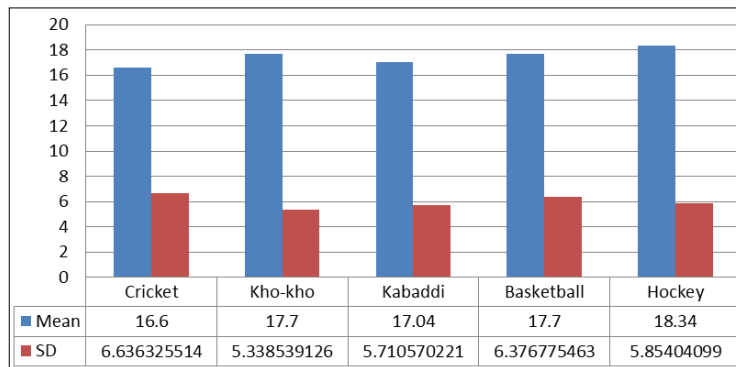
The purpose of this study was attempted to determine the knowledge and practice of balanced diet among players of team games and individual games.

**Tools used:** Eating habits questionnaire (Dana Farber Cancer Institute website) modifies according Indian food availability and used for Practice of balanced diet, and self-prepared questionnaires used for knowledge of balanced diet.

**Criterion Measures:** For the purpose of this study Score was obtained from the self-made questionnaire and eating habit questionnaire used to compare knowledge and practice of balanced diet among players of team games and individual games. The score was obtained for knowledge of balanced diet questionnaire with each having four options multiple choice question used and score (1 or 0). Practice of balanced diet total 52 questionnaires with each having 9 option 1-10 scale was used and scored from: (Never or less than one - 1score, 1-3 per month -2 score, 1 per week -3 score, 2-4 per week -4 score, 5-6 per week 5-score, 1- per day 4 score, 2-3 per day 3 score, 4-5 per day 2 score, 6+ per day 1 score).

**Data collection:** A study questionnaire consisting of 2 sections was developed, tested and verified at pilot study before the start of the final study. A pilot study was performed among 20 players of Physical education, Devi Ahilya University, Indore (M.P.). In section-I included 37 multiple choice questionnaires regarding the knowledge of a balanced diet. The final questionnaire was further examined by a physical education faculty, Physicians specialized in the area of sports medicine and dietitians. Reliability and validity check by index discrimination and difficulty rating method and in section-II consisted of 52 questionnaires regarding the practice of a balanced diet. The questionnaire was already prepared. Eating habits questionnaire (Dana Farber Cancer Institute website) modify according to Indian food contains and used for Practice of balanced diet. The data was collected through online-survey (Google drive). Data has been taken from Ten games such us Cricket, Kho-kho, Kabaddi, Basketball, Hockey, Athletics, Table-tennis, Tennis and wrestling players.

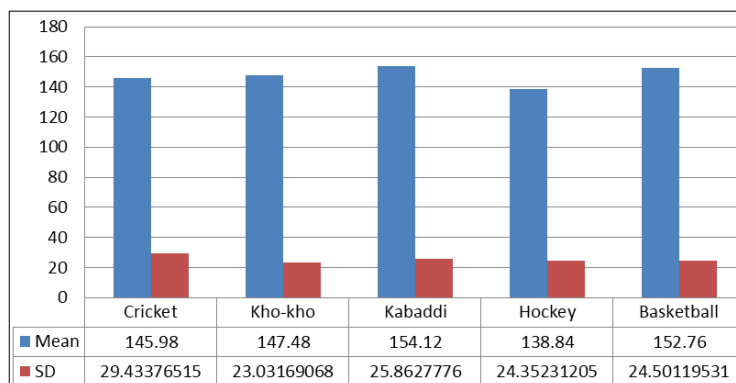
**Statistical procedure:** The collected feedbacks through questionnaires were coded, tabulated and analyzed statistically. MEAN and STANDARD DEVIATION was calculated from the scores of knowledge and practice of balanced diet questionnaires. Descriptive statics and ANOVA variable wise is presented graphically. The data analysis was performed using the MS Excel software. We here are assessing the current knowledge and practice of Balance Diet hence only descriptive statistics and one-way analysis of variance (ANOVA) was statistically applied.



**Fig 1:** Knowledge of balanced diet among team game players

**Table 1:** Analysis of variance of knowledge of balanced diet team game players.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	90.216	4	22.554	.626	.644
Within Groups	8824.140	245	36.017		
Total	8914.356	249			



**Fig 2:** Practice of balanced diet among team game players

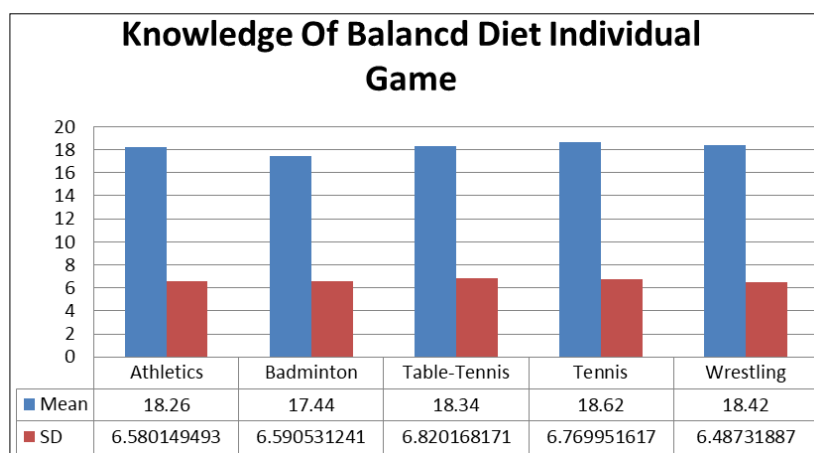
**Table 2:** Analysis of variance of practice of balanced diet team game players.

Practice of balanced diet team game players	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7411.696	4	1852.924	2.843	.025
Within Groups	159692.580	245	651.806		
Total	167104.276	249			

**Table 3:** LSD Mean Comparison between Practice of Balanced Diet Team Game

Cricket	Kho-kho	Kabaddi	Hockey	Basketball	M.D	Critical Difference
145.98	147.48				-1.5	10.007
145.98		154.12			-8.14	
145.98			138.84		7.14	
145.98				152.76	-6.78	
	147.48	154.12			-6.64	
	147.48		138.84		8.64	
	147.48			152.76	-5.28	
		154.12	138.84		15.28*	
		154.12		152.76	1.36	
			138.84	152.76	-13.92*	

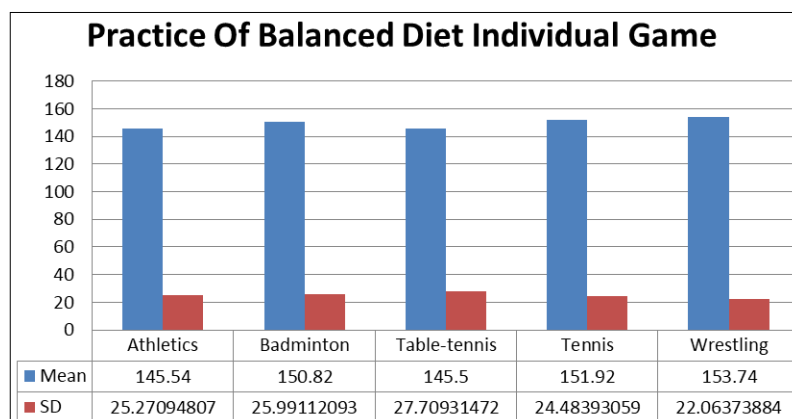
\*Significant at .05 level



**Fig 3:** Knowledge of Balanced Diet of Individual Game Players

**Table 4:** Analysis of variance of knowledge of balanced diet individual game players

Knowledge of balanced diet individual game players.	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41.216	4	10.304	.233	.920
Within Groups	10837.120	245	44.233		
Total	10878.336	249			



**Fig 4:** Practice of balanced diet among individual game players

**Table 5:** Analysis of variance of practice of balanced diet among individual game players.

Practice of balanced diet among individual game players	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2862.896	4	715.724	1.130	.343
Within Groups	155243.600	245	633.647		
Total	158106.496	249			

### 3. Results and interpretations

The graphical presentation Fig 1 shows the descriptive statistics of knowledge of balanced diet among players of team games. Cricket game players mean was 16.6 and SD was 6.63, Kho-kho players mean was 17.7 and SD was 5.33, Kabaddi players mean was 17.04 and SD was 5.71, Basketball mean was 17.7 and SD was 6.37, and Hockey players mean was 18.34 and SD was 5.85. Hockey players were found to be the highest score as far as knowledge of Balanced Diet followed by Kho-Kho and Basketball, Kabaddi, and Cricket players. The result of ANOVA states that there was no significant difference between the knowledge of the balanced diet of Team games players with F value was 0.626 and the tabulated value was 1.960 hence the calculated F value was less than tabulated F value therefore no further post-hoc was applied.

The graphical presentation Fig 2 shows the descriptive statistics of Practice of balanced diet among players of team games. Cricket game players mean was 145.98 and SD was 29.433, Kho-kho players mean was 147.48 and SD was 23.03, Kabaddi players mean was 154.12 and SD was 25.86, Basketball mean was 152.76 and SD was 24.50, and Hockey players mean was 138.84 and SD was 24.35. Kabaddi players were found to be the highest score as far as the practice of balanced diet followed by Basketball, kho-kho, Cricket and Hockey players. The result of ANOVA states that there was a significant difference between the practice of balanced diet of Team games players with F value was 2.843 and the tabulated value was 1.960 hence the calculated F value was greater than tabulated F value therefore further post-hoc was applied.

**Post Hoc Results shows the following results:** Practice of balanced diet of kabaddi players having the highest value and significantly superior to Basketball, Kho-kho, Cricket, and Hockey players. The practice of balanced diet Basketball players scored second highest and statistically significant with Hockey players and no significant difference was found between Kho-kho and Cricket. The graphical presentation Fig 3 shows the descriptive statistics of knowledge of balanced diet among players of individual games. Athletics – Athletics game players mean was 18.26 and SD was 6.58, Badminton player mean was 17.44 and SD was 6.59, Table-tennis player mean was 18.34 and SD was 6.82, Tennis players mean was 18.62 and SD was 6.76 and wrestling players mean was 18.42 and SD was 6.48. Tennis players were found to be highest as far as knowledge of Balanced Diet followed by wrestling, Table-tennis, athletics and badminton players. The result of ANOVA states that there was no significant difference between the knowledge of the balanced diet of individual games players with F value was 0.233 and the tabulated value was 1.960 hence the calculated F value was less than tabulated F value therefore no further post-hoc was applied. The graphical presentation Fig 4 shows the descriptive statistics of the practice of balanced diet among players of individual games. Athletics:- Athletics game players mean was 145.54 and SD was 25.27, Badminton player mean was 150.82 and SD was 25.99, Table-tennis player mean was 145.5 and SD was 27.70, Tennis players mean was 151.92 and SD was 24.48 and Wrestling players mean was 153.74 and SD was 22.63. Wrestling players were found to be highest as far as practicing balanced diet followed by Tennis, Badminton, Athletics and Table-Tennis players. The result of ANOVA states that there was no significant difference between the Practice of the balanced diet of Individual Game players with F value was 1.130 and the Tabulated value was

1.960 hence the calculated F was less than Tabulated F value thus no further post-hoc was applied.

### 4. Conclusion

On the basis of the results we can conclude that due to better education and practice kabaddi players are leading at the top as compared to hockey, cricket, kho-kho, and basketball players. As the primary objective was to compare the significance difference amongst the selected games which states the basketball players knowledge and practice of balanced diet is significant with hockey players possible due to effective coaching, training and education are given to players. As basketball was already a foreign sport which brings a lot of advancement from the West and hockey is rooted in India and also shaped very steeply in last decade as far as popularity is concern, which might be a reason that they basketball and hockey found significantly superiors than test of the games in India terms of knowledge and practice of balanced diet. This study could be helpful for the players to educate and practice the same during their training, whereas coaches and experts could be benefitted to improve the level of knowledge and practice of balanced diet amongst players while giving them training.

The purpose of this descriptive study and ANOVA was to determine the knowledge and practice of balanced diet among players of individual games. It is concluded that there was no significant difference found between knowledge and practice of balanced diet among players of individual games. And whatever players are having knowledge they are implementing and they are practicing as it is so we can't say there is any significant difference found in both variables knowledge and practice of balanced diet and we can say as per as mean values of the knowledge and practice of balanced diet of individual games players are concern about knowledge of balanced diet of tennis players were found to be highest as far as knowledge of balanced diet followed by wrestling, Table-tennis, athletics and badminton players. In the mean values wrestling topped the chart followed by tennis, badminton, athletics and table-tennis, so they can take an example:- wrestling is power sports so they followed a good diet and they should have followed good knowledge. These things already shown top in the chart then followed by Tennis which is also equally challenging and demanding sports so rest of the games badminton, athletics and table-tennis can lock up to wrestling how the following diet and what how they are practicing. Hence we can conclude that wrestling may give rest of the game players an idea or outlook to flow certain practice of a balanced diet.

### 5. References

1. [www.google.com](http://www.google.com)
2. Sobana RM. Analysis of nutritional profile, knowledge and impact interventions on physical efficacy of college sports persons.
3. The Academy of Nutrition and Dietetics *et al.* Nutrition and athletic performance Medicine & Science in Sports & Exercise. 2016; 48:543-568.
4. <https://www.everydayhealth.com>
5. [www.google.com](http://www.google.com)
6. Basanti Bamaniya *et al.* assessment of knowledge and practice of balanced diet on Basketball and Hockey players. ISSN 2048-7143, 2019, 94, Itpessy.
7. Basanti Bamaniya *et al.* A comparative study of knowledge and practice of balanced diet among players of selected team game ISSN 978-93-88746-00-7, (IC-

GAEMPSH-Jan) 2019.

8. Basanti Bamaniya *et al.* A comparative study of knowledge and practice of balanced diet among players of individual games. International Journal of Physiology. Nutrition and Physical Education. 2019; 4(1):191-193.