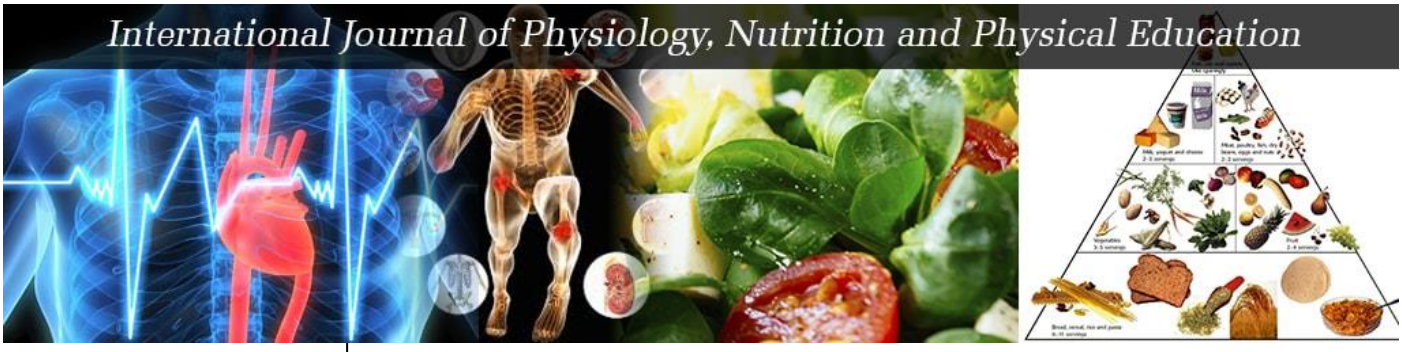

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A study of knowledge and practice of balanced diet on national level female athletes of team game and individual game

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Abstract
Balanced diet is an important component of any physical fitness program the optimum nutrient intake and good balanced diet knowledge and practice have been recognized as important factors in improving the player's performance and health status of players. The present study was conducted to assess the knowledge, practice, balanced diet on national level female players.
Aim: The purpose of this study was to investigate the knowledge and practice of balanced diet on national level female players. In our study we have taken, N = 48 national level female players of team games and individual games as 24 players from team games and 24 players from individual games. N = 6 players were selected from each game. Researcher had taken total 8 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 National level domestically.
Methodology data was collected through random sampling method (Online mode), descriptive statistics were applied in M.S. Excel. The result of this study revealed that kho-kho, kabaddi and hockey players have good knowledge of balanced diet as compared to basketball players. Basketball, hockey and kabaddi players were found good practice of balanced diet than kho-kho players. Athletics, wrestling players have good knowledge as compared to badminton and table-tennis players. Wrestling players have good practice of balanced diet than athletics, badminton and table-tennis players.

Keywords: Balanced diet, knowledge, practice, national level female athletes

1. Introduction
Female athletes are at increased risk for iron, calcium, vitamin B, and Zink deficiencies. These nutrients are vital for building bones and muscles and for energy production. Vegetarians are particularly at risk for developing deficiencies in these vitamins and minerals.
Sports and nutrition are directly related to each other. Taking into consideration the fact that sportspersons need more energy to carry out their spotting activity effectively, it becomes of prime importance to take care of the nutrition for sports performance. Track and field athletes pose a strong emphasis on diet. While only a few students have been conducted on nutrition knowledge among collegiate athletes, the majority of them have been conducted on nutrition knowledge in this population. One of the best ways to make sure energy and nutrition intakes stay at healthy levels is by getting educated. Girls can benefit from help and input from parents, coaches, or a registered dietitian, sports nutritionist or other health are professional. Along with learning the basics of healthy diet and energy balance, young female athletes need to know these key facts.

1. Nutritional needs are likely to increase and change with growth and body size increased activity.
2. Good nutrition generally involves planning efforts.
3. A focus on healthy eating is preferable to diets that emphasize body image or short term performance gains [1].

Nutrition in take is certainly important component that has an impact on physical performance of all athletes, women as well as men. The nutritionist required for physically active women are the same as for women in general population and for men.

Although the nutrients required are the same physical activity does influence the amount of same nutrient needed by female athletes. In general female athletes will need more energy, water, sodium, potassium and certain vitamins, than nonathletic females [2].

Nutrition for athletes has three purposes

1. Maximize initial performance, 2. Sustain maximal performance and 3. Rapid recovery. For the female athletes, proper nutrition is also needed to maintain menstrual cycle and bone health. The menstrual cycle is an additional energy user, so female athletes need to eat both for athletic performance and to maintain a normal menstrual cycle. Adequate nutrition also helps sustain normal levels of estrogen, a hormone needed not only to maintain normal menstrual cycle but also to stimulate bone growth. Consequently, inadequate nutrition causes problems with athletic performance, the menstrual cycle e.g. prolonged time between periods or complete cessation of periods and bone health. If female athlete lacks adequate calorie intake, it will impact her athletic performance and her bone development while also causing abnormal menstruation [3]. Today, most athletes understand that proper fueling optimal nutrition is an important part of a training program Sound nutrition is very important in attaining high level of achievement in sports aside from genetics and physical training [4]. A balanced diet is one that gives your body the nutrients it needs to function correctly. To get the proper nutrition from your diet, you should consume the majority of your daily calories in: fresh fruits, fresh vegetables and whole grains. As the study is dealing with the hockey and basketball players which needs a high level of coordination and strength endurance from the players [5]. 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 of the quantity of carbohydrate, protein and minerals do play a major role in shaping up an athlete be it an individual and team game players [6].

2. Methodology

2.1 Selection of the subjects

The objective of this study was attempted to determine the knowledge and practice of balanced diet on national level female players of team games and individual games. N = 48 national level female players of team games and individual games as 24 players from team games and 24 players from individual games. N = 6 players were selected from each game. Researcher had taken total 8 games as the age of the players between 18-30 years.

2.2 Tools used

Eating habits questionnaire (Dana Farber Cancer Institute website) modifies according Indian food availability and used for Practice of balanced diet. In section-I, 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 availability and used for Practice of balanced diet.

The data was collected through online-survey (Google drive). Data has been taken from eight games such as Kho-kho, Kabaddi, Basketball, Hockey, Athletics, Badminton, Table-tennis and Wrestling.

2.3 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.).

2.4 Criterion measures

The score was obtained for knowledge of balanced diet questionnaire with each having four options multiple choice questions used and score (1 or 0). Practice of balanced diet total 52 questionnaires with each having 9 option 1-5 scale was used and scored from: (Never or less than one -1 score, 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).

2.5 Statistical analysis

The collected feedbacks through questionnaires were coded, tabulated and analyzed statistically. Mean and Standard deviation were calculated from the scores of knowledge and practice of balanced diet questionnaires. Descriptive statics 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 was statistically applied.

3. Results and Discussion

To compare the knowledge and practice of balanced diet on national level female athletes of team game and individual games, means and standard deviations were calculated and data pertaining to this has been presented in table 1-4 and graphically presented in figure 1-4.

Table 1: Descriptive statistics on knowledge of balanced diet on national level team game female players

S. No.	Statistics	Kho-kho	Kabaddi	Hockey	Basketball
1.	Mean	21.5	21.3	18.33	12.83
2.	SD	3.27	5.2	3.26	5.84

Table 1 show that knowledge of balanced diet kho-kho mean is 21.5, kabaddi mean is 21.3, hockey mean is 1.33, basketball mean is 12.3. It clearly shows that kho-kho, kabaddi and hockey players have good knowledge as compared to basketball players.

Table 2: Descriptive statistics on knowledge of balanced diet on national level individual game female players

S. No.	Statistics	Athletics	Badminton	Table-tennis	Wrestling
1.	Mean	22.33	16.66	14.5	20.83
2.	SD	5.00	5.60	7.34	5.03

Table 2 shows that knowledge of balanced diet athletics mean is 22.33, badminton mean is 1.66, table-tennis mean is 14.5 and wrestling mean is 20.83. It clearly shows that athletics, wrestling players have good knowledge as compared to badminton and table-tennis players.

Table 3: Descriptive statistics on practice of balanced diet on national level team game female players

S. No.	Statistics	Kho-kho	Kabaddi	Hockey	Basketball
1.	Mean	11.9	136.16	144	177.16
2.	SD	11.11	15.27	23.71	33.9

Table 3 shows that practice of balanced diet kho-kho mean was found 11.9, kabaddi mean was 136.16, hockey mean was 144, basketball mean was 177.16. It clearly shows that basketball, hockey and kabaddi players have good practice as compared to kho-kho players.

Table 4: Descriptive statistics on practice of balanced diet on national level individual game female players

S. No.	Statistics	Athletics	Badminton	Table-tennis	Wrestling
1.	Mean	133	137	143.33	158.83
2.	SD	21.41	18.53	19.88	26.6

Table 4 shows that practice of balanced diet of athletics mean is 133, badminton mean is 137, table-tennis mean is 143.33, wrestling mean is 18.83 which is clearly shows that wrestling players practice is good as compared to athletics, badminton and table-tennis players.

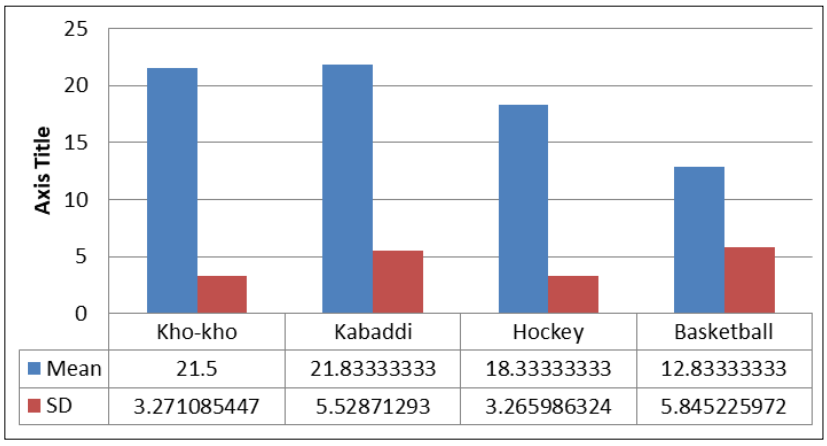


Fig 1: Knowledge of balanced diet national level female team game players

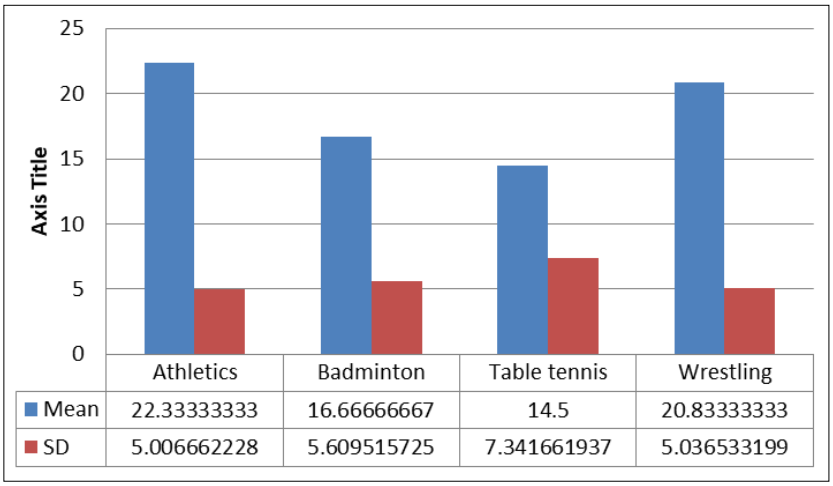


Fig 2: Knowledge of balanced diet national level female individual game players

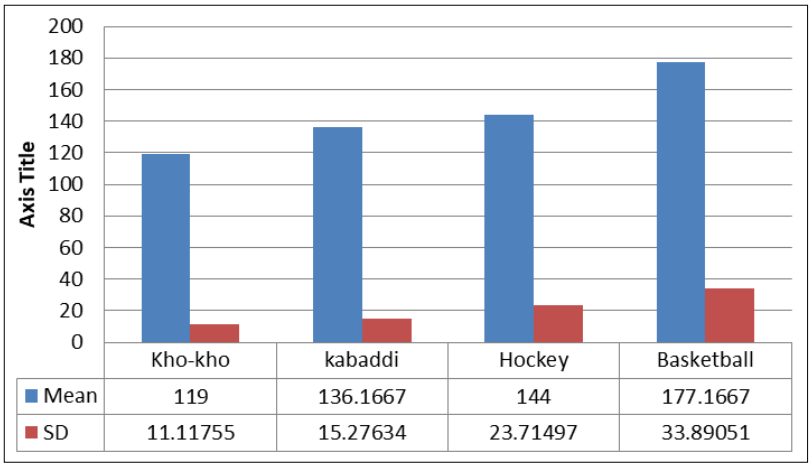
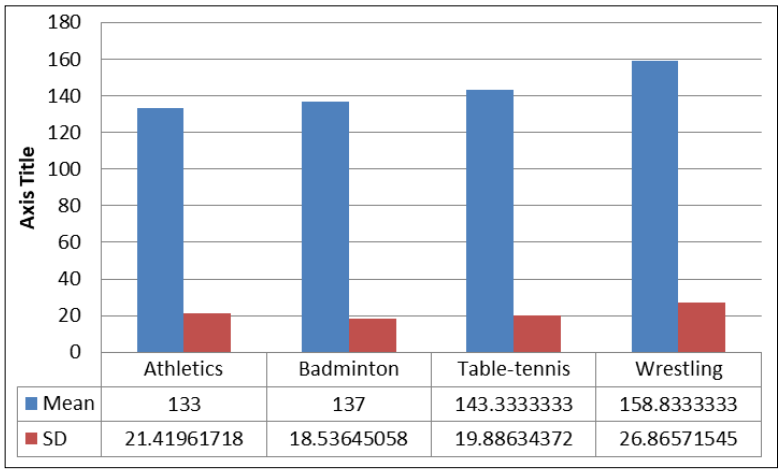


Fig 3: Practice of balanced diet national level female team game players



	Athletics	Badminton	Table-tennis	Wrestling
Mean	133	137	143.3333333	158.8333333
SD	21.41961718	18.53645058	19.88634372	26.86571545

Fig 4: Practice of balanced diet national level female individual game players

4. Discussion

As the data clearly indicates descriptive statistics shows that Knowledge and practice of balanced diet on national level female players of team games and individual games. Athletics female players were superior as compared to rest of the compared individual game players in practicing of balanced diet on the contrary to that they are lacking having knowledge yet they are practicing it thus it show they need education. Whereas in team game basketball female athletes found significantly better on the basis of mean score as compared to other team game playing female athletes in practicing balanced diet. But they are having lack of balanced diet knowledge. Wrestling playing female athletes were superior as compared to rest of the individual game female athletes and they practice is good. Individual game wrestling female can set example for rest of the athletes to obtain knowledge and practice of balanced diet. Table-tennis player's knowledge and practice of balanced diet were very poor and they need education of balanced diet and guidance of dietician.

5. Conclusion

1. Kho-kho, kabaddi and hockey players have good knowledge of balanced diet as compared to basketball players.
2. Basketball, hockey and kabaddi players were found good practice of balanced diet than kho-kho players.
3. Athletics, wrestling players have good knowledge as compared to badminton and table-tennis players.
4. Wrestling players have good practice of balanced diet than athletics, badminton and table-tennis players.

6. References

1. https://www.toppr.com/guides/science/components-of-foods/balanced-diet/
2. Rekha Srivastava, Anjna Fellows *et al*. "Good nutritional diet for cricket players." International Journal of Home Science 2017;3(3):145-147.
3. Sami Ullah Khan, Alamgir Khan *et al*. "Perception of Athletes about Diet and Its Role in Maintenance of Sports Performance" Journal of Nutrition & Food Sciences 2017.
4. Mashael, Abdullahpubmed *et al*. "Knowledge, attitude and practices regarding dietary supplements in Saudi Arabia." Journal of pub med 2019;8(2):365-372.
5. Basanti Bamaniya, Vivek Sathe B *et al*. "Assessment of knowledge and practice of balanced diet on basketball and hockey players" International multidisciplinary E-research journal ISSN: 2348-7143 2019.
6. Basanti Bamaniya, Vivek Sathe B *et al*. "A comparative study of knowledge and practice of balanced diet among players of team game and individual game." International journal of yogic, human movement and sports sciences 2019;4(1):120-124.