

**DIETARY HABITS AND NUTRITIONAL KNOWLEDGE OF INTER-COLLEGIATE  
ATHLETES ACROSS THE STATE OF GOA**

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**Abstract:**

The aim of the study was to survey the dietary habits and the nutritional knowledge of inter-collegiate athletes across Goa. The study was conducted using descriptive survey design. Pre-validated Dietary Habits and Nutritional Knowledge Questionnaire was used to collect the data from the subjects. The questionnaire was administered on the inter-collegiate athletes from various colleges affiliated to Goa University. Google forms were used to administer the questionnaire. A total of 136 athletes, 75 boys and 61 girls with a mean age of 20.04 were surveyed. The results showed 63% of the participants follow fair or poor dietary habits. Similarly, 57% of the participants have fair or poor nutritional knowledge. The 136 surveyed participants only 5 and 2 have excellent dietary habits and nutritional knowledge respectively. Around 65 % of the participants skip breakfast which is startling. The study recommends conduct of awareness sessions and courses for inter-collegiate athletes across the state of Goa.

**Key words:** *Nutrition, Diet, Inter-Collegiate, Athletes.*

**Introduction**

An athlete has to go through the rigorous training in order to achieve glory and to create a name in the sports. It takes months and years to become an established athlete. An athlete, in order to sustain training and enhance his performance has to follow certain guidelines and regime. An athlete trains himself in skill practices, fitness development, and mental preparation, besides these, an athlete also requires necessary rest, motivation, confidence and the diet as per the event or a game. Nutrition plays an important role in one's enhancement of the performance, and also to recover from pain and training fatigue. Without proper nutrition it is very difficult for any individual to sustain intensity of the workout during training (thomas, Bruke, & Ardman, 2016). Nutrition not only helps in giving energy or improving performance but it also helps in recovering from wear and tear of the muscles. As nutrition is an important aspect, one should have proper knowledge about it as it has to be taken in appropriate and adequate quantity (thomas, Bruke, & Ardman, 2016). One should also know the different forms of energy and its sources and also the functions of diet.

The knowledge about nutrition and its concepts benefits athletes in all aspects of sports training and performance. The energy value of food is measured in heat units called calories or kilocalories. To keep our body cells running properly, we must supply with correct amount of food having required chemicals in ratio of the food (Singh A. , Bains, Gill, & Brar, 2019). As an athlete one should maintain their Basic as well as Extra Energy requirements in order to maintain fitness level and very importantly a good health. To follow diet during training, an athlete should have knowledge about the percentage of energy fuel as per the event and the phase of the training. The athlete should also follow the guidelines of diet. As an athlete it is very difficult for them to understand the concept of dietary habits and nutrition, so it is advisable to consult specialist to follow the diet as per his events ( Indoria & Singh, 2016). The present study focusses on the dietary habits and knowledge of nutrition among college athletes across the state of Goa.

In Goa, 49 colleges are affiliated to Goa University (Univeristy, 2020). Every year, various sports competitions are organized by Sports Section of Goa University for these affiliated colleges. Competitions for 23 disciplines are held every year among various colleges. As per the ordinance of Goa University, the athletes to participate in these competitions has to go through rigorous training for at least 10 days in respective games and at least for two hours per day. The College Directors of

Physical Education and Sports (CDPES) and Instructor in Physical Education (IPE) train their athletes prior to the competition (Univeristy, 2020). In every college, only one CDPES is appointed and he is assisted by IPE in the skills training. The CDPES takes the training of the students either early in the morning or after the lectures. Sometimes, it is very difficult for a CDPES to look after the teams as there may be a competitions organized by the Goa university for more than one game and most of the time is required for the instructions and strategies to be followed during the games, that leads to restriction to impart knowledge about nutrition to the athletes.

### Objectives of the study

To Study Dietary Habits and Nutritional Knowledge of Inter-Collegiate Athletes across the state of Goa.

### Method

#### Research Design and Procedures

The research design used for the study is descriptive survey design. Data was collected using The Dietary Habits and Nutritional Knowledge Questionnaire. The Questionnaire was administered using google forms. Questionnaire was described and consent of the participants were taken before administering the questionnaire.

#### Population Sampling

All the students participating in inter-collegiate competitions organised by Goa University was the population of the study. For this study, 136 athletes 75 boys and 61 girls with average age of 20.4 age were selected as sample using non-probability convenience sampling technique. The questionnaire were distributed to 400 athletes from various colleges, but only 136 could reply and hence was considered as the sample for the study.

#### Instrumentation

Pre-validated The Dietary Habits and Nutritional Knowledge Questionnaire was used for the study. The questionnaire has three-part, part 1 demographic information, and part 2 dietary habits part 3 nutritional knowledge. The questionnaire was further modified with the help of the expert for local population. Scoring for the questionnaire is 85-100 % = Excellent, 70-84 % = Good, 55- 69% = Fair and 54% & below = Poor.

#### Data analysis and results

The aim of the research was to study the dietary habits and the nutritional knowledge of inter-collegiate Athletes across the state of Goa. The following are the findings of the study

**Table No. 1.1 Demographic Information**

| Demographic Information of Inter-Collegiate Sports Players |      |        |             |
|--|------|--------|-------------|
| Number of participants                                     | Male | Female | Average age |
| 136  | 75   | 61     | 20.04       |

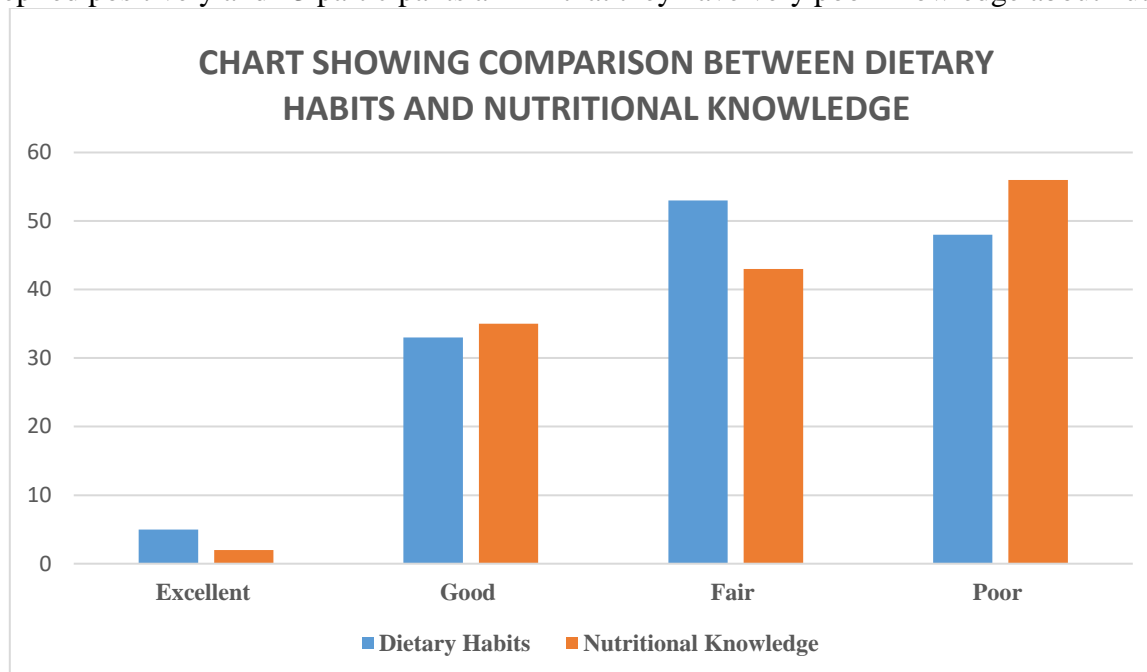
**Table No.1.2 Dietary habits and Nutritional Knowledge**

| Performance of Inter-Collegiate Sports Players | Dietary Habits | Nutritional Knowledge |
|--|----------------|-----------------------|
|  | Excellent      | 5                     |
| Good   | 45             | 56                    |
| Fair   | 33             | 35                    |
| Poor   | 53             | 43                    |

|       |     |     |
|-------|-----|-----|
| Total | 136 | 136 |
|-------|-----|-----|

### Interpretation

From the above table we can say that dietary habits of the athletes is very poor as out of 136 participants, 53 participants are not following right diet and also the timing differs. It is also seen that the participants is having poor knowledge about nutrition and its sources as only 2 participants out of 136 replied positively and 43 participants affirm that they have very poor knowledge about nutrition



From the above chart we can see the comparison of Dietary habits and nutritional knowledge. The participants with excellent nutritional knowledge have excellent dietary habits. Similarly, participants with good, fair and poor dietary habits showed good, fair and poor nutritional knowledge.

### Conclusion and Recommendations

The objective of the study was to study Dietary Habits and Nutritional Knowledge of Inter-Collegiate Athletes across the state of Goa. The survey results showed 63% of the participants follow fair or poor dietary habits. Similarly, 57% of the participants have fair or poor nutritional knowledge. The study shows direct relation between dietary habits and nutritional knowledge. Hence the study recommends awareness sessions and courses for inter-collegiate athletes across the state of Goa. The sessions related to Nutrition should be organized by Goa University or Directorate of Higher Education in order to keep students updated about the diet principles and also to follow the diet during training.

### References

1. Indoria, A., & Singh, N. (2016). Role of Nutrition in Sports: A Review. *Role of Nutrition in Sports: A Review.*, 147.
2. Best, J. W., & Kahn, J. V. (2005). *Research In Education*. New Delhi: Prentice India Pvt. Limited
3. Brace, A. M., De Andrade, F. C., & Finkelstain, B. (2018). Assessing the effectiveness of nutrition interventions implemented among US college students to promote healthy behaviors: A systematic review. *Nutrition and Health*, 171-181.
4. Gay, L. R. (1996). *Educational Research competencies for analysis and application*. New Jersey : Prentice-Hall Inc.
5. Kamlesh, M. L. (1994). *Methodology of Research in Physical Education*. New Delhi: Metropolitan Book Co, Pvt. Limited .

6. Roh, J., Paugh, S., Bidington, C., & Branhart, B. (2006, January). [www.researchgate.net](http://www.researchgate.net). Retrieved December 12, 2020, from Research Gate.
7. Singh, A., Singh, G., & Singh, B. (2009). Essentials of Physical Education. New Delhi: Kalyani.
8. thomas, D., Bruke, L. M., & Ardman, K. A. (2016). Nutrition and Athletic Performance. *Medicine and Science in Sports and Exercise*, 543-568.
9. Univeristy, G. (2020, October 12). Goa University . Retrieved from [unigoa.ac.in](http://unigoa.ac.in): [https://www.unigoa.ac.in/uploads/config\\_docs/20210903.073059~Annual\\_Report\\_2019-20.pdf](https://www.unigoa.ac.in/uploads/config_docs/20210903.073059~Annual_Report_2019-20.pdf)
10. WHO. (2020, OCTOBER 10). Global Strategy on Diet, Physical Activity and Health. WHO. Retrieved from [who.in](http://who.in).
11. Williams, J. F. (1964). *The Principles of Physical Education*. Philadelphia: W.B. Saunders.