



Research Article

NUTRITIONAL KNOWLEDGE ASSESSMENT OF ADOLESCENT NATIONAL FEMALE VOLLEYBALL PLAYERS

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ABSTRACT

Nutrition plays a very crucial part in everyone's life and so as with sportsman- which affects them in many ways. Fore mostly, nutrition helps in achieving and maintaining health. Optimal nutrition can reduce fatigue, allowing a sportsman to train and compete longer or recover faster between training sessions To understand and apply the principles of sport nutrition, some basic understanding of nutrition is necessary. The purpose of the study was to assess the nutrition knowledge of the adolescent's female volleyball players about general sports nutrition. The sample consists of 128 Players from all over India. Height and weight were recorded and BMI (body mass index) was calculated. The mean age of the female footballers was 14.6 ± 1.5 years. Height and Weight was recorded and BMI (Body mass index) calculated. The mean height and weight of the subjects were 159.9 ± 7.3 cm and 49.9 ± 8.1 kg respectively. The Mean BMI (Body Mass Index) was 19.48 ± 2.65 Kg/m². The result indicated that maximum number of players fall under Poor Knowledge score (0-20 %) which shows they had less knowledge of the component of Nutrients, Fluids and Recovery. It was concluded from the study that proper nutrition knowledge and intervention of that knowledge is crucial to maintain the health of the budding talents in sports.

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INTRODUCTION

Sports nutrition is a new area of science which involves the application of nutritional principles to enhance the athletic performance. Nutrition plays a very crucial part in everyone's life and so as with sportsman- which affects them in many ways. Foremost, nutrition helps in achieving and maintaining health. Optimal nutrition can reduce fatigue, allowing a sportsman to train and compete longer or recover faster between training sessions [1]. Sports and nutrition are directly related to each other. Taking into consideration the fact that sportspersons need more energy to carry out their sporting activity effectively, it becomes of prime importance to take care of the nutrition for sports performance [2]. Nutrition affects energy production and recovery from exercise. To understand and apply the principles of sport nutrition, some basic understanding of nutrition is necessary [3].

The Dietetic Association's around the world recommend that athletes of all ages in organized sports engage in healthful and balanced nutrition practices that promote optimal growth along with performance [4]. However, the average adolescent athlete does not consume the adequate nutrients necessary for a well-balanced diet [5]. Also, the adolescent athlete does not score any better on nutritional knowledge than their non-athlete counterpart [6].

The purpose of the study was to assess the nutrition knowledge of the adolescent's female volleyball players about general sports nutrition. In addition, to find out the lacking area of knowledge among sports players regarding nutrition so that proper guidance needs to be provided from the early stages of playing to develop proper nutritional habits for the long-term optimal health and performance.

MATERIALS AND METHODS

The subjects were taken from the National tournament of Volleyball Under 17 & 19 which was held at Yamuna Nagar. The teams were ranked in the national division. Consent to collect the data was taken from the respective coaches of the team. The sample consists of 128 Players from all over India. Anthropometric Measurements like Height and weight were recorded with anthropometric rod and weighing scale and BMI (Body mass index) was calculated.

To collect the data well-structured questionnaire was prepared to assess the knowledge of the female players. The knowledge questionnaire divided into subareas of nutrition includes, Knowledge on Nutrients, Fluids and recovery which are the basic sports nutrition components. The knowledge score of the players was assessed on a six-point score- Bad (Negative score), Poor (0-20% Score), Satisfactory (21-40% Score), Good (41-60% Score), Very Good (61-80% Score), Excellent

(>80 % Score). Data coding, entry and validation was done. Frequency and percentage were also calculated.

RESULTS AND DISCUSSION

The mean age of the female footballers was 14.6±1.5 years. Height and Weight was recorded and BMI (Body mass index) calculated. The mean height and weight of the subjects were 159.9 ±7.3 cm and 49.9 ±8.1 kg respectively. The Mean BMI (Body Mass Index) was 19.48±2.65 Kg/m². A large population of players had participated across India in these camps. Players admit that they did not try to obtain any specific nutritional information before and never been imparted any nutrition education from the specialist.

Table 1 Overall Nutrition Knowledge score

Scores Components	Bad (Negative)	Poor (0-20%)	Satisfactory (21-40%)	Good (41- 60%)	Very good (61-80%)	Excellent (>80%)
Nutrients	34	75	17	2	0	0
Fluids	69	38	11	10	0	0
Recovery	39	69	13	7	0	0

From the Table 1 it was depicted that maximum number of players fall under Poor Knowledge score (0-20%) which shows they had very poor knowledge of the component of Nutrients. In terms of knowledge of fluids, most of the players obtain negative knowledge score. 11 Players obtained satisfactory score & 10 Players scores Good which reveals that very few players have basic knowledge of fluids required for players to maintain their hydration. Recovery which is the most important attribute in players life. Herein, it was revealed that Budding players have very poor knowledge score regarding recovery which will directly impact the health and performance. Various studies were done on the knowledge, attitude and practice attributes of the players. The significant and positive correlations observed between knowledge, attitude, and behavior scores, although weak, indicate that an increase in knowledge can improve attitudes and behaviors. Cupisti et al. (7) suggest that adequate nutrition knowledge can protect from poor dietary behaviors. Taken together, these results suggest that knowledge, attitudes, and behaviors are important to promote changes in dietary practices of these collegiate athletes.

It was concluded that the knowledge of basic sports nutrition is also very important for the budding athletes. Still there is a paucity of nutrition intervention programs among athletes especially the adolescent. Adolescent’s is an age group where false eating habits, Peer influence, fad diets and beliefs will definitely affect the growth, health and performance of the players especially female. So proper nutrition knowledge and intervention of that knowledge is crucial to maintain the health of the budding talents in sports.

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