

## ANALYSIS OF SPORTS NUTRITIONAL KNOWLEDGE, ATTITUDE AND PRACTICE OF JUNIOR ATHLETES

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**Abstract:** The aim of this study is to examine the nutritional knowledge, attitudes and practices of young athletes. 100 young athletes (male and female) from Mahatma Gandhi University in Kottayam, Kerala, India were selected for this study. The only age limit for participants is 18 to 23. Male athletes (n=50) and female athletes (n=50) were selected as two groups of 50 each. Standard questionnaire to evaluate participants' knowledge, attitudes and practices on sports nutrition. The data obtained for the selected variables were subjected to the 't' test at a significance level of 0.05. The findings showed that there was a significant difference between boys and girls in choosing good nutritional knowledge, attitudes and practices. This finding suggests that boys outperformed girls in all aspects of the survey, including healthy eating habits, attitudes, and practices.

**Keywords:** Nutritional Knowledge, Attitude, Practice, Junior Athletes

### INTRODUCTION

Nutritional literacy refers to an individual's understanding and knowledge of all aspects of nutrition, including the role of different foods, nutritional processes, the food supply of nutrients, and the impact of food on health and well-being. It includes understanding the concepts of healthy eating and being able to make decisions about food choices and eating habits [1]. Behavior in nutrition is concerned with one's beliefs, thoughts, and feelings about food, nutrition, and culture. Healthy eating habits often lead to a desire to adopt healthy eating habits and make dietary changes to improve overall health. On the other hand, negative attitudes can lead to resistance to change and adherence to unhealthy eating patterns [2]. Culture refers to the actual behavior and actions of people regarding food and food-related activities. It includes the food choices they choose, the frequency and size of meals, their meal plans, and the general eating patterns they follow. Behavior varies from person to person and can be influenced by factors such as culture, personal preferences and nutritional knowledge [3]. Nutritional knowledge, attitudes and practices play an important role in nutritional behavior, simultaneously affecting the nutrition and general health of people, including young athletes. Evaluation and development of these areas can help improve nutrition and improve sports performance [4] A young athlete is someone who participates in sports and athletics at a young age, usually from childhood to adolescence. This period is important for physical and mental development, and participation in sports can have a significant impact on their health, well-being and productivity.

**2. METHODOLOGY**

For this purpose, 100 young athletes (male and female) from Mahatma Gandhi University in Kottayam, Kerala, India were selected for this study. The only age limit for participants is 18 to 23. Male athletes (n=50) and female athletes (n=50) were selected as two groups of 50 each. Top level athletes with at least 3 years of sports experience were included in the study. This study looked at individuals competing at least at the college or district level. The study looked at elite athletes in track and field, baseball, basketball, football, hockey, baseball, and cycling. A well-designed questionnaire (R. M. Sobana, 2016) was used to examine the knowledge, attitudes and practices of the selected population regarding food consumption. The collected data were analyzed using descriptive statistics and independent t-test with the help of SPSS program. In all cases, the 0.05 level was considered a significant level ( $p < 0.05$ ). This information is for the different options gathered from the options for the academic year 2022-2023.

**3. ANALYSIS OF DATA**

The independent-‘ t ’ test on the obtained of selected dependent variables between male and female athletes have been analyzed and presented in the table 4.1

**Table 1**  
**Summary of Mean Values and Independent-‘ t ’ Test of male and female athletes on selected Dependent Variables**

<b>Variables</b>	<b>Group</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>‘ t ’ test</b>
<b>Sports Nutritional Knowledge</b>	Male	15.89	±1.32	8.11*
	Female	12.44	±1.29	
<b>Sports Nutritional Attitude</b>	Male	8.61	±0.84	5.34*
	Female	6.37	±0.92	
<b>Sports Nutritional Practice</b>	Male	39.52	±3.27	11.74*
	Female	35.76	±2.81	

The table value for  $t_{98} = 1.99$

**3.1 Sports Nutritional Knowledge**

From the table 4.1 it was showed that the mean values between male and female athletes are 15.89 and 12.44 respectively. The obtained ‘ t ’ value is 8.11 which is greater than the required table of 1.99 with df 98 at 0.05 level of significance. It was concluded that there was a significance difference between boy and girl junior athletes on sports nutritional knowledge.

**3.2 Sports Nutritional Attitude**

As can be seen from the table above, the average of male and female athletes is 8.61 and 6.37, respectively. The resulting ‘ t ’ value is 2.81, which is greater than the 1 claimed in the table. The significance level for 99 and df 98 is

0.05. Conclusions There are significant differences between male and female athletes in sports nutrition.

### 3.3 Sports Nutritional Practice

As can be seen from the table above, the average of male and female athletes is 39.52 and 35.76, respectively. The resulting 't' value is 11.74, greater than the 1 claimed in the table. The significance level for 99 and df 98 is 0.05. Conclusion: There are significant differences between male and female athletes in sports nutrition.

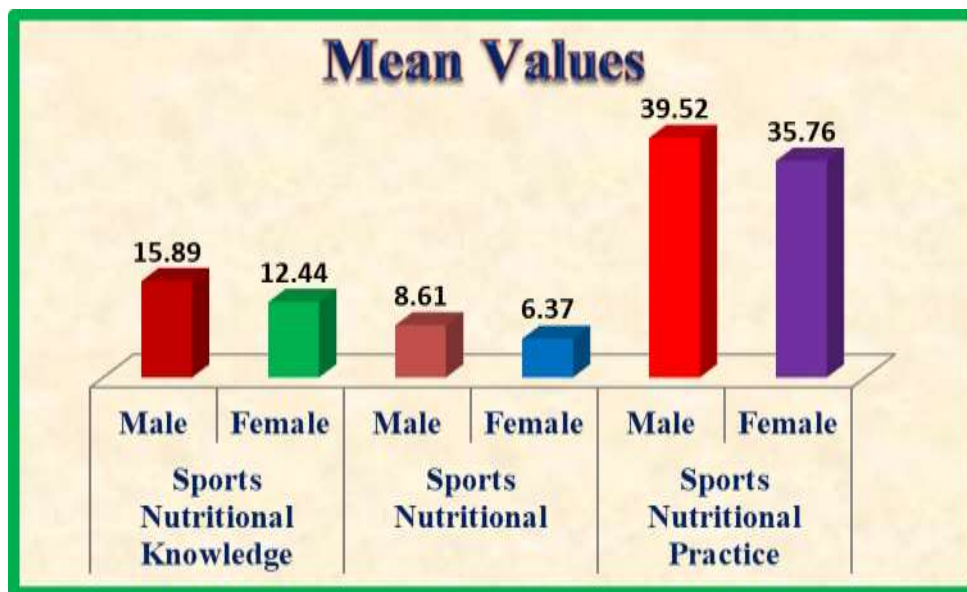


Figure-I: The Mean Values of Selected Dependent Variables between Male and Female Athletes.

## 4. DISCUSSION ON FINDINGS

The finding that boys outperform girls in all aspects of assessment, including knowledge, attitudes, and healthy eating practices, is a positive observation that needs to be translated with caution. In this discussion, we explore potential reasons for this difference and evaluate the implications of the findings. Social norms often play an important role in changing attitudes and behaviors, including those related to exercise and diet. In some societies, gender norms and expectations can lead to differences in opportunities and encourage boys and girls to participate in sport. This could lead to changes in the dissemination of information on sports, nutrition and promoting participation in physical activity. Gender stereotypes can also affect how boys and girls approach exercise and nutrition. For example, the perception that exercise and nutrition are more important for boys than girls can lead to differences and priorities in these areas. This misconception can affect the level of interest and investment in developing knowledge about nutrition and sports practices. Differences in sports participation between boys and girls can also lead to differences in knowledge and practice. If boys engage in sports that emphasize nutrition and performance, they will be more motivated to learn about sports nutrition and use it for their training. The level of

support and encouragement from parents and coaches can affect athletes' interest and participation in exercise and nutrition. More support and guidance for boys in these areas will help them achieve good food knowledge and practice. It should be accepted that there may be physical differences between men and women that will affect sports and nutrition. For example, men often have more muscles and different hormonal levels, which affects their nutritional needs and, in turn, their knowledge and behavior regarding food consumption.

## 5. CONCLUSION

From the finding of the study the results that males outperform girls in sports nutritional knowledge, attitude, and practice highlights the need for targeted efforts to address gender disparities in sports and nutrition. By promoting gender equity and providing tailored nutrition education and support, we can create a more inclusive and empowering environment for both male and female athletes to excel in their respective sports pursuits.

## Implications

- ❖ Gender equality in sport: The findings highlight the importance of addressing gender equality in physical education and nutrition. Efforts should be made to provide equality, support and assistance to young women and men so that they can reach their full potential.
- ❖ Nutrition Education: Know gender differences in nutrition knowledge and sports practices, Purpose of Nutrition Education; programs to meet the specific needs of all groups. Girls need to be equipped with the necessary knowledge and resources to improve their nutrition and performance.
- ❖ Strengthening women's participation: It is important to encourage and encourage girls to participate in sports, especially those related to nutrition and performance. This can help bridge the gender gap in sports knowledge and practice.
- ❖ Coach and Parent Education: Coaches and parents play an important role in shaping the attitude and behavior of the athlete. Educating teachers and parents on the importance of equality and support for boys and girls can help achieve better outcomes.

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