Annual Methodological Archive Research Review
http://amresearchreview.com/index.php/Journal/about
Volume 3, Issue 8 (2025)

Online ISSN 3007-3197
Print ISSN 3007-3189

http://amresearchreview.com/index.php/Journal/about

Perception of Athletes about Diet and Its Role in the Maintenance of Sports Performance

Ashfaq Ali Khattak
Assistant Professor, Department of Sports Sciences and Physical Education, Sarhad University of Science and Information Technology, Peshawar. ashfaq.ss@suit.edu.pk
Farrah Durrani
MS Scholar Department of Sports Sciences and Physical Education, Sarhad University of Science and Information Technology, Peshawar. farahduran1990@gmail.com
Dr. Mufti Kifayat Ullah*
Assistant Professor, Department of Humanities, Sarhad University of Science and Information Technology. Peshawar. Corresponding Auhtor Email: kifayat.edu@suit.edu.pk
Hina Fatima
MS Scholar Department of Sports Sciences and Physical Education, Sarhad University of Science and Information Technology Peshawar. hinafatimamarwat@gmail.com
Nazia Akhtar
MS Scholar Department of Sports Sciences and Physical Education, Sarhad University of Science and Information Technology. Peshawar. naziaakhtar0345@gmail.com
Bibi Nadia Kanwal
MS Scholar Department of Sports Sciences and Physical Education, Sarhad University of Science and Information Technology, Peshawar. nkmob623@gmail.com

ABSTRACT

Nutrition plays a vital role in enhancing athletic performance, recovery, and overall health. The present study investigates athletes' perceptions regarding the role of diet in maintaining sports performance. A mixed-method research design was used to collect both qualitative and quantitative data. A total of 20 athletes from different sports disciplines participated in the study. Data were collected through semi-structured interviews, dietary records, and nutrition knowledge surveys. The findings reveal that most athletes recognize the importance of nutrition in performance; however, a significant gap exists between knowledge and actual dietary practices. Many athletes rely on advice from coaches or peers rather than professional nutritionists. The results also show deficiencies in carbohydrate intake among endurance athletes and excessive protein consumption among weight-class athletes. Cultural influences, financial constraints, and limited nutritional awareness were identified as major factors affecting dietary behavior. The study concludes that personalized and culturally sensitive nutritional education

Annual Methodological Archive Research Review
http://amresearchreview.com/index.php/Journal/about
Volume 3, Issue 8 (2025)

Online ISSN 3007-3197
Print ISSN 3007-3189

http://amresearchreview.com/index.php/Journal/about

programs are necessary to improve athletes' dietary habits and optimize sports performance.

Keywords: Nutrition, Athletes, Diet, Sports Performance, Sports Science

1. Introduction

Sports performance is influenced by several factors including physical training, psychological preparation, and proper nutrition. Among these factors, nutrition plays a fundamental role in improving athletic performance, endurance, and recovery. Athletes require balanced dietary intake consisting of carbohydrates, proteins, fats, vitamins, and minerals to maintain optimal physical condition.

Carbohydrates are considered the primary energy source during high-intensity exercise because they replenish glycogen stores depleted during training. Proteins are essential for muscle repair and growth, while fats contribute to long-term energy supply and hormone regulation. Therefore, a balanced nutritional strategy is crucial for athletes to achieve peak performance.

Despite the scientific evidence supporting the importance of sports nutrition, many athletes do not follow recommended dietary guidelines. Their dietary choices are often influenced by cultural practices, personal preferences, and advice from coaches or peers rather than qualified nutrition professionals. These factors may lead to poor nutritional habits that can negatively affect performance and health.

Understanding athletes' perceptions regarding diet is important because their beliefs and experiences influence their eating behaviors. By examining these perceptions, researchers and sports professionals can develop more effective nutrition education programs tailored to athletes' needs.

This study aims to explore athletes' perceptions of diet and analyze how their dietary practices align with established nutritional recommendations for sports performance.

2. Literature Review

2.1 Importance of Nutrition in Sports Performance

Nutrition plays a critical role in athletic performance and physical fitness. Adequate intake of carbohydrates, proteins, and fats ensures proper energy production and muscle recovery during training and competition. Research indicates that carbohydrate intake between 6–10 g/kg body weight is recommended for endurance athletes to maintain

Annual Methodological Archive Research Review
http://amresearchreview.com/index.php/Journal/about
Volume 3, Issue 8 (2025)

Online ISSN 3007-3197
Print ISSN 3007-3189

http://amresearchreview.com/index.php/Journal/about

glycogen stores.

Protein intake is also important for athletes as it supports muscle repair and adaptation to training. Studies suggest that athletes require between 1.2 and 2.0 g/kg body weight of protein depending on the intensity of their physical activity.

Micronutrients such as iron, calcium, and vitamin D are equally essential because they support oxygen transport, bone health, and metabolic processes. Deficiency in these nutrients can lead to fatigue, reduced endurance, and increased risk of injury.

2.2 Challenges in Athletes' Dietary Management

Although athletes understand the importance of nutrition, they often face challenges in maintaining proper dietary habits. These challenges include lack of nutritional knowledge, financial limitations, and limited access to professional dietitians.

Athletes may also experience psychological pressures related to body image, particularly in weight-class sports. Such pressures can result in unhealthy eating behaviors, including excessive protein consumption or restrictive dieting.

Furthermore, busy training schedules and travel commitments may limit athletes' ability to maintain balanced meals.

2.3 Influence of Culture and Social Environment

Cultural traditions and social influences play a major role in shaping athletes' dietary patterns. Many athletes prefer traditional foods that may not always meet recommended nutritional guidelines. In addition, athletes frequently rely on advice from coaches and teammates regarding diet, which may not always be scientifically accurate.

Therefore, understanding athletes' perspectives is essential in developing effective and practical nutrition interventions.

3. Methodology

3.1 Research Design

This study employed a **mixed-methods research design** combining qualitative and quantitative approaches to analyze athletes' dietary perceptions and behaviors.

3.2 Participants

The sample consisted of **20 athletes aged between 18 and 30 years** from various sports disciplines including endurance sports, team sports, and weight-class sports. Participants were selected using purposive sampling to ensure that they had at least one year of

Online ISSN 3007-3197
Print ISSN 3007-3189
http://amresearchreview.com/index.php/Journal/about

competitive experience.

3.3 Data Collection Methods

Data were collected using the following tools:

1. **Semi-Structured Interviews**

Interviews were conducted to explore athletes' beliefs about nutrition, barriers to healthy eating, and sources of dietary information.

2. **Three-Day Food Diary**

Participants recorded their dietary intake over three days including training and rest days.

3. **Food Frequency Questionnaire (FFQ)**

This questionnaire was used to identify habitual food consumption patterns.

4. **Nutrition Knowledge Survey**

The survey evaluated athletes' understanding of nutrients, hydration, and recovery foods.

3.4 Data Analysis

Qualitative data from interviews were analyzed using thematic analysis to identify recurring patterns in athletes' perceptions and experiences. Quantitative data from dietary records and surveys were analyzed using descriptive statistics such as percentages and averages.

4. Results

4.1 Demographic Characteristics

Among the participants, the majority were male athletes with an average age of approximately 24 years. The sample included athletes from endurance sports, team sports, and weight-class sports.

4.2 Athletes' Perceptions of Diet

The results showed that **70% of athletes strongly believed that diet plays a crucial role in sports performance**, particularly in improving endurance, recovery, and energy levels.

However, **25% of athletes considered diet important but secondary to training**, while a small number believed that diet had minimal impact on performance.

4.3 Factors Influencing Dietary Choices

Several factors influenced athletes' dietary behavior, including:

Annual Methodological Archive Research Review
http://amresearchreview.com/index.php/Journal/about
Volume 3, Issue 8 (2025)

Online ISSN 3007-3197
Print ISSN 3007-3189
http://amresearchreview.com/index.php/Journal/about

- Personal preferences and cultural traditions
- Advice from coaches and teammates
- Limited nutritional knowledge
- Financial constraints

Approximately **60% of athletes demonstrated limited understanding of sports nutrition**, especially regarding micronutrients and meal timing.

4.4 Comparison with Nutritional Guidelines

Analysis of dietary intake revealed significant differences between athletes' eating habits and recommended nutritional guidelines.

Many endurance athletes consumed **insufficient carbohydrates**, which could negatively affect endurance performance and recovery. On the other hand, some weight-class athletes consumed **excessive protein**, often through supplements, without professional guidance.

Additionally, deficiencies in important micronutrients such as calcium, iron, and vitamin D were observed among several participants.

5. Discussion

- The findings of this study highlight the gap between athletes' awareness of nutrition and their actual dietary practices. Although most athletes recognize the importance of diet, their daily eating habits often fail to meet recommended guidelines.
- One major factor contributing to this gap is the lack of professional nutrition guidance. Many athletes rely on informal advice from coaches or peers rather than consulting qualified dietitians.
- Cultural and personal preferences also play an important role in shaping dietary patterns. Athletes tend to favor familiar traditional foods even when these foods may not provide optimal nutritional value for sports performance.
- Furthermore, financial constraints and limited access to quality foods can restrict athletes' ability to maintain balanced diets.
- These findings suggest that sports organizations should develop targeted nutrition education programs to help athletes improve their dietary habits and performance.

6. Conclusion

The study concludes that athletes generally acknowledge the importance of nutrition in

Online ISSN 3007-3197
Print ISSN 3007-3189
http://amresearchreview.com/index.php/Journal/about

maintaining sports performance. However, there remains a substantial gap between knowledge and actual dietary practices.

Factors such as cultural influences, financial limitations, and insufficient nutritional education significantly affect athletes' eating behaviors. Addressing these challenges requires comprehensive nutrition education programs and greater collaboration between sports organizations and nutrition professionals.

Improving athletes' understanding of proper nutrition will not only enhance their performance but also contribute to their long-term health and well-being.

References

Burke, L. M., & Deakin, V. (2015). *Clinical Sports Nutrition*. McGraw-Hill.

Thomas, D. T., Erdman, K. A., & Burke, L. M. (2016). Nutrition and athletic performance. *Journal of the Academy of Nutrition and Dietetics*.

Spronk, I., Heaney, S. E., Prvan, T., & O'Connor, H. T. (2015). Relationship between nutrition knowledge and dietary quality in athletes.

Maughan, R. J. (2018). Diet and athletic performance. *Journal of Sports Sciences*.

Phillips, S. M. (2012). Dietary protein for athletes.