## **Original Research Paper**



## **Physical Education**

# IMPORTANCE OF BALANCE DIET & NUTRITION'S FOR FEMALE ATHLETES

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ABSTRACT

Nutrition is a decisive factor of growth and development of a young organism. It has also a major impact on sports performance. Balanced diet and Good dietary practices allow athletes to train hard, regenerate quickly, adapt better, while reducing the risk of illness and injury. Athletes should use appropriate nutritional strategies before and after their performances, Athletes are often epitomized for optimal healths yet are susceptible to many nutrition related risks that can have a profound impact on both positive and negative performance gains. Becoming an elite athlete requires good genes, good training and conditioning, and a sensible diet. Optimal nutrition is essential for peak performance. Nutritional misinformation can do as much harm to the ambitious athlete as good nutrition can help. The aim of this paper is to discuss the basic importance principles of Balance diet and nutrition (Carbohydrates, fats, Proteins, Vitamins, and Minerals) for especially female athlete

## **KEYWORDS:** Nutrition, Carbohydrates, fats, Proteins, Vitamins, Minerals

#### INTRODUCTION

Nutrition plays a very important role in sports performance. Without adequate carbohydrate and fluid, an athlete will get tired very easily and quickly. Protein is needed to rebuild muscles. Without all three of these plus adequate vitamins and minerals, an athlete will never be able to perform to their maximum potential. Women are entering the sports arena and competing equally with men. The increase in women's participation has resulted in an increase in research on women athletes. The number of women participating in recreational and competitive sports has increased dramatically over the last century. The Modern Olympics are a good mark of the growth of women's involvement in sports. There are many factors that influence health status and greatly impact everyday life. One of the most modifiable and controllable areas is diet and nutrition. Diet is simply what you consume and the quantities of how much you consume, therefore fueling the body and profoundly impacting how an individual functions physically, mentally and even socially. Nutritional choices determine and greatly effect health status. Maintaining a healthy and well balanced diet is essential for the overall health and wellness of all populations and individualizing those nutritional needs based on behaviors is critical.

### $Why \ does \ Nutrition \ Matter \ especially \ for \ female \ Athletes?$

Athletes at all levels from recreational to the international competitive scale place incredible demands on their bodies. Through the combination of physical work, energy expenditure, time and recovery periods, by nature they are pushing their bodies to further limits. In doing so, athletes therefore require additional energy and fuel through nutrients and ultimately their diet. Participating in endurance sports requires optimal nutrition, with specific focus on dietary modifications. Targeted fitness development at an early age, especially in adolescence is deemed the foundation for leading an active lifestyle, avoiding potential overweight, reducing motor deficiencies and thus improving the general quality of life. At the time of final performance an athlete is supposed to be well nourished, uninjured, fit, focused and ready to compete. Sports nutrition is not just about calories to achieve weight or body composition goals; nor is it all about protein for muscles or carbohydrates for fuel. Nutritional and eating habits have been of specific interest in sports, especially given their impression on athletic performance. General recommendations need to be suggested by sports nutrition experts to accommodate the specific requirements of individual athlete regarding health, sports, nutrient, food choices and body weight and body composition. Athlete challenges their bodies on a regular basis through tough physical training and competitions. In order to keep up with demand for stamina of their activity or sport, athlete needs adequate fuel for their body on day to day basis.

#### What are the basic nutrients?

Food and beverages are composed of six nutrients that are vital to the human body for producing energy, contributing to the growth and development of tissues, regulating body processes and preventing deficiency and degenerative diseases. The six nutrients are classified as essential nutrients. They are carbohydrates, proteins, fats, vitamins, minerals and water. The body requires these nutrients to function

properly however the body is unable to endogenously manufacture them in the quantities needed on a daily basis.

#### Carbohydrates:

Carbohydrates are stored in the body in a form of glycogen, which can be used during physical activity. Carbohydrate is necessary to meet the demands of energy needed during exercise, to maintain blood glucose level and replenish muscle glycogen store. During sub-maximal exercise, carbohydrates in the body are the major source of fuel.

#### Protein

Protein is needed for nutrient transfer in the blood, connective tissue support and the repair of tissue in response to periods of exercise.

#### Fats:

Fat is primarily used as a fuel during low to moderate intensity exercise. Fat is also engaged in providing structure to cell membranes, helping in the production of hormones, lining of nerves for proper activity and make it easier for process of absorption of fat soluble vitamins.

#### **Vitamin and Minerals:**

Vitamins are required in wide variety of bodily functions and operations which helps to sustain the body healthy and disease free. The function of minerals is for structural development of tissues as well as the regulation of bodily process.

#### Water:

The human body can survive for a long duration without any of the micro and macro nutrient but not without water. The body is made of 55-60% water, representing a nearly ubiquitous presence in bodily tissues and fluids. In athletics, water is important for temperature regulation, lubrication of joints and the transport of the nutrients to active tissues. It regulates the body's temperature.

## CONCLUSION

Diet is of great importance to athletes, the key to achieving an optimal sports diet in relationship to peak performance and good health is balance. Athletes must fuel their bodies with the appropriate nutritional foods to meet their energy requirements in competition, training and recovery. If these nutritional needs are not met, there is an increased risk of poor performance and health issues. The use of a nutritional supplement within established guidelines is safe, effective and ethical. Thus a well balanced diet and effective training and coaching will be the winning combination and will help the athlete to build up strength and stamina for female athlete.

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