



Effect of Nutrition on Sports performance

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ABSTRACT

Nutrition plays a major role in sports. It can help enhance athletic performance, improve exercise, recovery and make reaching your goals possible. Sports nutrition helps players to keep their good physical condition to achieve high level performance. There is some kind of nutrition and its combinations going to enhance sports performance. Mainly six basic substances are required in the athletic food, Carbohydrates, Proteins, Fats, Vitamins, Minerals and Water. Each of these has specific function in providing good health to the body. The player's diet should be high in carbohydrates, moderate in proteins and low in fats.

The role of nutrition in sports performance is very important. Proper nutrition must be available prior, during and post competition. Greany and Jeukendrup stated that from fueling to recovery, muscle building weight and making optimal nutrition ensure the best platform for success in any sport. Meals eaten after and before the exercise are the most important in nutrition but we should really be very careful with all that the athlete intake in his body. As a general rule of thumb an athlete should eat about two hours before any exercise and the meal should be high in carbohydrates, low in fat and low to moderate in protein. Carbohydrates are the main source of energy that provides power to an athlete in exercise regime. Protein is required to develop muscle growth.

Introduction

Sports nutrition is the foundation for any type of player. It is a well designed nutrition plan that allows active and athletes to perform at their best. Sports nutrition and energy intake has been established as the cornerstone of the athlete's diet

Sports performance is directly related to the awareness about the nutrition. Many factors can impact the performance of a sports person during competition which may be related to different domains. The most commonly encountered nutrition related problem among the sports person is their failure to consume sufficient total of food energy.

Nutrition is important for an athlete because it provides energy required to perform the activity. The food they take leaves an impact on strength, training, performance and recovery.

Not only the type of food is important for sport nutrition but also the time is equally important for what they eat throughout the day. It also has an impact on their performance level and their body ability to recover after workout. An athlete needs to pay close attention about when, what and how much does he eat or drink prior to a game or match.

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 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.

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.

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Nutritional needs for peak athletic performance includes sufficient calorie intake, adequate hydration and attention on timing of meals taken.

Adolescent athletes and their advisor often are misinformed or have misconception about sports nutrition. The studies show nutritional need for young athletes have common misconceptions about sports nutrition. Studies show that proper nutrition for young athletes is critical not only to their athletic success, but more importantly to their growth, development and overall health.

A balanced nutrition plan should include sufficient calories and healthy macronutrients to optimize athletic performance. Carbohydrates or fats can be used as main energy source depending on intensity and duration of exercise. Inadequate calorie intake can impede athletic training and performance.

A normal healthy diet can take care of normal exercising regimen. Intense training will require significantly more nutrients to support energy demands.

Athletic goals will determine the best sports nutrition strategy. Pre and post workout meal planning are unique for each athlete and essential for optimal performance. Adequate hydration and electrolytes are required for athletic health and athletic performance. Rehydration with water and sports drinks containing sodium are often consumed depending on athlete and sporting event.

The main role of sports nutrition is to support the training program. Dietary intake for performance will change as the training regime changes. Poor nutrition can lead to injury, fatigue and poor recovery, all three of which can hinder as to how efficiently an athlete performs.

American Dietetic Association, Dietician of Canada and American College of Sports and Medicine stated that physical activity, athletic performance and recovery from exercise are enhanced by optimal nutrition. Appropriate selection of foods and fluids, timing of intake and supplement choices are required for optimal health and exercise performance.

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 nutritional supplement within established guidelines is safe, effective and ethical.

Sports nutrition plays a major role in success of any type of the player. Certain nutrition and the dietary approaches are helpful in good performance of an athlete and should vary in accordance to the type and the intensity of training, type of sports event, environmental factors, eating habits and other specific requirements.

Finally the future of nutritional supplement looks bright in regard to the areas of transport mechanism, improved muscle retention as well as treatment of numerous clinical maladies through supplementations.

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