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A bunch sports supplements for javelin throwers

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Abstract

The javelin thrower requires speed, strength, power and a wide variety of skills to be successful in this event. Only a handful studies have assessed the nutritional needs of such javelin thrower because of this recommendation for nutritional requirements to support and enhance training as well as competition performance the goal of preparation cycle of nutritional periodization for the javelin throwers include attacking desirable body weight, high ratio of lean body mass and improved muscles power and speed. Nutritional recommendation for training and competition period includes

1. Carbohydrate to take as it provides adequate fuel, for energy demands.
2. During competition of adequate protein intake to meet protein synthesis and turnover need.
3. Always consume effective supplements. Translating these supplements and dietary recommendation into guideline for javelin throwers during training is important for performance.

Keywords: Nutrition, throwers, supplements, carbohydrate, protein, energy

Introduction

Throwing event javelin throws require strength, power, speed, and technical skills. They must produce the dynamic power. The javelin weighs less than the other throwing implements and requires a fast run-up, smooth acceleration, and power for a fast throw. The study says that without proper techniques and without taking proper supplements javelin throw is not possible. Supplementations were taken soon after the training and it can optimize recovery and restored energy. Why do sports nutrition is important for javelin thrower? Athletics is the sports of speed, strength, which requires extreme nutrition because thrower group requires maximum strength. In the speed strength sports a javelin throwers needs more supply of energy. Important supplements and their importance for javelin thrower

Carbohydrate

Carbohydrate, class of naturally occurring compounds and derivatives formed from them. In the early part of the 19th century, substances such as wood, starch, and linen were found to be composed mainly of molecules containing atoms of carbon (C), hydrogen (H), and oxygen (O) and to have the general formula $C_6H_{12}O_6$; other organic molecules with similar formulas were found to have a similar ratio of hydrogen to oxygen. The general formula $C_x(H_2O)_y$ is commonly used to represent many carbohydrates, which means "watered carbon."

Carbohydrates are probably the most abundant and widespread organic substances in nature, and they are essential constituents of all living things. Carbohydrates are formed by green plants from carbon dioxide and water during the process of photosynthesis. Carbohydrates serve as energy sources and as essential structural components in organisms; in addition, part of the structure of nucleic acids, which contain genetic information, consists of carbohydrate. Are the main source of energy and it is made up of chains of sugar molecular, carbohydrates contain about 4 cal/ gm a monosaccharide is a simplest form of sugar. The three monosaccharides are glucose, fructose and galactose. Glucose is the work of building block and fructose is a fruit sugar, carbohydrates consumed in diet which is not immediately use for energy and it is stored as a glycogen (stored in liver and muscle cell). It is therefore single glucose molecules provide a rapid source of energy. The amount of stored glycogen can be increased fivefold with physical training. In the high performance a javelin thrower requires more amount of carbohydrate for long lasting exercise.

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Javelin Thrower does not deplete glycogen stores and therefore carbohydrate loading before a competition is not necessary.

Protein

Protein, highly complex substance that is present in all living organisms. Proteins are of great nutritional value and are directly involved in the chemical processes essential for life. The importance of proteins was recognized by chemists in the early 19th century, including Swedish chemist Johns, who in 1838 coined the term protein, a word derived from the Greek proteios, meaning "holding first place." Proteins are species-specific; that is, the proteins of one species differ from those of another species. They are also organ-specific; for instance, within a single organism, muscle proteins differ from those of the brain and liver. A protein molecule is very large compared with molecules of sugar or salt and consists of many amino acids joined together to form long chains, much as beads are arranged on a string. There are about 20 different amino acids that occur naturally in proteins. Proteins of similar function have similar amino acid composition and sequence. Although it is not yet possible to explain all of the functions of a protein from its amino acid sequence, established correlations between structure and function can be attributed to the properties of the amino acids that compose proteins. Protein belong to third group indispensable supplements which contain 4 calorie per gram and are the building block of human and animal structure. Protein serves innumerable function in the human body, including formation of brain, blood muscles, skin and hair. Protein is made from amino acid which consists of carbohydrate with nitrogen containing amino group and sulphur. Eight to ten essential amino acids cannot be by body and must be consumed in diet. A specific food's protein quality is determined by assessing its essential amino acid composition. Protein require by athlete according to their types of activity and level of training. The American and Canadian dietetic association recommended that athlete consume 1.5gm of protein per kg of body weight. In the case of javelin thrower require protein 1.5 to 2.8 gram/kg of body weight. Every javelin thrower requires 9000 kcal to build muscles. Animal protein and soya protein are better source in comparison to plants. However, combining complementary incomplete plant protein that together can provide all the essential amino acid boosts the protein quality.

Fat

Fats Also known as lipids, fats are stored as an oily liquid under the skin and in the abdomen in thin-walled cells. Fats form the body's main energy store and are converted into fuel as required. Fat stores also form an insulant against heat loss. A mechanical shock absorber and a contouring element. Bodies' Fats Are triglycerides and consist of a 'backbone' of glycerol to which three fatty acids are attached. Fats differ by virtue of different fatty acids. After the carbohydrate it is the ultimate source of energy which provide 9calorie per gram. Ounce of ounce, this is 2.25 times more calories than both carbohydrate and protein. Fats serve much critical function in human body, including insulation, cell structure, nerve transmission and vitamin absorption and hormones production. According to American dietetic association recommended that fat intake is mostly unsaturated with an emphasis on increase of omega -3 (ADA. 2007). Omega-3 or omega -6 much more important for javelin thrower it contains fatty acid.

Creatine

Creatine is a nitrogenous organic acid that occurs naturally in vertebrates. Its main role is to facilitate recycling of adenosine triphosphate (ATP), the energy currency of the cell, primarily in muscle and brain tissue. This is achieved by recycling adenosine diphosphate (ADP) to ATP via donation of phosphate groups. Creatine also acts as a pH buffer in tissues. It is a compound formed in protein metabolism which is a natural substance and provides energy to muscles. Creatine is produced in liver, pancreas and kidneys, is transported to the body's muscle through the bloodstream. While doing workout ATP level drop out rapidly. Creatine is responsible for restoring ATP level. Creatine supplementation has the potential to provide performance benefits to javelin thrower. (Burk, 1996). Creatine is responsible to increase the muscle size and due to more workouts a javelin thrower requires more amount of creatine.

Caffeine

A small amount of caffeine (1-3 mg/kg) can help performance in prolonged exercise and may also be helpful in exercise of shorter duration. Such moderate doses can be found in everyday amounts of coffee, cola drinks and some sports products. Caffeine is very important for javelin thrower. Because javelin throw is also shorter duration skill full event. So it's very necessary for javelin throwers,

Minerals and Vitamins

Vitamin and mineral are active substance essential for the body, which is constantly dependent on their supply. Vitamins and minerals are required by body for various functions. Without vitamin and mineral javelin thrower growth and development are not possible. The body cannot synthesize minerals and vitamins itself. Human body needed 13 different types of vitamins but in case of javelin thrower some following types of vitamins are very essential for high performance. The javelin thrower has high devastating effects on their bones and joints which can prevent by consuming minerals and vitamins. Mainly calcium, zinc, iron, vitamin C, vitamin B12 are very helpful for hammer thrower performance.

Calcium: It is the important enzyme activator and is also functionally necessary for neuromuscular signal transmission, cell membrane permeability, and energy release and blood coagulation. Calcium is the main component of strength training. Calcium plays an important role in supporting joint. In achieving high performance a javelin thrower undergoes through devastating effect on their joints. To prevent relief from stress calcium is very important for javelin thrower.

Iron: The trace element iron is a component of oxygen transporting component in hemoglobin, myoglobin and enzymes. Female javelin throwers require consuming more amount of iron in comparison of males. Iron is the most reliable diagnostic parameter. Javelin thrower should consume iron supplements to enhance the blood level. All javelin throwers taking iron supplements should have iron status monitored due to the potential association between iron status and chronic disease.

Zinc: It is the component of many enzymes. In the normal body 1.32 to 2 gm are stored, mainly bone and muscles. Zinc has great physiological significance in competitive sports. Zinc aids help in synthesis of protein which impedes breakdown of zinc and reduces cell damage during extreme exercise which supports the reactivity of the immune system. The zinc supplements are therefore recommended for javelin thrower.

Vitamin C: Vitamin c or

ascorbic acid has a long history based on the fact that the effects of vitamins on the performance of javelin thrower. Vitamin C is involved in metabolic process additionally vitamin C influence iron metabolism by supporting absorption in the intestine and increasing the stability of ferritin. High dose of vitamin C do not increase the performance capacity.

Vitamin B12 or cobalamin is only found in animal products. Vegetable food is free of vitamin B12. Vitamin B12 is much more essential for javelin thrower because they require B12 to digest other supplements. Vitamin B12 helps to breakdown of branch chain amino acids. Vitamin B12 is very necessary to boost cell development and deoxyribonucleic acid synthesis. Therefore vitamin B12 is required for the maturing of blood in the bone marrow.

Conclusion

Sports supplements for javelin thrower play an important role in achieving high performance. Sports supplements for javelin thrower are becoming increasingly scientific and recognized for its importance in javelin thrower. This article covers the most important principles of sport supplements for javelin throwers.

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