



Nutrition and its importance in Sports

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ABSTRACT

The purpose of the study was to ensure that the key to success in sports is diet. Diet is the main source which gives energy to do various life activities and movements. An athlete's or sports persons dietary requirements depends on several aspects, including the sport or game, the environment, practical issues and the athletes goal. The importance of diet has been increasingly recognized during and after the training and during competition. Carbohydrate rich diet maintains high level of carbohydrate oxidation which prevents from hypoglycemia and has a positive effect on nervous system. Proteins are large, complex molecules that play many critical roles in the body. They do most of the work in the cells and are required for the structure, function and regulation of the body tissues and organs and play a central role in biological processes. Athlete should maintain a balanced diet during and after competition or training programme. A sports person should maintain adequate level of hydration, minimize fluid loss during exercise.

Keywords: - athlete, carbohydrates, diet, nutrition, performance, proteins, sports, training.

INTRODUCTION:

Nutrition is the sum total of the processes by which an organism obtains its food and utilized it to produce energy for the body to carry out different kinds of life processes. Nutrition plays an important role in the life of an organism especially for an athlete. Nutrition depends on various factors such as the physical condition, existing nutrient condition, surrounding atmosphere of the organism and athlete etc. There is lot of myths and facts about nutrition. This is apparently dependent on the atmosphere around an athlete. An athlete's body needs the right quantity of carbohydrates, proteins, fats, vitamins, minerals and fluids to fuel one's body and fitness. Even if it is not competing in a sport, eating right kind of food can help to train harder, delay fatigue and help to increase performance. We can learn to balance from nature a lot. For example consider a peanut. If you slice a single peanut into two, one of the two pieces will have a small tip with a tiny granule attached to it. When we ever try to taste this separately, it is sour in taste. It tells us that the two parts of peanut, which taste sweet, should be eaten with this granule to balance the taste and nutritional value. This is how nature teaches us to balance the diet. We should identify and learn the right kind of diet. The difference between participating and achieving goals can be tied to your nutritional status. At THAPOS, we help the one to get information that might help to achieve targets. We present this information, which

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are suggestions, after lot of screening to help to take decisions. We have small articles for every possible topic in an easy understandable manner. The difference between participating and achieving goals can be tied to one's nutrition. Sports person's needs different kinds of super powers than a normal person as compared to physical fitness, endurance, delay fatigue, and other physiological parameters that can help an athlete to achieve his goals. So the nutrition of the athlete should be a balanced one which may contain all the nutrients in required quantity.

Discussion:

Hydration: Body depends a lot on the fluid levels one's body takes in. One's performance is affected if proper hydration levels are not maintained.

Start a sporting/exercise activity having fluids at least an hour before and after the routine. Replace sweat loss during the activity by having fluids at regular intervals.

Identify a fluid replacement plan which suits one's body type to prevent over heat, stress on the cardiovascular system and the outcome of one's performance.

Hydration levels are to be optimized as per the situation, to deliver performance.

Experiment during training with fluids and their volume of intake, so that one can give ones best at the right time.

Foods and Food Pyramid:

Food is available abundantly all over the world in various forms. The availability depends on various ecological and environmental conditions. Decades ago food pyramid was formed and finally it changed to MY Pyramid and My Plate. So, it is one who have to decide on what and how to have food.

Types of Foods:

Foods are generally classified into vegetables and legumes/beans, fruits, lean meats and poultry, fish, eggs, nuts and seeds. Grain (cereal) foods, mostly whole grains and/or high cereal fibre varieties. Milk, yoghurt, cheese and other alternatives. There also have foods that one can consume frequently, just for satisfaction; these do not contain essential nutrients. This will be a discretionary choice. sweet biscuits, cakes and pastries Processed meats, sausages and bakery products with high fat/ salt content. Sweetened condensed milk, ice cream and others of the same family, confectionery and chocolate commercially fried foods, cream, butter and spreads which contain high saturated fats, sweetened soft drinks and cordials, sports and energy drinks.

An athlete also needs unsaturated fats for a healthy diet. These are of two types of fats such as

Mono unsaturated fats (mostly in olive/canola oil, cashews, almonds, avocados).Poly unsaturated fats like omega-3s and omega-6s. Omega-3s are found only in oily fish. Omega-6s are found in Safflower, Soybean oil and Brazil Nuts.

Importantly, one should try and replace saturated fats with unsaturated fats to make his diet healthier. It is for the one to make his diet interesting instead of getting bored by sticking to a standard one. Try varied combinations. Try combinations only while training. Listen to your body what kind of nutrient it needs.

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Carbohydrates:

Carbohydrates are the common sources for energy. A lot of research has proved that while maintaining optimum hydration levels, a high carbohydrate diet is essential to achieve peak performance during an exercise or sporting routine. These are the basic organic sources of food comprises of carbon, hydrogen and oxygen.

Vitamins and Minerals:

Vitamins are organic compounds that are vital nutrients. There are 13 vitamins available in variety of forms. They have diverse biochemical functions which you need to identify. Make it a routine to read food labels before you purchase a food product. Compare the labels with your diet.

Minerals like iron, potassium, magnesium, calcium etc. are also needed in your ordinary diet. They have to be recognized from the foods we take. It is always better to have variety of foods in your diet. Multi vitamin, multi mineral supplements are the last resorts that one should take.

Fats:

Eating habits vary between individuals. It is a common myth that one should avoid fat based foods for a healthy diet while it is a truth that fat is needed for a healthy diet. One should identify the right kind of fats. The good fats are: Monounsaturated Fats, Polyunsaturated Fats Conjugated Linoleic Acid (CLA) Medium Chain triglyceride.

Proteins:

Proteins for the body are like bricks for a construction. They are present in every part of the body. The amount of protein needed is different for different sports/exercises. One should be cautiously listening to his body depending on the level of intensity of his workouts. one have to click a balance with foods, as they also support him with other kinds of nutrients such as carbohydrates, fats, vitamins and minerals.

An athlete should maintain a regular diet plan. There will be slight changes before the game. Depending on the type of game, athlete needs to assess the right kind and amount of food he have to take. Generally, he should just eat to control the hunger never eat full. Count his calories. Do not take more calories that will harm him. Have sufficient time interval between the game and having food. This may give time for the food to digest and release energy. If it is a lunch/dinner have gap of at least 3 hours and a gap of 1 hour. Observe his fluid intake as well. Keep himself well hydrated even during the game. Apart from water fruit juices or sports drinks are also good choices. Carbohydrates provide energy. They are easy to digest than protein and fats. Avoid carbohydrates with high fiber since they take a longer time to digest and a time lag can make one uncomfortable. Protein and fat intake should meet ones daily requirement. Of the total calorie intake protein should be 12 to 15 percent, fat 25 to 30 percent and the rest should be carbohydrates.

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Conclusion

The optimum diet is completely dependent on the social and geographical environment in which an organism lives. A nutrient is a substance that is required for life. A nutrient comes from food, and supplements are taken as a final step. Lack of nutrients is experienced in the present, not the future. All of us are different from each other biologically and each of us must say individually what we need to eat. One can complete his nutrition exercise when he classify all the nutrients and understand about where they come from. One can know about the nutrients that require extra effort to obtain and their quantities. One can change his diet, based on visible signs and feelings, as essential to maintain the balance between excessively available nutrients and the scarcest nutrients.

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