#### **OPEN ACCESS**

# **Nutrition for Healthy Sport**

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Abstract

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A healthy diet is vital to overall well-being. It is essential to the growth and well-being of sports. Athletes should make sure they have a healthy meal before training or competition. This essay lists wholesome foods that are great for balancing a daily diet

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and providing a lot of nutrition for athletes.

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#### Introduction

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The cornerstone for success in any endeavor, whether it be academics, athletics, singing, or dancing, is a strong and healthy physique. One of the key factors contributing to sports success is eating a healthy diet. Eating and selecting foods that are appropriate for our jobs is the path to a healthy life. Sports are a great way to stay in shape for people who play them on a daily basis, are enthusiastic about sports at school, work in an office, or are full-time athletes.

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The study and use of diet and nutrition in relation to enhancing an athlete's performance is known as sports nutrition. A significant component of many sports training regimens is nutrition, which is especially true for endurance sports like swimming, cycling, running, and bodybuilding as well as strength sports like weightlifting. Studies on sports nutrition concentrate on the kinds and amounts of food and liquids consumed by athletes.

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# **Nutrition Required**

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25% to 35% fat, 10% to 30% protein, and 45% to 65% carbs make up an optimal diet. Drinking fluids before, during, and after sporting events is crucial for preserving hydration and preventing dehydration. Eating at the right time of day is crucial for peak performance.



# **Sportsman Diet Chart**



Focus on a diet rich in carbohydrates, moderate in protein and low in fats. Here are some tips: Eat a meal 3 to 4 hours before activity. Include plenty of carbs and some protein but keep the fat low.

### **Principles of Sports Nutrition**

- 1. Fuelling providing the body with food to enhance stamina, strength and clarity.
- 2. Hydration preventing dehydration and fatigue, whilst optimising muscle performance.
- 3. Recovery to aid in recovery after exercise.

#### **Importance of Sports Nutrition**

- Injury prevention.
- Strengthening of the immune system.
- Decreased muscle tiredness and soreness.
- Muscle healing and recovery.
- Improved energy levels.
- Increased focus and attention span.

# **Benefits of Sports Nutrition**

- Allows you to train harder longer.
- Delays onset of fatigue.

- Improves body composition and strength.
- Enhances concentration.
- Prepares the body for the next day's workout
- Helps maintain healthy immune function.
- Reduces the potential for injury.

#### **Food**

"Eating also has an impact on athletic success or failure." The body is crucial to athletes. It is important to make sure that the athletes' calorie intake is appropriate for their age and weight. Individuals who participate in sports should consume meat, poultry, and pork on a daily basis. Include foods high in protein in your diet. Soup with mutton tastes excellent. Consume vitamin "C"-rich foods like carrot juice and lemon juice as well as vitamin "D"-rich non-vegetarian foods.

Grain foods, tubers, and lentils are all excellent options. Eat more beetroot. Because beetroot contains nutrients that can endure pain, if they are struck while playing. It improves blood circulation as well. Foods high in fiber should be avoided by athletes. Playing will facilitate easier bowel movements in the stomach if this is avoided. It is advisable to limit your intake of sweet foods. You shouldn't consume it while the game is going on. Playing with high blood sugar can cause early weariness.

Athletes require 5,000–11,000 calories per day, compared to the average person's 2,000–3,000 calories. The amount of calories needed for a given sport can range from four to five times that of another. The amount of food consumed by runners, marathon runners, 100- and 200-meter short distance runners, long distance runners, weightlifters, and athletes competing in both indoor and outdoor sports varies depending on their training.

#### **Fruits**

92% of watermelon is made up of water, 8% is natural sugar, and the minerals calcium, magnesium, potassium, and sodium are vital electrolytes. The body will be protected from UV rays by the abundance of vitamin C, beta carotene, and lycopene found in watermelon. Ninety percent of a grapefruit is water and barely thirty calories. Grapefruits contain phytonutrients called limonoids, which have the potential to be detoxifying and to prevent the growth of cancerous tumors. Strawberries are high in water content and highly nutritious. Additionally, the minerals they offer might have a variety of positive effects on health. Oranges are an excellent source of antioxidants, fiber, water (88%), and a number of other nutrients. They may also help avoid kidney stones and a number of other diseases. Cucumbers have extremely few calories but a high water content of 95%. This combination offers advantages for several aspects of your health, including hydration.

#### Coconut

Iron, potassium, and fiber are all present in good amounts in coconut. 185 calories, 18 grams of fat (more than in a tablespoon of oil), 7 grams of carbohydrates (5 grams of which come from fiber), and 2 grams of protein are found in one ounce of unsweetened flakes coconut meat. A very healthy drink that will help you stay hydrated is coconut water. Water makes over 95% of coconut water as well. It's among the most well-liked methods for hydrating athletes who train at a modest level. Because it is only found in young coconuts, coconut water is different from coconut milk. Because of its comparatively low sodium and carbohydrate content, it might not be the best option for athletes who train hard or for endurance athletes. After working out, coconut water is a far healthier choice than marketed sports drinks, which are sometimes filled with sugar and other harmful components

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# Vegetables

With their outstanding nutritional profile, tomatoes may offer numerous health advantages. 95% of a tomato is water. Additionally, there are 18 calories, 0.9 grams of protein, 3.9 grams of sugar, 1.2 grams of fiber, and 0.2 grams of fat in 100 grams of fruit.

Another extremely healthful vegetable with many benefits to your health is bell peppers. Water makes up more than 90% of the weight of bell peppers. They are high in potassium, B vitamins, and other minerals as well as fiber. Antioxidants called carotenoid pigments are also present in bell peppers and may lower the incidence of eye disorders and some types of cancer.

In addition to having a high water content (92%), cauliflower is high in fiber, minerals, and a decent alternative to less hydrating cereals.

Consuming cabbage can improve your health in a number of ways, including hydration. This is because it contains 92% water, as well as nutrients and antioxidants.

Potatoes are a good source of fiber, vitamins, minerals, and carbs, among other essential components. Potatoes have significantly more potassium, very little fat, and fewer calories per weight when compared to other stable meals.





#### **Sports Drinks**

Sports drinks come in three primary varieties, each with varying proportions of water, electrolytes, and carbohydrates: (3) hypertensive beverages with 32% carbs, 4% electrolytes (not all drinks), and water; (1) isotonic drinks with water, carbohydrates, and 4-8% electrolytes; and (2) hypotonics with 6% electrolytes, 2% carbohydrates, and 92% water. It is advised to have isotonic beverages for intense physical exercise and hypertensive drinks, which are meant to swiftly replenish energy stores and have a high carbohydrate content, for really intense training. Hydration following exercise (1).

Sports drinks, sometimes referred to as electrolyte drinks, are functional drinks whose claimed use is to assist athletes in replenishing energy, electrolytes, and water prior to, during, and particularly following training or competition.

# **Electrolyte Drink for Sports**

The two main electrolytes that survive sweating are sodium and chloride; minor amounts of potassium, magnesium, and calcium also survive. Sport drinks should contain at least 500 mg of electrolytes per liter and 150–180 mg of sodium and 75 mg of potassium per 8 ounces. Electrolytes are essential for several processes, including blood pressure, muscle contraction, and hydration.



#### **Black Water**

Evocus is a high-pH (8+) black alkaline beverage that is loaded with vital minerals. Evocative Alkaline water and necessary minerals are combined to create a black alkaline drink. Long-term, persistent hydration is what Black Alkaline Drink offers; it hydrates you more quickly.



#### Conclusion

In the past few decades, specialty food items, sports beverages, and energy drinks have all gained a lot of popularity. It is now known that a modest degree of dehydration or insufficient water intake may increase the risk of acquiring chronic illnesses. We will go over the fundamentals of sports nutrition and apply them to particular meal plans, recipes, and case studies. Before looking for a job in the "real world," students are advised to look for extra chances outside of the classroom to work with elite and recreational athletes to obtain more experience using sports nutrition concepts.

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