

APPLICATION OF BALANCE DIET IN SPORTS AND PHYSICAL EDUCATION**Ashwani Kumar Yadav**

Research Scholar, University of Lucknow

Dr. Baiju Abraham

Associate Professor, Lucknow Christian College Lucknow

ABSTRACT

Maintaining excellent health requires a balanced diet and proper personal cleanliness. Food energy affects both your weight and athletic performance. Nutrition is a complicated and multifaceted topic. It covers everything, including supplements, sports performance, and weight reduction and growth. Here, we want to provide you with a fundamental grasp of the importance of eating a balanced diet for athletes. Most people should consume 60% carbohydrates, 30% fat, 10% protein, vitamins, minerals, and water in a balanced diet.

Keyword:

Nutrition, Requirements, Performance.

INTRODUCTION

Eating is one of the pleasures of life. When there is a sufficient amount of food, eating meals together is a significant aspect of social gatherings, festivals, and everyday family life. A food is neither good nor terrible on its own from a nutritional standpoint, but it may all be enjoyed as part of a healthy diet. How a particular food works in conjunction with another food to satisfy a person's or an individual's energy and nutrient demands is what counts. For kids who can only consume enough food in one or two meals to meet their nutritional needs, this is extremely crucial. Breakfast is especially crucial for providing nourishment for both mental and physical activity. The article offers fundamental recommendations for healthy eating habits, lifestyle choices, and food value to maximize the amount of food that is readily available. The knowledge offered could help avoid diet-related illnesses and poor nutrition.

Carbohydrates: In actuality, the brain can only use energy derived from the breakdown of carbohydrates, making them our primary energy source. Foods high in sugar and starch contain these. The breakdown of carbohydrates occurs in the muscles and liver through a process called glycogen synthesis. Until it is required, it is then stored as glycogen. People who play sports, especially those who compete in endurance events, frequently need to consume more carbohydrates than the recommended 60% in order to keep their glycogen stores full and avoid exhaustion. Carbohydrates can be classified as either simple or complex.

Basic carbs/Simple carbohydrate: Describe sugars that have a basic one- or two-part molecular structure. When simple sugars are converted to glucose, the body can process them quickly due to their simple molecular structure. This results in an energy spike, which is followed by a low after the process is finished and the simple carbs have been used. Compared to complex carbohydrates found in nature, which have a lower GI, processed and refined sugars often have a higher GI, which has the effect of rapidly raising blood sugar levels.

Complex carbohydrates: The term "complex carbohydrates" describes sugars that have three or more complicated molecules; because of this, the body takes longer to break them down and produce the glucose it requires for energy. Complex carbohydrate-rich foods are also a good source of fiber, vitamins, and minerals, all of which are essential for good health. Foods containing complex carbs can give you sustained energy levels for longer than foods containing simple carbohydrates because the body processes them more slowly. Foods high in complex carbs hence have a lower Glycaemic Index (GI).

Glycaemic Index (GI): This metric quantifies the rate at which blood glucose levels increase following a meal. Those with complex carbs will often have a lower GI score since it takes the body longer to convert them into glucose, while those with higher GI levels likely to include more simple carbohydrates.

Fats: Any diet must include fat since it is a fantastic source of energy, aids in the body's absorption of nutrients, and gives the body vital fatty acids that it cannot produce on its own. Fats have a number of vital functions. They give us energy and, when stored, shield our important organs.

Saturated and unsaturated fats are the two categories. Fats that are saturated. These fats are necessary, but it's crucial to watch how much you eat because too much of them might cause you to gain too much weight, which raises your chance of developing major health issues. Fats have a number of vital functions. They give us energy and shield our important organs while they are stored.

Fats come in two varieties: unsaturated and saturated. Butter and animal fat are examples of saturated fats, which are undesirable fats that are often solid at room temperature. Because it is more difficult to break down, unsaturated fat is mostly deposited in the body. Although they can also be found in nuts and avocados, unsaturated fats are generally better for humans and are frequently liquid at room temperature, such as olive and sunflower oils. No more than 30% of a healthy diet should be fat, and saturated fat should make up no more than 10%. Understanding the two forms of fat that are present in food is crucial since the improper sort of fat can harm the body, increase cholesterol, and clog arteries.

Unsaturated fat: Any oils with fatty acid chains with one or more double-bond chemical structures are considered unsaturated fats.

Mono-saturated: fatty acids are those found in the chain of amino acids that have a single double bond between two components. The viscosity of lipids increases with the number of double bonds they contain. The Mediterranean diet frequently uses mono-saturated fatty acids; olive oil is a notable example, as it contains 80–85% mono-saturated fats.

Poly-saturated: These fatty acids are often more thicker since they have several double bonds. They are present in fish, nuts, and legumes and are usually thought to be beneficial to diet; research has indicated that they lower the risk of heart disease and are a crucial component of a balanced diet.

Trans Fats: Often regarded as synthetic fats, these are produced by hydrogenating plants.

Saturated Fats: Saturated fatty acids are "saturated" in hydrogen, meaning they don't have double bonds. They have been studied for many years and are found in large concentrations in animal fat. There is general agreement that these fatty oils have been linked to diseases like cancer even though they are not as dangerous as trans fats. Reducing consumption of saturated fats and, if feasible, substituting them with poly-saturated fatty oils should be the goal. One of the main dangers is substituting processed carbohydrates for saturated fats, which can be just as harmful.

It's a good idea to always choose a healthier sort of fat when deciding what to consume. Since polyunsaturated fats have been proved to be more advantageous overall, anyone who wants to lead a healthy lifestyle should take this fundamental foundation into consideration.

Proteins: Found in all bodily cells, proteins play a crucial role in tissue growth and repair. Meats, eggs, seafood, dairy products, nuts, and seeds are all rich sources of protein. Since protein is necessary for the development, maintenance, and repair of bodily tissues, many athletes—primarily those who need to be strong or large—increase their protein intake to support the growth and development of their muscles.

Water: One of the most vital elements on the planet is water. Water is necessary for the survival of all plants and animals. Life on Earth would cease to exist if there was no water. People utilize water for a variety of purposes besides drinking it to stay alive. In order to assist avoid dehydration, water is essential in all sports. Sweating helps our bodies cool down while we workout. Water is lost as a result, and it needs to be refilled to prevent performance issues. Sweating also causes the loss of electrolytes like salt. Because of this, a lot of sports beverages combine electrolytes and water. These electrolytes also aid in the water's diffusion back into the body through the small intestine.

Vitamins and Minerals: Although they are only required in trace levels, vitamins and minerals are essential for a variety of bodily processes. There is no need for vitamin or mineral supplements if you eat a balanced diet with lots of fresh foods, as seen above.

Importance of balanced diet in physical Education: A balanced diet and regular exercise are the foundations of good health, which is why they are important in physical education. Being overweight and associated health issues can result from poor eating habits and insufficient physical activity. We may maintain a healthy lifestyle by eating well and exercising. The foundation of good health is a healthy diet and frequent exercise. Being overweight and associated health issues can result from poor eating habits and insufficient physical activity. We may maintain a healthy lifestyle by eating well and exercising. Since our nutrition has a significant impact on our health, we shall

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concentrate more on eating a healthy diet here. All of the macro and micronutrients we require, in the proper amounts, must be included in a balanced diet. In order to be healthy, people typically consume too many macronutrients and too few micronutrients. Fats, proteins, carbohydrates, and water are examples of macronutrients; vitamins, minerals, and trace elements are examples of micronutrients that we require in trace amounts. Except for water, all of our energy and calories come from macronutrients. Additionally, fats have over twice as many calories as protein and carbs! It can be challenging to remember which foods provide us with which nutrients, and we are not always able to keep track of how much of each nutrient we require each day. However, we can readily recall that no single item can provide us all we need to be healthy, so we must eat a range of foods and exercise moderation in our eating habits to meet our nutritional needs.

- Avoid foods and drinks that have a lot of added sugar. Sugar has no additional nutrients; it only gives us calories.
- Eat less salt when cooking and refrain from adding salt to food at the table. Be mindful of the quantities found in packaged foods and snacks. Excessive intake of salt causes hypertension.
- Up your intake of fiber to support digestive health. Consume more raw produce and whole grain breads and cereals.
- Eat foods high in calcium, such as cheese, yogurt, and milk. To get all the nutritional benefits with a lower fat content, try low-fat types.
- Water should be consumed in eight glasses or more throughout the day.

And lastly, keep on going! If you want to maintain your health, you must exercise. Most days of the week, adults need 30 minutes of moderate-to-intense exercise, while children need at least an hour. Maintaining your fitness will help you feel and look better, keep your weight down, and keep your body in shape. Every day, everywhere, we pledge to uphold the motto "Good Food, Good Life."

CONCLUSION

The cornerstones of optimal health are a healthy diet and consistent exercise. Being overweight can result from bad eating habits and insufficient exercise, which can also cause other health issues. A healthy lifestyle can be maintained by eating well and exercising. The cornerstones of optimal health are a healthy diet and consistent exercise. Being overweight can result from bad eating habits and insufficient exercise, which can also cause other health issues. A healthy lifestyle can be maintained by eating well and exercising. Because what we eat has a big impact on our health, we will be concentrating more on eating a healthy diet here. Obesity and its associated health issues can be caused by poor eating habits and insufficient physical activity. A healthy lifestyle can be maintained by proper nutrition and exercise. We'll concentrate more on eating a healthy diet here because our health is greatly influenced by what we eat. All of the essential macro and micronutrients must be present in the proper amounts in a balanced diet. For optimal health, people typically consume too many macronutrients and insufficient micronutrients.

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