

### Nutrition and Sport - Nutritious Diet in Regular's Day - Editorial

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#### COLUMN ARTICLE

Oxford Dictionary defines Nutrition as the process of providing or obtaining the food necessary for health and growth. "A guide to good nutrition". On the other hand, Cambridge Dictionary defines Nutrition as the process of taking in and using food, or the scientific study of this'. The year of 2016, or as a few mathematicians would say, we are into the second decade of another century of sun's revolution [1].

Combine sports and nutrition, you'd arrive at what Wikipedia answers all. They say, "*Sports Nutrition is the study and practice of nutrition and diet as it relates to athletic performance. It is concerned with the type and quantity of fluid and food taken by an athlete, and deals with nutrients such as vitamins, minerals, supplements and organic substances such as carbohydrates, proteins and fats.*"

We wonder, at times, if not many a time, what's in rarity that paints the lives of these unflappable athletes with bounds and ounces of credence day-in and day-out if only to succeed, or say, reach the top. "*Fate to come down and be sewn into boards, to make a certainly movable framework with a sack and a knife, moving like a trundle would do anything that could have possibly done with bare hands and barren feet. We are in our own march to journey beyond the farthest corners of the earth bent, if not bruised, on the loft*

*ends of our destiny, betokening a humble character. Isn't it?"*

A month ago, one of the most beady-eyed and agog sporting event in the world of sport, The Olympics have taken place. Many an athlete has touched down and flew off safely from the Antonio Carlos Jobim International Airport, in Rio de Janeiro. My nation, India, might not be as great as you all think, but, we did fly home with a few medals. Today, we pay our prostrating to our Gurus, parents and everyone who ensured our girls haven't returned home empty handed [2].

William Ross Wallace (1819-1981) in his poem "*The hand that rocks the cradle is the hand that rules the world*" said,

*"Woman, how divine your mission  
Here upon our natal sod;  
Keep-oh, keep the young heart open  
Always to the breath of God!  
All true trophies of the ages  
are from mother-love imperaled,  
for the hand that rocks the cradle  
Is the hand that rules the world".*

If not for the sacrifices of our parents and coaches, we wouldn't be here, nor, we wouldn't be writing this.

As professional nutritionists, we understand, Water is the most neglected nutrient. At the most basic level, nutrition

is important for athletes' as it provides source of energy required to perform the activity. It is not just at type of food that goes in to the body, eating food on one will have a huge impact on the levels of performances of athletes and their bodies' ability and performance to recover after exercising. We read, write and breathe nutrition at the dawn of the morning's sun and even at the dusk of the evening's sky [3].

Through our pens, we shall build a camaraderie that lasts beyond the canons of time. We shall, too, dear readers, would like to be on your good side when the earth is crumbling down to its knees and our bodies are waning out into the inevitable graves beyond the soil.

Melvin H Williams in her research article entitled "Dietary Supplements and Sports Performance: Introduction and Vitamins has reported that; Dietary supplements are used by athletes worldwide. In the United States, the Dietary Supplement Health and Education Act has defined dietary supplements as something added to the diet, mainly vitamins, minerals, amino acids, herbs or botanicals, and metabolites/constituents/extracts, or combination of any of these ingredients. In addition to actual food products targeted to athletes and physically-active individuals, numerous companies have marketed dietary supplements to athletes, often with the claim that sports performance may be enhanced [4].

Ms Mayuri and I have come up with a scheduled diet that would help many a budding athlete and social animals (kindly read as personnel) who are healthy, and, who are aiming to be healthy all over again.

### Pre - Workout

The prework out goal of every athlete is to be fueled, hydrated and comfortable. The ideal timing of a pre workout meal depends on individual comfort and performance, as well as the intensity of exercise planned. Generally, sports medical guidelines suggest that a meal or series of snacks be consumed 1 to 4 hours before exercise. The goal is to allow ingested carbohydrates to be absorbed and stored in the liver and muscles as glycogen [5].

Foods best suited for the pre workout meal are carbo-

hydrate rich, low to moderate protein and easily digested typically low fat and low fiber choices.

### Sample Pre work out foods

- Fruits and low fat yogurt
- Sandwiches made with lean meat or peanut butter
- Energy bars
- Cereals and millets (Oats, wheat flakes, ragi, bajra) with milk
- Whole wheat pasta and rice based dishes with low added fat

### Post - Workout

As all types of workouts use carbohydrate for energy, muscle carbohydrate depletion is inevitable. Therefore, a post workout meal, high in carbohydrate is required to refill muscle carbohydrate/energy store. Research has shown that a carbohydrate intake of 0.8 g per Kg of body weight maximizes glycogen synthesis and accelerates protein repair while preventing excess fat gain.

Since muscle protein is degraded during workout, the addition of a relatively large amount of protein in post work out meal is necessary to help rebuild the structural aspects of the muscle. Post work out meal should be rich in protein and carbohydrates and free from fat. Eating fat during the post workout period may slow down the digestion and absorption of carbohydrates and proteins. Finally, the important factor to be considered is the timing of this meal. It is absolutely crucial that to consume post work out meal immediately after work out [6].

### Sample Post workout foods

- Fruits like banana, grapes and watermelon juice 300 – 400 ml
- Glucose mixed with water 300 – 400 ml
- Whey protein with water
- Boiled egg

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