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Nutrition and Diet Plan for Soccer Players

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Abstract:

The purpose of the study was to find out the Nutrients and diet to enhance fitness of Soccer players. As a science, nutrition is concerned with the study of food and effect on soccer players. Soccer is a sport that consists of a variety of exercise intensities ranging from sprinting to standing still. Fuel from the bursts of intense activity is provided predominantly by carbohydrate and fat used during the less intense parts of the game. Soccer is a power sport and requires both strength and endurance. As a consequence a soccer player's requirements are 1.4-1.7g of protein per kg body weight. Soccerplayers need fats because active muscles quickly burn through carbohydrates and need fats for long-lasting energy .Vitamins and minerals have no caloric value. Although they are required only in small amounts, they are essential for body functioning. Water is the most basic of all the nutrients-it is necessary to sustain life.A pre match meal should be eaten 2-4 hours before training or a match. The meal should be high carbohydrate, low in fat and low to moderate in protein.Post-match food Effective recovery from training and replacement of the glycogen stores used during training or games is essential. These five components of diet (Nutrients) are being used by the body to sustain vital processes such as repair and regulation of cellular functions and the production of energy.

***Key words**: Balanced Diet and Nutrition: Macro and Micro Nutrients, Pre match food, Post match food.*

Balance Diet

It is never generalized and suitable for all individual. It is individual specific.Variety is the key to a balanced diet. There is no perfect food or supplement that can supply the 40-plus nutrients the body needs for top performance. A daily diet should be made up of a selection of foods from each of the five food groups. A basic food plan for one day should have: Breakfast 35%, Lunch 27%, Snacks 15%, Dinner 23%.

Nutrition: It is the process of obtaining and consuming food or breaking down food and substances taken in by themouth to use for energy in the body**.**

Nutrients: The energic food in our diet consists of various types of essential chemicals for our body termed as nutrients:-Protein, Fat, Carbohydrates, vitamins and Minerals.

Components of Diet Nutrients

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Fats
Proteins

Minarals

A balanced diet will provide you with enough energy and nutrients to stay healthy feel good and perform well in training and competition. Athletes have different requirements to the general population but essentially the diet should still be made up of the five basic food groups with greater proportions of some of the food group's example,Carbohydrates and Protein.

Carbohydrates

Carbohydrates have one major function in the body – to provide energy for fuel. In fact, the brain, nervous system and red blood cells must have a constant supply of carbohydrates to keep working.

Soccer is a sport that consists of a variety of exercise intensities ranging from sprinting to standing still. Fuel from the bursts of intense activity is provided predominantly by carbohydrate and fat used during the less intense parts of the game. Fatigue in soccer is often caused by a depletion of muscle glycogen (the carbohydrate stored in the muscle). Also if blood glucose levels drop during a game this may lead to loss of concentration and tactical skills. This is why carbohydrates are so important for soccer players. Carbohydrates are stored in the body as glycogen in the muscle and liver, therefore it is essential to pay attention to the amount of carbohydrate you eat on a regular basis.

Nutrition experts advise people to choose whole grains (such as brown rice, oatmeal, whole wheat bread) more often than processed carbohydrates (such as white bread, cakes, crumpets). Whole grains both provide the energy athletes need to perform and the fiber and other nutrients they need to be healthy.The amount of carbohydrate that you need to eat each day depends on the amount of training you do on a daily basis. On average soccer players would require 5-8g carbohydrate per kg body weight.

Protein

Protein is required throughout life to create, maintain and renew our body cells. Protein is essential for the growth and repair of all body tissues including muscle and bone. It is not difficult to meet protein needs if eating a balanced diet with a variety of foods. However athletes have slightly higher protein needs than the average person due to the wear and tear on their bodies.

Soccer is a power sport and requires both strength and endurance. As a consequence a soccer player's requirements are 1.4-1.7g of protein per kg body weight. If performing more strength training aim for the upper end of that range i.e. 1.7gram protein/kg.Animal protein sources include: meat, chicken, fish, milk, yogurt and eggs.Vegetable protein sources include: beans, lentils, tofu, nuts and seeds.

Fat

Fats are oily or waxy substances made up of fatty acids and glycerol. Like carbohydrate and protein, fat is essential for health but does pose a problem if you do not exercise enough. Excess fat contributes to weight gain, heart disease, and other health problems. Even for athletes who burn off the extra energy fat supplies, there is an increased risk of adverse effects later in life.

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Soccerplayers need fats because active muscles quickly burn through carbohydrates and need fats for long-lasting energy**.** Experts advise athletes to concentrate on healthier fats, such as unsaturated fats found in most vegetable oils. Fatty foods can slow digestion, so it's a good idea to avoid eating these foods for a few hours before and after exercising

As an example, a male soccerplayer requiring 3200kcals per day could eat 90g fat per day, which would equate to 25% to total energy intake.

A female soccer player requiring 2500kcal per day could eat 70g fat per day, which would also equate to 25% of total energy intake.

Vitamins And Minerals

Vitamins and minerals have no caloric value. Although they are required only in small amounts, they are essential to body functioning. Vitamins are needed for normal growth and development .Vitamins do not provide energy from the foods that are consumed. Minerals are essential to the regulation and performance of such body functions as the maintenance of water balance and skeletal muscle contraction.

Vitamins are classified according to their solubility. Water soluble:-B1, B2, B12, Niacin and folic acid. Fat soluble:-A,D,E,K

Water

Water is the most basic of all the nutrients-it is necessary to sustain life. The most abundant of all the nutrients in the body,water accounts for approximately 60% of the chemical process performed by the body. It is essential for such functions as energy production, digestion, temperature regulation, and elimination of the by-products of metabolism.

Pre Match Food

A pre match meal should be eaten 2-4 hours before training or a match. The meal should be high carbohydrate, low in fat and low to moderate in protein.

It is also important to note that large meals take a long time to be digested and absorbed. Large meals eaten the day before an athletic event would be acceptable; however, large meals should not be consumed on the day of an event, before the competition. Suitable foods for a pre match meal

Pasta with tomato based sauces with chicken and vegetables or other low fat sauce fried noodles or rice with vegetables and meat. Cereal and milk/yogurt., Toast/muffins/crumpets with honey, jam .Rolls or sandwiches with meat. Suitable foods for pre match snacksFresh or dried fruit. , Cerealbars Fruitbuns, flavoredmilk, Low fat yogurt, Rice.

Post Match Food

Effective recovery from training and replacement of the glycogen stores used during training or games is essential. When you exercise, you should aim to have carbohydrate rich food or drink within 30 minutes as the muscle can store carbohydrate more efficiently during this time.After each game the players should aim to eat:

Minimum 60g Carbs and 20g Protein and Fluids

Carbohydrate

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Choose one option

	read Roll and Banana	(60g)
	eal Bar and 2 Fruit	(60g)
	t / Iced Bun and Banana	(60g)
	6 Jet planes (lollies) and Bread Roll	(60g)
	ml Sports drink and 2 Fruit	(75g)
	umpets/English muffins with jam	(50g)

Post-match recovery snacks providing 50g carbohydrate and 17g protein

- 1 Sandwich with low fat spread and tuna/chicken/meat plus a piece of fruit.
- 200g low fat yogurt plus cereal bar and banana.
- 400ml flavored milk and 1 piece of fruit.

Add in cereal bars, sports drinks, bananas, dried fruits etc to add more carbohydrate to match your needs.

Meal time for Soccer Players

08:30 am Game

Breakfast	6.00am-7.00am
Game	8.30am
Post-Game snack	10.30am
Lunch	12.30am
Afternoon snack	3.30pm
Evening meal	6.30pm
Supper	9.00pm

10:30am Game

Breakfast	7.00am-8.00am
Game	10.30am
Post-Game	12.30am
Lunch	2.30am
Afternoon snack	5.30pm
Evening meal	7.00pm
Supper	9.00pm

01:00 pm Game

Breakfast	7.00am

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Pre Match	10.00am-11.00am
Game	1.00pm
Post-Game	3.00pm
Afternoon snack	5.00pm
Evening meal	7.00pm
Supper	9.00pm

Evening Game

Breakfast	8.00am
Morning tea	10.00am
Lunch	12.00pm
Pre match	3.00pm
Game	6.00pm
Recovery	8.00pm
Evening meal	10.00pm

Conclusion:

Dietary planning requires the thoughtful application of nutritional knowledge to ensure that the diet is adequate and balanced. Player's conditions and factors such as age, sex, weight, environment and level of physical activities must be considered in dietary planning. Because of the significant impact of the nutritional practice on health, the production of energy for physical activities and the regulation of body composition, attaining and maintaining desirable level of health fitness requires careful attention to nutritional practices.

Works cited and consulted:

1. Sports Nutrition, An Introduction to Energy Production and Performance. Asker Jeukendrup, Michael Gleeson. 2004.
2. Nutrition for Life. Catherine Saxel by. 2002.
3. AU Winning Diet.U Australian Institute of Sport and Jeni Pearce. 2002.
4. Cary Zinn U. Consultant Dietitian & Sports Nutritionist.Auckland University of Technology. 2007.
5. Bucher, Charls A. Foundatation of Physical education and Sports, B.I. Publication, New Delhi, 1992.