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## Nutrition for athletes to enhance performance

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### Abstract

Chronic Low Back Pain (CLBP) is defined as mechanical musculoskeletal pain in the lower back that has no known cause and lasts for more than 12 weeks. It is one of the four most common health problems in the world with huge socio-economic consequences. Various interventions are used for its physiotherapy treatment, such as electrotherapy methods that seem to have a positive effect on reducing pain and improving the functioning of these patients. The aim of this review was to evaluate the efficacy of interferential current (IFC) in the treatment of patients with CLBP. The following databases were searched in English: MED line, Science Direct and Scopus; with the following keywords: Efficacy.

**Keywords:** Chronic low back pain, interferential current electrotherapy, physiotherapy, rehabilitation

### Introduction

Athletics is becoming increasingly competitive. More and more stress is being placed on how well you perform. To reach your highest potential, all of your body systems must be perfectly tuned. Nothing is more important to your well-being and ability to perform than good nutrition. Eating the right foods helps you maintain desirable body weight, stay physically fit, and establish optimum nerve-muscle reflexes. Without the right foods, even physical conditioning and expert coaching aren't enough to push you to your best. Good nutrition must be a key part of your training program if you are to succeed.

Sports and nutrition are directly related to each other. Taking into consideration the fact that sportspersons need more energy to carry out their sporting activity effectively, it becomes of prime importance to take care of the nutrition for sports performance. Careful planning and implementation is required, when it comes to athlete sports nutrition. Read further to explore information about sports nutrition diet as far as the nutritional diet of sportsperson is concerned, there are lot many things that deserve proper attention like selection of foods, timing of food intake, selection of nutrition supplement and many more. These things are again decided, keeping in mind several factors like the athletes' energy needs, body composition, nutritional needs etc.

### Sports Nutrition Diet Tips

- There is a need to consume fats and in fact 20-25% of your energy should come from fats. If the fat intake would be less than that, it won't be able to make any contribution in boosting your performance level.
- There is a need to eat food before, during and after your exercise session, as that helps to control blood glucose level, thereby helping in enhancing your sports performance.
- When an athlete performs his/her sporting activity, lot of fluid loss takes place, which causes dehydration. Dehydration can eventually cause heat stroke. So, it is vital to drink adequate water during and after your sports performance.
- It is advisable for Sportspersons to eat a balanced diet consisting of plenty of proteins, vitamins and minerals. Opt for complex carbohydrate food and the intake of fat should be in moderate quantities.
- It is vital to plan out your pre exercising or sports meal that works vest towards charging your energy. Limit the quantity of salt and simple sugar.
- Don't change your diet plan before going in for your sports competition.
- Fasting is not recommended for sportspersons, as it is likely to hamper their performance level.

- If you feel some kind of an uncomforted or pain in your abdomen or intestine, then you must have had a high fiber or high fat content food in your pre exercise/sports meal, so take care that it doesn't happen again.
- The problems come when deciding what the best nutrition for exercise and athletics is.

### Conventional (Wrong) Approach

This is an example of advice that is given to athletes:

There is no one "miracle food" or supplement that can supply all of your nutritional needs. Certain foods supply mainly proteins, other foods contain vitamins and minerals, and so on. The key to balancing your diet is to combine different foods so that nutrient deficiencies in some foods are made up by nutrient surpluses in others. Eating a variety of foods is the secret.

The nutrients – the proteins, carbohydrates, fats, vitamins, minerals, and water are teammates that work together to provide good nutrition. Just as each team member carries out different tasks during a game, each nutrient performs specific functions in your body. A lack of just one nutrient is a disadvantage to your body, just as losing a player to the penalty box is a disadvantage for a hockey team. Your body needs all these nutrients all of the time, so the foods you eat should supply them every day.

Just because you are not hungry does not necessarily mean that your body has all the nutrients it needs. You can fill up on foods that contain mostly carbohydrates and fats, but your body still has basic needs for proteins, minerals, and vitamins.

### Methodology

The training period offers you an excellent opportunity to establish sound eating practices that will benefit you on the playing field as well as give you a measure of well-being throughout life.

### Make Snacks Count

Chose (sic) snacks that contain more than just calories. When you eat out with friends, choose something nutritionally sound, like a cheeseburger with a slice of tomato and lettuce leaf. How many food groups are present in this sandwich? What might you eat along with this sandwich to make an even better snack?

### Look for Extra Food Energy

Teenage athlete's burn up more calories than non-athletic teens. You can fill this requirement by eating more food from all food groups. Carbohydrates are the most efficient fuel for your body during strenuous exercise. Get most of your extra energy from foods like starchy vegetable and whole grain or enriched bread, cereal, rice, or pasta instead of from fatty foods. For example, on an athlete's plate, a baked potato should get the nod over French fries.

### Eat Regularly

Breakfast is especially important because you need food to start the day. Your body begins the day in a low-energy, fasted condition. Teens that eat breakfast score higher on physical fitness tests. Breakfasts can be made up of any combination of nutritious foods that you enjoy eating. Spaghetti and meatballs, together with an orange and a glass of milk, is nutritionally sound meal for any time of the day-even breakfast!

### Check Your Diet Frequently

Spot-check your daily diet at least once a week. Are you

eating at least the minimum number of servings from each food group each day? How can you use the food guide pyramid as a tool to make improvements?

How can you tell if your diet is stacking up? Nutritionists have developed a food-guide system in the shape of a pyramid that can help you rate or evaluate your diet. This guide divides food into five groups on the basis of the nutrients each group provides. By eating the recommended amounts of food from each group daily, you can greatly increase your ability to get all the nutrients your body needs-and that will improve your ability on the playing field.

Here is some additional information about the food groups that can help you improve your diet. There then follows specific recommendations based on the all too familiar food triangle. In this case it involves:

- **6 to 11 portions daily** of whole-grain and enriched breads and cereals, such as cooked or ready to eat cereals, bread, macaroni, grits, spaghetti, crackers, noodles, and rich. These, it says, 'Contributes complex carbohydrates (starch and fiber) and significant amounts of protein, B vitamins, and iron.
- **3 to 5 servings daily** of vegetables – including dark green, deep yellow, and starchy vegetables – and their juices. These, it says: Provides vitamins and minerals that complement other food sources. Good sources of Vitamin C include tomatoes, broccoli, and brussel (sic) sprouts. Good sources of Vitamin A include carrots, broccoli, spinach, greens, pumpkin, and sweet potatoes.
- **2 to 4 serving daily** of fruits and their juices, which are, apparently a Good source of many vitamins and minerals. Good sources of Vitamin C include citrus fruits and their juices, melons, and strawberries. Apricots are good sources of vitamin A.
- **3 servings daily** of Milk, yogurt, and all types of cheese which 'Provides calcium. Also contains protein, vitamin A, and riboflavin (B<sub>2</sub>).
- **2 to 3 servings daily** of Beef, pork, lamb, poultry, fish, eggs, dry peas, dry beans, peanuts, peanut butter. These the advice says are a 'Good source of protein. These foods also contain thiamin (B<sub>1</sub>), riboflavin (B<sub>2</sub>), niacin, iron, and Zinc.

### Discussions

To meet increased energy needs, most teen athletes require more than the minimum number of servings listed. In some cases, a teen athlete may need more than the recommended number of servings. For most athletes, the increased energy should come from the vegetable group and the bread, cereal, rice, and pasta group. Food in these two groups contains a lot of starch, which is an excellent source of food energy. Athletes who participate in very high levels of physical activity and or who have the largest body stature will require the highest intake of food energy. Foods that occupy the smallest area the top of the Food Guide Pyramid, such as butter, margarine, sweets, and jellies, should be used sparingly. These foods do provide energy and some nutrients. However, go easy on these foods and get your energy from foods that are more nutritious. Your body needs the additional vitamins and minerals to help it use energy. Make this food guide pyramid system the basis of your training table.

### Conclusions

Nutritionists can play an essential role optimizing the health and athletic performance of vegetarian athletes of all ages and abilities. Sports nutritionists who work with vegetarian athletes and their coaches and trainers, however, need to be sensitive to and knowledgeable about vegetarian issues. In this setting, the role of the nutritionists is to work with the athlete to ensure adequate nutritional status given his/her vegetarian beliefs, income and lifestyle. While athletes should be encouraged to eat a wide variety of plant foods, this does not mean convincing the vegetarian athlete that they need poultry, fish or dairy products in the diet. The American Dietetic Association's position on vegetarian diets states that "vegetarian diets are healthy and nutritionally adequate when appropriately planned".

### References

1. "Sports Nutrition and Weight Management" "to 15", "Dr. Vikram Shankarrao Kunturawar 2016, 1.
2. Sports Nutrition for Endurance Athletes, 3rd Ed. By Monique Ryan Paperback 2012.
3. Krause's Food and Nutrition Therapy, 12<sup>th</sup> edn, 2008.
4. Nancy Clark's Sports Nutrition Guidebook 4<sup>th</sup> Ed. By Nancy Clark 2008.
5. Nutrition for Fitness and Sports, Melvin Williams; Brown, Benchmark 1995.
6. Nutrition for the Recreational Athlete, Catherine Jackson, editor; CRC Press 1995.
7. Advances in Sports Medicine and Fitness 1989, 2.