



PROTEIN NEEDS FOR PERFORMANCE

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INTRODUCTION:

Most of the work we do with athletes regarding sport nutrition is to teach them and their coaches how to structure their diet and time food intake to optimize performance and recovery. Dietary supplements can play a meaningful role in helping athletes consume the proper amount of calories, carbohydrate, and protein in their diet. However, they should be viewed as supplements to the diet, not replacements for a good diet. While it is true that most dietary supplements available for athletes have little scientific data supporting their potential role to enhance training and/or performance, it is also true that a number of nutrients and/or dietary supplements have been shown to help improve performance and/or recovery. This can help augment the normal diet to help optimize performance. Exercise physiologists must be aware of the current data regarding nutrition, exercise, and performance and be honest about educating their clients about results of various studies (whether pro or con). With the proliferation of information available about Protein supplements to the athlete, the exercise physiologist, nutritionist, and nutrition industry lose credibility when they do not accurately describe results of various studies to the community. The following overviews several classifications of nutritional supplements that are often taken by athletes and categorizes them into apparently effective, possibly effective, too early to tell, and apparently ineffective supplements based on my interpretation of the literature. It should be noted that this analysis will primarily focus on whether the recommended

protein has been found to affect exercise and/or training adaptations based on the current available literature. Therefore, just because a nutrient does not appear to affect performance and/or training adaptations, that does not mean it may not have possible health benefits.

Proper nutrition is essential to help athletes recover from workouts and competitions. It is widely accepted that carbohydrates are a critical fuel source during exercise and also play a major role in promoting recovery after exercise.

However, the importance of protein is less understood. There is no doubt that protein ingestion helps athletes recover from exercise, but questions remain regarding the optimal amount, type and timing of protein needed in order to optimize training-induced adaptations in skeletal muscle.

NUTRITIONAL GOALS:

Every athlete is different. Not only do they have different necessities for energy and nutrients depending on body size and physique and on their event and training load, but in addition they have individual physiological and biochemical characteristics that shape their nutrient needs. Each athlete must therefore identify key nutritional goals, in terms of the requirement for energy, protein, carbohydrate, fat and all of the vitamins and minerals that are essential for health and performance. Once nutritional goals are identified, each athlete must therefore plan an eating strategy to ensure that suitable foods are eaten in appropriate amounts at the right times to run into those goals.

While the general principles are simple, the detail may be more complex, and the serious athlete will seek professional help to ensure that health and performance are not exposed by poor nutritional choices. Accredited sports dietitians and qualified sports nutritionists are able to give expert advice that athletes can trust.

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