

COMMON MEDICAL ILLNESSES IN ATHLETICS:

INADEQUATE NUTRITION



Because nutrition is a driving factor behind success in physical activity, athletic performance, and recovery, this topic is not a new point of interest in athletics. However, so much of what is published to our athletes and our coaches is misinformation, marketing based, or

just plain wrong. Therefore, weeding through misinformation can be a daunting task.

Although proper nutrition for athletic competition is specific to the individual and their sport in question, it is not uncommon for a majority of athletes to fall short in the broad-based nutritional guidelines that have been set for those in athletics. For example, when is the last time you saw an athlete's pre-game meal that either consisted of a Big Mac or a 5 Hour Energy Drink? With broad-based nutritional guidelines readily available and well-researched, it can be very easy to get our athletes on the proper course to well-rounded nutrition, adequate hydration, and optimal performance.

Therefore, the following information is broad-based in its scope and has been taken from the following peer-reviewed and research-based recommendations. These documents are also available free of charge at each entities' website.

*Nutrition and Athletic Performance:
A Joint Position Statement of the American College of
Sports Medicine, Dieticians of Canada, and
The American Dietetics Association. 2009*

*National Athletic Trainers' Association Position Statement:
Evaluation of Dietary Supplements for Performance Nutrition, 2013*

Supplements 101

In a realm where supplements are mostly unregulated and their claims unsubstantiated, the athlete, coach, or parent could very easily be spending a considerable amount of money on a product that could either be worthless, partially effective, have dangerous consequences, or just be downright illegal and they wouldn't necessarily know it. Therefore, here are a few good points to remember when considering supplementation.

- #1. Whole foods should ALWAYS be emphasized over dietary supplements for a number of reasons:
 - a. Greater Nutritional Content
 - b. Better Absorption Rates
 - c. Strict standards for Safety, Purity, and Labeling
- #2. Proper nutrition is always first. Supplementation is always second.
- #3. Most of the amino acids, vitamins, and minerals required for muscle building and energy are much less expensive and much easier to be absorbed when they are retrieved from a dietary staple and not a processed powder.
eg. Peanut Butter, Milk, Eggs, etc...

After Steps 1-3:

- #4. If you are still considering a multivitamin or multimineral, focus on those most needed in athletics such as calcium, vitamin D, the B vitamins, iron, zinc, magnesium, and some anti-oxidant vitamins such as C and E, Beta-carotene, and selenium



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What is Nutrition for the Athlete?

General Recommendations:

- Athletes need to consume adequate energy during strength and conditioning training
 - Low energy intake = loss of muscle mass, menstrual dysfunction, loss or failure to gain bone density, increased risk of fatigue, increased risk for injury and illness, and a lengthened recovery process
- Body weight and composition should not be used as the sole criterion for participation in sports and daily weigh-ins are discouraged
 - Ideal weight (fat) loss should occur in the off season or prior to beginning competition
- Carbohydrate recommendations range from 2.7-4.5 grams/lb of body weight
- Protein recommendations range from .5-.8 grams/lb of body weight
- Fat recommendations range from 20-35% of total energy intake. High-fat diets are not recommended for athletes

Areas of Challenge:

- Hydration! Water deficits of as little as 2-3% negatively affect performance.
 - Every 1lb of exercise weight loss = 16-24 oz of replacement fluid
- Athletes who use severe weight-loss techniques, eliminate one or several food groups from their diet, or consume high or low carbohydrate diets are at a greater risk of:
 - Micronutrient deficiencies in iron, calcium, vitamin D, riboflavin, zinc, & vitamin B12
 - Bone Density Loss
 - Menstrual Dysfunction
 - Loss of Lean Muscle Mass



Supplements 101 cont.

#5. If you are considering a supplement, consider those supplements with third-party verification. However, also consider that these third-party verification groups do not assure safety or efficacy but assure truth in labeling and good manufacturing practices.

Common Groups Include:

A. For Purity:

- U.S. Pharmacopia Dietary Supplement Verification Program
- ConsumerLab.com Quality Evaluation
- NSF International Dietary Supplements Certification Program



B. For Purity and Banned Substances:

- NSF Certified for Sport
- Banned Substances Control Group
- Informed-Choice Program

Keep in mind that good health and successful athletic competition all begin with a nutritionally well-balanced diet and adequate hydration. Should supplementation be a consideration, always do your homework first. You may very well be able to find a safer and more nutritionally-sound product if you do.

Have a great summer!

A Note to the Reader.....

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