



Food over Supplements: A How-to Guide

A well-planned diet and hydration plan are recognized by many athletes to positively influence their athletic performance. Combine that with physical training, conditioning, mental preparation, good sleep habits, and commitment, and athletes are well on their way to successful careers. But with a multi-billion dollar dietary supplement industry marketing new specialized sports nutrition products, many student athletes fall prey to choosing those products over foods and fluids. In fact, in the 2005 NCAA survey, 41 percent of student athletes reported the use of nutritional supplements, with creatine, protein and amino acid products, and thermogenic products for weight loss most commonly named.¹

However, when we as practitioners simply dismiss the use of use of dietary supplements, we may lose credibility with athletes. It is important that coaches and trainers stay up-to-date and maintain an open dialogue with athletes about the different products on the market, while also educating them on the importance of consuming adequate nutrients through food. That means helping athletes understand that they can get the performance enhancement they need from choosing the right foods and beverages, and coaching them on how to do it.

The foundation of a healthy diet includes lean proteins, whole grains, fruits and vegetables, low-fat dairy, and healthy fats. For athletes, the type and timing of macronutrients are also critical to enhance sports performance. Each of the different food groups supplies the body with different vitamins and minerals which it needs for proper growth, development, and health (see Food over Supplements fact sheet for specifics). Moreover, foods provide much more than just vitamins and minerals. They contain powerful compounds and chemicals that work synergistically to improve the nutritional potential of the diet far beyond what is possible from individual nutrients or supplements.

The U.S. government strictly regulates foods for ingredients, additives, manufacturing practices, safety and packaging. That is not the case for nutrition supplements. Under the Dietary Supplement Health Education Act (DSHEA), dietary supplements are not required to be registered with or obtain pre-market approval by the FDA. This means FDA provides no assurance of purity, safety or effectiveness.² The FDA must show that a supplement is unsafe or has been adulterated before it can be removed from the market.² The FDA does not conduct premarket reviews to determine if a supplement is effective and manufacturers are not required to share with consumers or FDA any information on safety or effectiveness of supplements.² Dietary supplements can cause adverse health effects and may result in a positive test for banned substances.²

That said, some situations may call for a dietary supplement. For example, athletes who omit a certain food group due to a food allergy or other medical issue, or athletes on lower calorie diets may need a supplement in order to meet the recommended daily intake. Further, dietary supplements may be necessary to treat or prevent a known nutrient deficiency. If vitamin/mineral supplementation is required, it should be part of a total dietary management plan and prescribed by a sports dietitian or physician. Dietary supplements should never be taken in place of a healthy diet or “just in case” an athlete feels it is needed. The risk is that when taken in large amounts or at the wrong time, some dietary supplements can hinder performance and can be harmful.

Unlike foods that have a Nutrition Facts label, dietary supplements have a Supplement Facts label that lists the contents, amount of active ingredients per serving, and other added ingredients (like fillers, binders and flavorings). The manufacturer suggests the serving size, but a health care provider might determine that a different amount is more appropriate. Dietary supplements must also include a disclaimer: “This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure or prevent disease.”

When additional macronutrients and hydration are needed, athletes should first complement meals with foods and beverages that have a Nutrition Facts Label. Sports drinks, bars, and gels can be a practical and convenient way to supplement an athlete’s diet if more calories are needed. The fact that a product has a Nutrition Facts label indicates that it contains nutrients found in everyday foods. On the contrary, just because a food or beverage item has a Nutrition Facts panel does not mean it is recommended. Some products, such as energy drinks, may be dangerous and subject athletes to disqualification due to high levels of caffeine and stimulant herbs.

To tackle the use of supplements and ergogenic aids, coaches and athletic trainers need open ears and open communication with athletes. Sports foods and dietary supplements, when used as directed and indicated, can assist in meeting the nutritional needs of athletes. They should never be used to replace a nutrient-dense diet. All student athletes should be familiar with and adhere to the NCAA banned substance list, and should be reminded that they are responsible for what they ingest.

Author

Written by SCAN Registered Dietitians (RDs). For advice on customizing a nutrition plan or determining if a dietary supplement is necessary, consult a registered dietitian (RD) who specializes in sports, particularly a Board Certified Specialist in Sports Dietetics (CSSD). Find a SCAN RD at www.scandpg.org

References

- 1.) Sports, Cardiovascular, and Wellness Nutrition Dietetic Practice Group, Rosenbloom C, Coleman E. Sports Nutrition: A Practice Manual for Professionals, 5th edition. Academy of Nutrition and Dietetics: 2012.
- 2.) http://ods.od.nih.gov/About/DSHEA_Wording.aspx

©2014 Sports, Cardiovascular, and Wellness Nutrition (SCAN)
NCAA is a trademark of the National Collegiate Athletic Association