[IMAGE]

Nutrition for Athletes

Back to Basics

By Michael Dobbins, DC

True or false: I often receive calls from my patients asking, "Doc, what about taking creatine? Should I?" (true) or "What about the powdered entrails of the Mongolian muskrat? Have you seen the studies?" (not so true), and so on. The point is, everyone wants magic. The retail stores, infomercials, magazines, the Web, and endless unsolicited e-mails all promote hundreds of "performance enhancement" products that look good on paper - or at least the models in the ads certainly look good. It is so easy to fall into a trap.

Ponder this: If anything other than food, air and water were necessary to obtain and maintain human health, you would not be reading this article and there would be no magazine. In fact, there would be few humans around. We have not historically had "super" foods or "super" supplements. Yet any review of human history shows us that, in general, people of the not-too-distant past were considerably more robust, more athletic and leaner than the average American today. Review the incredible research of Dr. Weston Price, as recorded in his book *Nutrition and Physical Degeneration,* and you will see the negative physical effects on primitive societies when "modern" food and eating patterns are introduced. Perhaps a "back- to-basics" or at least a "back-to-traditional" diet plan is a more sane approach.

Man doing push-ups. - Copyright â Stock Photo / Register Mark What then shall you, the athlete, eat? Our ancestors made protein and fat the base of their food pyramid. Oh, I know, there was this one tribe on this one island that ate only popcorn or some such thing, but even if that really did happen, it wasn’t the norm for most of humanity. How interesting to consider that in the natural food supply, the high-protein foods that were so basic were also high in good saturated fats. Good saturated fats, our only truly efficient source of fat-soluble vitamins such as A and E, and another factor that Dr. Price called "Factor X," are necessary for proper mineralization of bones. Contrary to what is commonly believed, current literature seems to indicate that the higher the protein intake for humans, the better the whole-body bone density. How interesting, once again, that the traditional diet so neatly provided all that was needed.

How then can I assist you, the athlete, the "wanna-be" athlete or the weekend warrior, in your quest? Other than the dietary changes referenced above, I recommend you take a few fundamental whole-food supplements to make certain you are receiving the nutrients you need before, during and after exercise. Certain whole-food supplements provide nutritional support for joints, proper muscle function (lactic acid distribution) and cardiovascular function (adequate oxygenation for the increased demand). Diet is the critical factor, but changing your diet takes time. You need to provide your body with the essential nutrients in the most efficient way while that change is taking place.

The number of nutrients involved in joint function (at least the ones we know about) is surprising. It is essentially the same as for all connective tissue, like bone. There are 30-plus known factors involved in building and maintaining bones. For example:

- **Manganese** is a trace mineral; it is essential for the proper function and maintenance of bone, cartilage and connective tissues.
- **Calcium** is also an essential nutrient. It is the most important element required for the body to maintain strong bones and teeth.
- **Vitamin E** is a powerful antioxidant that increases joint mobility and protects the joints from damage by free radicals. One of the richest sources of the complete vitamin E complex is found in wheat germ oil.
- **Co-enzyme Q_{10}** increases tissue oxygenation to aid in repair of connective tissues. This important nutrient can be found naturally in bovine (cow) heart tissues.

The combination of these ingredients and others from whole-food sources contributes to the overall functioning and well-being of the skeletal system through a number of physiological processes. I recommend a complex formula that provides food-based nutrients to support ligament and tendon activity. It is derived from what you ought to be eating, but probably aren’t.

For your muscles - and for every cell in your body - the source of energy that keeps everything going is called ATP (adenosine triphosphate). ATP is the biochemical way to store and use energy and efficiently dispose of waste products. A major player in this activity is the B family of vitamins. Talk with your health care professional about taking a whole-food vitamin B supplement that naturally contains small amounts (just like food) of *all* of the factors our bodies need, not just the very few of which we have knowledge.

Fish Oil Capsules, Salmon, Nuts & Grains and Extra-Virgin Olive Oil. - Copyright â Stock Photo / Register Mark Cardiovascular health is of great concern to many people, especially to us baby boomers. It is a major killer of our time and one of the reasons people decide to take up physical activity. There are several nutrients known to assist the heart when under stress. Co-enzyme Q_{10} is one example. People take hundreds of milligrams of this daily, yet never stop to consider that no human ever had such a thing available, and that *human* consumption has always been in micrograms, not milligrams. The best source of co-enzyme Q_{10}, as mentioned, is bovine heart tissue. Another important nutrient for the heart is choline. Choline helps maintain healthy homocysteine levels. Healthy homocysteine levels have been correlated with maintaining healthy blood vessel diameter. The B vitamins also help maintain a healthy and strong heart. For example, vitamin B_6 may help maintain healthy blood pressure and circulation. I recommend a whole-food supplement containing a variety of the foods that provide these and other important nutrients to support the heart.

To receive the best care and guidance for your individual needs, seek the advice of your health care professional. Your doctor's sure and certain guidance will help you sift through all of the hype - diet after diet, magic pill after magic pill, potion after potion - thrown at you from your neighbors, the tabloids, television and the Web. Your doctor should encourage you to start with principles that have stood the test of time. Keep it simple because it *is* simple; otherwise, we wouldn't be here.

Nutrition Essentials

Before, During and After Exercise

While your body's nutritional demands can vary considerably, depending on the sport you're involved in, not to mention the level at which you're performing (professional, amateur, weekend warrior, etc.), all athletes can benefit from keeping a few basic nutritional considerations in mind. The world-renowned Mayo Clinic offers the following tips for maximizing athletic performance:

A bunch of bannanas. - Copyright â Stock Photo / Register Mark **1 How often to eat:** Skipping a meal can cause low blood sugar, which can make you feel weak and lightheaded. If you can't eat a true "meal" before working out, and your choice is candy or nothing, eat the candy - believe it or not, from an energy perspective, it's better than eating nothing. Just remember that candy is high in sugar and low on nutrients; eating yogurt or a banana will provide more lasting energy and better overall nutrition.

A wall clock. - Copyright â Stock Photo / Register Mark **2 When to eat:** Exercising immediately after a large meal may make you feel sluggish or lead to an upset stomach, cramping or diarrhea. Why? Because your muscles are competing with your digestive system for energy. To avoid these complications, eat a large meal at least three to four hours before exercising, or a small meal two to three hours before exercising.

A fork with pasat noodles wrapped around the tines. - Copyright â Stock Photo / Register Mark **3 What to eat:** Carbohydrates are your primary source of fuel. Cereals, breads, pastas, rice and fruit will give you the energy you need to exercise. Within two hours of finishing your workout, eat a meal that contains carbohydrates *and* protein, to help your muscles recover. Fats also provide fuel; however, they remain in your stomach longer, which can make you feel full during your workout.

Water bottle. - Copyright â Stock Photo / Register Mark **4 The water factor:** During exercise, your body produces heat, which leaves your body as you sweat, taking valuable electrolytes - potassium, sodium, chlorine, etc. - with it. Having an adequate water supply allows you to sustain your workout while avoiding dehydration. How much should you drink? When exercising, drink at least one glass before your workout, one glass every 10-15 minutes during your workout, and at least one glass after your workout.

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