

THERE ARE FOUR IMPORTANT DIFFERENCES BETWEEN GENERAL NUTRITION AND SPORTS NUTRITION:

1. Greater total energy/nutrient needs

It has always been understood that athletes require more daily food calories due to their high level of energy expenditure in training and competition. The specific needs for the three individual macronutrients--carbohydrate, lipid, and protein--appear to increase equally for endurance athletes. In other words, if a sedentary person consumes 60 percent carbs, 25 percent fats, and 15 percent proteins, so should an endurance athlete. He/she just needs more of each.

Evidence that athletes also require more micronutrients--vitamins, minerals, and phytonutrients--has begun to accumulate more recently. It is now established that athletes require more antioxidants, such as vitamin E, and more sodium, iron, and other minerals. It remains to be seen whether it is optimal for athletes to increase their intake of all the essential micronutrients proportionately and to the same degree that they increase their energy consumption.

2. Training/competition hydration and energy needs

Athletes clearly benefit from consuming the right forms of nutrition during training and competition. Performance will increase anytime an athlete consumes a well formulated sports drink at a sensible rate during exercise lasting an hour or longer.

3. Post-workout recovery nutrition needs

Fast and complete post-workout rehydration and muscle repair and refueling as vital to maximizing the benefits an athlete gets from a recently completed workout and maximizing performance in the next workout. The human body uses nutrition very differently within the first hour after exercise than it does at other times. Always consume a meal or recovery supplement contain carbohydrates and protein plus fluid within an hour after finishing every workout and competition.

4. Potential benefit of performance-enhancing supplements

Nutritional supplements are not necessary for optimal health, but certain supplements may enhance sports performance to a level that foods cannot match. Creatine is proven to be a "must-have" supplement for strength/speed/power athletes. As yet, scientists have not singled out any equivalent supplement for endurance athletes, but various supplements have shown benefits in select studies.