

Enzymes for Physical Fitness

The quest for optimal health and fitness rages on. Today there is no end to the number of supplements, articles and books dedicated to achieving this allusive goal. Yet amid all of the advice and miracle products offered, you will rarely hear anyone mentioning the important role enzymes play in achieving success.

Enzymes and Digestion: Digestion is defined as the ability to convert food into a form that can be assimilated by the body. Nutrients, whether in the form of food or supplements, can only be delivered to the cells by an enzyme, or multiple enzymes. Thus, it goes without saying that proper digestion and assimilation are vital for good health and physical fitness. Often there is a tendency to fill the body with vitamins, proteins and specialty supplements which lack the necessary enzymes to deliver these essential nutrients in their proper amounts, and to their proper places. The reason we often recommend such large amounts has little to do with the bodies need for such high quantities and has much to do with the body's inability to assimilate such supplements. Thus, to ensure at least some delivery, it is often recommended that we take enormous amounts of specific nutrients to better our chances of delivery. It would be impossible to consume these quantities in a healthy diet of organic foods. Yet we seem perfectly content to flood the body with pills and capsules. The solution is simple! Add a high-quality digestive enzyme with all meals and supplements consumed for proper assimilation.

Diet: The diet of the fitness enthusiast often consists of large amounts of proteins, both in the form of sports drinks and food. Plant and animal prote-



in often contains a substantial amount of fat. As is the case with all living things, whether plant or animal, the proper amount of digestive enzymes are included in the food to break down the proteins, fats and carbohydrates. However, when this food is cooked, processed, stored for long periods of time or picked before ripe, the enzymes it contains become denatured and useless. When we consume such foods our body must then supply the proper enzymes for digestion and assimilation. This can ultimately inhibit the speed by which we reach our goals associated with health and fitness.

Metabolic Enzymes: Metabolic enzymes speed up the chemical reaction within the cells for detoxification and energy production. They enable us to see, hear, feel, move and think. Every organ, every tissue, and all of the 100 trillion cells in our body depend upon the reaction of metabolic enzymes and their energy factor. The pancreas, liver, gallbladder and other organs produce these enzymes. When we eat foods with little or no enzyme activity, we call on these organs to produce the enzymes needed to properly assimilate the food. In effect we are robbing our body of metabolic enzymes. The solution once again is to add a high-quality digestive enzyme with all meals and supplements consumed for proper assimilation.

Protease (proteoalytic enzymes): Protease is the enzyme that digests proteins. For those on a high protein diet it is absolutely essential to add a sufficient amount of protease with each meal (or

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sports drink). To do otherwise is to waste the protein. Without the proper amount of protease we will not get the desired result and potentially over tax the digestive system and the organs responsible for enzyme production, create a pH imbalance and ultimately a toxic body.

Increase Performance:

Athletes are always looking for ways to perform at peak levels. Enzymes can assist in doing so. In a recent study, runners

were given protease supplements or a placebo four times a day for three days. This consisted of 24 hours before and 48 hours after running. The participants were evaluated for mood, muscle soreness and pain threshold 24 and 48 hours after running 30 minutes at about 7 miles per hour. The result was less soreness, improved pain threshold and no mood change with those taking the protease supplements over the group who took the placebo. This is not new. According to some sports medicine reports, there is scarcely a top athlete in Germany who is not familiar with enzyme therapy. Additionally, in Australia, athletes, runners, wrestlers, boxers, handball players and skiers are provided with enzyme capsules as a precaution to aid in rapid recovery after injury.

Sports Injuries & Recovery: As mentioned above, in European countries, enzymes are used to enhance performance and recovery. After a sports injury, a series of metabolic processes takes place (inflammation). The physician will likely recommend cooling, compression and rest to the athlete. One of the major concerns of inflammation is capillary blood flow. The smallest blood vessels in the body are called capillaries. They are responsible for carrying oxygen and nutrients to the cells and removing waste. After an injury some of these capillaries may be damaged, making them incapable of carrying fluid to and from the damaged tissue. This leads to what is termed "walling off" of the damaged area from fibrin build up and blockage. The result is pain, swelling, redness, heat and loss of function. By repairing the capillaries the bruises, swelling and pain disappear. For

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the reason aspirin, ibuprofen or some other type of anti-inflammatory drug is often recommended. The desired effect is to reduce the amount of fibrin in the damaged capillary, improve circulation and speed healing. This can be done very efficiently with protease (proteolytic enzymes) instead of the usual

drugs. Once in the blood stream proteases hydrolyze (digest) the fibrin network and enhance blood flow. Additionally these same proteases have been known to stimulate phagocytes

(cells that ingest foreign particles and debris) and accelerate elimination by way of the lymphatic system.

Conclusion: Enzymes have been described as the "energy of life" and are vital to all living organisms. To achieve the status of health and fitness you desire add a high quality plant based digestive supplement and a high protease product to your daily regimen.

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