Amino Acids are essential to a healthy body!

While most of us know that good nutrition is vital in helping us feel our best and reach our optimal health; finding time to eat a balanced diet on a daily basis seems an arduous task in this fast-paced society. In this age of fast food and nutrient deficient diets it is often common to be missing some of these in your diet. Humans can produce 10 of the 20 amino acids. The others must be supplied in the foods we consume. Failure to obtain enough of even 1 of the 10 essential amino acids, those that we cannot make, results in the breakdown of the body's proteins, muscle and more. The human body does not store excess amino acids for later use; the amino acids must be in your daily food consumption.

Below are some of the benefits of the listed Amino Acids. Before taking any of these in supplemental form you should consult with your healthcare practitioner and see which, if any of these will benefit you.

Aspartic Acid

Aspartic acid facilitates the use of carbohydrates as an energy source for the body. It helps maintain stamina and fight off fatigue. Aspartic acid also aids in the excretion of toxins such as ammonia from the body.

Dimethylglycine(DMG)

Dimethylglycine bolsters the immune system, increases physical energy and may help control epileptic seizures. This is also used in treatment of autism and can improve speech and other areas of difficulty.

D, L Phenylalanine(DLPA)

DLPA is a mixture of the essential amino acid L-phenylalanine and its mirror image D-phenylalanine. DLPA (or the D- or L-form alone) has been used to treat depression. D-phenylalanine has been used to treat chronic pain. It acts as a natural painkiller, selectively blocks pain and is non-addictive. Can be an effective pain reliever for osteoarthritis, rheumatoid arthritis, lower back pain, night-time muscle and leg cramps.

GABA

Gamma-amino butyric acid (GABA) is an amino acid classified as a neurotransmitter. Studies have shown GABA to play a key role in the secretion of growth hormone. The principle anabolic actions of growth hormone include the stimulation of amino acid transport, stimulation of protein synthesis and the proliferation of cell growth.

Lysine

Lysine synthesizes protein to be used for growth and repair of muscles. Lysine allows for better absorption of calcium and so it may help prevent osteoporosis. With the addition of vitamin C, lysine is involved in the development of collagen in connective tissues, skin, cartilage and bone. Lysine can help lower high serum triglyceride levels. Lysine promotes the production of antibodies, hormones and enzymes and may prevent, or at least treat the onset of cold sores (herpes type 1). Lysine may also be helpful in fighting some cases of genital herpes.

L-Arginine

An essential basic amino acid involved primarily in urea metabolism and excretion as well as DNA synthesis. Supports the effects of exercise and is one of the most important amino acids involved in immune function. Can aid in retardation of tumors and cancer, aids in liver detoxification, assists in the release of growth hormones, detoxify ammonia, increase sperm counts in males and can aid in kidney disorders and trauma.

L-Carnitine

Plays a major role in the process of burning fat for energy. This nutrient is a great weight loss aid as it can help to increase muscle strength, energy and increase fat burning efficiency. L-Carnitine can also help you achieve more energy, increase immune function, enhance and protect your mental faculties, and lower your cholesterol and triglyceride levels. May help to control hypoglycemia and enhance the effectiveness of antioxidants.

L- Carnosine

Has strong antioxidant and free radical fighting properties, L-Carnosine is a good way to protect the body's most vital building blocks from many forms of cellular damage. It may have a positive impact on our ability to slow the effects of age-related degeneration by hindering production of abnormal proteins.

L-Cysteine

An important anti-aging nutrient, helps to detoxify the system, protect against copper toxicity, and is an antioxidant free-radical fighter.

L-Phenylalanine

Is an essential amino acid and is a precursor to the amino acid tyrosine. Because tyrosine is necessary for the synthesis of proteins and the production of the neurotransmitters dopamine and norepinephrine, phenylalanine is an extremely important nutrient that must be obtained

through the diet or supplementation. May help in treatment of depression, it also aids in memory, learning and obesity. This amino acid is known to elevate moods and assist in overcoming depression. Improves memory and mental alertness, acts as an antidepressant, helps suppress appetite and increase sexual interest.

L-Glutamic Acid/Glutamine

Glutamine is involved in maintaining a positive nitrogen balance (an anabolic state) and also aids rapidly growing cells (immune system lymphocytes and intestinal cell enterocytes). Glutamine is a regulator of acid-base balance and a nitrogen transporter. May assist in improved brain function, fatigue, in ulcer healing, as a mood elevator and may serve as a brain stimulant.

L-Glycine

Is important in the synthesis of protein. Aids in the production of glycogen which mobilizes glucose from the liver, bolsters the immune system and is effective against hyperacidity.

L-Histidine

Is known as a semi-essential amino acid (protein building block) because adults generally produce adequate amounts except during periods of growth. Histidine is also a precursor of histamine, a compound released by immune system cells during an allergic reaction. It can help dilate blood vessels and alleviate symptoms of rheumatoid arthritis.

L-Lysine

Is an essential amino acid, which means your body cannot manufacture it; it must be obtained through the diet or by supplementation. Lysine is one of the most well known amino acids and is an essential component of all proteins. The function of Lysine is to ensure adequate absorption of calcium, and to form collagen. Promotes growth, tissue repair and production of antibodies. Latest research for Lysine is that it may inhibit the virus that causes cold sores, or fever blisters.

L-Methionine

A Lipotropic agent (helps catalyse the breakdown of fat during metabolism) that reduces fat and protects the kidneys, aids in lowering cholesterol and natural chelating agent for heavy metals. Can significantly improve the skin and can contribute to healthy hepatic function.

L-Ornithine

L-Ornithine is a non-essential amino acid that is an important intermediate in the urea cycle, functioning along with Arginine to rid the body of ammonia, a byproduct of protein metabolism. Also works as a muscle building substance and increases potency of arginine.

L-Taurine

Is a free-form amino acid that participates in a variety of metabolic processes. Taurine is a neurotransmitter, a neuromodulator and is involved in glucose uptake. It is also used to treat some forms of epilepsy by helping to control seizures.

L- Theanine

L-Theanine promotes relaxation without the drowsiness or negative side effects associated with other calming agents. L-Theanine also supports healthy cardiovascular function through this relaxing effect as well as its antioxidant properties.

L-Tyrosine

Acts in regulation of emotional behavior. Important in eventual synthesis of thyroxine, thus aiding in prevention of hypothyroidism. Has important role in stimulating and modifying brain activity, helps control drug resistant depression and anxiety.