How often do you think about Amino Acids? For most people, not so much. Well, your body "thinks" about them 100 percent of the time! While most of us have heard that amino acids are the building blocks of protein, do we really grasp their importance – that without them our bodies simply *cannot* make the proteins required by every living cell? In a sense, that makes amino acids the "building blocks" of our bodies! Is your body getting the amino acids it needs every day? Are you living your most vibrant life?

The collective role of amino acids in the repair and maintenance of a healthy body make them **vital**. There are an estimated 100,000 plus proteins found in the human body made from combinations of amino acids. These combinations are responsible for:

- Building and repairing cells including muscles, organs, glands, bones, skin, hair and nails
- ~ Making metabolic and digestive enzymes
- ➤ Making neurotransmitters critical for brain and nerve function
- Making hormones
- ~ The production of antibodies which fight against infection and illness
- ~ Building a healthy immune system

If one amino acid is deficient, can you imagine how easy it is for a chain reaction of symptoms to occur within your body?

About 75% of the human body is comprised of long and short chain protein molecules made up of amino acids. Of the classic 22 amino

The Amazing Amino Acids

Dr. Dan Smith, D.C.

acids, 12 are non-essential and 10 are essential (meaning our bodies cannot make them on their own; we must ingest them every day in our diet and/or by supplementation – our bodies do not store amino acids like they store fats and starches). A deficiency in even one of the 10 essential amino acids sets up a cannibalistic-type reaction within our bodies – breaking-down our body's proteins (muscle and so forth) –searching for the missing amino acid!

Our mental and emotional wellbeing is another vital area where amino acids are required for proper functioning. Communication within the brain and nervous system occur through chemical "languages" used by neurotransmitters – two fairly well known neurotransmitters are Serotonin and Dopamine. Neurotransmitters are powerful chemical messengers that regulate numerous physical and behavioral processes, including cognitive and mental performance, emotional states, and pain response. Amino acids support the natural replenishment of neurotransmitters.

Additionally, amino acids aid in the detoxification processes of our systems – removing the internal pollutants that are created from environmental chemicals, medicines, nicotine, alcohol, processed foods and so on.

Do you think you are getting enough protein in your diet? If you suffer from any of the following conditions, you may not be getting sufficient amino acids:

- Fatigue
- Carbohydrate cravings
- Allergies
- Hypoglycemia
- Low-serotonin conditions such as depression, anxiety, panic, insomnia, or fibromyalgia
- ~ Low-endorphin conditions such as chronic physical or emotional pain, or addictions