A memo from the desk of Dr. Rody

Dr. Rody Hawkins, Ph.D.

Re: What makes the amino acids in meat so special?

Meat contains all the amino acids and the 10 essential amino acids in sufficient amounts for energy production. These amino acids are the building blocks for sarcoplasmic proteins, myofibular proteins, and connective tissue proteins. In fact, all these proteins are present in meat and they work with the amino acids to release the energy, build the muscle tissue, create the neurotransmitters, and maintain the cellular integrity throughout the body. The sarcoplasmic proteins contain all the glycolytic enzymes needed to release energy. These proteins also contain creatine and creatine kinase, which are an organic acid and enzyme needed to supply energy to the muscles. Another component of sarcoplasmic proteins is myoglobin. Myoglobin is the oxygen receiver in the muscle tissue that receives oxygen from red blood cells to supply it for energy production and muscle building; sufficient oxygen transport is definitely needed for long term energy release and stamina.

Myofibular proteins are structural proteins for muscle building and can be used for energy. The dominant myofibular protein is myosin, which is the main structural protein responsible for muscle contraction. Actin is another dominant structural protein that works with myosin for muscle contraction. These and many other proteins are all readily available in meat.

Connective tissue proteins include predominately collagen, which is the most abundant protein in the body! Although collagen is not directly associated with energy release, it is the structural protein in almost every component of the body, including muscle, tendons, skin, blood vessels, hair, eye, bone and cartilage. Collagen provides strength and functionality to these components. Meat has an abundance of collagen and the amino acids needed to produce more collagen.

Rody

Copyright © RDI Foods LLC. All rights are reserved