Product: Chainsaw

Class: BCAAs

Flavors available: Blue Bomb and Coconut Lime

Serving Size: 30 servings

Product Summary: Branch Chain Amino Acids (BCAAs) are made up of three essential amino acids; Leucine, Isoleucine, and Valine. They are essential because the body cannot produce them from other amino acids, meaning they must be ingested via food or supplements. Chainsaw contains the clinically proven 2:1:1 ratio of Leucine: Isoleucine: Valine. To differentiate from the competition, we have infused our BCAAs with 4 of the 7 major electrolytes to support the additional use of our BCAAs as an intra-workout.

Ingredient Details:

L-leucine (2,500mg) is one of the three BCAAs and is sometimes referred to as the 'main' amino acid since the most popular benefit of BCAAs (muscle building) is primarily due to leucine. Leucine is an activator of the protein known as mTOR, which induces muscle protein synthesis. The studies assessing leucine mostly look at muscle protein synthesis when additional leucine is added to the diet or to a test meal, and it appears that leucine is able to reliably increase muscle protein synthesis after test meals.

Isoleucine (1,250mg) in relation to the other two BCAAs is intermediate for its ability to induce muscle protein synthesis (stronger than valine, but much weaker than leucine). Isoleucine is able to significantly increase glucose uptake and usage during exercise. However, isoleucine does not promote glycogen synthesis. Isoleucine can be seen as the BCAA which mediates glucose uptake (into a cell) and breakdown (into energy) to a larger degree than other amino acids and may serve as a performance enhancer.

Valine (1,250mg) is one of the BCAAs alongside leucine and isoleucine. It seems to be more similar to leucine than to isoleucine, but the transient state of insulin resistance occurs faster than with leucine (isoleucine causes glucose uptake) while the muscle building effects of valine are likely less than both leucine and isoleucine.

Glutamine (5,000mg) has a variety of functions in the body. It helps repair and build muscle, fuel the cells that line the intestines, and is an important component of the body’s immune response. Many athletes take glutamine because excessive exercise depletes glutamine stores, and glutamine supplements are thought to speed up recovery times, prevent muscle wasting and make it easier to build and maintain muscle mass. Athletes who train for endurance events (like marathons) may have reduced amounts of glutamine in their bodies; it is common for them to catch a cold after an athletic event. Some experts think that may be because of the role glutamine plays in the immune system.

Calcium DimaCal® dicalcium malate (40mg) is one of the 7 major electrolytes and is a crucial mineral for bone health as well as metabolic functions all over the body.* Because bone is constantly remodeling, or rebuilding itself, a steady supply of calcium is needed to keep it strong.* DimaCal is a highly bioavailable form of calcium. In fact, comparative research has shown that DimaCal is better absorbed than calcium carbonate, calcium citrate, and microcrystalline hydroxyapatite.

Potassium Citrate (35mg) is one of the 7 major electrolytes and helps maintain the levels of water in the body, and can assist the body by converting excess blood sugar into glycogen. This is an extremely important benefit to athletes and weightlifters. Whereas sodium is mainly found outside cells, potassium is the major positively-charged ion (cation) inside cells and is hugely important for regulating heartbeat and muscle function. It forms the other half of the electrical pump that keeps electrolytes in balance and allows conductivity between cells, also making potassium a critical part of neuron transmission. Potassium citrate promotes kidney health and helps reduce the possibility of kidney stones. Kidney stones can be caused by increasing levels of calcium in the body, or acidic urine. In addition, potassium citrate can help maintain a healthy heart.

Sodium Chloride (32mg) is one of the 7 major electrolytes and is an essential electrolyte for humans; sodium is responsible for controlling the total amount of water in the body. It is also important for regulating blood volume and maintaining muscle and nerve function. Sodium is the major positively-charged ion (cation) outside your body cells and is mostly found in blood, plasma, and lymph fluid. This creates one-half of the electrical pump that keeps electrolytes in balance between the intracellular and extracellular environments (i.e., sodium outside of cells and potassium inside).

Magnesium (14mg) is one of the 7 major electrolytes and may be the most under-appreciated mineral in your nutritional arsenal. Not only is it necessary for over 300 biochemical reactions in the body, but it also plays an important role in the synthesis of both DNA and RNA, essential to every cell of every known living organism. The fourth most prevalent mineral in the human body, magnesium helps maintain normal nerve and muscle function, boosts the immune system, maintains stable heart rate, stabilizes blood sugar, and promotes the formation of bones and teeth. Nuts, spices, leafy green vegetables, coffee and tea are all generally good sources of the mineral.