

# MUSCLE AID®

## Maximizing Energy Production

Malic acid is a precursor to malate, a substance in the body critical in the production of energy in both the oxygen-dependent and independent routes.\* Malate is a source of energy and is the only metabolite of the oxygen-dependent cycle that decreases in concentration during intense physical activity. Therefore, the need for Malic Acid in energy production is critical.

In some individuals, for unknown reasons, the efficiency of energy production via the oxygen-dependent route does not work at a maximum, so the body may switch to anaerobic energy production. This can lead to the build up of acid in muscle tissues leading to muscle soreness and feelings of fatigue. Malic acid has an oxygen sparing effect. As such, it helps promote the proper functioning of the oxygen dependent route of energy production and aids in feelings of muscle wellness.\*

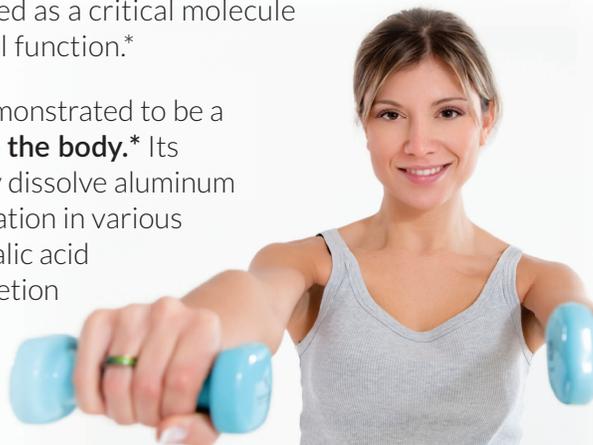


ID# 11002

## The Energy Currency of the Body

**Adenosine Triphosphate (ATP)** is the substance that stores energy created when the body burns carbohydrates and fats in the citric acid cycle (Krebs's cycle). When energy is needed, as for a muscular contraction, ATP is broken down to release the stored energy. ATP is the universal energy molecule for the body and is produced within structures in cells called mitochondria. Malic acid has been indicated as a critical molecule in controlling mitochondrial function.\*

Malic acid has also been demonstrated to be a **chelator of aluminum from the body**.\* Its presence is able to naturally dissolve aluminum complexes and the accumulation in various body tissues and organs. Malic acid primarily increases the excretion of aluminum in the urine, but also causes excretion in fecal matter.



### Supplement Facts

Serving Size: 1 Tablespoon (15mL)  
Servings Per Container: 32

Amount Per Serving	% Daily Value
<b>Malic Acid</b> 1.5 g	*

\*Daily Value not established.

**Ingredients:** Purified water, malic acid, sorbic and/or benzoic acid(s) (protect freshness).

### Muscle Aid provides support for:

- Muscle wellness\*
- Healthy energy levels\*
- Endurance\*
- Aluminum removal from the body\*