



## Fueling the Burn: Higher Metabolism at a Remarkably Lower Dose

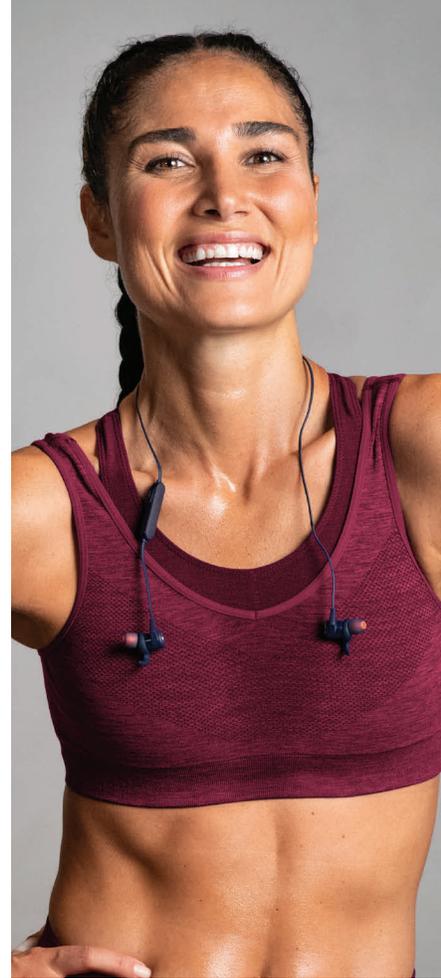
“Higher” “Faster” and “Stronger” describe more than box office superheroes. Ingredients shown to activate AMPK can help your formulas become category heroes because a higher, stronger metabolism is associated with targeted weight loss and sustained energy while cutting calories.

Preliminary research now suggests that remarkably lower doses of Bioenergy Ribose activate AMPK, the enzyme that regulates energy metabolism, with and without exercise.

Adenosine 5' monophosphate-activated protein kinase (AMPK) helps balance energy consumption and production. Studies show that when activated, AMPK stimulates fat burning and boosts energy, among other health benefits.

Energy depletion is thought to stimulate AMPK activity. Some of the best AMPK activators are things we think of as beneficial “stressors” such as calorie restriction, fasting and/or intense exercise. This can be compared with the popular keto diet.

Bioenergy Ribose’s unique mechanism of action through the purine salvage pathway also helps optimize mitochondrial function and has been shown to upregulate the PGC-1a, an important molecule for fat loss and energy metabolism regulation. This is all achieved with low doses of Bioenergy Ribose. (Dosing starts as low as 800mg/serving. Contact us for details.)



### RiboActiv Will Become the Industry’s Trusted AMPK Activator

BLS is acting quickly on this new research, in part by pending patents to support your consumer product formulas:

- Ribose as a generalized activator of AMPK
- Ribose is proven to produce marked benefits for humans at a low dose
- Ribose activates PGC-1a
- Ribose increase citrate synthase activity which correlates with increased mitochondrial activity (more citrate synthase = more mitochondria)

## What is RiboActiv?

RiboActiv, an AMPK booster, is a precision dose of Bioenergy Ribose. Ribose is the backbone of our ATP structure, making it essential for the production of cellular energy. Age and stress increase our cells' ATP requirements. Having sufficient levels of Ribose in your cells is crucial. But while Ribose is naturally present in every living cell in the body, the process to produce it is very slow.

Supplementing with multi-patented Bioenergy Ribose is vital for steady, sustainable cellular energy. Bioenergy Ribose is supported by ongoing research documenting its ability to help you become a healthier you, from the inside out.

## New Science Reveals This Powerful New Evidence

Several recent independent pre-clinical trials by Bioenergy Life Science evaluated the energy-boosting effects of orally administered D-Ribose in low doses in combination with exercise. The trials demonstrated low doses of Bioenergy Ribose activated AMPK, independent of exercise and without exercise.

We also observed:

- Significant ATP level elevation in exercising and non-exercising groups. Serum ATP levels reached up to 250% over that of the control in normal sedentary subjects.
- Combining exercise with D-Ribose treatment resulted in a further increase in serum ATP levels.
- Significant elevation of AMPK in liver, heart and skeletal muscle tissue independent of exercise, indicating the power of Ribose by itself to increase AMPK.
- Significant elevation in PGC-1a activity in skeletal muscle: 30% increase in PGC-1a in skeletal muscle without exercise and 260% increase in PGC-1a with Ribose combined with exercise.
- Significant elevation of citrate synthase activity which indicates the elevated turnover of new mitochondria, or more mitochondria.
- D-Ribose treatment did not lead to a significant alteration in feed intake and body weight gain during the study. Although in some subjects a clear trend in reduced feed consumption, with clear markers of improved ATP metabolome under the stress of exercise.

Researchers concluded that low doses of Bioenergy Ribose efficiently boost serum ATP levels and help to maintain energy levels during strenuous exercise and without exercise. It can also stimulate the activation of genes known to be up-regulated during exercise, adding to the benefits of regular exercise on health and wellness.

BLS intends to build on this research with additional research for this exciting new discovery with such a long-standing ingredient.

---

### About Bioenergy Life Science, Inc. (BLS)

BLS is the Total Solution Provider for dietary supplement, functional food, beverage and personal care product producers and marketers. We use our innovative ingredients or products, applications and finished concepts to partner with our customers to develop or refine new formulations and/or line extensions. We also support our customers' marketing efforts and promotions.

These statements have not been evaluated by the Food and Drug Administration.  
This product is not intended to diagnose, treat, cure or prevent any disease.