

GlucoResolve: AMPK Support

“ Finding ways to activate AMPK is a subject you will be hearing a lot about in the future because it fights aging and increases life span.”

You may have heard me say that glutathione is the holy grail of antioxidants. Well, from what we know of AMPK, it is the holy grail of anti-aging enzymes. AMPK is an enzyme that burns fat, improves metabolism, breaks down sugars, acts as an antioxidant, facilitates oxygen delivery, aids in weight loss, provides similar benefits as exercise, improves blood circulation, helps with fertility, promotes production of mitochondria, helps reduce inflammation, improves heart health, and increases testosterone levels. The enzyme is called "AMPK" short for adenosine monophosphate-activated protein kinase.

Some people call it a protein but it is technically an enzyme consisting of three proteins or sub-units that together create a functional enzyme. Finding ways to activate AMPK is a subject you will be hearing a lot about in the future because AMPK fights aging and increases life span.

As we age, AMPK activation progressively declines. But it



can be increased by lifestyle modification and supplements. This enzyme is so powerful it is often referred to as the "metabolic master switch". AMPK activation has been shown to facilitate several longevity pathways to foster healthy aging and it is essential for maintaining energy balance. One of the ways it works is to enhance autophagy.

We've talked about this amazing process that our body uses to cannibalize inefficient organelles and then recycle them. AMPK stimulates mitochondrial autophagy as well as mitochondrial

repair or biogenesis.

AMPK also optimizes other critically important pathways like insulin, leptin, mTOR, and other components that affect cell growth and metabolism. It also increases nerve growth factor and helps protect against the type of oxidative stress that leads to Parkinson's disease.

Increasing AMPK enzyme activity tells cells to stop storing fat and start using it to create ATP. This master regulator of metabolism shrinks body fat stores especially in the belly region, lowers blood sugar and lipid levels, and produces

other beneficial effects that slow the aging process. Basically, it monitors energy, and is activated when ATP production decreases. Because AMPK inhibits fatty acid synthesis and increases fatty acid catabolism, researchers are investigating it as a possible pathway for weight loss.

As I mentioned, your AMPK levels naturally decline with age. The standard American diet consisting of too much unhealthy fat, sugar and a deficiency of antioxidants also inhibit AMPK activity. Insulin resistance is also a powerful inhibitor of AMPK. As you might expect, AMPK is activated naturally through caloric restriction, intermittent fasting, vigorous exercise and physical stresses like saunas and cold showers. And not surprising there are many natural compounds that have been shown to raise AMPK.

Knowing the power of AMPK, Biotics Research Corporation assembled key phytochemical botanical extracts together with core vitamins and minerals known to support AMPK activation in a product called GlucoResolve. GlucoResolve comes in 180 count bottles and contains therapeutic levels of Pomegranate Seed Extract, Berberine, Lipoic Acid, Green Tea Extract, Forskohlii, Acetyl-L-Carnitine, Grape Seed, Quercetin, Vitamin E, Selenium, Chromium, Biotin, CoQ10, Taurine, Vanadium and Phytolens plus vitamins, minerals and phytochemicals to support blood sugar regulation.

We have discussed some of the benefits of Berberine, EGCG, Lipoic Acid, Acetyl-L-Carnitine, Taurine and CoQ on other forums. And you can read more about the benefits of the individual ingredients on the attached literature sheets, but I'm pretty excited about Pomegranate Seed Extracts.

Pomegranate seed extracts are known to possess enormous antioxidant benefits and also support healthy inflammatory pathways and the maintenance of healthy blood sugar levels in vitro and in vivo. Pomegranate seed extracts contain a variety of exciting phytochemicals including phytosterols, catalpic acid,

polyphenols and isoflavones.

In a number of animal studies, pomegranate seed oil supplementation improved insulin sensitivity in mice with a high-fat diet, supporting its ability to ameliorate glucose intolerance. Catalpic acid supplementation resulted in improvements of fasting glucose and insulin concentrations compared to the controls. A decrease in the accumulation of abdominal white adipose tissue was also observed as well as increased HDL cholesterol and lowered triglyceride levels in plasma.

McFarlin and his team reported that the consumption of pomegranate seed oil and a high fat diet resulted in decreases of body weight, leptin, insulin and increased adiponectin compared to controls.

As a reminder, the higher your adiponectin levels are the less fat you will carry. Beyond the powerful plant based antioxidants shown to enhance AMPK production, GlucoResolve has the antioxidants known to support AMPK, namely, Quercetin, Phytolens, vitamin E, CoQ10, Taurine and Lipoic Acid. When you think of GlucoResolve, think increased AMPK activity which has been shown to support glucose and insulin homeostasis, healthy weight management and an optimized metabolism.

In terms of dosage, two capsules tid and monitor progress. Based on the animal studies and clinical feedback, diabetics should monitor their blood sugar. When the body gets the energy it needs to work, sugar is burned. One tid is the maintenance dose but it may take a while to up-regulate tissue levels.

It's an exciting time to be in this field. And as we discover more and more ways to turn on our anti-aging enzymes like AMPK, we help our clients live a healthier life.

I look forward to being with you again next Tuesday.