

**NUTRI-SPEC**



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**THE NUTRI-SPEC LETTER**

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From:  
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## **SUPPLEMENTS FOR “MITOCHONDRIA SUPPORT”?**

### **Don't make me laugh!**

Dear Doctor,

----- Here we have a new come-on by the unscrupulous Health Food Industry and all its nature cure peddlers.

“Mitochondria Support”? ----- A new buzzword --- on which to base a whole new crop of health food store “Flavors of the Month”.

I haven't wasted my time & energy attempting to track the fraudulent trail back to the original “GURU” (pronounced CHARLATAN) who coined the meaningless term --- but many, many gurus and wannabee gurus have already jumped on the bandwagon.

Why all the hype about mitochondria? The Alternative Healthcare hucksters know that nearly anyone who took a high school biology course will recognize mitochondria as being about “making energy”. A mitochondria-based marketing ploy can easily generate countless convincing non-sequiturs extrapolated from scientific fact. ----- Gullible Health Food store shoppers will eat it up.

The full story on mitochondria is already baked into your Nutri-Spec cake ...

Yes, mitochondria are all about cellular energy --- specifically, aerobic respiration to generate ATP --- the energy that drives body chemistry. Biochemists have called this cellular organelle the ...

### **“THE POWERHOUSE OF THE CELL”.**

But, if you want to talk mitochondria --- if you are looking for more cellular energy to spark your metabolism --- then, stay clear of the Alternative Medicine propaganda blitz --- and run with your Nutri-Spec. Truly ...

### **IF YOU WANT TO MAKE EVERY CELL IN YOUR BODY A MEGA-MITOCHONDRIA POWERHOUSE ...**

Nutri-Spec is the sure way.

How many ways does Nutri-Spec empower --- for you, your family, and your patients --- both the efficiency and the capacity of energy production?

Look at your Glucogenic/Ketogenic Imbalance. Your Ketogenic patients are energy insufficient because they rely too heavily on fatty acids and ketogenic amino acids for energy --- incapable of accessing adequate carbohydrate energy sources. ----- In contrast, your Glucogenic patients are entirely too dependent on rapid oxidation of carbs and glucogenic amino acids, with inefficient access to beta oxidation of fats. ----- Oxygenic K and Oxygenic G, along with the appropriate eating plan, restores full energy-producing capacity.

Look at your Anerobic/Dysaerobic Imbalance. You Anerobic patients are so inefficient at mitochondrial aerobic respiration, they cannot even get into the mitochondria to produce energy. Rather, they are stuck out in the cytosol desperately trying to produce energy by the inefficient process of anerobic glycolysis. Your Dysaerobic patients are quite the opposite --- oxidizing everything in sight, but burning fuel so inefficiently the fire, like an old clunker coal furnace, leaves messy clinkers. In other words, we have oxidative free radical damage creating an excess of Reactive Oxygen Species, and other damaging metabolic by-products. Maximize mitochondria efficiency by supplementing with Oxy D & Oxy D+, or Oxy A & Oxy Tonic.

Look at your BALANCING PROCEDURE. The goal is to first saturate the body with Thiosulfate --- restoring immunologically protective tissue membranes, while at the same time enhancing Aerobic energy over Anerobic energy production. Second, the BALANCING PROCEDURE restores selective permeability to tissue membranes. All individuals need their own specific blend of Oxy Tonic &/or Electro Tonic &/or Oxy D+ to pump up cellular energy

production. You see why we call these three supplements “Metabolic Sparks”? You could just as easily call them “Mitochondria Sparks”.

Look at the entire concept of your Stage Of Life Inflamm-Aging Defense Diphasic Nutrition Plan. In one master plan, you address both the Diphasic daily cycle of energy production, along with the change in the pathways of energy production that occur during advancing Stages Of Life.

But ---

### **THE ABSOLUTE ULTIMATE MEGA-MITACHORNDIA SUPPORT ---**

Is your amazing tandem of ---

### **ACTIVATOR + REJUVENATOR.**

No one but you --- with Nutri-Spec --- effectively employing your SOLID DNP --- can meet the specific mitochondrial needs of every patient, in any state of health, at any Stage Of Life. Only you recognize that the nutrition needs of a 25-year-old are radically different than the needs of a 45-year-old, which are dramatically different than the needs of a 65-year-old --- you recognize, and, have everything you need to meet those needs.

Let us look at Activator and Rejuvenator and exactly how the ADAPTOGENS and REJUVENINS they contain pump up the mitochondrial powerhouse.

Aging is typified by what Nutri-Spec describes as ---

### **FADING “VITAL RESERVES” ---**

a steady decline in amplitude (a flattening) of the Diphasic Cycle. The alternative operation of opposing forces between morning acceleration and night-time restoration simply lacks vigor.

Vigor? Vitality? ----- Think ATP. Think mitochondria. In a sense, Aging = declining Vital Reserves = Mitochondria ATP factory losing power.

One of countless illustrations --- enzymes involved in intracellular Glutathione synthesis and function are completely dependent on ATP. Those enzymes also require magnesium as a cofactor. ----- Activator + Rejuvenator?

----- As you have learned, the only way to increase intracellular Glutathione (since it cannot be absorbed through the cell wall) is by supplementing Glycine + NAC in the right proportions, which are easily absorbed and then produce

Glutathione within the cell. That Glycine + NAC combination is found in perfect proportions in both Activator and Rejuvenator. There are small amounts in Activator, to easily supply the needs of those in the younger Stages Of Life. Rejuvenator, given in increasing quantities as an individual progresses from Stage to Stage, supplies the large quantity essential to achieve the anti-INFLAM-AGING needed to control Endogenous Aging.

And the Magnesium? Activator supplies Magnesium, not only in substantial quantity, but also in four different combinations --- each with its own particular biological activity.

Increasing ATP in the mitochondria also translates into increased energy/vitality at the systemic level ...

To illustrate: a study done comparing elderly subjects to younger subjects showed that the elderly group had 76% lower Glutathione than the younger adults, while plasma oxidative end-product concentrations were 845% higher than the younger group. Glycine + NAC supplementation yielded a 200% increase in cellular concentrations of Glutathione, and decreases in concentrations of Oxidative end-products by 74%.

This study also measured mitochondrial fuel oxidation. Compared to fasting young adults, older adults had a significantly higher Respiratory Quotient and abnormal mitochondrial fuel oxidation. They showed significant 54% lower mitochondrial fatty acid oxidation and 51% higher mitochondrial glucose oxidation.

Glycine + NAC supplementation entirely corrected mitochondrial fatty acid and glucose oxidation --- and without affecting energy expenditure. The Respiratory Quotient showed much more efficient fat burning, and thus less dependence on sugar metabolism.

With the improvements in Respiratory Quotient --- there was a significant reduction in total body fat and in waist circumference --- showing preferred abdominal fat loss --- an indication of improved insulin sensitivity.

More evidence of Activator + Rejuvenator protecting against INFLAM-AGING by increasing mitochondrial action ...

Some of the most highly toxic products of lipid oxidation inhibit mitochondrial respiration by inhibiting Alpha Ketoglutarate Dehydrogenase and Pyruvate Dehydrogenase. This inhibition of mitochondrial respiration is reversed by supplementation with Lipoic Acid --- which you have abundantly in Activator, and super-abundantly in Rejuvenator.

In age-related oxidative stress, a reduced supply of energy from the mitochondria necessary for the contractile function of cardiomyocytes is found. LA targets mitochondrial function, increasing myocardial energy efficiency by up to 30% by increasing glucose oxidation and decreasing fatty acid metabolism. By several mechanisms, LA attenuates mitochondrial damage caused by oxidative stress and the aging process.

LA increases Glutathione and enhances SOD activity in mitochondria damaged by oxidative stress.

More on Lipoic Acid support of mitochondria function ----- with aging, a reduced supply of energy from the mitochondrion necessary for the contractile function of cardiomyocytes is found. Lipoic Acid increases mitochondrial energy efficiency by up to 30%. By several mechanisms, Lipoic Acid attenuates mitochondrial damage caused by oxidative stress and the aging process. ----- In general, Lipoic Acid increases mitochondrial membrane potential and increases metabolic activity --- maintaining healthy metabolic activity through the later stages of life.

Quercetin is the only nutrient found by Gerontologists to be clinically effective as a Senolytic (--- destroying Senescent Cells). ----- One of Quercetin's primary actions is enhancing the biogenesis of mitochondria --- thus yielding many benefits in controlling Endogenous INFLAM-AGING. Keep in mind that Nutri-Spec has sought out what research shows is by far the most biologically active form of Quercetin --- we import it from South America at significant expense. Your Activator has recently been enhanced with no less than 200 mg of this powerful bioflavonoid.

You want cellular energy and metabolic vitality? Look no further than Carnosine --- one of the very first REJUVENINS identified by Gerontologists. Carnosine regulates the pyruvate dehydrogenase complex in the mitochondrial matrix that allows pyruvate to enter the Krebs Cycle producing energy in the mitochondria. Carnosine is thus characterized as an anti-fatigue agent in addition to a REJUVENIN.

Carnosine's activity is particularly notable in the brain. Carnosine has been shown in animal studies to reduce the accumulation of Amyloid, and fully restore mitochondrial function in affected brain cells. In mice with brain function impaired by a high corn oil diet, Carnosine prevents cognitive decline. You have this powerful Rejuvenin in your Rejuvenator in a clinically significant quantity of 500 mg.

Taurine, the ADAPTOGEN with metabolic benefits almost too numerous to contemplate, plays a critical role in mitochondrial structure and function. Specifically, Taurine supports mitochondrial protein synthesis. Taurine is particularly concentrated in brain tissue, where it maintains mitochondrial function to the degree it actually protects against traumatic brain injury. With Nutri-Spec, you have Taurine available as a stand-alone product, and it is found in several of your Nutri-Spec products. But the 100 mg found in Activator, taken day after day, from early adulthood through all ensuing Stages Of Life --- protects against both Exogenous INFLAM-AGING and Endogenous INFLAM-AGING.

Thus far in this month's Letter, we have emphasized how uniquely amazing is your Nutri-Spec SOLID DNP in supporting mitochondrial energy production --- and all the glorious benefits that derive. But while your Activator and Rejuvenator are maintaining mitochondrial ATP production by mitigating mitochondrial-associated functional and structural damage --- what we have explained so far this month has barely scratched the surface of what you are achieving in the mitochondria with your Nutri-Spec approach to controlling both Exogenous INFLAM-AGING and Endogenous INFLAM-AGING.

You see, the powerhouse of the cell does much, much more than generate. The mitochondria are the key to extending both Health Span and Life Span. The mitochondria are primary in ---

- cell signaling,
- cell differentiation
- cell division
- apoptosis (programmed cellular death) and
- immune signaling.
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This incredible array of functions is the key to controlling INFLAM-AGING --- and all these functions are supported by your amazing tandem of Activator + Rejuvenator.

For yourself, your family, and your patients --- do not waste time, energy and money on Alternative Medicine nonsense. Fully implement your Stage Of Life INFLAM-AGING Defense Diphasic Nutrition Plan immediately and ...

**LIVE STRONGER LONGER.**

