

# Mitochondrial Energy Optimizer with PQQ

# Maintain youthful cellular energy

## Item #01868 · 120 capsules

Mitochondrial Energy Optimizer with PQQ is designed to counteract age-related structural and functional changes by providing the following unique ingredients:

- CARNOSINE: Carnosine has been shown to protect cellular structures against advanced glycation end-products (AGEs). These compounds are formed when proteins or lipids are cross-linked with sugars in a process known as glycation. Glycation is linked to a host of age-related events in the neurologic, vascular, renal and ocular areas. Carnosine protects neurons against reactive and cytotoxic protein carbonyl species associated with normal aging. 18-24
- PQQ: This breakthrough micronutrient has been shown to trigger *mitochondrial biogenesis* the growth of <u>new</u> mitochondria in aging cells!<sup>6</sup> PQQ also activates genes involved in protecting the delicate structures within the mitochondria.<sup>7-10</sup>
- LUTEOLIN: Luteolin is a plant-derived flavonoid that has been shown to inhibit inflammatory factors, which have been linked to virtually every undesirable consequence of aging. Luteolin works by inhibiting pro-inflammatory cytokines, including interleukin-1 and tumor necrosis factor-alpha.<sup>25-34</sup>
- **BENFOTIAMINE:** Effectively modulates multiple destructive biochemical pathways that are induced by higher than desirable blood glucose levels. Benfotiamine can activate glucose metabolism and promote already healthy blood glucose levels already within normal range. In addition, benfotiamine exhibits direct antioxidative capacity and supports DNA function.<sup>16</sup>
- **PYRIDOXAL 5'-PHOSPHATE:** Aging results in the formation of **advanced glycation end products** throughout the body. **Pyridoxal 5'-phosphate** is the active form of vitamin B6 that has been shown to protect against both lipid and protein **glycation** reactions. <sup>17-20</sup>
- R-LIPOIC ACID: Destructive free-radical activity in the mitochondria plays a major role in the loss of cellular vitality. A microencapsulated Bio-Enhanced® R-lipoic acid facilitates youthful mitochondrial energy output while guarding against free radicals.
- TAURINE: This free amino acid supports whole-body health and boosts new brain cell formation in the area of the brain connected to learning and memory.<sup>21</sup>

#### Doforoncos

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# Four capsules contain:

Vitamin B6 (as pyridoxal 5'-phosphate) 100 mg	
Sodium 18 mg	
Carnosine 1000 mg	
L-Taurine 800 mg	
Benfotiamine 150 mg	
R-Lipoic Acid (as microencapsulated	
PQQ Pyrroloquinoline quinone 10 mg disodium salt	
Luteolin [from orange extract (fruit)] 8 mg	
Other ingredients: vegetable cellulose (capsule), microcrystalline cellulose, stearic acid, silica, hydroxypropy cellulose, candelilla wax, beeswax, calcium silicate.	/l



### Dosage and use

 Take two capsules twice daily, preferably early in the day or all at once upon wakening, or as recommended by a healthcare practitioner. This product can be taken with or without food.

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