

REOXlife

PQQ PLUS
CAPSULE



Revitalize Cells, Energize Life

What is

Mitochondria

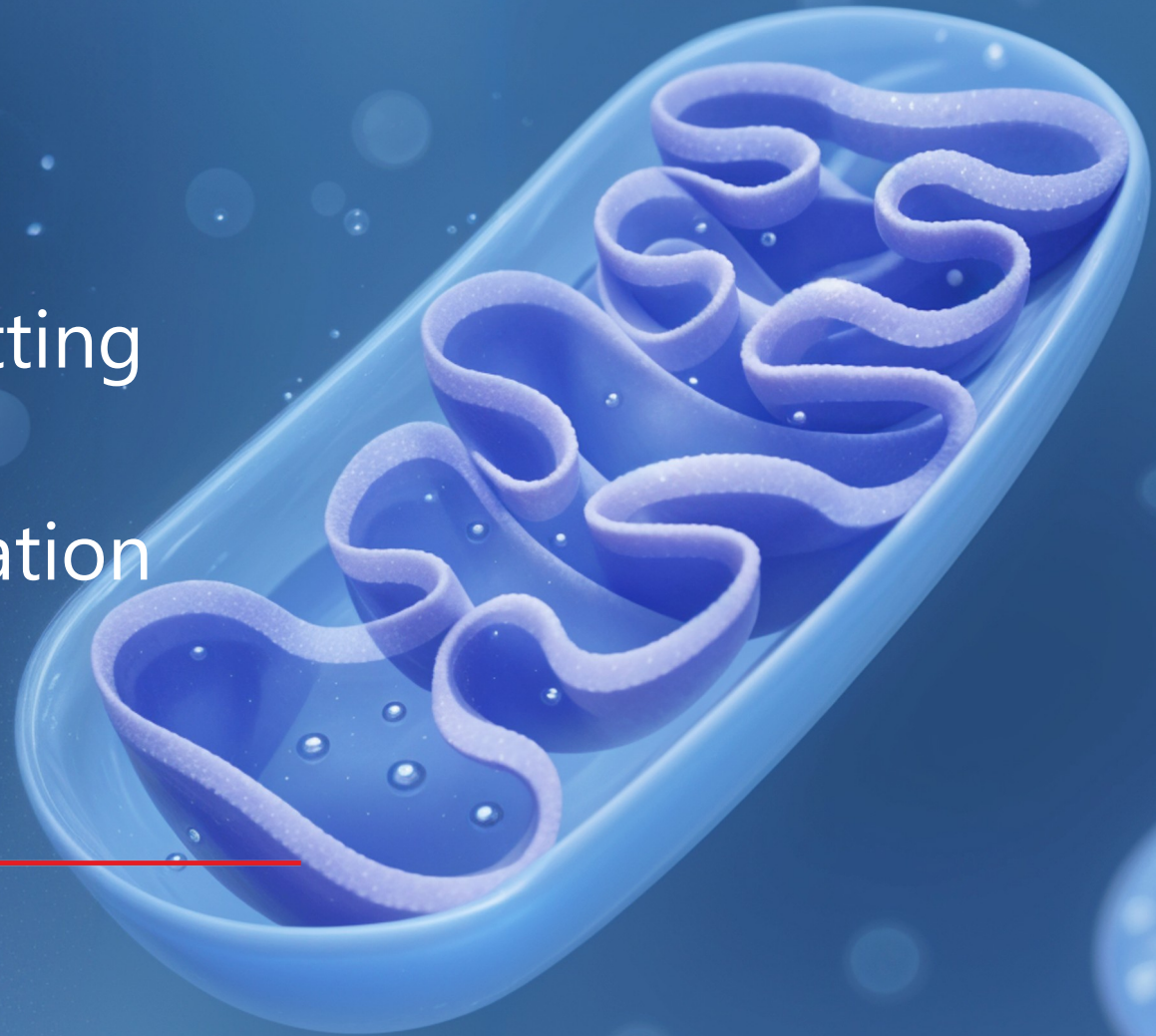
?

Do you know the
importance of it?

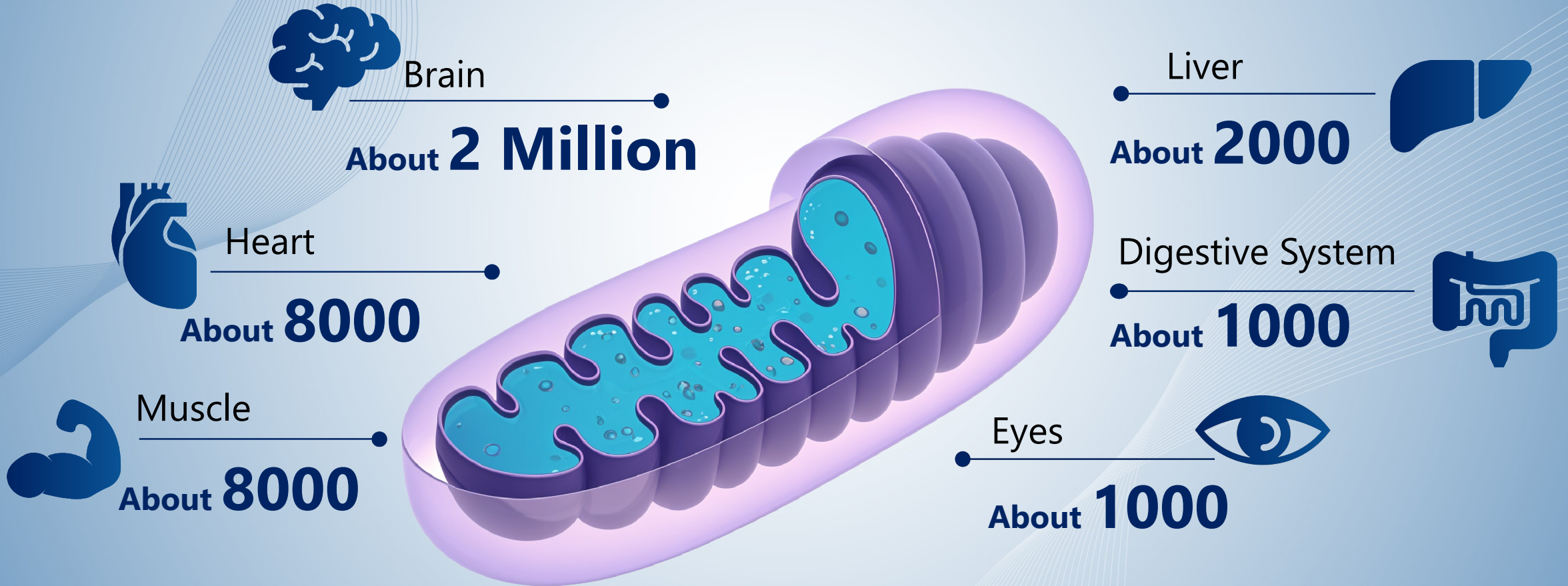


- Organelle
- Provide cellular energy
- Responsible for transmitting cellular signals.
- Regulates cell differentiation and metabolism

Provides energy, supporting the body in daily activities



Mitochondria are in every cell!

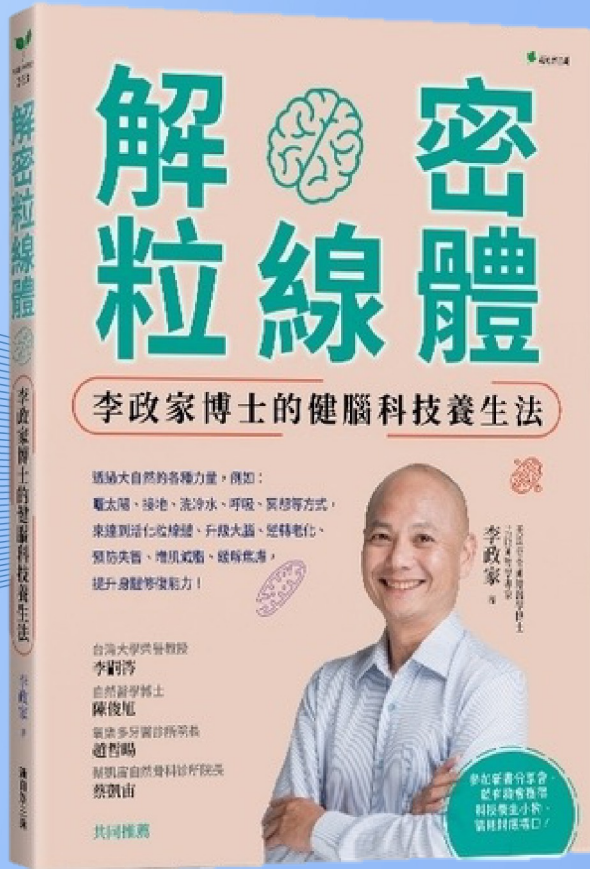




Mitochondrial Deficiency

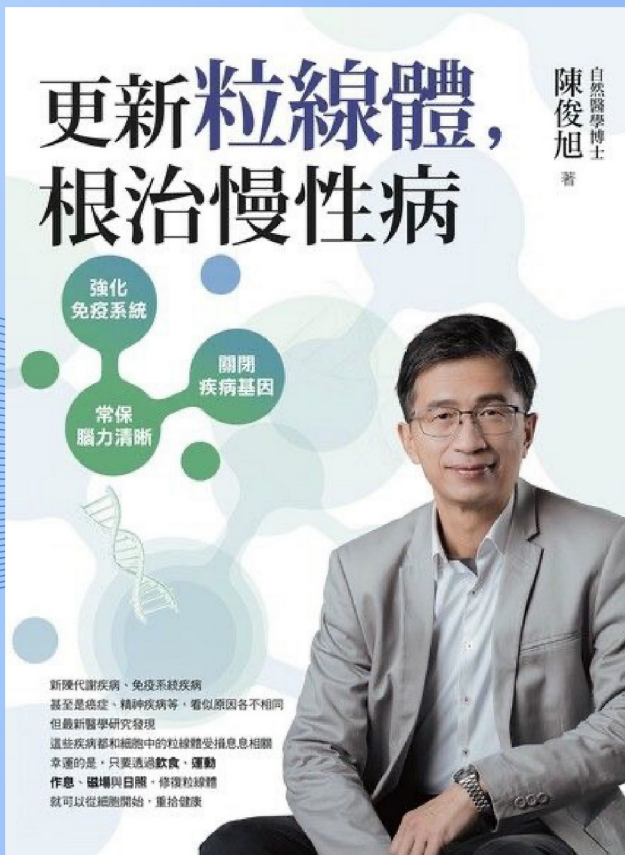
Effects

- Fatigue, low energy
- Memory decline
- Decline in learning ability, poor executive function, and reduced concentration.
- Increased risk of neurological diseases such as parkinson's disease, alzheimer's disease, and dementia
- Increased risk of cardiovascular diseases (such as stroke and heart disease)
- Insomnia and decreased sleep quality
- Muscle atrophy
- Metabolic disorders affecting weight control and blood sugar regulation



"80-90% of chronic diseases occur due to inadequate energy from mitochondria, leading to cell degeneration and degenerative diseases."

—— Dr. Lee, Doctor of Chiropractic Neurology



"To activate all body cells, turn off disease genes, and initiate longevity mechanisms, maintaining mitochondria is the most rapid and effective choice."

—— Dr Chen, Doctor of Naturopathic Medicine



PQQ

60 Years of
research

1964

Discovered as the third redox cofactor after nicotinamide and flavin in bacteria

1989

Identified as an essential nutrient in animal

2005

Research indicates that PQQ may stimulate mitochondrial biogenesis, key process for maintaining cellular energy production.

2018

In 2018, Bruce Ames recognized PQQ as a "longevity vitamin" in the Proceedings of the National Academy of Sciences, emphasizing its importance for long-term health.

1979

Extracted from methanol dehydrogenase and identified its molecular structure

2003

Kasahara and Kato stated that PQQ was a new vitamin in Nature Magazine

2007

Studies shown PQQ may have neuroprotective effects, offering protection against neurological diseases. It also has potential benefits for cardiovascular health, anti-inflammatory effects, liver injury & joint health.

Now

Current research focuses on investigating the potential therapeutic effects of PQQ on brain injuries.



"PQQ should be considered an important '**longevity vitamin**' due to its potential to extend healthy lifespan."

— **Dr. Bruce Ames**

American biochemist and molecular biologist

"Many studies around the world show
that PQQ significantly benefits
mitochondria."

Clinical trials on PQQ

"Research on 41 elderly individuals taking PQQ for 12 weeks found that it could prevent the decline in brain function associated with aging, particularly in attention and working memory."



Functional Foods in Health and Disease

Improves multiple sleep quality indicators in adults

Journal of Clinical Biochemistry and Nutrition

"PQQ helps reduce cellular oxidative damage, preventing neurodegeneration and improving memory"

Pyrroloquinoline Quinone and Function in Mice¹ Modulates Mitochondrial Quantity

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ABSTRACT When pyrroloquinoline quinone (PQQ) is added to an amino acid-based, but otherwise nutritionally complete basal diet, it improves growth-related variables in young mice. We examined PQQ and mitochondrial function based on observations that PQQ deficiency results in elevated plasma glucose concentrations in young mice, and PQQ addition stimulates mitochondrial complex 1 activity in vitro. PQQ-deficient weanling mice had a 20–30% reduction in the relative amount of mitochondria in liver; lower respiratory control ratios, and lower respiratory quotients than PQQ-supplemented mice (2 mg PQQ/kg diet). In mice from dams fed a conventional laboratory diet, but switched at weaning to the basal diet, plasma glucose, Ala, Gly, and Ser concentrations were elevated at 4 wk (PQQ– vs. PQQ+), but not at 8 wk. The relative mitochondrial content (ratio of mtDNA to nuclear DNA) also tended (P < 0.18) to be lower (PQQ– vs. PQQ+) at 4 wk, but not at 8 wk. PQQ also counters the mitochondrial complex 1 inhibitor, diphenylene iodonium (DPI). Mice were gavaged with 0, 0.4, or 4 µg PQQ/g body weight (BW) daily for 14 d. At each PQQ level, DPI was injected (i.p.) at 0, 0.4, 0.8, or 1.6 µg DPI/g BW. The PQQ-deficient mice exposed to 0.4 or 4.0 µg DPI/g lost weight and had lower plasma glucose levels than PQQ-supplemented mice (P < 0.05). In addition, fibroblasts took up ³H-PQQ added to cell cultures, and cultured hepatocytes maintained mitochondrial PQQ concentrations similar to those observed in vivo. Collectively, these results indicate that dietary PQQ can influence mitochondrial amount and function, particularly in perinatal and weanling mice. J. Nutr. 136: 390–396, 2006.

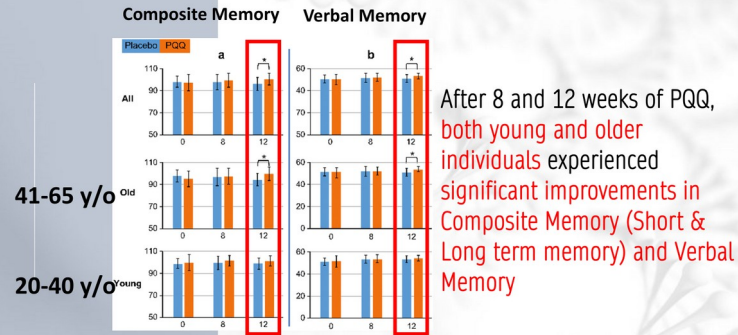
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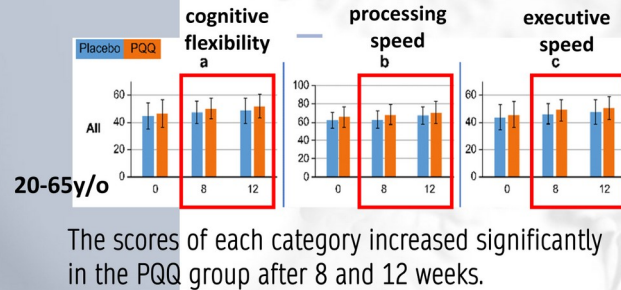
University of California–Davis

Research suggested that PQQ increases metabolism and vitality

PQQ Enhances Cognitive Flexibility



PQQ Enhances Cognitive Flexibility



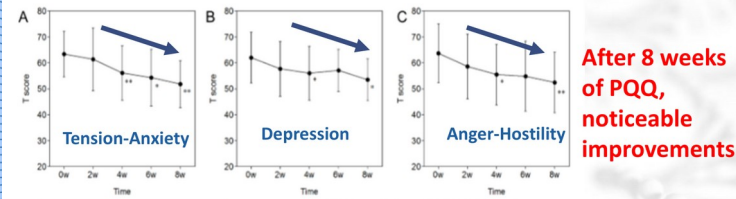
PQQ Improve Sleep Quality

Component	0w	4w	8w
PSQI-J global score	10.0±1.9	8.2±2.1 **	6.4±2.0 **
Sleep quality	2.2±0.4	1.6±0.5 **	1.5±0.7 **
Sleep latency	2.1±0.9	1.8±0.8	1.4±0.9 **
Sleep duration	2.4±0.6	2.1±0.6 *	1.9±0.6 **
Habitual sleep efficiency	0.5±0.6	0.2±0.4	0.1±0.2
Sleep disturbance	1.1±0.3	1.1±0.7	0.8±0.6
Use of sleeping medication	0.0±0.0	0.2±0.7	0.0±0.0
Daytime dysfunction	1.8±0.8	1.4±0.5 *	0.9±0.7 **

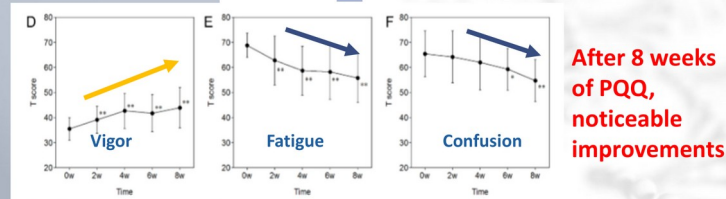
n = 17, Wilcoxon signed rank test (multiple comparison by Holm's test)** : p < 0.01, * : p < 0.05

➤ After 8 weeks of PQQ, improvements were observed in sleep quality, sleep onset latency, sleep duration & daytime functioning

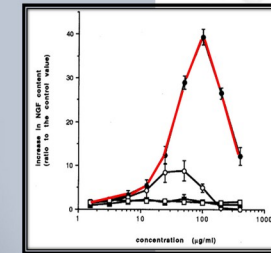
PQQ Improves Mood & Emotions



PQQ Improves Mood & Emotions



PQQ on Nerve Growth Factor (NGF)

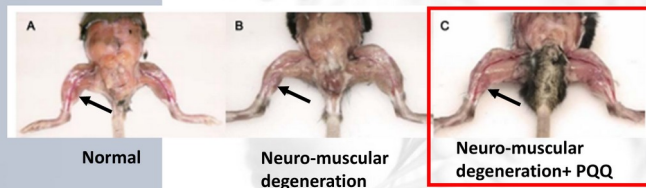


Studies have found that PQQ increased the production of nerve growth factors (NGF) in L-M cells during *in vitro* experiments.

NGF is a vital neurotrophic factor in the nervous system, playing a crucial role in the survival and development of nerve cells. Research suggests that NGF may be an anti-dementia drug, and multiple studies have been conducted to verify its therapeutic effects on memory disorders and dementia, such as Alzheimer's disease.

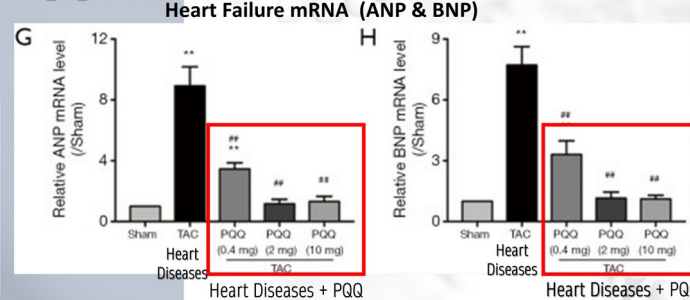
PQQ can increase the production of nerve growth factors (NGF).

PQQ on Neuromuscular Function



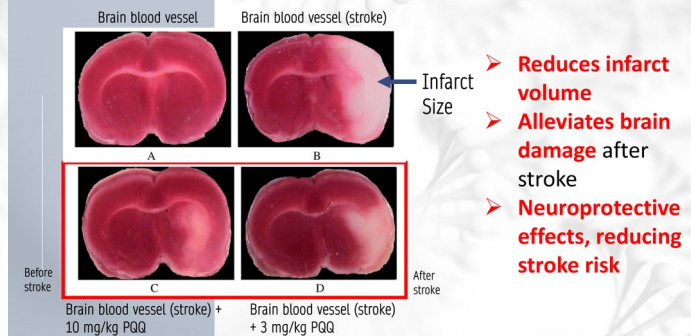
PQQ maintains mitochondrial electron transport in skeletal muscle, providing significant benefits for treating muscle atrophy.

PQQ Benefits Cardiovascular Health



12 weeks of PQQ, there is a significant reduction in the mRNA levels of heart failure biomarkers.

PQQ on Stroke



PQQ has different benefits for EACH OF OUR ORGANS!



Brain



- Helps prevent memory loss and combat oxidative stress.
- May prevent degenerative diseases (such as Parkinson's and Alzheimer's).
- Enhances cognitive function, improves mood, and boosts vitality.
- Improves sleep quality.

PQQ has different benefits for EACH OF OUR ORGANS!



Heart



- Promotes efficient contraction of cardiac muscles
- Maintains normal low-density lipoprotein (LDL) level

PQQ has different benefits for EACH OF OUR ORGANS!



Liver



- Aids in regulating liver lipid metabolism
- Antioxidant properties help prevent liver fibrosis
- Reduces levels of liver enzymes AST and ALT

PQQ has different benefits for EACH OF OUR ORGANS!



Muscle



- Increases skeletal muscle energy
- Alleviates muscle soreness and damage after exercise
- Enhances muscle endurance and improves athletic performance

PQQ has different benefits for EACH OF OUR ORGANS!



Others



- Relieves joint inflammation and supports flexibility
- Lowers uric acid levels
- Aids blood sugar control and insulin sensitivity
- Regulates lipid metabolism for weight management
- Protects skin, enhancing hydration



REOXlife
PQQ PLUS
CAPSULE



Revitalize Cells, Energize Life





+



>



MMNT[™]
Micro-Mineralised Nutrient Technology
TREATMENT

Synergetic Effect

Micro cluster Formation, Enhance Nutrients Absorption



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Elderly

- Those with memory decline, muscle atrophy, cardiovascular issues, liver and joint problems.
- Preventing the risk of neurological diseases such as dementia and Parkinson's disease.



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Office Workers

- Increase energy and relieve stress.
- Improve sleep quality and reduce the frequency of insomnia.



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Students

- Promote brain function and enhance brain flexibility.
- Increase concentration, improve cognitive function, and memory.
- Support growth development.



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For those who like sports
or athletes:

- Enhance athletic performance.
- Reduce muscle soreness after exercise.



REOXlife PQQ PLUS CAPSULE

Ladies

- Help stabilize mood and reduce stress.
- Enhance energy and improve mood.



Benefits



3 hours

- Reduced muscle soreness
- Improved mental state



3 months

- Enhanced memory and focus
- Reduced chest tightness and wheezing
- Less frequency of joint and muscle inflammation



6 months

- Lower cholesterol and liver enzyme levels
- Maintain joint flexibility and muscle health
- Overall enhancement of organ function

