



Kaneka Ubiquinol® for Mitochondrial Health

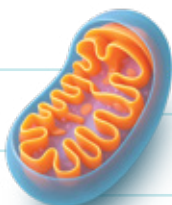
Mitochondria are increasingly understood as central to systemic wellness and healthy aging, helping to coordinate processes such as immune response, signaling, and cellular repair.^{1,2}

Beyond their role in producing adenosine triphosphate (ATP)—the energy molecule of the cell—mitochondria are now recognized for their contribution to broader cellular processes that support health and resilience, such as:

Cell signaling pathways³

Mitochondrial biogenesis⁴

Mitochondrial fission
and fusion⁵



Programmed cell death
(apoptosis) and mitophagy^{6,7}

Cell senescence^{8,9}

Altered mitochondrial function profoundly impacts overall cellular health and is a common component underlying numerous conditions of aging.¹⁰

The Influence of Oxidative Stress on Mitochondria

Reactive oxygen species (ROS) are natural byproducts of mitochondrial energy generation and are neutralized by antioxidants.^{11,12}

When ROS production exceeds the cell's antioxidant defenses, oxidative stress may occur, potentially affecting mitochondrial integrity, including membrane lipids, proteins, cellular and mitochondrial DNA, and mitochondrial structures and functions involved in energy production.^{12,13}



Ubiquinol's Role Supporting Mitochondrial Function

Ubiquinol—the active antioxidant form of CoQ10—is naturally produced in the body and found throughout the cells and mitochondria.^{11,12}

Ubiquinol supports mitochondrial function through its dual role in supporting energy production and antioxidant defense.^{11,12,14}

Antioxidant defense mechanisms become less efficient with age, which can lead to increased free radical damage. Additionally, levels of ubiquinol decline with age due to a decreased ability to convert ubiquinone to ubiquinol and an increased demand for its antioxidant activity because of greater ROS production.¹⁵⁻¹⁷



Benefits of Ubiquinol Supplementation

Research demonstrates that 200 mg of Kaneka Ubiquinol® increases ubiquinol levels by approximately 8x compared to baseline in healthy adults when taken daily for at least 30 days.¹⁸



Healthy Aging

Clinical studies show that supplementation with Kaneka Ubiquinol® increases plasma ubiquinol levels.^{19,20} Research demonstrates a correlation between higher total CoQ10 status and lower risk of frailty and sedentarism in older adults.²¹



Cardiovascular Wellness

Clinical research shows that ubiquinol supplementation improves certain blood markers associated with heart health.^{20,22}

Ubiquinol has been shown to benefit vessel health by:

- Facilitating proper vasodilation
- Enhancing nitric oxide (NO) production²⁰
- Maintaining mitochondrial integrity¹⁷

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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.



Formats

Kaneka Ubiquinol® is available as a pure crystalline powder for use in the following product applications:

- Softgels
- Liquid capsules
- Gummies
- Cap-within-cap
- Liposomal formulations
- Other light and oxygen-controlled environments

Kaneka Ubiquinol® is also available in an air-stable form as Q30®, a 30% Ubiquinol powder. Additional applications include:

- Stick packs
- Sachets
- Soft chews

Packaging

1 kg or 5 kg units

MOQ: 1 kg

Q30® MOQ: 3 kg



Safety

Kaneka Ubiquinol® has a well-established safety profile as demonstrated by extensive clinical trial data.

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Preconception Support

Female preconception support: Ubiquinol supports mitochondrial function and cellular energy generation—essential for oocyte quality and overall egg health.²³⁻²⁵

Male preconception support: Kaneka Ubiquinol® supports healthy sperm function, including sperm count, motility, and morphology.^{26,27}



Athletic Performance

Research shows that Kaneka Ubiquinol® supports physical performance by:

- + Promoting a healthy oxidative balance³⁰
- + Supporting energy metabolism³¹
- + Reducing fatigue and supporting cardiovascular performance when training at high altitudes^{32,33}
- + Enhancing peak power production in elite athletes when taken at 300 mg/day³⁴

Menopausal Well-Being

Kaneka Ubiquinol® supports general health and well-being during and after menopause. In a consumer use study, 80% of menopausal women taking 200 mg of Kaneka Ubiquinol® per day reported decreased irritability, sensitivity, stress, and mood swings after 60 days of supplementation.^{28,29}

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