

UBIQUINOL

The Active CoQ10

The nutrient that assists organs to perform at their best

What is CoQ10?

Coenzyme Q10 (CoQ10) is a nutrient found in every cell of the body. The body makes CoQ10 and the cells use it as energy to assist organs to perform at their best.

CoQ10 is concentrated in the organs that require most energy to function: the heart, liver, kidney, pancreas and muscles.

Two forms of CoQ10:

It exists in the body in two forms:

- **Ubiquinone**, the oxidized form
- **Ubiquinol**, the reduced form

How they produce energy:

In their co-existence, Ubiquinone accepts an electron and becomes Ubiquinol; and Ubiquinol by donating the electron become Ubiquinone. The back and forth chain reaction leads to energy (ATP) production.

Ubiquinol, the active form:

In the young, healthy body 95% of the total CoQ10 is in the form of Ubiquinol, the form responsible for the benefits associated with CoQ10.

The body has to create this "active" form of CoQ10 by converting Ubiquinone.

CoQ10 and Aging

The concentration of CoQ10 in the body tends to decrease year after year, indicating that it has a close relationship with aging.

Research also shows that with aging it becomes increasingly harder for the body to convert Ubiquinone to Ubiquinol.

Taking CoQ10 Supplement

Medical practitioners and researchers recommend that taking dietary supplement of CoQ10 may help supplant the body's reservoir of the nutrient.

Ubiquinol or Ubiquinone?

While a supplement in the Ubiquinone form can be effective for those in good health in their 20s and 30s, the Ubiquinol form can be of particular importance to those older or with impaired ability to convert Ubiquinone to Ubiquinol.

Advantages of Ubiquinol**

Ubiquinol is 3 to 8 times more absorbable

Ubiquinol is the active form responsible for benefits associated with CoQ10

CoQ10 is the subject of numerous clinical investigations, with focus on Ubiquinol.

The world-renown Mayo Clinic of the U.S. cites that while more research is needed on the benefits of taking CoQ10 supplements, early evidence supports the use of supplements for various conditions*:

DIABETES

CoQ10 may improve blood flow and blood vessel widening in people with diabetes. It may benefit people with **nerve pain** caused by **diabetes**.

EXISTING HEART DISEASE

CoQ10 may benefit people with chronic heart disease, advanced heart failure, and weakened heart muscle; and in combination with cholesterol-lowering drug in people with coronary heart disease.

BLOOD PRESSURE

There is good evidence to support the use of CoQ10 in the treatment of high blood pressure.

MUSCLE WEAKNESS FROM CHOLESTEROL DRUG

CoQ10 may help reduce some side effects of statin therapy, including muscle weakness.

OTHER USES

CoQ10 may benefit people with **FIBROMYALGIA**—long term pain and tenderness in the muscles and joints; CoQ10 shows promising evidence in treating **GUM DISEASE**.

SKIN HEALTH/ ANTI-AGING

Early study suggests that a combination of CoQ10 and other antioxidants and minerals may improve skin roughness and fine wrinkles.

WEIGHT LOSS

CoQ10 may help promote weight loss in obese people. Levels of CoQ10 may be lower in people with a higher body mass index (BMI)..

MALE INFERTILITY

There is early evidence that supports the use of CoQ10 for improving sperm health.

CHRONIC FATIGUE

Early research shows that CoQ10 may improve symptoms of chronic fatigue

ABOUT PARADIGM PHARMA

Paradigm Pharmaceuticals Inc., a New York, U.S., company offers dietary supplements along with pharmaceuticals. It markets supplements whose benefits are sufficiently supported by scientific and clinical evidence to offer as natural and complementary medicines.

It manufactures at GMP-certified plants, with each production batch tested and certified for the claimed composition and safety.

*www.mayoclinic.org/drugs-supplements/coenzyme-q10/evidence/hrb-20059019