WAVE-Q10™

Co-enzyme Q10 100mg & L-Carnitine 500mg Tablets

Product Description:

Each soft gelatin capsule contains

- Coenzyme Q10 100mg
- L-Carnitine 500 mg

General Information:

- Most patients with chronic kidney disease (CKD) have other diseases that cause CKD or contribute to the risk of cardiovascular events or death.Managing these comorbidities is a challenge.Diabetes, hypertension, cardiovascular disease, and anemia are more common in CKD patients than in individuals who do not have CKD, and the prevalence of these comorbidities increases as CKD progresses .**Most patients (86%) with advanced CKD have at least 1 comorbidity**

Coenzyme Q10

Coenzyme Q-10 is a fat-soluble, vitamin-like compound that is naturally found in most tissue of the human body. It is essential for life and health of every living cell. The highest concentrations are found in the **heart, liver, kidney, and pancreas.**The human body produces coenzyme Q-10. Humans can replenish coenzyme Q10 from dietary sources, including meats and seafood.**Plasma concentrations of CoQ10 are depressed in patients with chronic kidney disease (CKD).**

Coenzyme Q10 primary function are as

- An antioxidant,
- Membrane stabilizer
- Production of adenosine triphosphate (ATP) in the oxidative respiration process.
- As an antioxidant and its role in ATP, coenzyme Q10 offers many therapeutic benefits. Also, coenzyme Q10 has been shown to help preserve myocardial sodium-potassium ATPase activity and stabilize myocardial calcium dependent ion channels.

Coenzyme Q10 roles in CKD Patients:

- CoQ10 treatment decreases superoxide production in endothelial cells and improves cardiac capacity in patients with heart failure.
- Long-term therapy with CoQ10 can reduce major adverse cardiovascular events, and is safe and well-tolerated by the general population.
- **Plasma concentrations of CoQ10 are depressed in patients with non-dialysis CKD, and in those undergoing dialysis.**
- **Depleting CoQ10 leads to inefficient electron transport and increased reactive oxygen species production.**
- CoQ10 supplementation may improve mitochondrial function and decrease oxidative stress in patients undergoing haemodialysis.

CoQ10 may have favourable effects on

- Cardiac function,
- Hypertension,
- Glucose metabolism,
- Lipid profiles,
- Inflammation and oxidative stress in patients with non-dialysis CKD and those undergoing dialysis,

L-Carnitine:

L-carnitine, an amino acid-derived nutrient crucial to cellular energy management, may play a vital role in kidney disease prevention and management.Patients undergoing maintenance HD, usually present with plasma carnitine insufficiency, due increased removal via HD.This may affect clinical consequences such as impaired muscle function, decreased wound healing and abnormal immune function.

LC supplementation: Clinical Benefits - Erythropoietin-resistant anemia, decreased cardiac performance, intradialytic hypotension, muscle symptoms, as well as impaired exercise and functional capacities

Indication & Usage:

CoQMulti is to be used in minimizing comorbid conditions in

- Chronic Kidney Disease Patients
- Dialysis Patients
- Patients with high risk of CVD Disease
- Type 2 diabetic patients
- In reducing muscle cramps during dialysis

Dosage and Administration:

1-2tablets per day

Mechanism of Action:

Within the cell, coenzyme Q-10 is mostly present in the mitochondria (40-50%). It is the electron acceptor for the mitochondrial electron transport chain and plays an essential role in the production of energy in all cells.CoQ10 transports electrons from complexes 1 or 2 to complex 3 in mitochondria.CoQ10 provides essential nutrients that may benefit the heart

Contraindication:

CoQMultiis contraindicated in patients with known hypersensitivity to any of the ingredients.

Drug Interaction:

- There is some concern that antioxidants might decrease the effectiveness of some medications used for cancers. But it is too soon to know if the interaction occurs.
- Coenzyme Q-10 seems to decrease blood pressure. Taking coenzyme Q-10 along with medications for high blood pressure might cause your blood pressure to go too low

Use in Special Population:

Pregnancy

Your doctor will determine the suitability and safety of the use of this medicine.

Breast-feeding

This medicine is not recommended for use in breastfeeding women unless absolutely necessary and the potential benefits outweigh the risks involved. Doctor may advise to stop breastfeeding for a certain period of time depending on clinical condition of patients.

Side Effects:

Major & minor side effects are as follows

- Nausea and Vomiting
- Diarrhoea
- Skin irritation and rashes
- Lower blood pressure