



The Kidney and Oxidative Stress

Our kidneys regulate the amount of water, salt and other minerals in our body. Waste products and excess water not needed by our body is excreted as urine. Our kidneys are vulnerable to oxidative stress caused by conditions such as diabetes and hypertension, and environmental factors that increase free radical production such as high fat diets, pollution, and certain medicines. MitoQ is a revolutionary form of coenzyme Q10 and is a powerful antioxidant that can neutralise free radicals and decrease oxidative stress when taken in conjunction with a healthy diet and exercise.

Our kidneys are bean shaped organs, roughly the size of a conventional computer mouse, located on either side of our spine, just below our ribs. While most people are born with two kidneys, one kidney is capable of performing the normal functions of both kidneys.

Humans are actually just one big bag of water and the responsibility of maintaining that water balance rests with our kidneys. Our kidneys also remove waste products formed after the metabolism of food, and regulate the concentration of salt and other minerals. Without our kidneys we could not activate vitamin D to allow our bones to take up calcium, control our blood pressure nor stimulate our bone marrow to produce more red blood cells.

The kidney is made up of three main areas; the cortex (outer layer), the medulla (middle layer) and the renal pelvis (inner tubing that collects urine and takes it to the bladder). Each kidney contains over one million microscopic tubules called nephrons which separate out waste products and toxins from the blood and excrete them in urine. Approximately 180 litres of blood and fluid is filtered by the kidneys each day, with about 1.5 litres eventually leaving the body as urine.

The kidneys are vulnerable to oxidative stress. Oxidative stress is the state your body is put in when waste products in the form of free radicals are overproduced and unable to be controlled by your body's own supply of antioxidants. Many disease states, several of which directly impact on the kidneys have been associated with oxidative stress. High cholesterol, infections, antibiotics, drugs used to treat cancer, NSAIDs (a type of painrelief), and pollutants such as cigarette smoke also inflict direct damage on the kidneys or induce oxidative stress.

Oxidative stress can be corrected by treating the underlying cause (if possible), eating a healthy, balanced diet, exercising and by taking an antioxidant supplement such as MitoQ.

MitoQ is a revolutionary form of coenzyme Q10 (COQ10) which is an antioxidant that is produced naturally within our bodies. Ageing, pollutants, heart conditions, and a poor diet all decrease our body's manufacture of COQ10, which makes supplementation a good idea. MitoQ is specially formulated to get right inside mitochondria which are one of the major sites of free radical production and present in large numbers within kidney cells. MitoQ is a powerful neutraliser of free radicals and can reduce oxidative stress. So what are you waiting

for? Reduce oxidative stress damage before it starts causing you problems by taking MitoQ today.

Always read the label and use as directed. If symptoms persist see your healthcare professional.

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