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COENZYME Q-10

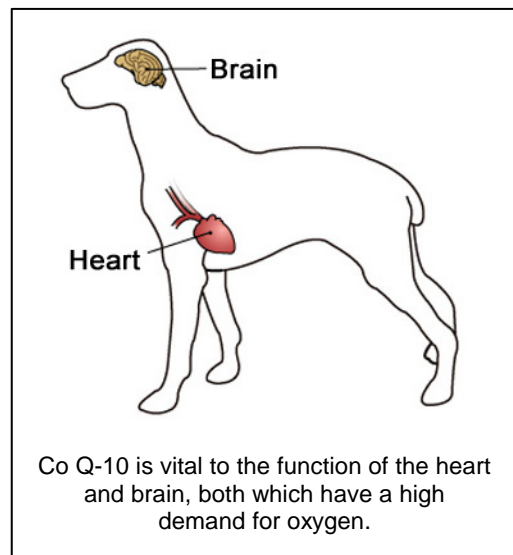
What is coenzyme Q-10?

Coenzyme Q-10 (co Q-10 or ubiquinone) exists in abundance in every human and animal body. It is a vital component of the mitochondria, which are the parts of the cell that produce energy from oxygen. It is thus especially important to the function of organs with a high demand for oxygen, including the heart and the brain, resulting in coenzyme Q-10 being studied as a treatment for heart disease and Parkinson's disease in humans. Because Coenzyme Q-10 has a natural affinity for oxygen and other oxidizing compounds, it binds to them and serves also as an antioxidant.

Why recommend administration of coenzyme Q-10 to my pet?

Coenzyme Q-10 is potentially useful in any organ with a very high energy requirement, including the heart muscle. Not surprisingly, then, research has shown a significant correlation between reduced levels of co Q-10 and the incidence of heart disease. Coenzyme Q-10 thus is a standard inclusion in many supplements designed to improve heart function.

As an antioxidant co Q-10 is used where oxidizing chemicals are causing significant cell damage, leading to the formation of cancer cells and chronic inflammatory changes



How much experience is there with the use of coenzyme Q-10 in pets?

Coenzyme Q-10 has been used in people and pets for several years for the treatment of heart disease. Double blinded studies of co Q-10 show a clear improvement in heart function in patients with chronic heart disease. Recently it has been recommended for treating cancer and gingivitis, although research evidence is lacking. Improved outcomes have been reported in patients receiving both co Q-10 and chemotherapy for cervical cancer.

What species of animals are being treated regularly with coenzyme Q-10?

Dogs and cats are the pets most commonly prescribed coenzyme Q-10.

How much research has been conducted on this supplement?

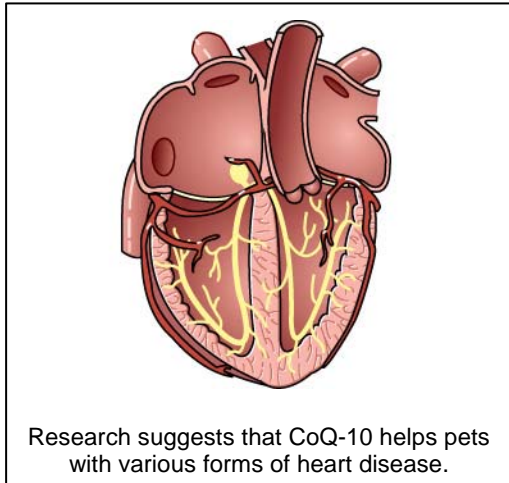
Coenzyme Q-10 has shown effectiveness in research studies conducted on dogs with heart disease and heart failure. Clinical experience suggests its effectiveness for pets with periodontal disease and as part of a cancer protocol. Coenzyme Q-10 has been shown to protect against heart damage caused by certain types of cancer chemotherapy (such as adriamycin.)

How can my pet benefit from coenzyme Q-10?

For pets with heart disease, coenzyme Q-10 can help the heart function as optimally as possible. Effects of co Q-10 alone are probably only mild to moderate, but research suggests there may be a synergistic (complimentary) interaction between co Q-10 and other cardiac medications. A reduction in heart muscle pathology (abnormality) has been demonstrated in dogs with heart disease receiving co Q-10, and a slowing of the progression of signs has been observed clinically.

How successful is coenzyme Q-10?

Co Q-10 appears very successful in helping pets with mild cardiac disease. It can be used as an adjunctive therapy along with conventional medications for pets with more severe heart disease. Many holistic veterinarians recommend using 1 mg per pound of body weight daily, which is much higher than the typical recommended dose of 15-30 mg per pet per day. Co Q-10 is an expensive supplement when used at the dosage of 1 mg per pound per day.



Based on the small amount of research that has been conducted in humans, coenzyme Q-10 may be helpful for pets with elevated blood pressure, diabetes, immune problems, and decreased physical performance. Since coenzyme Q-10 levels decrease in people and pets as they age, supplementation of older pets may be warranted.

How safe is coenzyme Q-10?

Co Q-10 appears to be extremely safe. No significant side effects have been found. Veterinary supervision is advised, however, to ensure that pets with severe heart disease are improving and that any declines in function are addressed. The maximum safe dosages of co Q-10 for young children, pregnant or nursing women, or those with severe liver or kidney disease has not been determined; the same is true for pets of similar circumstances.

Where do I obtain coenzyme Q-10 and do I need a prescription?

Your veterinarian may have preferred supplements that he or she will recommend. Pet owners are cautioned against buying supplements without knowledge of the manufacturer, as supplements are not highly regulated and some supplements may not contain the labeled amount of coenzyme Q-10. A prescription is not needed for coenzyme Q-10 supplements.