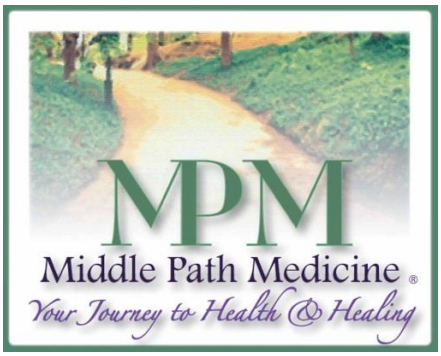

Alpha Lipoic Acid

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Alpha Lipoic Acid (ALA) is a part of the family known as "mitochondrial nutrients". ALA is a biphasic (both water and lipid soluble) antioxidant which has been shown in numerous trials to directly prevent the generation of oxidants, scavenge free-radicals, and activate mitochondrial enzymes (increasing cellular energy production). ALA also helps with the regeneration of better known anti-oxidants such as vitamin C and E, while enhancing one of the body's own most powerful anti-oxidant systems in glutathione. As one of the family of mitochondrial nutrients, it is often used in conjunction with Acetyl-L-Carnitine (ALC) and CoEnzyme Q10 (CoQ10) for the treatment of a myriad of health conditions.

Its utility in the treatment of peripheral neuropathy is unquestioned and in "double-blind, placebo controlled randomized clinical trials" (DBPCRCT) has been found to be more effective than commonly prescribed drugs, especially in the treatment of diabetic neuropathy. If you have any kind of sensory neuropathy – numbness or tingling involving primarily the feet spreading upwards or the hands spreading upwards, ALA is the only fundamental treatment of choice. Drugs used to treat neuropathy mask symptoms while hindering nerve function, whereas ALA, especially when combined with ALC, has been clinically proven to repair nerve function while also treating the symptoms. (Dosages discussed below)

DBPCRCT also exist documenting the utility of ALA for the treatment of peripheral arterial disease (PAD). In a three month trial of ALA in people with claudication (pain with walking due to PAD), walking time prior to developing pain improved by 34% and peak pain decreased by an amazing 93%. The mechanism by which ALA improves both vaso-dilation and veno-dilation is because it directly inhibits the production of asymmetric dimethylarginine (ADMA), an endogenous inhibitor of nitrous oxide (a vasodilator) synthesis. ADMA is an independent risk factor for cardiovascular death and ALA prevents its formation. That is why ALA has been shown to help lower blood pressure and also help with men's erectile dysfunction.

Interestingly, ALA also inhibits unique markers of inflammation that may prove useful for preventing the restenosis of angioplasty sites. Especially in people with metabolic syndrome, the inhibition of these unique factors known as nuclear factor-kappaB and matrix metalloproteinase-9 may prove to be a unique target in the prevention of coronary artery disease.

For those less interested in mechanisms of action, what I am telling you is that sound scientific basis exists for the utility of this nutrient, and DBPCRCT's have already

documented ALA's utility in the treatment of neuropathy, cognitive dysfunction, hypertension, metabolic syndrome, adult onset diabetes, peripheral arterial disease, sexual dysfunction, and mitochondrial dysfunction diseases such as fibromyalgia and chronic fatigue syndrome.

Although the active isomer of ALA is known as R-lipoic, most of the clinical trials continue to use ALA as it is more common and far less expensive. This is why I continue to recommend ALA as compared to R-lipoic. However, if either you or your clinician prefer R-Lipoic, simply take half of the dosage of ALA that I recommend (to get the R-lipoic dosage).

The most common dosage of ALA is 300mg –timed release- twice per day with food. At this dosage, I have never had a patient experience a side-effect, however at higher dosages from 1200-1800mg per day, some people might experience mild nausea. This along with its utility in preventing insulin resistance and treating diabetes may lead to a benefit of weight loss. I consider ALA to be one of the most exciting supplements of our current day, and look forward to many more clinical trials. In the interim, I have found it dramatically effective in the conditions that I have listed above.

Your Journey to Health and Healing,
Gary E. Foresman, MD

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