

The Wellness Express™



Jump on the train to good health

Issue 4, March 2011

Alpha-Lipoic Acid May Help with Several Serious Health Problems

Presented by: **Dr. Mark Glesener**

Antioxidants have received a lot of exposure in the health media over the last decade. These are powerful molecules found in your body. They protect you from free radicals, which damage cells, tissues and organs.

Every time you take a breath, you undergo oxidative stress. For the most part, your body handles the oxidation process quite well, but a small number of cells will evolve into free radicals. Once let loose, free radicals produce mutant cells and these mutations leave you vulnerable. Free radicals are linked to heart disease and some types of cancer.

Well-known antioxidants include vitamin C, vitamin E, selenium and coenzyme Q10. Alpha-lipoic acid - abbreviated as LA - is another antioxidant that has been the focus of quite a bit of health research. It seems to be a versatile nutrient, as it shows potential in treating several health conditions.

LA is an interesting substance. Not only is it an antioxidant in itself, but it plays a supporting role to other antioxidants, especially to glutathione, which is the major antioxidant created by your own body.

Everyone produces small amounts of alpha-lipoic acid naturally. However, it can also be found in food and is also available in supplement form.

Best Sources of Alpha-Lipoic Acid (LA)

LA is found in both plant and animal sources. Organ meats like liver are particularly rich in this nutrient. If organ meats do not appeal to you, vegetables that contain healthy amounts of LA include spinach and broccoli.

The daily amount of alpha-lipoic acid recommended for healthy people is 200 – 400 mg. If you're a senior citizen or have specific health conditions, talk to your chiropractor to ensure you are getting the right amount of LA.

Research Shows Promising Results

Metabolic Syndrome

It has been called several names over the years, but most experts now refer to it as metabolic syndrome. It is not a disease itself but a group of health conditions that can trigger disease. People with metabolic syndrome often have excess abdominal fat, high blood pressure and elevated blood sugar.

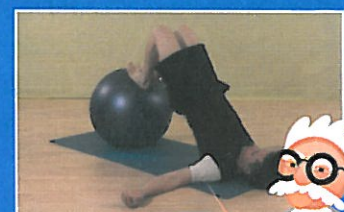
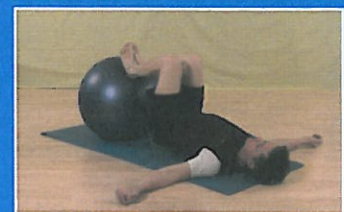
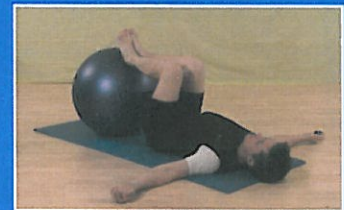
Exercise of the Week Hip Thrust, Bent-leg position

(Consult your chiropractor before engaging in this or any other exercise.)

Start on your back with both feet on the ball, legs bent to 90 degrees. Lift the hips a few inches. Stabilize. When ready, pushing down into the ball with both feet, lifting your hips toward the ceiling. Stop when body is straight from knees to shoulders. Hold for 2 counts. Lower hips, but don't let them come to the floor.

Repeat 5-10 times.

Note: for greater difficulty, change the arm position



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Metabolic syndrome is often a precursor for diabetes and heart disease.

In a study of metabolic syndrome, patients received 300 mg of alpha-lipoic acid over four weeks. These patients saw vasodilation (widening of blood vessels) improve 44% compared to the patients who received a placebo.¹

Diabetes

Diabetes is linked to metabolic syndrome and much of the research on alpha-lipoic acid has focused on how this substance can help such patients. The most common diabetes is type 2. Although the studies on LA and type 2 diabetes have been small, the results prove promising. LA appears to improve insulin sensitivity.

One clinical study showed that patients who received 1000 mg of LA intravenously boosted insulin sensitivity by 50% compared to patients who received a placebo injection.²

A similar study was conducted but used oral supplementation rather than injections. In this placebo-controlled study, patients received 600 mg of LA daily for four weeks. Patients in the test group saw their insulin sensitivity increase by 25%.³

A frequent problem for diabetics is the development of peripheral neuropathy, which affects 20% of patients. It is a condition that damages the nerves and this can lead to pain and loss of sensation. It is the major reason for limb amputation among diabetics.

In a review of several studies, medical researchers noted that diabetics who received 600 mg of LA daily over a three week period were able to dramatically reduce the symptoms of peripheral neuropathy.⁴

Heart problems are common for diabetics. Cardiovascular neuropathy causes fluctuations in heart rate. In a small trial, patients with type 2 diabetes supplemented orally with 800 mg of LA daily over four months. The test group saw better improvement in heart rate compared to the placebo group.⁵

Neurological Health

The brain may also benefit from alpha-lipoic acid. Combining LA with other antioxidants or L-carnitine (an amino acid important in fat metabolism) can slow cognitive problems associated with aging. Since the research was conducted on animals, human clinical studies still need to be conducted to confirm these preliminary findings.^{6,7,8}

Hepatitis

When combined with milk thistle and selenium, alpha-lipoic acid showed the ability to protect the liver from damage caused by hepatitis C. Patients were given these three nutrients daily over several months. At the end of this preliminary trial, the hepatitis patients had both improved liver function and better health in general.⁹

Play It Safe

Before using an alpha-lipoic acid supplement, discuss it with your chiropractor. This is especially important if you suffer from kidney or liver disease, diabetes, hypoglycemia, or thyroid problems.

Quote to Inspire

"One of the most sublime experiences we can ever have is to wake up feeling healthy after we have been sick."

- Harold Kushner

References and sources:

1. Irbesartan and lipoic acid improve endothelial function and reduce markers of inflammation in the metabolic syndrome: results of the Irbesartan and Lipoic Acid in Endothelial Dysfunction (ISLAND) study - *Circulation*. 2005; 111(3):343-348
2. Enhancement of glucose disposal in patients with type 2 diabetes by alpha-lipoic acid - *Arzneimittelforschung*. 1995; 45(8):872-874.
3. Thioctic acid-effects on insulin sensitivity and glucose-metabolism - *Biofactors*. 1999; 10 (2-3):169-174
4. Treatment of symptomatic diabetic polyneuropathy with the antioxidant alpha-lipoic acid: a meta-analysis - *Diabet Med*. 2004;21(2):114-121.
5. Effects of treatment with the antioxidant alpha-lipoic acid on cardiac autonomic neuropathy in NIDDM patients; a 4-month randomized controlled multicenter trial (DEKAN Study) - *Deutsche Kardiale Autonome Neuropathie*. *Diabetes Care*. 1997;20 (3):369-373.
6. Feeding acetyl-L-carnitine and lipoic acid to old rats significantly improves metabolic function while decreasing oxidative stress - *Proc Natl Acad Sci U S A*. 2002; 99(4):1870-1875
7. Memory loss in old rats is associated with brain mitochondrial decay and RNA/DNA oxidation: partial reversal by feeding acetyl-L-carnitine and/or R-alpha-lipoic acid - *Proc Natl Acad Sci U S A*. 2002; 99(4):2356-2361
8. The antioxidants alpha-lipoic acid and N-acetylcysteine reverse memory impairment and brain oxidative stress in aged SAMP8 mice - *J Neurochem*. 2003; 84(5):1173-1183.
9. A conservative triple antioxidant approach to the treatment of hepatitis C. Combination of Alpha-lipoic acid (thioctic acid), silymarin, and selenium: three case histories - *Med Klin* 1999; 94 Suppl 3:84-9.

Wellness Express™ newsletters

are written and designed exclusively for chiropractors

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