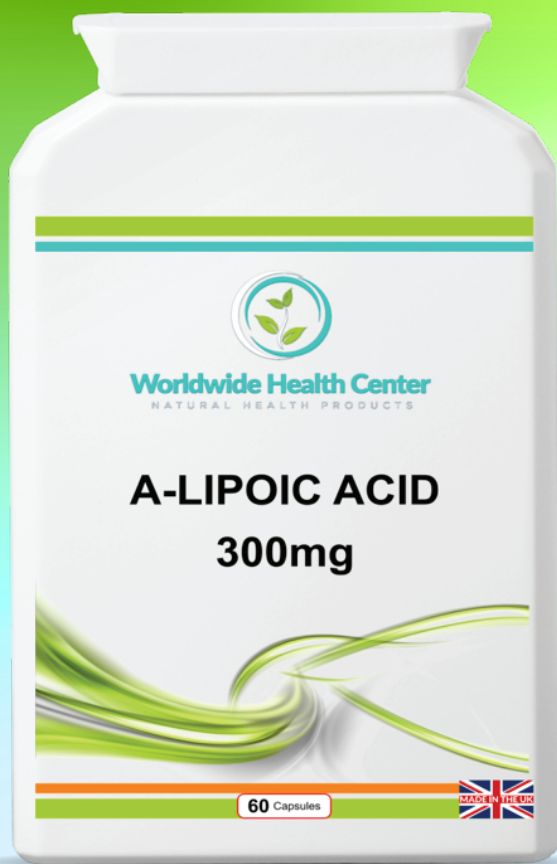




A-LIPOIC ACID



The powerful antioxidant

PRODUCT INFORMATION

Each capsule provides:

Alpha lipoic acid, 300 mg

Ingredients: alpha lipoic acid, anti-caking agent: maltodextrin powder, magnesium stearate (magnesium salts of fatty acids), stearic acid (fatty acid), silicon dioxide.

Directions: Take 1 capsule, 2 times per day or as advised. Do not exceed the recommended daily intake. Food supplements should not be used as a substitute for a varied diet and healthy lifestyle.

Do not take if pregnant or breast feeding.

Alpha Lipoic Acid (ALA) – Like A Vitamin

Alpha Lipoic Acid (ALA) is a vitamin-like substance that has generated much interest in the last few years, especially with regards to both its ability to act as a powerful antioxidant and because of its role in energy production. Our bodies are able to make ALA although a dietary source is still important, and it is found in almost all foods, especially in kidney, liver, spinach, and broccoli.

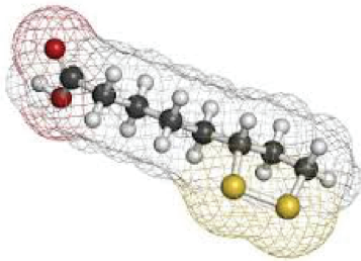
What is it about foods like broccoli and spinach that make them so healthy? There's the fibre, vitamins and minerals, of course, but then there's other important chemical compounds we call "antioxidants" too – like alpha lipoic acid (ALA).

How Do They Work?

Chances are you've heard a lot about the many benefits of various antioxidants and high-antioxidant foods — fighting inflammation, helping beat cancer or heart disease, warding off depression and cognitive decline, and so much more — but have you ever wondered what exactly antioxidants are and how they work in the body?

Alpha lipoic acid — one kind of antioxidant — is a type of compound found in plant foods we commonly eat that scavenges free radicals, fights inflammation and slows the aging process.

But perhaps its most famous use is in treating diabetes naturally.



Humans also make a small amount of ALA on their own, although the concentration in our bloodstreams goes up substantially when we eat a healthy diet. Naturally abundant in foods like green veggies, potatoes and certain types of yeast, lipoic acid is similar to a vitamin in that it can also be man-made in a lab so it can be taken as an anti-inflammatory supplement (which is then called alpha lipoic acid).

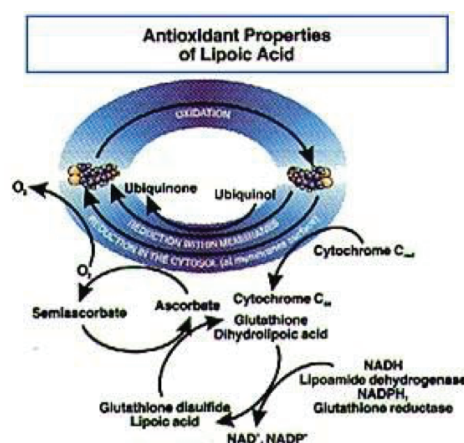
How Alpha Lipoic Acid Works

Lipoic acid is found in the body and also synthesized by plants and animals. It's present in every cell inside the body and helps turn glucose into “fuel” for the body to run off of. Is it “essential” that you consume a certain dosage of alpha lipoic acid every day? Not exactly.

Even though we can make some of it on our own without supplements or outside food sources (which is why it's not considered an “essential nutrient”), eating an antioxidant-packed diet plus potentially using ALA supplements can increase the amount circulating in the body, with studies show has far-reaching benefits.

ALA's most valuable role in the body is fighting the effects of free radicals, which are dangerous chemical-reaction byproducts that form during the process of oxidation. Within our cells, ALA is converted into dihydrolipoic acid, which has protective effects over normal cellular reactions.

As oxidation takes place in the body over time - due to normal chemical reactions like eating or moving, but also from exposure to environmental pollutants and toxins - certain compounds can become very reactive and damage cells. At times, this causes abnormal cells to grow and multiply, or it can have other effects like slowing metabolic efficiency and changing neuron signalling.



How Do They Work?

Like other antioxidants, alpha lipoic acid can help slow down cellular damage that is one of the root causes of diseases like cancer, heart disease and diabetes. It also works in the body to restore essential vitamin levels, such as vitamin E and vitamin C, along with helping the body digest and utilize carbohydrate molecules while turning them into usable energy.

In addition, alpha lipoic acid works like a synergist with B vitamins, which are needed for turning all macronutrients from food into energy. And it's synthesized and bound to protein molecules, making it act as a cofactor for several important mitochondrial enzymes.

Something that makes ALA unique is that it's both water-soluble and fat-soluble, unlike other nutrients (like B vitamins or vitamin A, C, D or E), which can only be properly absorbed with either one or the other.

There's some evidence that ALA acts as a "heavy metal chelator," binding to metals (also called "toxins") in the body, including mercury, arsenic, iron and other forms of free radicals that make their way into the bloodstream through water, air, chemical products and the food supply.

Finally (as if this wasn't enough!), alpha lipoic acid can increase how the body uses a very important antioxidant known as glutathione, and it might increase energy metabolism too - which is why some athletes use ALA supplements for enhanced physical performance.

Alpha Lipoic Acid Health Benefits

Because it acts like an antidote to oxidative stress and inflammation, alpha lipoic acid seems to fight damage done to the blood vessels, brain, neurons, and organs like the heart or liver. This means it offers numerous benefits throughout the whole body, from naturally treating Alzheimer's disease to controlling liver disease.

Alpha Lipoic Acid

- Improves symptoms of diabetic neuropathy
- Improves insulin sensitivity
- Acts synergistically with acetyl-L-carnitine as antioxidant
- May slow progression of Alzheimer's
- Dietary sources: Spinach, broccoli
- Supplemental doses: 300-900 mg/day

Feeling Young And Healthy

Because ALA isn't an official essential nutrient, there hasn't been an established daily recommendation needed to prevent a deficiency. However, being low in antioxidants in general can speed up in the aging process, resulting in symptoms like a weakened immune function, decreased muscle mass, cardiovascular problems and memory problems. Here are five ways that including more alpha lipoic acid in your diet (and for some people taking supplements too) can help keep you feeling young and healthy:

① Fights Diabetes and Diabetic Complications

Because alpha lipoic acid can protect cells and neurons involved in hormone production, one benefit is it offers protection against diabetes. ALA is considered an effective drug in the treatment of diabetic distal sensory-motor neuropathy, which affects about 50 percent of people with diabetes.

② Preserves Eye Health

Oxidative stress can damage nerves in the eyes and cause vision problems, especially in people with diabetes or older adults. Alpha lipoic acid has been used successfully to help control symptoms of eye-related disorders, including vision loss, macular degeneration, retina damage, cataracts, glaucoma and Wilson's disease.

③ Prevents Memory Loss and Cognitive Decline

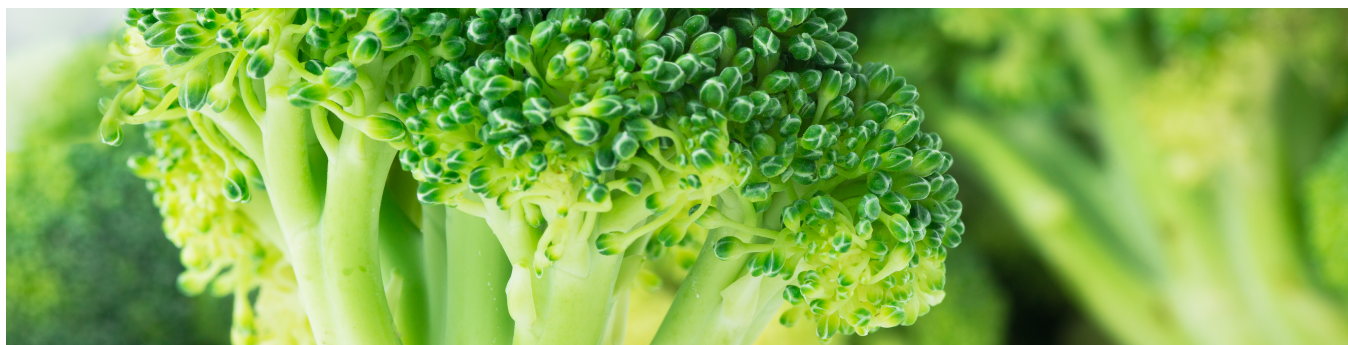
We know that a nutrient-dense diet filled with various colourful "brain foods" helps protect memory. Some health care professionals use alpha lipoic acid supplements to further help prevent their patients from experiencing neuron damage, memory loss, motor impairment and changes in cognitive functioning because of its antioxidant activity. ALA seems to easily make its way into the brain by passing the blood-brain barrier, where it can protect delicate brain and nerve tissue. It's also used to prevent strokes and other brain problems, including dementia in older adults.

④ Helps Boost Glutathione

Glutathione is considered the "master antioxidant" by many experts, since it's crucial for immunity, cellular health and disease prevention. Some studies have found that 300–1,200 milligrams of alpha lipoic acid helps increase the ability of glutathione to regulate the body's immune response and fight off diseases like diabetes/insulin resistance or even HIV/AIDS. In adults, supplementation with alpha lipoic acid seems to positively impact patients with immune deficiency syndromes and serious viruses by restoring blood total glutathione levels and improving functional reactivity of lymphocytes to T-cell mitogens.

⑤ Might Help Protect Skin from Damage

When it comes to battling physical signs of aging on the skin, certain studies have found that topical treatment creams containing 5 percent alpha lipoic acid can help reduce fine lines caused by exposure to sun rays. Skin damage is one side effect of high amounts of free radicals, which is why antioxidant-packed fruits and veggies are said to keep you looking young.



Alpha Lipoic Acid Dosage Recommendations

If you do choose to take ALA supplements, keep in mind that taking more won't always offer better results. While side effects and risks of taking more seem to be very rare (considering it's a natural chemical found in the body at all times), as little as 20–50 milligrams per day seems to be beneficial for general preventative health. Larger doses up to 600–800 milligrams per day are sometimes used in patients with diabetes or cognitive disorders but not recommended for the general public.

Dosage recommendations differ depending on who you ask, but below are some general guidelines that are within the safe range:

- 50–100 milligrams for antioxidant purposes in generally healthy adults
- 600–800 milligrams for patients with diabetes (divided into two doses, usually tablets are 30–50 milligrams each)
- 600–1,800 milligrams for patients with neuropathy and diabetic neuropathy (dosages this high should only be taken with supervision from a doctor)

According to researchers from Oregon State University, the amounts of lipoic acid available in dietary supplements (ranging in dosage from 200–600 milligrams) can be as much as 1,000 times greater than the amounts that could be obtained through someone's diet alone! Taking ALA supplements with a meal is believed to decrease its bioavailability, so most experts recommend taking it on an empty stomach (or at least one hour before or after) for the best results.

