

NITRIC OXIDE and Your HEALTH

Just say “NO” to aging and disease

First in a series about environmental health and natural wellness

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CELLULAR COMMUNICATION IS “NO” SMALL TASK

Nitric oxide (NO) is a molecule that our bodies produce naturally when given the right exercise and food. NO helps make it possible for the 50 trillion cells in your body to communicate with each other by transmitting signals.

In the last twenty years we’ve learned more about how NO works thanks, in large part, to three scientists that were awarded the Nobel Prize for this discovery. Since then, many articles have been published that highlight the importance of NO for memory, behavior and mood, as well as keeping the eyes healthy—mostly by helping nerve cells talk to each other. NO also helps the immune system fight off bacteria and defend against tumors. It reduces inflammation, increases endurance and strength and increases vascular blood flow. Every cell in your body responds to NO and can stimulate its production if treated right.

NITRIC OXIDE AND EYE HEALTH

Glaucoma, retinal degeneration and uveitis (the third leading cause of blindness in developed countries) can all arise from an NO imbalance in the eye. Inducible nitric oxide actually lowers intraocular pressure and a precise regulation of NO may lead to new therapeutic options, likely safer and more efficacious, than currently available treatments for various sight-threatening eye diseases. Scientists have even discovered that circles under the eyes are due to reduced NO in the skin and have formulated a skin lotion that reverses this by increasing NO in the skin.



NITRIC OXIDE AND HEART DISEASE

Nitric oxide has gotten the most attention due to its cardiovascular benefits. Nitroglycerin acts by releasing nitric oxide, which relaxes narrowed blood vessels, increasing oxygen and blood flow. The interior of your arteries produce nitric oxide. When plaque builds up in your arteries, the capacity to produce nitric oxide is diminished.

NITRIC OXIDE AND ERECTILE DYSFUNCTION

Viagra®, Cialis® and Levitra® are impotence medications that work because of their action on nitric oxide. One cause of impotence is unhealthy and aged arteries that feed blood to the sexual organs. These drugs work by creating more nitric oxide, causing a cascade of enzymatic reactions magnifying and extending nitric oxide, causing more blood flow and better erections.

HOW TO INCREASE YOUR NITRIC OXIDE LEVELS

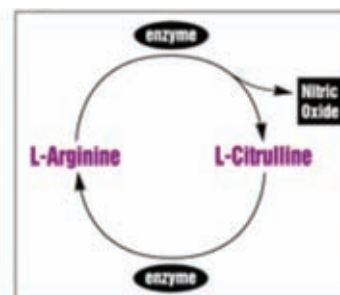


Diagram 1

The most common way to increase nitric oxide is through exercise, which causes the lining in the arteries to release nitric oxide into the blood, which allows for more blood to pass through the arteries. As we age, our blood vessels and nitric oxide production become less efficient due to free radical

damage, inactivity and poor diet, causing our veins and arteries to deteriorate.

Another way to increase nitric oxide is through diet, most notably by consuming the amino acids L-arginine and L-citrulline. Arginine, which can be found in nuts, fruits, meats and dairy, directly creates nitric oxide and citrulline inside the cell (see diagram 1). Citrulline is then recycled back into arginine, making even more nitric oxide. Enzymes that convert arginine to citrulline, and citrulline to arginine need to function optimally for efficient nitric oxide production. We can protect those enzymes and nitric oxide by consuming healthy foods and antioxidants like fruit, garlic, soy, vitamins C and E, Co-Q10 and alpha lipoic acid, allowing the production of more nitric oxide.

Other proven nitric oxide inducers include beet powder, spinach, pomegranate, green tea, certain Chinese herbs, microcurrent stimulators, NAC (N-Acetyl-Cysteine), EDTA chelation treatment, hyperbaric oxygen, ozone treatments, B vitamins and much more. Nitric oxide only lasts a few seconds in the body, so the more antioxidant protection we provide, the more stable it will be and the longer it will last. Doctors are utilizing this science by coating stents (mesh tubes that prop open arteries after surgery) with drugs that produce nitric oxide. Nitroglycerin induces NO causing relief of angina due to instant increase in blood flow.

With nitric oxide deficiencies occurring frequently due to aging, inactivity, smoking, high cholesterol, fatty diets and lack of healthy foods, increasing your nitric oxide levels can help increase your energy and overall wellness.

EASILY MONITOR YOUR NO LEVELS

A new, inexpensive saliva "dip stick" allows you to monitor your body's nitric oxide levels with instant feedback. These are available online from Neogenis®, a company that also produces a supplement proven to increase NO levels within an hour by combining beet powder, citrulline, hawthorne and other natural ingredients. At my clinic, Southwest Wellness Solutions, I use this saliva test before and after various wellness treatments to determine which increase NO levels. ☺

FOODS AND SUPPLEMENTS THAT BOOST NITRIC OXIDE

Protect your enzymes and boost nitric oxide levels by consuming an abundance of healthy foods and taking antioxidant supplements. Proven nitric oxide inducers include:



Green Tea



Spinach

Soy

Garlic

Vitamin C



Beets

Pomegranate

B Vitamins



CoQ10



Just say "NO" to aging and reverse/slow damage to your cells by increasing exercise and eating foods that increase nitric oxide naturally!

Visit us for additional resources!

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