

Good Health LIFESTYLES

forever young

Is glutathione the key to a long, healthy life?

by Jacob Teitelbaum, MD

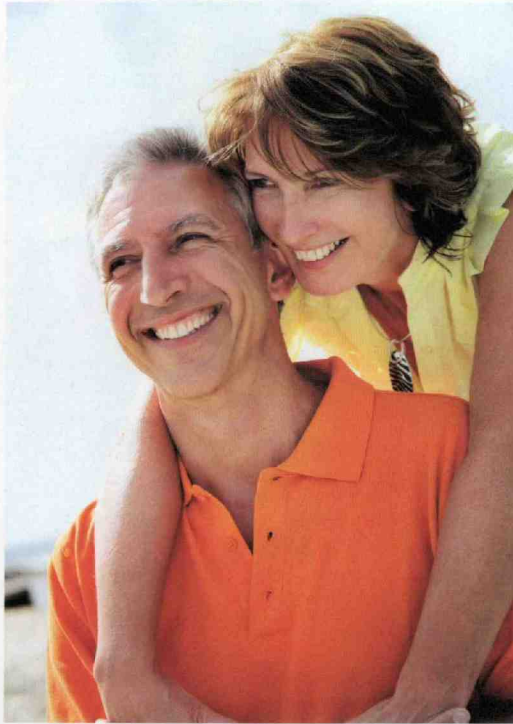
A very wise doctor once said that he wished all his patients would die young...at a very old age! But what does it take to live young into your nineties and beyond? Eating healthy foods, staying active, focusing on things that feel good, and avoiding bad habits like excessive drinking and smoking all play a role. However, scientists are starting to unlock a special molecule that profoundly affects both everyday health and our ultimate longevity: glutathione.

Everybody makes glutathione, much of it in the liver. It has been called the master antioxidant, but it is so much more. The liver is completely reliant upon glutathione to filter out and eliminate toxins. Some of the hardest-to-quench free radicals—those linked to a wide variety of chronic diseases—are stopped in their tracks by glutathione. High levels of oxidative stress are linked to Parkinson's disease (PD), Alzheimer's disease (AD) and cancer, to name a few. Your body can't make adequate white blood cells to fight off infection without glutathione.

As for healthy, active people over the age of 100, studies have shown they have significantly higher glutathione production than people not so blessed with vigor and long life.

Glutathione Challenges

Unfortunately, our ability to make glutathione is diminished by age, certain illnesses, liver damage, some drugs (especially acetaminophen), toxic exposures, and even genetics. An estimated one in three people are born with a genetically linked sluggish glutathione production, and their levels can be reduced 50 percent or more than people without this genetic variant. The aging process takes a significant toll as well. By age 40, we are making 30 percent less, and by 65, as much as 50 percent less—and that is in healthy individuals. Anyone with liver stress or disease produces significantly less.



It would make sense that glutathione supplementation would be heralded as an amazing natural medicine breakthrough, but there are great challenges in delivering the right kind of glutathione to the body. Integrative practitioners have used intravenous (IV) glutathione for years with excellent results. But these treatments require a doctor and a clinic licensed to administer medications directly into the veins.

Researchers have experimented with oral glutathione supplements, but these products have proven problematic. Here's why: There are two kinds of glutathione that exist in your body. The beneficial kind is active or "reduced" glutathione. The other type has lost its master antioxidant status and is "oxidized glutathione." The active form delivers health miracles, while the oxidized form just adds to the body's oxidative stress burden—not a good thing.

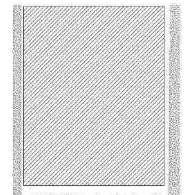
Researchers found that active glutathione is fragile—so fragile that when taking standard supplements the digestive process itself—not just stomach acid—converts it to oxidized glutathione.

New French Discoveries Pave the Way

Fortunately, a recent discovery about the nature of glutathione allowed French scientists to create an active form delivered to the body intact in a unique, slow-melt tablet. Clinical studies on this French breakthrough showed that holding the tablet under the tongue until completely dissolved twice a day greatly improved glutathione levels by 38 points in only 11 days. Additional studies showed that this special form improves glutathione ratios (the ratio of active glutathione to the oxidized form) by 230 percent compared to unprotected glutathione. For the first time, people can benefit from boosting one of the most important nutrients in the body without expensive and time-consuming visits to an IV clinic.

Glutathione and Longevity

How does glutathione extend life? By greatly enhancing your detoxification processes, glutathione neutralizes harmful



toxins that can prematurely age you. Glutathione also arrests free radical damage to your DNA—damage that can accelerate the aging process. It is critical for healthy immunity while protecting against auto-immune induced inflammation. Finally, glutathione helps to preserve the caps on the end of your chromosomes, called telomeres. Telomeres help keep that important strand of DNA from unraveling, much in the way the hard end keeps shoelaces from fraying. Many cutting-edge research studies have proven the dramatic link between telomere length and longevity. In an animal study, mice that were modified to have better protection of their telomeres lived 40 percent longer than average mice.

DISEASES WITH DOCUMENTED LINKS TO LOW GLUTATHIONE

Huntington's disease multiple sclerosis
viral infections accelerated aging
eyesight issues, including macular degeneration
sinusitis arthritis cystic fibrosis
asthma lupus atherosclerosis
HIV and AIDS angina
infertility bipolar disorder
Alzheimer's disease
acne and other skin conditions
migraines Parkinson's
Cancer: breast, lung, cervical, colon, ovarian, leukemia
amyotrophic lateral sclerosis (ALS, or Lou Gehrig's disease)
depression erectile dysfunction
thyroid diseases, both hyper and hypo
hypertension hepatitis of any kind
Lyme's disease
gout
autism
allergies
diabetes
gastric ulcers
pancreatitis
COPD
stroke
chronic fatigue

Glutathione and Disease

Reduced glutathione is essential to a strong immune system. Studies suggest that boosting glutathione levels can enhance the immune response by optimizing macrophage function. Macrophages are white blood cells that gobble up infectious invaders. Glutathione also protects other disease-fighting cells, called lymphocytes, from oxidative damage and premature cell death. A strong immune response requires a healthy army of 'killer' lymphocytes to be able to destroy undesirable cells, including cancer

cells. Doctors are giving a great deal of attention to the role of reduced glutathione for neurological diseases like Parkinson's disease (PD) and cancer.

As early as 1996, an Italian study found that the progression of PD was reduced and the symptoms were improved by 42 percent after only 30 days of treatment with reduced glutathione. The challenge was that, at the time, glutathione could only be given intravenously, limiting its daily therapeutic use. However, improvements in the efficacy of glutathione supplements have solved this problem, making daily use attainable for those with PD, as well as other cognitive and neurological problems.

Some of the biggest factors that increase the risk of developing cancer are exposure to toxins and oxidative stress. Preliminary research reveals that reduced glutathione improves the body's ability to rid itself of dangerous compounds and vigorously reduces oxidative stress in ways no simple antioxidant can manage. For that reason, integrative medical practitioners often use glutathione for prevention. Reduced glutathione may also help those undergoing chemotherapy. In a 2008 study, Japanese doctors found that intravenously administered glutathione dramatically reduced nerve damage in patients being treated with drug chemotherapy that caused neurotoxicity. Not only did glutathione exert a neuroprotective effect, it helped to reduce the oxidative stress caused by the chemotherapy that was part of the nerve damage in some people. ■



Jacob Teitelbaum, MD, is a recognized leader in the treatment of pain, chronic fatigue syndrome, and fibromyalgia. His most recent book is *The Fatigue and Fibromyalgia Solution*. He has been a guest on Good Morning America, CNN, Fox News, the Dr. Oz Show, and Oprah & Friends. His web site: www.JacobTeitelbaum.com