

Vitamin D Deficiency Linked to Rheumatoid Arthritis

By: David Gutierrez, Natural News

A growing body of research suggests that not only may vitamin D deficiency be a risk factor for rheumatoid arthritis; it may also make rheumatoid arthritis patients significantly more susceptible to cardiovascular disease.

Rheumatoid arthritis is an autoimmune disorder that occurs when the body's immune system attacks its own tissues, particularly the joints. Because vitamin D is known to play an important role in regulating the immune system and has been specifically linked to the occurrence of other autoimmune disorders, many researchers have long suspected that deficiency might increase the risk of rheumatoid arthritis.

Confirmation of this link came in 2010, in a study published in the journal *Environmental Health Perspectives* that looked at the effect of environmental factors on rheumatoid arthritis risk. The researchers found that women living in the Northeast were significantly more likely to develop the disease.

"The results were unexpected," researcher Veronica Vieira said. "Prior to the analysis, we were more interested in the relationship with air pollution. I hadn't given latitudes much thought."

Because the body produces vitamin D upon exposure to sunlight, deficiency rates are significantly higher at latitudes farther from the equator, particularly among people with darker skin or who regularly cover their skin with clothing or sunscreen.

Important for the heart and bones

More recently, a study conducted by researchers from *Johns Hopkins University School of Medicine* and published in the journal *Arthritis Care Research* looked at the connection between vitamin D levels and cardiovascular disease risk among rheumatoid arthritis patients. Both vitamin D deficiency and rheumatoid arthritis are known risk factors for cardiovascular disease.

The researchers found that 41 percent of rheumatoid arthritis patients studied were significantly deficient in vitamin D, with another 46 percent having insufficient levels of the vitamin. Participants with lower vitamin D levels had more insulin resistance, lower levels of HDL ("good") cholesterol and more markers of inflammation, even after adjusting for other potential risk factors such as body mass index, antibody status, sex and ethnicity.

Higher levels of inflammation suggest that low vitamin D status may actually worsen rheumatoid arthritis symptoms.

Part of the reason that rheumatoid arthritis patients are believed to have higher rates of cardiovascular disease is that the chronic inflammation caused by the autoimmune disorder also attacks the heart and blood vessels. By abating inflammation and protecting the heart, vitamin D supplementation may significantly extend the life expectancy of rheumatoid arthritis patients.

For example, a 2008 study published in the *Archives of Internal Medicine* found that people with severe vitamin D deficiency were twice as likely to die as those with sufficient levels, particularly from cardiovascular disease.

Rheumatoid arthritis patients are also known to have a higher risk of developing osteoporosis, a problem that is made even worse by the fact that many of the steroids used to treat rheumatoid arthritis can also promote bone loss. By increasing calcium absorption in the body, higher vitamin D levels can also protect against this effect.

Because many osteoporosis drugs do not function well in vitamin D-deficient individuals and can actually cause vitamin D depletion, it is especially important that people taking those drugs monitor their vitamin D status.

Of course, getting plenty of vitamin D is important even for people who do not suffer from osteoporosis or rheumatoid arthritis. In addition to helping build healthy bones and teeth, vitamin D helps regulate the immune system and can reduce your risk of infections, heart disease, diabetes, cancer and autoimmune disorders.

Sources for this article include:

<http://www.vitasearch.com/get-clp-summary/40251>

<https://www.ncbi.nlm.nih.gov/pubmed/22555877>