



Read This Shocking Vitamin D Report or You'll Kick Yourself for the Next Decade

Posted by [Dr. Mercola](#) | March 16 2010 | 156,300 views

The *British Medical Journal* has published a remarkable paper confirming that low vitamin D levels obtained in the past are a risk factor for developing colon cancer in the future.

But the study contained an even more significant finding -- as Dr. Cannell's site has [reported before](#), vitamin A, even in relatively low amounts, can thwart vitamin D's association with reduced rates of colon cancer.

This is the largest study to date showing vitamin A blocks vitamin D's effect.

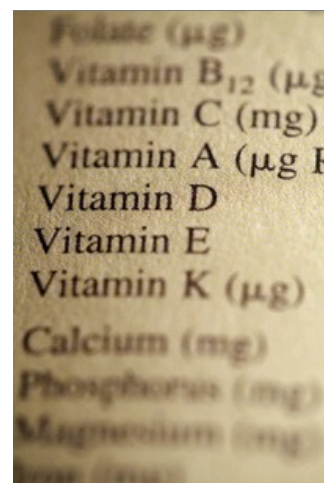
Hidden on page eight of the paper was one sentence and a small table, showing that the benefits of vitamin D are almost entirely negated in those with the highest vitamin A (retinol) intake.

And the retinol intake did not have to be that high -- only about 3,000 IU/day. Young autistic children often take 3,500 IU of retinol a day in their powdered multivitamins, which doesn't count any additional vitamin A given in high single doses.

The finding explains some of the anomalies in other papers on vitamin D and cancer -- similar studies sometimes have widely different results. This may be because the effect of vitamin A was not taken into account. In some countries, cod liver oil, which contains vitamin A, is commonly used as a vitamin D supplement, and in others it is used more rarely, causing differences in the results.

Sources:

- » [The Natural Advocate February 28, 2010](#)
- » [Vitamin D Council](#)
- » [British Medical Journal. BMJ 2010;340:b5500](#)



Dr. Mercola's Comments:

If you already subscribe to the excellent newsletter from [The Vitamin D Council](#) then you're aware of this important information. If not, I highly recommend becoming a subscriber, as The Vitamin D Council is a great source of information on this vital topic.

In this recent article by Dr. Cannell, he discusses the [latest research published in the *British Medical Journal*](#), which confirms his previous assertion: that [too much vitamin A negates many of the beneficial health effects of vitamin D](#).

In his [December 2008 issue](#), Dr. Cannell explained:

"The crux of the problem is that a form of vitamin A, [retinoic acid](#), weakly activates the vitamin D response element on the gene and perhaps blocks vitamin D's more robust activation. In fact, the authors of a [1993 study](#) state "there is a profound inhibition of vitamin D-activated...gene expression by retinoic acid."

So what does this mean?

Vitamin A versus Vitamin D

Well, naturally, since appropriate vitamin D levels are crucial for your health, it means that it's essential to have *the proper ratio* of vitamin D to vitamin A in your body.

This also means that vitamin A supplementation is potentially hazardous to your overall health, as vitamin D plays a significant role in a large number of common diseases and afflictions.

In a paper published in the August 2007 issue of the *American Journal of Clinical Nutrition*, Anthony Norman, an international expert on vitamin D, identified vitamin D's potential for contributions to good health in:

- Your adaptive and innate immune systems
- The secretion and regulation of insulin by your pancreas
- Heart and blood pressure regulation
- Muscle strength
- Brain activity

There are only 30,000 genes in your body and vitamin D has been shown to influence over 2,000 of them. That's one of the primary reasons it influences so many diseases, including:

Cancer	Hypertension	Heart disease
Autism	Obesity	Rheumatoid arthritis
Diabetes 1 and 2	Multiple Sclerosis	Crohn's disease
Flu	Colds	Tuberculosis
Septicemia	Aging	Psoriasis
Eczema	Insomnia	Hearing loss
Muscle pain	Cavities	Periodontal disease
Athletic performance	Macular degeneration	Myopia
Pre-eclampsia	Seizures	Fertility
Asthma	Cystic fibrosis	Migraines
Depression	Alzheimer's disease	Schizophrenia

Vitamin A production is tightly controlled in your body. The substrate, or source of the vitamin A, are carotenoids from vegetables in your intestine. Your body converts these carotenoid substrates to exactly the right amount of retinol. However, when you take vitamin A as retinol directly, such as in cod liver oil, you bypass all the natural controls in this closed system.

Ideally, you'll want to provide all the vitamin A and vitamin D substrate your body needs in such a way that your body can regulate both systems naturally.

This is best done by eating colorful vegetables (for vitamin A) and by exposing your skin to sun every day (for vitamin D).

Even Low Amounts of Vitamin A Can Negate Benefits of Vitamin D

Given that cancer, heart disease and diabetes are three of the top causes of death in the United States, ensuring that you are getting enough of this crucial vitamin should be a top priority.

A study by Dr. William Grant, Ph.D., another internationally recognized research scientist and vitamin D expert, found that about 30 percent of cancer deaths -- which amounts to 2 million worldwide and 200,000 in the United States -- could be prevented each year with higher levels of vitamin D.

Knowing this, it's clearly important to avoid anything that might hamper your vitamin D production, and it appears vitamin A supplementation may indeed have this effect.

I highly recommend you read Dr. Cannell's article about this latest BMJ study, in its entirety, as he explains quite well how even the researchers themselves seem to have missed this crucial connection.

He writes:

"Dr. Mazda Jenab and his 45 colleagues from the International Agency for Research on Cancer confirmed that low vitamin D levels are a risk for colon cancer in a dose response manner; those with the highest levels were about twice as less likely to develop colon cancer compared to those with the highest levels.

However, hidden on page eight is one sentence and a small table, which shows that the benefits of vitamin D are almost entirely negated in those with the highest vitamin A intake. And the retinol intake did not have to be that high in these older adults to begin to negate vitamin D's effects, about 3,000 IU/day.

Remember, young autistic children often take 3,500 IU of retinol a day in their powdered multivitamins, which doesn't count any additional vitamin A given in high single doses.

This is the largest study to date showing vitamin A blocks vitamin D's effect and explains some of the anomalies in other papers on vitamin D and cancer."

The Synergistic Effects of Vitamin A on Vitamin D

It's highly unfortunate, but many people in developed countries are potentially sabotaging the multitude of health benefits they could receive from adequate vitamin D by taking excessive amounts of vitamin A, either in the form of multi-vitamins or cod liver oil.

I spent many hours reviewing this issue in the latter part of 2008, and as a result, I issued a [revision of my long held recommendation for cod liver oil](#). If you missed that important update, please take the time to review it now.

I had recommended cod liver oil as a source of vitamin D for quite some time, prior to this revision. My stance was based on the fact that cod liver oil contains vitamins D and A in addition to healthy omega-3 fats.

These vitamins are essential for most everyone who cannot get regular sun exposure year-round.

However, as I began reviewing the latest research, I realized there was compelling evidence that the *ratios* of these two vitamins may be of paramount importance in order to extract optimal health benefits. And this latest study appears to confirm that theory.

It's important to understand that vitamin A is essential for your immune system and a precursor to active hormones that regulate the expression of your genes just like vitamin D, and the two *work in tandem*.

For example, there is evidence that without vitamin D, vitamin A can be ineffective or even toxic. But if you're deficient in vitamin A, vitamin D cannot function properly either.

So proper balance of these two vitamins is essential. Too much or too little of either may create negative consequences.

Unfortunately, we do not yet know the optimal ratios between these two vitamins, but it is clear that nearly all cod liver oil products supply them in levels that do not appear to be ideal.

You also need to discern between various forms of vitamin A.

It is the *retinoic acid (retinol)* form of vitamin A that is problematic. Not beta carotene.

Beta carotene is not a concern because it is PRE-vitamin A. Your body will simply not over-convert beta carotene to excessive levels of vitamin A. So taking beta carotene supplements is not going to interfere with your vitamin D.

How Can You Ensure Proper Ratios of Vitamins A and D?

As Dr. Cannell has stated in earlier writings on this topic, the ideal way to obtain the proper vitamin A to D ratio is to obtain it the way your body was designed to obtain it:

- Vitamin A through your diet, in the form of colorful vegetables
- Vitamin D through daily sun exposure on your skin

For more information about the vital importance of these two vitamins, please review the articles below.

Related Links:

- » [Important Cod Liver Oil Update](#)
- » [Why Vitamin A May Not Be as Useful or Harmless as You Thought](#)
- » [My One Hour FREE Vitamin D Lecture to Clear Up All Your Confusion on this Vital Nutrient](#)