



The Cod Liver Oil Controversy

Because the days are getting shorter, and there is less and less sun for those of us in northern climates, it is time to consider how to keep vitamin D levels up through the winter. Vitamin D deficiency is very common, and it is needed daily by the body for cardiovascular, brain, kidney and bone health. Cod liver oil is a good option, but one must choose wisely.

Ever since Dr. Cannell of the Vitamin D Council put out notice that he thinks cod liver oil should not be consumed, scientists and doctors are duking it out on both sides of the issue.

Who would have thought that cod liver oil could be controversial? After all, our grandparents were raised on cod liver oil, and it was given to all children like a religion prior to the 1950s with no apparent ill effects, and lots of good effects ...

But when Dr. Mercola, who has a readership of over a million people, sided with Dr. Cannell, and told his subscribers he was no longer recommending cod liver oil, a few readers asked me what I thought of the whole controversy.

So, here is my two cents worth. Please remember that I am neither a doctor, nor a scientist - just a health geek that reads a lot and comes to my own conclusions, so take what I say with a good dose of skepticism, just as I think one should of what anyone tells you, *including* your doctor and your government. Do your own research and make up your own mind about what feels right for you.

Cod liver oil is not only a fabulous source of omega 3 fatty acids, important for brain function and cardiovascular health, but also **a good source of vitamin D and A,** especially important in the winter months in parts of the world where there is little sun, and **vitamin D deficiency is common.**

If your shadow is longer than you are when you are in the sun, your body can't make vitamin D. Because there are not many foods that contain much vitamin D, and people have been frightened away from precisely those foods like lard, liver, eggs etc. due to the mistaken belief that cholesterol and saturated fat are unhealthy, **cod liver oil would seem to be an excellent choice in the winter,** especially since synthetic vitamin D supplements are less reliable than a food for obtaining health benefits.

It should also be noted that the Inuit live in darkness for many months of the year - no sun available at all - and they traditionally relied on food sources for their vitamin D - seal blubber and lots of fatty fish. They did not appear to have any signs of vitamin D deficiency.

I would imagine that because we are all biochemically different, we would all require different amounts of vitamin D and A to be healthy. There is certainly some indication of that concept based on [this study](#) of calcium absorption in Inuit children.

So, what's the problem?

In a nutshell, **some cod liver oils are very high in vitamin A in relation to vitamin D,** and **vitamin A in high doses is not only toxic**, but according to Dr. Cannell can actually interfere with the utilization of vitamin D. So by taking in too much vitamin A, according to Dr. Cannell, it can inhibit the binding of Vitamin D to your DNA, thereby affecting the expression of those genes that are regulated by Vitamin D.

The argument is that in the western world, we get a lot of vitamin A in our diet, and there is no reason to risk supplementation with extra vitamin A, especially at the high levels often found in cod liver oil.

Because both vitamin A and D are fat soluble rather than water soluble, we do not excrete the excess vitamin A and D that we consume, and hence the toxicity danger. Both vitamin A and D are both tightly controlled by the body, and converted to the active form only as needed in order to reduce the chance of

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converted to the active form only as needed in order to reduce the chance of toxicity.

But because the vitamin A in cod liver oil comes in its active form, retinol, it bypasses the body's control mechanism, increasing the chance of toxicity.

In the developing world, vitamin A toxicity is unlikely to be an issue, but in the developed world, some argue that vitamin A toxicity is more common than one would think.

However, **according to the research of Weston A Price, vitamin A is NOT toxic except in the case of vitamin D deficiency. In nature, foods that contain vitamin D also contain vitamin A, because they work synergistically.**

Seal oil, a staple of the Inuit diet has far higher levels of vitamin A than cod liver oil. In fact, Dr. Price found that many traditional cultures consumed vitamin A in far greater amounts than we do in current times.

The Weston A Price Foundation does not agree at all that there is rampant vitamin A toxicity in the western world, due not only to the general population's fear of saturated fat, but also due to the fact that many (those with thyroid, liver problems, diabetes, children and babies) have trouble converting carotenoids in vegetables into vitamin A.

Until there is a similar medical test for vitamin A levels as is available for vitamin D, I guess we won't know who is right. The Weston A Price Foundation also disagrees with Cannell's statement that high levels of vitamin A will interfere with vitamin D regulated gene transcription, stating that "researchers from Spain recently showed that vitamin D can only effectively activate target genes when its partner receptor is activated by vitamin A".

To understand the biochemistry of the interaction between vitamin A and D in more detail, click [here](#) for the Spanish study.

The key, according to the Weston A Price Foundation, is that the body can use natural food sources of vitamin A and D, as they are packaged in appropriate ratios.

Supplementation is problematic, because frequently not only are those ratios are out of whack, but also synthetic vitamin A and D are toxic. Once again, rely on food for nutrition, not supplements.

So, **what does this all mean for cod liver oil?** The problem is that in the modern cleaning processing of cod liver oil, the vitamins are frequently removed, and then synthetic vitamins are added back in, and not in the same ratios that were naturally in the oil to begin with.

Cod liver oil is frequently being turned into a supplement rather than the food it originally was. **So often one sees ratios of vitamin A to D of 100:1, which is crazy high in vitamin A with respect to D. Ratios should be in the range of 10:1 or less**, and thankfully there are many natural cod liver oils on the market that meet that requirement.

So rather than throwing the baby out with the bathwater and missing out on the omega 3s and vitamins in cod liver oil, I think we simply need to be very picky about what cod liver oil we choose to use. Look for naturally occurring vitamin A and D, and make sure the ratio is 10:1 or less.

Fermented cod liver oil is probably the best, but is hard to get in Canada at least. Carlson's is readily available in my neck of the woods, and has 700 to 1200IU vitamin A to 400IU vitamin D in the liquid, a good ratio, and well below the recommended daily allowance of 10,000IU vitamin A a day.

Other good online sources include Blue Ice Fermented Cod Liver Oil 120 Caps, Garden of Life regular dose, Nordic Naturals High Vitamin D cod liver oil, and Radiant Life High Vitamin Cod Liver Oil.

Remember that **fish oils as well as fish liver oils, like vegetable oils, are mostly polyunsaturated fatty acids and therefore very prone to oxidation, and need to be kept in the fridge in order to prevent rancidity** (vegetable oil exceptions are olive and coconut oils which are mostly monounsaturated and saturated fatty acids respectively).

Pay attention to expiry dates. Furthermore, this vitamin controversy does not apply to regular fish or krill oils that are used for omega 3 supplementation, as these oils do not have vitamin A nor D in them.

Please do keep the comments coming on my [blog](#). If you want to share this article, go to the blog post and scroll to the bottom and click on the "share this" icon. If you want to subscribe or search for other posts by title or by topic, go to www.wellnesstips.ca.

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