

## Tuesday Minute Transcript

This Week's Topic

# Test Every Patient For Vitamin D

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Here's an interesting update on vitamin D. I was listening to Dr. Mitchell Glen who holds advanced degrees in Osteopathy as well as a PhD in anti-aging medicine. He blew me away when he mentioned that in his practice only 1% of the 2,700 new patients he tested had sufficient levels of vitamin D. Ironically, the majority of them are from the "sunshine" state, Florida.

A colleague of mine, Julie Burns, works with professional athletes. She tested "trained and fit" hockey players from the Chicago Blackhawks. Their vitamin D levels were woefully deficient. She supplemented to help them reach optimal levels. I'm not saying it was the reason they won the Stanley Cup, but optimal levels of vitamin D can help increase performance and reduce injuries.



According to Dr. Glen's research, patients should have vitamin D levels of 60-100 ng/ml. So the ranges seem to keep going up as more data accumulates. In fact Dr. John Cannel suggests the goal for autistic kids be 100 ng/ml for 3 months, and if results are not noticeable, increase to 150 ng/ml. He is quick to say these are pharmacological doses and should be monitored on a regular basis.

I must confess I have been worrying about patient's pocketbooks too long

because I haven't ordered lab test as frequently as I should. But pre and post testing is more important than I realized; and I'd like to give you two reasons why.

The first reason comes from a study about the lack of vitamin D in "over the counter" supplements. The study was presented at the June 2010 meeting of "The Joint Consortium of Multiple Sclerosis Centers" and "America's Committee on Treatment and Research in Multiple Sclerosis." Are you ready, the mean vitamin D

content from 10 different over the counter brands was only 33% of label claim. The actual numbers ranged from 0.24% to 81.7% of what was listed on the label. Now, this is only one study; but when your patient comes into your office and says that they are taking vitamin D, you have no idea of whether they are getting or absorbing it.

Sadly the state of the GI tract for many of our patients is less than optimal. I use Bio-D-Mulsion Forte from Biotics Research Corporation because it's already emulsified and goes right into the lymph system and doesn't have to be broken down or digested in an already compromised GI tract. I am always surprised when doctors are surprised that Bio-D-Mulsion Forte raises blood levels so consistently. I'm thinking "isn't that what it is supposed to do? Why are you surprised?"

The second reason pre and post testing is so important is that low levels of vitamin D ultimately mean elevated levels of inflammation. Dr. Alex Vasquez years ago articulated how low levels of vitamin D can be precursors to the genetic expression of NF-kappaB. Physicians commonly use high sensitive C-reactive protein, sedimentation rate, elevated liver enzymes or elevated glucose levels as inflammation markers. But why not consider using 25-hydroxyvitamin D3 levels as another "light on the dashboard."

For example, a 2010 study in the "Annals of Family Medicine" showed "men with low levels of vitamin D (15 ng/ml or lower) were at increased risk for heart attack compared to those with sufficient levels (30 ng/ml or higher)."

A study from "The Journal of Clinical Endocrinology & Metabolism 2010 showed "older

women who have levels below 20 ng/ml were twice as likely to have depressed moods as those with higher levels." Data from the same study showed "those who were severely deficient (below 10 ng/ml) were approximately 60% more likely to experience substantial cognitive decline than those who were sufficient. (above 30 ng/ml)." To me, 30 ng/ml is not sufficient, but you get the point.

The vitamin D explosion has spawned over 1,500 articles in 2010 alone. I think we can legitimately rationalize testing to look for serious disease parameters; but in our heart of hearts, we know we are looking for evidence to increase longevity and quality of life. If a clinician says "take this vitamin D, it does blah blah blah," that's one thing. But if a clinician says "your blood levels are low and if we can get them up, we can help prevent all kinds of diseases and help your genes function better," which would motivate you more?

As you order testing, always make sure you order a chemistry panel that contains serum calcium. Calcium is almost always below optimal levels of 9.4; but when it exceeds the reference range, pay attention. Parathyroid hyper-function as well as excess vitamin D can be a contributor. In light of updated research suggesting vitamin D levels as a marker for inflammation, it's powerful therapeutic benefits and since some manufacturers may not be supplying consistent levels of nutrients, I've been motivated to step up my testing. Hey, if the benefits outweigh the cost, it's worth it.

Thanks for reading this week's edition of the Tuesday Minute. See you next Tuesday.