

What You Don't Know About Osteoporosis



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PART 1

What keeps aging bones strong?

For years, I thought I knew.

When I first began my career in Integrative Medicine, integrating conventional and alternative approaches to healing, I felt I had a pretty good handle on the good and bad of bone health.

Don't smoke. Watch your alcohol intake. Drink plenty of milk. Don't be a vegetarian. Eat meat. Watch your weight. Was the weight thing really a risk factor? Didn't know, but it seemed like a good idea. Exercise and whenever possible, don't fall down. And whatever you do, *don't get old*. Old means brittle bones. Not much you can do about brittle bones once you got them. And vitamins seemed like a good idea.

Well, it turns out there was a lot more I had to learn. And along the way, came up with a slew of things I didn't know about osteoporosis. So here are the pearls -- some little, some huge -- I have found which continue to help my patients and myself as we age.

This is the first of three articles on what helps keep bones healthy and strong -- and what does not. We will be covering both prevention of and treatment for osteoporosis for women as well as men.

Don't Smoke?

True. Smoking is a well-defined contributor to osteoporosis. But it is also true if you are a smoker it can only help if you quit. Bones are living tissue and will remodel over time -- given the right kind of love and supplements and diet.¹

Diet and Calcium Intake

We are all aware of the importance of high calcium intake in our diet and the need to take calcium supplements to protect our bones -- generally recommended by physicians to be at least 1200 mg a day. We see this regularly on television advertisements, hear this on the radio, and view it on the Internet as well.

We're also told how important it is to drink milk or take dairy -- yogurts of various name brands, cheese from happy cows in California and make sure we got milk with our chocolate chip cookies. That way we can help build strong bones and stave off osteoporosis, perhaps even help reverse it.

So it's a rather serious blow to the dairy industry, not to mention the current mythology of Calcium, to see the following five major studies -- including studies on children and young adults -- which rather clearly and quite emphatically state: "SORRY, CHARLIE. NOT TRUE." In fact the Harvard study suggests there may be an increased risk of fractures if one is taking calcium supplements.²⁻⁶

Evaluating over 190 thousand men and women over a period of time of up to 18 years, these studies concluded, "**Neither milk nor a high-calcium diet appears to reduce risk. These data do not support the hypothesis that higher consumption of milk or other food sources of calcium by adult women protects against hip or forearm fractures. And for men we also find, "In conclusion, these results do not support a relation between calcium intake and the incidence of forearm or hip fractures."**

Some studies put qualifications on all this myth shattering. Oxford says dietary calcium matters in younger women, but not so very much in older women and not in men at all. The British Journal of Nutrition says there may be an increased risk of fractures only if dietary calcium levels are extremely low.
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What's to believe? Is nothing sacred?

Bottom Line: Calcium -- either dietary or supplement sources - by itself does not offer any clear or consistent benefit in preventing osteoporosis or reducing fracture risk in anyone.

That certainly ruined my day when I realized some years ago that all the milk I was drinking was of -- at best -- questionable benefit for my bones. And yours as well. So did this mean calcium was totally out?

Calcium and Vitamin D Intake

One of the studies which showed no benefit from calcium intake alone also showed that of the 72,337 women who took Vitamin D in adequate amounts there was a 37% lower risk of hip fractures. The National Institutes of Health and the National Cancer Institute in their September, 2007 conference on Vitamin D concluded "Combined calcium and vitamin D supplementation decreases the risk of bone fracture and increases bone mineral density but vitamin D alone does not." 9

This conclusion about the ineffectiveness of vitamin D alone, however, was based upon relatively low doses of the vitamin as we will see below.

Bottom Line: Besides military secrets, medical truths may be perhaps the most fleeting of all. But for now, it is a reasonable approach to be taking adequate amounts of Vitamin D with Calcium to protect against fractures. In my clinical practice I routinely recommend 1200 mg of highly absorbable calcium combined with Vitamin D and the other nutrients listed below. So calcium by itself? Not so helpful. But with its colleague, vitamin D, this is a good thing.

What is an adequate amount of Vitamin D to take?

In March, 2007, an international group of medical University based Vitamin D researchers -- including those from Harvard, Switzerland, London, Germany, Australia, Finland, New Zealand and Canada -- urgently appealed for higher doses of D to be recommended to the general population. They urged policy makers to increase the daily recommended levels to significantly higher amounts for all adults. Their reasoning was straightforward. Higher intake of vitamin D is not only safe but is essential to provide optimal health and protection against disease.¹⁰

What diseases does vitamin D protect against? Besides osteoporosis, vitamin D deficiency causes muscle weakness and increases the risk of cancer, hypertension, type 1 diabetes, heart disease, infection, multiple sclerosis rheumatoid arthritis and other auto-immune diseases.¹¹

And vitamin D deficiency is not an occasional issue. It is in fact, a worldwide epidemic.¹²

Higher doses approach the optimal levels of this crucial nutrient. The currently recommended dose of 400-800 IU per day "is not based on current evidence and is viewed by many as being too restrictive...Human clinical trial data... support a significantly higher" intake, and "are sufficient to show that vitamin D is not toxic at intakes much higher than previously considered unsafe." Furthermore, "the absence of toxicity in trials conducted in healthy adults that used vitamin D dose greater than 10,000 IU" per day "supports the confident selection of this value" as the tolerable daily intake level.¹³

Some proponents suggest 1000 IU a day should be taken. Yet the reviews we have seen, in fact, suggest the margin of safety is actually more than 10 times higher than the currently recommended daily intake.¹⁰

Caveat for smokers: High intake of vitamin D may increase a smoker's risk of cancer in one study of Finnish smokers. Smokers should maintain lower normal blood levels until further data is available.¹⁴

Bottom Line: Regardless of intake, you should have your blood levels of vitamin D checked by a DEQAS certified lab.¹⁵

In my clinical practice, I routinely measure vitamin D levels on almost all patients and ask patients to take between 2000 and 10,000 IU per day to achieve optimal blood levels of 25(OH) vitamin D.

The health risks associated with suboptimal levels of D go far beyond that of osteoporosis. I encourage all of us to take enough D to maintain blood levels of 40ng/mL to 80ng/mL to support optimal health. (Of course with the calcium).

In Part 2 of "What you don't know about Osteoporosis" we'll take a look at Bioidentical Hormone Replacement Therapy and its controversies and answer the question if being overweight can actually *reduce* your risk of osteoporosis. See you then!

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