The Institute of Medicine (IOM) of the National Academies of Science has finally updated their recommendations for dietary vitamin D intake.

As expected, they recommended only modest increases in the RDAs for vitamin D (I'll talk more about why this was expected in a minute).

The vitamin D RDAs for children and adults up to age 70 were increased from 200-400 IU/day to 600 IU/day. And for adults over 70 they raised the RDA to 800 IU/day.

They did recognize that vitamin D was much safer than earlier thought, so they raised the Tolerable Upper Intake Level (the level that is safe for virtually everyone) from 2,000 IU/day to 4,000 IU/day.

You are probably wondering "Why are these recommendations so low? All of the experts that I have heard are recommending thousands of IUs/day".

To understand the answer to that question you need to know a bit more about the basis for the IOM recommendations:

1) RDAs are meant to represent the level of nutrients needed to prevent deficiency diseases - not the levels needed to promote optimal health.

Osteoporosis is generally thought to result from a lifelong deficiency of calcium and vitamin D. Heart disease, cancer and diabetes are not usually considered to be deficiency diseases.

2) The IOM requires decades of clinical studies before it considers the science to be sound enough set a dietary standard.

The relationship between calcium, vitamin D and osteoporosis has been studied since the 1930s. There have been literally thousands of clinical studies on the topic. Everyone agrees that those data are rock solid.

In contrast, it is only in the last decade that we have learned that vitamin D levels can affect heart health, cancer, diabetes, autoimmune disease and many other conditions. There has simply not been enough time to accumulate the number of clinical studies that the IOM requires in setting its standards.

3) The IOM did not consider the amount of dietary vitamin D required to give adequate blood levels of 25-hydroxy vitamin D in setting their standards.

That's because the research on correlation of 25- hydroxy vitamin D levels and health outcomes has primarily focused on things like heart disease and cancer, which they consider to be preliminary.

In contrast, most of the studies on the amount of vitamin D needed to prevent osteoporosis were conducted before it was even possible to accurately measure blood levels of 25-hydroxy vitamin D, so those data are primarily based on dietary intake of vitamin D.

So what does all of this mean to you?

For starters it means that everyone should make sure that they are getting at least 600 IU/day of vitamin D in their diet (800 IU/day if you are over 70).

Personally, I think that the data on vitamin D and other health outcomes are strong enough that most people should aim for 1,000 to 4,000 IU/day of vitamin D.

I also think that the data correlating blood levels of 25-hydroxy vitamin D and health outcomes are strong enough that everyone get their blood levels of 25- hydroxy vitamin D determined the next time they visit their physician.

And, if you haven't had your blood levels of 25-hydroxy vitamin D determined lately, I recommend that you use Shaklee's online vitamin D calculator (Vitamin D-Ology) to determine your most likely vitamin D requirement based on your skin color, age, weight, sun exposure, latitude of residence and season. The IOM did not take those factors into account in making their RDA recommendations.

And, finally, I agree with the IOM that vitamin D intakes of greater than 4,000 IU/day are likely to be toxic for some people.

I have already recommended that you ignore those experts who say that everyone should be getting 5,000 to 10,000 IU/day of vitamin D in my previous "Tips From THe Professor" emails. And there has already been some evidence from the literature that high intakes of vitamin D may have some adverse effects.

To Your Health!
Dr. Stephen G Chaney