

# Vitamin D Revisited

---

Copyright 2009 by Virgo Publishing.

<http://www.naturalproductsinsider.com/>

By:

Posted on: 07/13/2009

---

 PRINT

By Steve French and Philip Barr, M.D.

While vitamin D fortified milk was developed in the 1930s to combat rickets, recent research is uncovering the true value of vitamin D across many other disease states, including cancer, cardiovascular disease (CVD), metabolic syndrome, diabetes and autoimmune diseases. New findings are also revealing the recommended daily allowance (RDA) of 400 IU/d may need to be increased to 800 or even 1,000 per day to be fully effective in prevention, even though many adults are not even getting the RDA of 400 IU. Sun exposure is one way to increase levels of vitamin D in the body. However, the benefits of sun exposure are often limited for older adults, people living in northern climates and darker skinned people. Fortified dairy products are another way to increase vitamin D consumption, but diets with such restrictions and the proliferation of sodas and non-dairy beverages are contributing to lower vitamin D intake.

"Vitamin D may be the single most important nutrient we recommend for supplementation, based on research studies from the last five to 10 years," said Philip Barr, M.D., of the California Health and Longevity Institute. "A byproduct of preventing skin cancer is that we don't get enough sun exposure, and thus, are not creating vitamin D conversion in our skin. The safest approach is to take a vitamin D3 supplement."

While clinical studies are showing the extensive benefits of vitamin D, the message may not be reaching the consumer. Natural Marketing Institute (NMI) provides insights into consumers' perception, usage and understanding of this underutilized vitamin.

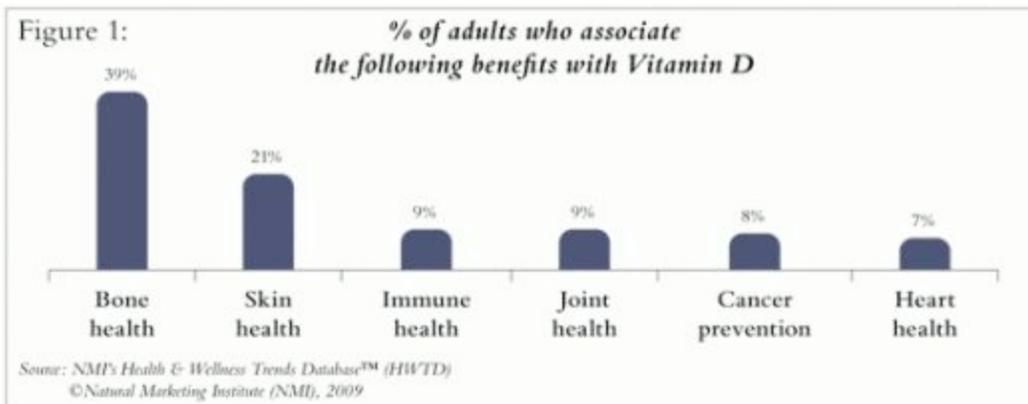
## Knowledge of Vitamin D Benefits

Why should we care about vitamin D deficiency? Scientists at the University of Tennessee Health Science Center, Memphis, found 87.3 percent of the general population had inadequate levels of vitamin D.<sup>1</sup> Many other researchers are confirming the epidemic proportions of this otherwise silent deficiency which can contribute to many conditions. Beyond the prevention of rickets in childhood, vitamin D is also essential for the maintenance of bone health as an adult. Recent research is showing premature deaths in the most severely deficient individuals from diverse disease causes, including heart disease, cancer, infection and diabetes. More and more diagnoses are being identified as worsened by vitamin D deficiency, including hypertension, skin conditions, pregnancy complications, mood disorders, arthritic conditions, osteoporosis, headaches, dementia, multiple sclerosis, autoimmune and other inflammatory conditions.

NMI research found only one out of five U.S. adults (20 percent) feels their diet is deficient in vitamin D. However, besides fortified milk and some cereals, food sources with high vitamin D value are rare. Fatty fish such as salmon and tuna are good sources, but these are a lesser part of the American diet.

Supplementation is another option, but only about one in five adults indicate they use a vitamin D supplement separately from their multivitamin.

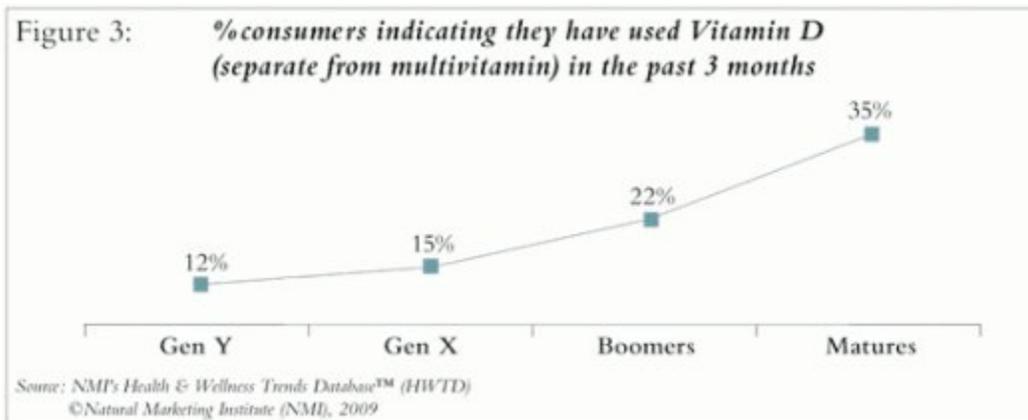
Along with an underestimated rate of deficiency, consumers' lack of knowledge about the benefits of vitamin D may also be contributing to a slowed pursuit of vitamin D consumption. More than one-third of the population (36 percent) indicates they don't know any benefits of vitamin D. More alarming, more than half of the youngest age group, those 18 to 29 years of age (53 percent), are the least likely to know any benefits. Even among those who indicate they are aware of the benefits of vitamin D, understanding is still surprisingly lacking—only 39 percent associate vitamin D with bone health (presumably based on the connection with calcium absorption). **See Figure 1 below.**



{vpiimagebreak}

### Vitamin D Use

Vitamin D has benefits across an array of consumer health conditions, offering help to both young and old. It appears, however, that older consumers show much higher supplementation with vitamin D, probably driven by the stronger understanding of the link between vitamin D and specific health conditions such as bone health. **See Figure 2 below.**



The average age of the vitamin D supplement user is 53 years old. These users skew more toward managing conditions instead of preventing illness, compared to the general population. The vitamin D user also indexes high for managing joint pain/arthritis, heart problems, digestive problems, fatigue and the need to boost immunity; most of these problems can benefit from vitamin D supplementation.

Physicians may need to play a bigger role in informing consumers about vitamin D benefits. In fact, compared to the general population, substantially more vitamin D users wish their doctor knew more about supplements, vitamins and minerals (61 percent versus 48 percent). While a quarter of consumers said their doctor recommended the use of specific supplements, only 12 percent of those consumers said their doctor recommended a vitamin D supplement. On a positive note, however, doctor recommendations of vitamin D are up from 7 percent a year ago.

The recent flu epidemic was a missed opportunity to publicize the usefulness of vitamin D in promoting influenza protection. Typically, flu season coincides with a drop in vitamin D levels each fall. Researchers at Johns Hopkins University made the correlation with the onset of flu season and identified an immune enhancing compound that vitamin D assists the body in producing. While not meant to replace the flu vaccine, vitamin D supplementation has certainly been shown to reduce our susceptibility to the influenza virus.

Dr. Barr stated, "In order to meet our vitamin D needs [from food], we would need to drink 20 glasses of milk a day. For various reasons, drinking that much milk is not good for us, so the simplest approach is to take a vitamin D3 supplement. The safest plan is to have a blood level drawn at a medical facility and then supplement accordingly."

He further stated FDA is in the process of increasing the RDA of vitamin D for adults and children. "Vitamin D3 at 1,000 IU/d is safe under most circumstances, and many adults are supplementing with 2,000 IU/d," he said. "In order to achieve desired blood levels more than 40, some people require even higher doses. An alternate approach would be to take 10,000 IU weekly, as do the researchers at the Creighton University vitamin D lab."

{vpiimagebreak}

## **The Future of Vitamin D**

Many of consumers' biggest fears about aging center around conditions which vitamin D has shown to benefit, such as premature death due to CVD, restricted mobility (52 percent), cancer (40 percent), chronic pain (38 percent), arthritis (35 percent) and osteoporosis (16 percent). The economic downturn has only added to consumers' concerns, as they are looking for alternative ways to promote healthy aging in lieu of expensive medical bills, doctor visits and prescription medications. Educating consumers on the value of adequate vitamin D intake will put a sense of control back into consumers' hands and equip them with a relatively inexpensive alternative to help counteract some of these fears.

Currently available products require the consumer to take a separate vitamin D3 supplement to achieve therapeutic levels. Increasing the amount of vitamin D3 in current multivitamin and food products would clearly be a service to the public.

Industry can further help meet the challenges of today's consumer by creating a product mix which fits consumers' lifestyles. From combination supplements with added vitamin D to food fortified with vitamin D, great opportunities exist for the expansion of vitamin D across many new categories, to ensure consumers meet their RDA of this underutilized yet vital nutrient.

*Steve French is managing partner at The Natural Marketing Institute (NMI), a strategic consulting, market research and business development firm specializing in the health, wellness and sustainability marketplace. For more information on NMI's services or proprietary research tools, contact French at [steve.french@NMIsolutions.com](mailto:steve.french@NMIsolutions.com) or visit [NMIsolutions.com](http://NMIsolutions.com).*

*Philip Barr, M.D., is an integrative internal medicine physician at the California Health and Longevity Institute in Westlake Village, CA.*

**References:**

1. Ray MM et al. "Prevalence of vitamin D deficiency in an urban general internal medicine academic practice." Presented at the American Federation for Medical Research annual meeting, New Orleans, 2009.