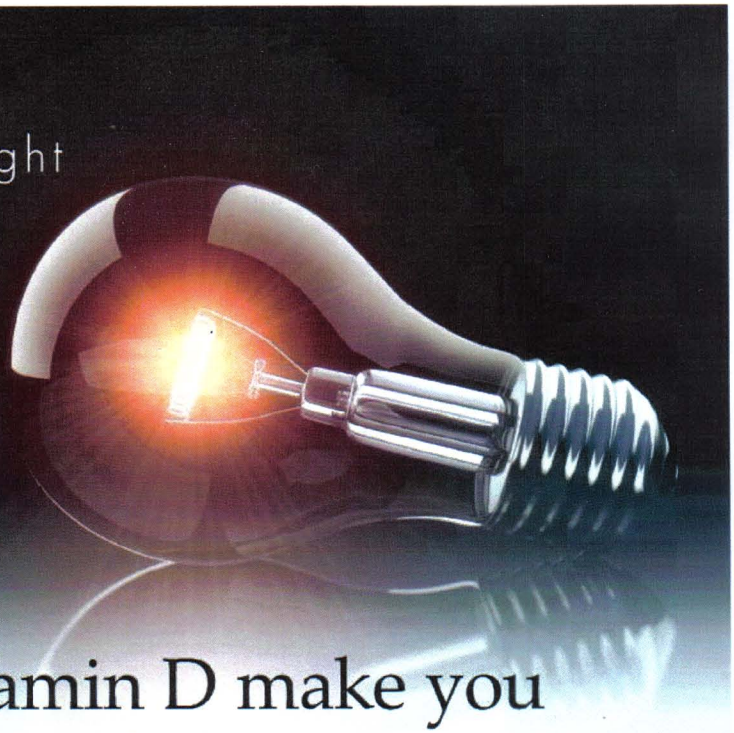
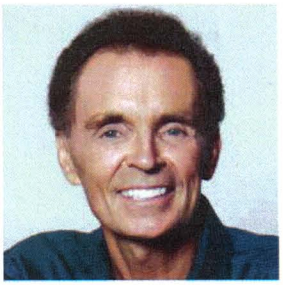


Can vitamin D make you happier and smarter?

BY MARC SORENSON, ED.D.



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▸▸Who doesn't want to be in a good mood and feel smarter? In the recent wave of vitamin D research reported in medical and scientific journals, none has been more intriguing than a study on mood and cognitive abilities reported in the *American Journal of Geriatric Psychiatry* in December 2006.

In this study, Dr. Wilkins and colleagues investigated the association between blood levels of vitamin D and the risk of mood disorders in elderly persons. The results were impressive. Those whose vitamin D levels were deficient – defined as "less than 20 ng./ml." – had 11.69 times the chance of an active mood disorder when compared to those whose vitamin D levels were higher than 20 ng./ml. Usually an association is considered meaningful when one measured factor is correlated to a 50 percent increased or decreased incidence of another. In this case, the correlation between vitamin D deficiency and risk of mood disorders was a staggering 1,169 percent!

In addition, the researchers measured cognitive ability (mental capabilities) among these same people. In two measurements, those with vitamin D deficiency exhibited cognitive performances that were 5.22 times and 3.22 times poorer than those who were not deficient.

Vitamin D, when administered in late winter, produces a positive effect on mood in only five days and reduces feelings of negativity. (*Psychopharmacology*, 1998). It is theorized that vitamin D may cause the brain to produce more serotonin, which is a terrific natural "upper." Certainly, we know that UVB exposure from sunlight and tanning beds makes us feel better in a few minutes. Much of the dermatological profession laments the fact that tanning beds may sometimes be addictive due to increased endorphins, serotonin, etc. Since tanning beds produce large quantities of vitamin D that can dramatically reduce cancer, heart disease, multiple sclerosis, osteoporosis and mood disorders, I say, "thank God for the addiction."

In another wintertime experiment, subjects were able to double serum vitamin D levels in six months of supplementation and dramatically increase their scores on a well-being assessment (*Nutr J*, 2004). The two groups of participants in this study were given a supplement of either 1,000 international units (IU) or 4,000 IU daily. Though both groups improved, the higher dose produced better results.

Other recent research regarding "smarts" has shown that cognitive abilities are directly related to serum levels of vitamin D (*Arch Biochem Biophys*, 2007). Researchers show a highly positive correlation between vitamin D levels and performance on a test known as the mini-mental state examination (MMSE). The significance of the correlation was .06, which for those who don't understand statistics, means almost perfect.

When we venture into the sunlight after a cold winter, the mood elevation is almost immediate, and the same happens with tanning bed use. Now you know that when you succumb to your desire to expose yourself to UVB, you may not only feel better, but you may become a little (or a lot) smarter! ◂◂