Dynamic Chiropractic

NUTRITION / DETOXIFICATION

Vitamin D Deficiency

G. Douglas Andersen, DC, DACBSP, CCN

Last year, I wrote an article titled, "FDA's Crackdown on Vitamin D Fortification Is Troubling" (*DC*, Sept. 24, 2003). In that article, I discussed the FDA decision to remove vitamin D from foods like protein bars and protein drinks that were not considered "breakfast foods." This month, I'll review some disturbing studies concerning vitamin D.

Deficiency Among Musculoskeletal Pain Patients

One hundred and fifty consecutive musculoskeletal pain patients were tested at a university health care center. Ninety-three percent were found to be vitamin D deficient. There was no difference in the rate of deficiency between males and females, immigrants and natives, and those over or under 30 years of age.[1]

Deficiency in Adolescents

Three hundred and seventy teenagers (mean age: 15) were tested for vitamin D status. Forty percent had insufficient levels of vitamin D; twenty-four percent had full-blown vitamin D deficiency. The breakdown was as follows: 35% of blacks, 22% of Latinos, 17% of Asians and 6% of whites were deficient. When the kids were tested in the summer, their levels were 20% higher, compared to in the winter and spring. None of 307 adolescents had excessive amounts of vitamin D.[2]

Deficiency in Medical Students

Thirty-six medical students were tested over a one-year period for vitamin D status. Nine out of 36 were deficient in the fall; sixteen out of 36 were deficient in the spring; and 19 out of 36 were deficient in the spring and/or fall. Sixty-seven percent did not get the RDA (400 IU) from their diet. Twelve of the 36 took multivitamins, and of those, only one was deficient in vitamin D.[3]

Deficiency Linked to Prostate Cancer

An association between vitamin D deficiency and prostate cancer was first noticed during a 13-year study of 19,000 men enrolled the Helsinki Heart Study. Vitamin D inhibits the proliferation and differentiation of cancer cells. The authors recommended that serum vitamin D levels be tested annually in males beginning at age 30. Exposure to adequate sunlight or supplementation appears to reduce the risk of prostate cancer. When the deficiency occurs in young and middle-aged men, the risk of prostate cancer in later years is further increased. Men who work indoors and have dark skin should be especially careful to ensure they are receiving adequate vitamin D.[4] The authors further commented that these men (indoor types - especially indoor and dark-skinned) should get 1,000 IU of vitamin D a day.

Deficiency and Bone Loss

One hundred ninety-five women with insufficient levels of vitamin D and a mean age of 75 were studied for a one-year period. Subjects received 800 IU of vitamin D and 1,000 mg of calcium carbonate (in two divided doses) daily, or a placebo. After one year, the vitamin D and calcium carbonate group had significant increases in bone mineral density in both the spine and extremities, along with marked decreases of parathyroid hormone levels - neither of which were observed in those on placebo.[5]

(Note: Parathyroid hormone tends to be elevated when individuals on an acid ash diet do not eat enough calcium to maintain blood pH. It also helps transfer calcium from the bones to the blood to prevent acidosis.

A Word About Calcium

The geriatric women in the previous study gained bone mineral density using calcium carbonate. Are other forms of calcium absorbed better? Yes. However, if calcium carbonate is working, why would you put a patient on another form of it - especially a senior citizen on a limited income? Did the extra vitamin D help? You bet!

A couple of years ago, when I gave a lecture to a group of representatives of a vitamin company, I upset them when I said that calcium carbonate had received a bad rap by the supplement industry. At the time, I had just reviewed a study that showed that postmenopausal women who supplemented with 1,000 mg of calcium carbonate a day gained bone mineral density over the two-year period of the study.[6] A good time to recommend a more expensive form is in those cases in which it isn't working - for example, your patient's bone density continues to decline or does not increase while using 1,500 mg/day of calcium carbonate with appropriate support factors (especially vitamin D).

References

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G. Douglas Andersen, DC, DACBSP, CCN
Brea, California
gdandersen@earthlink.net
www.andersEnchiro.com