High Doses of Vitamin D Linked to Increased Risk of Falls

According to new research in *JAMA Internal Medicine*, relatively high doses of vitamin D may increase the risk of falls.

The study—designed to determine whether doses of vitamin D that achieved blood concentrations of 30 ng/mL improve strength and balance—comprised 200 men and women (age 70 and older) who were living at home with reasonably good cognition and mobility, but had a prior fall. More than one half of participants had vitamin D concentrations <20 ng/mL, which is considered deficient. Two doses (i.e., 60,000 immunizing units [IUs] of vitamin D3 monthly or 24,000 IUs of vitamin D3 plus 300 μg of calcifediol monthly, equivalent to ~2,000 IUs daily) achieved the goal of 30 ng/mL in 80% of participants—a level that has been recommended as best for reducing risk of fractures and for other health benefits.

However, compared with a monthly dose of 24,000 IUs of vitamin D3 (equivalent to 800 IUs daily), the higher doses had no effect on physical performance and instead increased the risk of falls. **Source. “New Study Shows Vitamin D Supplements May Cause Falling.” (2016, January 12). Retrieved February 2, 2016, from bit.ly/1Pe8MS1.**

Involving Family Members to Reduce Hospital Readmissions

A new study found that educating and involving family members in the care of a loved one who has memory loss may significantly reduce hospital readmissions. When researchers evaluated the strategy in treating 489 patients in its congestive heart failure (CHF) unit, the results were impressive: the 30-day readmission rate dropped from 23% to 16%.

Researchers sought to evaluate the effectiveness of using a health psychology service that involved family member participation as part of the care team in the hospital’s inpatient CHF unit in comparison to CHF patients treated in two other parts of the hospital without the service. Researchers evaluated 489 patients (17% of total admissions) admitted to the Cardiology Teaching unit in 2014.

Results included:
• average 30-day readmission rate on the CHF unit was 16%;
• average 30-day readmission rate on a cardiac floor unit was 21.5%; and
• average 30-day readmission rate on other patient units was 22.8%.

Reading Problems Linked to Possible Alzheimer’s Disease Misdiagnosis

Correctly diagnosing Alzheimer’s disease remains a challenge for medical professionals. A study in the *Journal of Alzheimer’s Disease* reveals a new clue to possible misdiagnosis. The study found that older adults with a history of reading problems perform similarly on some neuropsychological tests to those who show signs of mild cognitive impairment (MCI) associated with early Alzheimer’s disease.

Researchers assessed the relationship between MCI classification and suspected reading disorder in 1,804 community-dwelling adults from the Framingham Heart Study from 1999-2005. Participants’ mean age was 62 years. Individuals with previous dementia, stroke, and other neurological disorders were excluded from the study.

The study assessed memory recall, reading, visual processing, and executive functioning with tests frequently used in the assessment of cognitive complaints in older adults. Specific areas of memory analyzed included recall of previously presented short stories and word pairs, and the ability to draw from memory previously presented visual figures.

Findings showed individuals with evidence of lifelong reading difficulty were two to three and one half times more likely than their peers to score at a level suggestive of possible memory decline on two tests commonly used to evaluate memory complaints in older adults.


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Zinc Supplement Boosts Immunity in Older Adults

A study in the *American Journal of Clinical Nutrition* set out to determine if it was feasible to increase serum zinc concentrations in older adults in nursing homes who were zinc-deficient.

The small double-blind, placebo-controlled trial involved adults 65 and older from three Boston-area nursing homes. Participants had baseline serum levels of zinc that ranged from moderately to very zinc-deficient. Participants were given zinc supplements or placebo for 3 months. A total of 25 individuals completed the study, with 13 receiving placebo (i.e., a daily multivitamin with only 5 mg of zinc) and 12 receiving a daily multivitamin with 30 mg of zinc. A serum level of 70 μg/dL was used as the cutoff standard for adequate serum zinc level and measuring improvement from supplementation. Function of the immune response was assessed by determining the immune cell profile and function.

In addition to serum zinc concentrations, researchers found that zinc supplementation improved function of T-cells as determined by their ability to proliferate in response to stimuli that mimicked infection. There was also a positive correlation between serum zinc levels and number and function of T-cells. This effect of zinc was attributed to increasing the number of T-cells rather than enhancing the function of each.


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