

# Vitamin D Levels and Risk

## In the Elderly

Community-dwelling elderly individuals often have low levels of vitamin D, which is associated with a greater risk of falls and diminished cognitive function, according to Amie Peterson, Oregon Health and Science University, Portland, Oregon. These findings came from an analysis of data gathered as part of the Intelligent Systems for Assessment of Aging Changes Study, a home-based cohort study of independently living seniors  $\geq 70$  years old. Information on vitamin D levels was available for 154 participants (74% women) whose average age was 85 years; the mean serum vitamin D level was 38.0 ng/mL (range, 9 to 90 ng/mL). A total of 37 subjects (24%) reported experiencing at least 1 fall during the period spanning 3 months before and 3 months after the blood test. The mean vitamin D level was significantly higher among individuals who had not fallen (39.7 ng/mL) than in those who had experienced single falls (34.1 ng/mL) or multiple falls (28.6 ng/mL;  $P=0.03$  for both comparisons). Levels of vitamin D also correlated significantly with several domains on a standardized psychometric battery and the Mini-Mental State Examination (MMSE). ■

## In People With MS

Insufficient levels of vitamin D (25-hydroxyvitamin D) were found to be common among a population of patients with multiple sclerosis (MS) in southeastern Michigan, reported Asfa Y. Shaf, Henry Ford Hospital, Detroit, Michigan. Data obtained during routine office visits between 2007 and 2009 revealed insufficient vitamin D levels ( $<10$  ng/dL) in 80% of MS patients vs 60% of healthy controls. Individuals with MS were also significantly more likely to have extremely low levels of vitamin D when compared to controls (odds ratio [OR], 2.26; 95% confidence interval [CI], 1.26 to 4.05;  $P=0.006$ ). Similarly, MS patients were significantly less likely to have normal vitamin D levels, defined as  $>30$  ng/dL (OR, 0.44; 95% CI, 0.29 to 0.68;  $P<0.001$ ). Within the MS cohort, insufficient vitamin D levels were observed more frequently among younger and African-American patients ( $P<0.01$  and  $P<0.001$ , respectively). No significant correlations were found between vitamin D insufficiency and gender, type of MS, duration of disease, or scores on the Expanded Disability Status Scale at the time of testing. ■