Vitamin D Screening Not Needed for Most Healthy Folks

BY SHARON WORCESTER

EXPERT ANALYSIS FROM THE ANNUAL MEETING OF THE ENDOCRINE SOCIETY

BOSTON – Healthy individuals do not need to be screened for vitamin D deficiency, according to guidelines from the Endocrine Society.

“That’s an important message. So we’re recommending screening for those at risk for vitamin D deficiency — those who are obese, African Americans, pregnant and lactating women, patients with malabsorption syndromes, and a whole list that we have provided in the guidelines,” lead author Dr. Michael F. Holick said at the meeting.

Dr. Holick headed a task force appointed by the clinical guidelines subcommittee of the Endocrine Society to formulate evidence-based guidelines on vitamin D deficiency.

The task force commissioned two systematic reviews of the literature to inform its key recommendations and followed the approach recommended by GRADE, an international group with expertise in development and implementation of evidence-based guidelines.

“All available evidence suggests that children and adults should maintain a blood level of 25(OH)D above 20 ng/mL to prevent rickets and osteomalacia, respectively. However, to maximize vitamin D’s effect on calcium, bone, and muscle metabolism, the 25(OH)D blood level should be above 30 ng/mL,” the group wrote.

In the new guidelines, vitamin D deficiency is defined as a 25(OH)D concentration less than 20 ng/mL (50 nmol/L).

The task force suggests:

- Infants aged 0-1 year require at least 400 IU/day (IU = 25 ng) of vitamin D to maximize bone health.
- Children 1 year and older require at least 600 IU/day.
- Adults aged 19-50 years require at least 600 IU/day.
- Adults aged 51 years and older; 700 IU/day.
- Adults 70 years and older require 800 IU/day.
- Pregnant and lactating women require at least 600 IU/day.

‘In the absence of unprotected sun exposure, it is difficult if not impossible to obtain an adequate amount of vitamin D from dietary sources.’

Vitamin D is important for multiple functions, including bone health, muscle function, and immune system regulation.

The guidelines also emphasize the importance of adequate sun exposure, as the body can produce vitamin D through skin exposure to ultraviolet B (UVB) light.

However, sufficient sun exposure is often challenging for individuals living in areas with limited sunlight or those with darker skin tones.

“The task force noted that most individuals do not get adequate vitamin D for a number of reasons. In particular, ‘there needs to be an appreciation that unprotected sun exposure is the major source of vitamin D for both children and adults and that in the absence of sun exposure it is difficult, if not impossible, to obtain an adequate amount of vitamin D from dietary sources without supplementation to satisfy the body’s requirement. Concerns about melanoma and other types of skin cancer necessitate avoidance of excessive exposure to midday sun,’ they wrote.”

The guidelines are cosponsored by the Canadian Society of Endocrinology and Metabolism and the National Osteoporosis Foundation.