Evaluation, Treatment, and Prevention of Vitamin D Deficiency in Infants and Children

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The Endocrine Society has published a new practice guideline on vitamin D deficiency. This summary covers key points of the guideline relevant to children (the adult portion can be found atJW Gen Med Jun 23 2011).

- Screening for vitamin D deficiency is recommended only for high-risk individuals. However, risk in the pediatric population is poorly defined. Risk factors for vitamin D deficiency in children include breast-feeding without vitamin D supplementation, dark skin pigmentation, and maternal vitamin D deficiency.
- Vitamin D deficiency is defined as serum 25-hydroxyvitamin D (25[OH]D) level <20 ng/mL (50 nmol/L).This definition is consistent with the Institute of Medicine report.
- Infants (age range, 1–12 months) require at least 400 IU/day of vitamin D.
- Children (age range, 1–18 years) require 600 IU/day of vitamin D.
- Infants and children who are vitamin D–deficient should receive 2000 IU/day of vitamin D_2 or vitamin D_3, or 50,000 IU of vitamin D_2 or vitamin D_3 once weekly for 6 weeks.

Comment: Despite the plethora of recent publications on vitamin D and the apparent association between vitamin D deficiency and many diseases, the only fundamental change in vitamin D recommendations in the pediatric population has been an increase in the requirement from 400 IU to 600 IU in children older than 1 year. Population-wide screening for vitamin D deficiency is not recommended.

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