

# Vitamin D Deficiency and Insufficiency According to Current Criteria for Children: Vitamin D Status of Elementary School Children in Turkey

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Dear Editor,

We read the article of Hocaoglu-Emre et al (1) entitled 'Vitamin D Deficiency and Insufficiency According to the Current Criteria for Children: Vitamin D Status of Elementary School Children in Turkey' in the Journal of Clinical Research in Pediatric Endocrinology with great interest. In this study, the researchers investigated serum vitamin D levels in 640 healthy children between the ages of 6 and 9 years. It was stated that serum vitamin D levels of the subjects were obtained from the hospital records. They explained further that vitamin D levels were checked in healthy children by an "annual check-up for vitamin D status" at the hospital. The authors conclude that close follow-up of vitamin D status especially in the winter and post-winter period is necessary and that vitamin D supplementation be given for a strong bone structure and healthy growth (1).

Vitamin D deficiency screening should aim to identify people with low vitamin D levels who theoretically could benefit from vitamin D supplementation. Only after this theoretical screening program, we would expect improvement in particular health outcomes e.g improved bone mineral density, reduced risk of falls etc. Furthermore in any screening programme, the intervention and subsequent treatment should be harmless (2). However, there is no firm evidence showing benefits of vitamin D deficiency screening for healthy children (3,4). Recent global consensus recommendations caution strongly against population-based screening for vitamin D deficiency in healthy children (3). According to this consensus, serum 25(OH)D measurement would be reasonable for patients

with high risk of vitamin D deficiency, such as patients having rickets, chronic kidney disease, hepatic failure, malabsorption, hyperparathyroidism or granuloma-forming disorders (3). Similarly, the American Academy of Pediatrics advises screening only in patients who have disorders associated with low bone mass such as rickets and/or a history of recurrent, low-trauma fractures (4). In addition, there has been a significant increase in health costs related to vitamin D tests and prescriptions for children in primary care over the past decade (5).

In conclusion, current evidence is not sufficient to suggest that screening for vitamin D deficiency in a healthy population produces health benefits, is necessary, safe or cost-effective.

## Ethics

**Informed Consent:** Consent form was filled out by all participants.

**Peer-review:** Internally peer-reviewed.

## Authorship Contributions

Concept: Ahmet Anık, Özgür Akbaba, Design: Ahmet Anık, Özgür Akbaba, Data Collection or Processing: Ahmet Anık, Analysis or Interpretation: Ahmet Anık, Özgür Akbaba, Literature Search: Ahmet Anık, Özgür Akbaba, Writing: Ahmet Anık, Özgür Akbaba.

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