Research indicates that the prevalence of vitamin D insufficiency among children in the United States is higher than previously thought. Although several small studies had found a high prevalence of vitamin D deficiency in specific populations of children, this study is the first to examine the issue nationwide.

## Vitamin D deficiency common in US children

A study in the journal *Pediatrics* reveals a troublesome prevalence of low levels of vitamin D among children in the U.S.

Researchers evaluated data from over 6,000 children aged 1 to 21 who participated in the National Nutrition Examination Survey (NHANES) between 2001 and 2004. Insufficient levels of vitamin D were defined as 15 to 29 nanograms per milliliter (ng/mL), and deficient levels as less than 15 ng/mL.

Over 60 percent of the children studied had vitamin D levels defined as insufficient. Outright deficiency occurred in nine percent of the subjects. If applied to the U.S. population, these percentages would be equivalent to nearly 51 million children with insufficient vitamin D levels, and 7.6 million children with vitamin D deficiency. Participants who consumed at least 400 IU of vitamin D per day were less likely to experience a deficiency, but just four percent of the children used vitamin D supplements.

In addition to its consequences regarding bone health, vitamin D deficiency can potentially increase the risk of future heart disease and other health conditions. The researchers concluded that physicians should be screening children for vitamin D levels, especially in populations that are considered high risk.

Kumar J. Prevalence and associations of 25-hydroxyvitamin D deficiency in US children: NHANES 2001-2004. Pediatrics. 2009 Sep;124(3):e362-70.