**Vitamin D Status of School-Age Children in North India**

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**Abstract**

Information on vitamin D deficiency in prepubertal children is scarce. The authors studied calcium intake, sunlight exposure, serum calcium, alkaline phosphatase, 25-hydroxyvitamin (25OHD), and intact parathormone (iPTH) in the children (*N* = 135) attending the pediatric endocrinology clinic (declared normal after evaluation) and their healthy siblings. Serum 25OHD < 12 ng/mL was frequent (55.6%) and median (IQR) 25OHD lower [10.1 (11.4) ng/mL] in pubertal (*n* = 36) versus prepubertal (*n* = 99) children [36.4% (*p* < 0.05), 15.5 (13.2) ng/mL (*p* < 0.001)]. Girls had lower 25OHD [12.33 (10.32)] vs. [15.83 (13.37) ng/mL, *p* < 0.05], calcium intake [517.20 (405.5) vs. 623.6 (430.5) mg, *p* < 0.05], and minutes of sunlight exposure [MSE, 38.55 (42.86) vs. 63.4 (66.8) min, *p* < 0.01] than boys. MSE and body surface area (BSA) exposed were significant associations of 25OHD in a multivariate model. Vitamin D deficiency in children, both pubertal and prepubertal, assumes public health importance in the authors' region. Girls are at higher risk. Duration of sunlight exposure and BSA are modifiable factors.