

# Vit D independently, inversely tied to cholesterol in children

August 16 2018

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(HealthDay)—Serum 25-hydroxyvitamin D [25(OH)D] is independently

and inversely associated with total cholesterol, low-density lipoprotein (LDL) cholesterol, and high-density lipoprotein (HDL) cholesterol in children, according to a study published in the July issue of the *Journal of Clinical Endocrinology & Metabolism*.

Sonja Soininen, M.D., from the University of Eastern Finland in Kuopio, and colleagues examined the associations and interactions of 25(OH)D and related gene variants with lipids in 419 prepubertal white children aged 6 to 8 years.

The researchers found that serum 25(OH)D was negatively associated with total cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides after adjustment for age and sex. After adjustment for adiposity, physical activity, sedentary behavior, diet, daylight time, and parental education, associations of 25(OH)D with total cholesterol, LDL cholesterol, and HDL cholesterol remained. The lowest total cholesterol and LDL cholesterol were seen in children in the highest quartile of 25(OH)D, after adjustment for age and sex. Gene variants in cytochrome P450 family 2 subfamily R member 1 and vitamin D binding protein did not explain or modify the associations of 25(OH)D with lipids.

"Serum 25(OH)D was associated with lower total, LDL, and HDL [cholesterol](#) independent of body fat percentage, dietary factors, physical activity, sedentary behavior, daylight time, and socioeconomic status," the authors write. "Further studies are needed to detect the mechanisms for the associations of 25(OH)D with lipids."

**More information:** [Abstract/Full Text](#)

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Citation: Vit D independently, inversely tied to cholesterol in children (2018, August 16)  
retrieved 18 April 2024 from  
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