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Vitamin D may not reduce cholesterol-related risk

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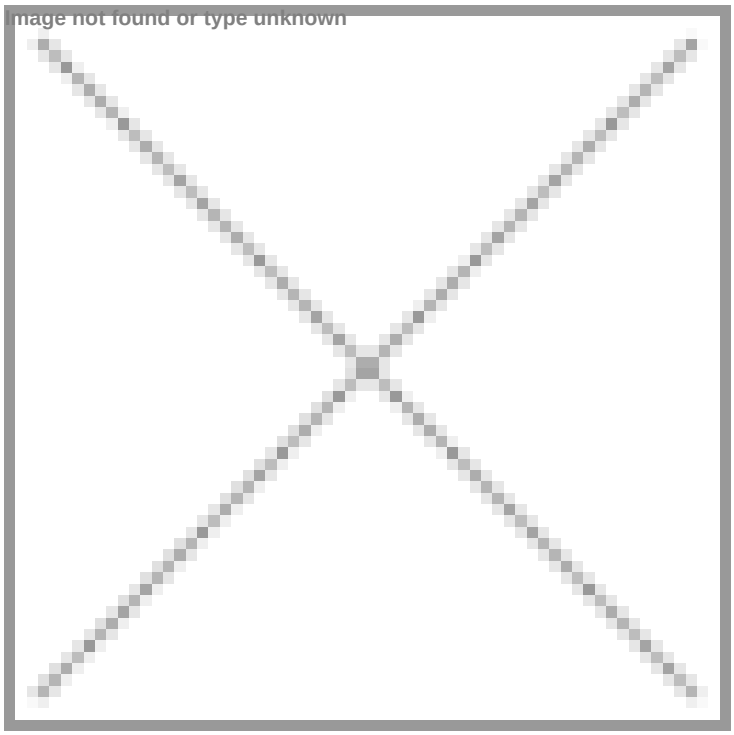
Vitamin D supplementation may not reduce cholesterol-related heart disease risk, new study finds



Singapore: According to a study, titled 'Vitamin D May Not Improve Lipid Levels: A Serial Clinical Laboratory Data Study' published in Circulation, raising vitamin D to optimal from deficient blood levels may not improve total cholesterol and other blood lipids, which are the key markers of cardiovascular disease risk. The study conducted by researchers at Quest Diagnostics and The Rockefeller University, is the first large-scale examination of the clinical impact of correcting vitamin D deficiency on lipid levels and associated cardiovascular disease risk. The study,

Dr Manish Ponda, lead investigator, assistant professor, clinical investigation, The Rockefeller University's Laboratory of Biochemical Genetics and Metabolism, said that, "Prior studies have associated low vitamin D level with an unhealthy lipid profile, but the effect of therapeutically correcting a vitamin D deficiency by itself on lipids is unclear."

The researchers conducted two studies on patients tested for vitamin D and lipids by Quest Diagnostics in the US. The first study involved a cross-sectional analysis of 107,811 patients to assess differences in lipid levels between those with optimal and deficient vitamin D levels. Cross-sectional studies evaluate a study population in one moment in time.

The analysis found that patients with optimal levels of vitamin D, defined as 30 ng/ml or higher, had a statistically significant lower lipid risk profile, including lower overall total cholesterol, LDL cholesterol and triglycerides, and higher HDL cholesterol, as compared to those with deficient levels measuring less than 20 ng/ml.

The investigators also performed a longitudinal analysis to assess the impact of therapy to correct vitamin D deficiency on

lipid levels. Longitudinal studies evaluate changes in a study population over time. The longitudinal study examined data for 8,592 patients re-tested between four and 26 weeks. It showed that raising vitamin D levels from deficient-to-optimal levels had no statistically significant effect on LDL cholesterol or triglycerides, and had a small, but clinically minimal impact on total and HDL cholesterol.