Higher vitamin D levels linked to lower risk for type 2 diabetes

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(HealthDay)—Higher serum 25-hydroxyvitamin D (25OHD) concentrations are associated with a lower risk for incident type 2 diabetes (T2D), according to a study published online Aug. 26 in *Diabetes Care*.

Mengying Wang, from Peking University in Beijing, and colleagues investigated the prospective association between 25OHD and the risk of incident T2D and whether any association is modified by sleep behaviors. Analysis included 350,211 individuals free of diabetes participating in the U.K. Biobank.

During a median 8.1 years of follow-up, there were 6,940 incident cases of T2D. The researchers found that serum 25OHD was significantly associated with a lower risk of incident T2D (adjusted hazard ratio, 0.88 per 10 nmol/L increase). There was also a significant interaction between 25OHD and overall sleep patterns on the risk of incident T2D. Among participants with healthier sleep patterns, the inverse association between high 25OHD and T2D was more prominent. Daytime sleepiness showed the strongest interaction with 25OHD. The lower risk of T2D associated with high 25OHD was more prominent among participants with no frequent daytime sleepiness versus those with excessive daytime sleepiness.

"Our findings, if confirmed by replications, may have implications for the development of T2D prevention strategies targeting improvement of vitamin D supplementation among people with sleep disorders, especially daytime sleepiness," the authors write.

More information: Abstract/Full Text (subscription or payment may be required)