

## **Vitamin D supplementation does not reduce blood pressure in people with hypertension**

Vitamin D supplementation in hypertensive patients with low levels of vitamin D does not reduce ambulatory blood pressure (Pilz S, Gaksch M, Kienreich K, et al. *Hypertension* 2015; 65(6):1195-1201). An Austrian study investigated the effect of vitamin D supplementation in 200 participants with high blood pressure and 25-hydroxyvitamin D levels below 30 ng/mL. Patients were randomised to receive either 2800 IU of vitamin D3 per day or placebo for 8 weeks, and 188 patients completed the study. After 8 weeks there was no significant difference in ambulatory 24-hour systolic blood pressure between the two groups of patients. There was no significant effect of vitamin D supplementation on a number of other cardiovascular risk factors, with the exception of triglyceride levels that were significantly elevated in the vitamin D group ( $p=0.013$ ). The mechanism for this effect of vitamin D on triglyceride levels is unknown, but it may be a chance finding, or it may reflect confounding factors present in patients with low vitamin D levels (e.g. obesity, low physical activity, inflammation, or poor dietary habits), according to the study authors. The study findings demonstrate that vitamin D supplementation does not have an antihypertensive effect, nor does it reduce cardiovascular risk factors. Therefore, vitamin D cannot be recommended for use as an antihypertensive or cardio-protective agent.