A recently published study showed that adults with low vitamin D levels had more than double the risk of prehypertension and prediabetes than adults with higher vitamin D levels.

LOW VITAMIN D LEVELS LINKED TO PREDIABETES AND PREHYPERTENSION

Prediabetes and prehypertension have been associated with low vitamin D levels. In a recent issue of the journal *Diabetes Care*, scientists report a correlation between reduced vitamin D levels and prediabetes and prehypertension in adults. Both prediabetes and prehypertension are estimated to exist in at least one-fourth of disease-free adults.

Researchers analyzed data from 898 men and 813 women who participated in the National Health and Nutrition Examination Survey (NHANES), 2001-2006. Blood pressure measurements were obtained during examinations conducted upon enrollment, and blood samples were evaluated for glucose, serum 25-hydroxyvitamin D and other factors.

Prediabetes was defined as having a fasting serum glucose of between 100 and 125 milligrams per deciliter, and prehypertension was defined as systolic blood pressure of 120 to 139 mmHg and/or diastolic blood pressure between 80 and 80 mmHg. Prediabetes was 33 percent higher among those with vitamin D levels of 76.3 nmol/l (30.5 ng/ml) or less compared to those with higher levels. Prehypertension was evident in 61 percent of those with the lower vitamin D levels. Participants with undiagnosed diabetes and untreated hypertension had even lower vitamin D levels on average. Serum vitamin D levels tended to decline with increasing age and body mass.

When the risk of having both conditions was considered, those with low vitamin D levels had 2.4 times the risk of that experienced by subjects with higher vitamin D levels.

It is reasonable that among those with prediabetes or prehypertension, vitamin D supplementation resulting in increased serum vitamin D levels may help reverse subtle changes in fasting serum glucose and resting blood pressure that may lead to more advanced disease states.