

August 18th, 2010

A new long-term research study conducted in over 3,000 individuals indicates that individuals with the lowest vitamin D levels are at increased risk of Parkinson's disease.

VITAMIN D STATUS AND RISK OF PARKINSON'S DISEASE

In a newly published study, researchers examined whether serum vitamin D levels are predictive of the risk of Parkinson's disease.

Participants included 3,173 Finnish men and women aged 50-79 determined to be free of Parkinson's disease at the beginning of the study. Vitamin D samples were taken at the beginning of the study and frozen. During 29 years of follow-up, 50 documented cases of Parkinson's disease were recorded among study participants.

Serum vitamin D levels were determined from the frozen samples taken at the beginning of the study. The relationship between serum vitamin D concentration and Parkinson's disease incidence was then calculated.

Participants with the highest levels of vitamin D (more than 50 nmol/L) had a 67 percent lower risk of developing Parkinson's disease than those with the lowest vitamin D levels (less than 25 nmol/L.) The difference was validated after adjustment for sex, age, marital status, education, alcohol consumption, leisure-time physical activity, smoking, body mass index (BMI), and month of blood draw.

The results of this study are consistent with the suggestion that high vitamin D status provides protection against Parkinson's disease. The scientists acknowledge that there may be other factors involved in the results, however, so further research is warranted.

Knekt P, et al. Serum Vitamin D and the Risk of Parkinson Disease. 2010. Arch Neurol 67(7):808-11.