

Clinical Update

Low vitamin B6 may increase Parkinson's disease risk

Insufficient levels of vitamin B6 may increase the risk of Parkinson's disease by about 50%, says a new study from Japan.

(*British Journal of Nutrition*, March 2010)

The study, published in the *British Journal of Nutrition*, does not prove that low vitamin B6 levels are the cause of Parkinson's disease, but indicates that additional study should focus on whether increased levels of vitamin B6 may reduce the risk of developing the disease. On the other hand, blood levels of vitamin B12, folate, and riboflavin were not linked to the incidence of Parkinson's disease.

Parkinson's disease, named after Dr James Parkinson, the London doctor who initially identified it as a particular condition, occurs when nerve cells are lost in a part of the brain called the substantia nigra. According to the American Parkinson's Disease Association, over two million Americans currently suffer from the disease.

This is not the first study to link vitamin B6 intake and the risk of the disease. In 2006 researchers from the Erasmus Medical Center in Rotterdam reported that people who had daily vitamin B6 intakes of 230.9 micrograms or more had an associated risk of developing Parkinson's disease 54% lower than people who had average daily intakes lower than 185.1 micrograms. The study involved 5,289 people over the age of 55 (*Neurology*, Vol. 67, pp. 315-318).

The link between B vitamin intake and Parkinson's disease is related to homocysteine, an amino acid reported to potentially toxic to brain cells.

The researchers conducted a hospital-based case-control study involving 249 people with Parkinson's disease and 368 people without any neurodegenerative condition. Intakes of the B vitamins was assessed using a validated, self-administered, semi-quantitative, diet questionnaire. After crunching the numbers no link between folate, vitamin B12 and riboflavin was observed. However, low intakes of B6 were linked to an increased risk of the disease, independent of other factors, concluded the researchers.

Despite apparently agreeing with the Rotterdam study, an earlier study from the US reported no link between B vitamin intake and Parkinson's disease. There is a need to confirm these links in both additional observational studies and clinical trials.

Source: www.nutraingredients.com