Vitamin D

The positive effects of vitamin D on cardiovascular disease

Adequate vitamin D levels reduce the risk of death for heart patients. This is the conclusion reached by Chinese cardiologists from the Huazhong University of Science and Technology on the basis of data collected in England.

Lei Dai, Man Liu and Liangkai Chen were able to follow 37,079 middle-aged heart patients for almost 12 consecutive years. The study participants had a history of heart attack or stroke, or suffered from heart failure or atrial fibrillation. During this period, 6319 patients died, a notably many of whom had low levels of vitamin D in their blood.

The more vitamin D the study participants had in their blood, the less likely they were to die. According to the researchers' calculations, the risk of death decreased by 12 per cent for every 10 nmol/L increase in vitamin D levels. This is probably because both blood vessels and heart muscles need vitamin D to stay healthy and supple.

Most heart patients did not have enough vitamin D in their blood. Sixty per cent of the study participants had a vitamin D level below 50 nmol/L. Doctors and nutritional scientists consider this the minimum value for a healthy individual. In most countries in the Northern Hemisphere, however, such low values are normal. More than half of the Dutch population has a vitamin D level below 50 nmol/L in the winter months. That sounds worrying, and, of course, it is.

The Endocrine Society, a worldwide organisation of endocrinologists, believes that everyone should have a vitamin D level of at least 75 nmol/L. In the Chinese study, only 11.6 per cent of British heart patients had such an excellent vitamin D level.

The researchers had eliminated the effect of as many other factors as possible on the basis of statistics. By correcting for the impact of diabetes, obesity, medicine use, smoking, alcohol and other lifestyle factors, the researchers believe that their research really does show the influence of vitamin D. They cannot be one hundred per cent sure. That would require a different type of study: an intervention study, in which test subjects are given vitamin D supplements or are treated with UVB light.

Bron: Dai L, Liu M, Chen L. Association of Serum 25-Hydroxyvitamin D Concentrations With All-Cause and Cause-Specific Mortality Among Adult Patients With Existing Cardiovascular Disease. Front Nutr. 2021 Sep 23;8:740855.