

Folic acid no help for heart and blood vessels

May 12 2011, By Astrid Smit

Folic acid does not reduce the risk of getting cardiovascular diseases, reports a three-year study of more than eight hundred people by Wageningen University. The results have been published in the *American Journal of Clinical Nutrition*.

The belief that folic acid can reduce the risk of getting cardiovascular diseases took root sixty years ago. Scientists discovered that people with a certain [hereditary disorder](#) suffered from cardiovascular diseases and brain haemorrhage already at a young age. These people had a high level of homocysteine in their blood. Subsequently, epidemiologists did research into people without such a disorder, and found that this relationship also exists: the higher the level of homocysteine in the blood, the bigger the chance of cardiovascular diseases. As it is difficult to establish cause and effect In epidemiological studies, the logical next step was to carry out specific experiments. Since vitamins B6, [B12](#) and folic acid are effective in lowering homocysteine levels, the question was raised as to whether they could do the same for cardiovascular diseases.

This did not seem to be the case for people who had recovered from a [heart attack](#) or a [stroke](#). The chance of getting a heart attack a second time did not become less. Perhaps, folic acid only works at an early stage, was the thinking of Wageningen researchers of the Top Institute Food & Nutrition. Together with researchers from the Julius Centre in Utrecht, they began a major study in 1999. More than 800 people between the ages of fifty and seventy who had high levels of homocysteine in their blood - but had almost no cardiovascular diseases - were monitored for three years. Half of them were given a high dose of

folic acid daily, while the other half got a placebo. Measurements were taken at the start and after three years of the carotid artery thickness and its elasticity, both of which are indicators of arteriosclerosis and cardiovascular disease.

The folic acid pills appeared to have taken effect: they lowered the homocysteine level in the blood by a quarter. But neither the thickness of the vessel walls nor their elasticity had any significant changes. As such, the chances of getting cardiovascular diseases have not changed too. 'This study confirms that extra folic acid cannot prevent cardiovascular diseases', says Petra Verhoef, now working at Unilever, who was then the project manager of the study. 'Homocysteine is perhaps not the cause of heart and vascular diseases, but an offshoot in a process related to heart and vascular diseases. Luckily, there are other ways to lower the risk of getting heart and vascular diseases.'

Provided by Wageningen University

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