



THE HEALTH SUPPLEMENTS INFORMATION SERVICE COMMENTS ON A TRIAL EVALUATING B VITAMINS IN PATIENTS WITH CARDIOVASCULAR DISEASE

August 19, 2008

In response to a paper published in this week's issue of the Journal of the American Medical Association (JAMA)¹ regarding B vitamins, folic acid and cardiovascular events in patients with coronary artery disease, the Health Supplements Information Service (HSIS) would like to make the following comment:

Pamela Mason, spokesperson for HSIS notes: "This is yet another study attempting to use vitamin supplements like drugs in the treatment and prevention of disease. B vitamin supplements are not intended to be taken like drugs to prevent or treat cardiovascular disease. People should not be taking them for this purpose. They are **health supplements** and their role is in helping to maintain good health, particularly in those large numbers of adults whose dietary intake of essential nutrients is inadequate. This study, like many other recent studies evaluating vitamins, does not address the issue of health maintenance.

"The researchers compared a combination of 0.8 mg of folic acid , 0.4mg vitamin B12 and 40mg vitamin B6 , or folic acid plus vitamin B12, or vitamin B6 alone or placebo. These B vitamins can help to lower plasma homocysteine levels, and high homocysteine levels are associated with increased risk of cardiovascular disease.²

"The main outcome measure in this study was the total number of deaths from any cause, plus nonfatal acute myocardial infarction (heart attack), plus acute hospitalization

¹ *JAMA*. 2008; 300[7]: 795-804.

² *BMJ*. 2006 Nov 25;333(7578):1114-7.

for unstable angina pectoris, and nonfatal thromboembolic stroke. It is important to realize that the subjects in this study were patients who already had coronary artery disease.

“So, what did the researchers find? The key findings were two fold. Firstly, mean plasma homocysteine concentration fell by 30 per cent in patients taking folic acid and vitamin B12. Secondly, there was **no difference** in mortality or the incidence of major cardiovascular events among these patients given the B vitamins and group given the placebo. Essentially, they were able to confirm that B vitamins **do** lower homocysteine levels but not the related hypothesis that this would reduce cardiovascular disease. There was a lower incidence of stroke and higher incidence of cancer in the groups receiving folic acid, but these observations were not statistically significant.

The authors say that their findings do not support the use of B vitamins as secondary prevention in patients with coronary artery disease. However, B vitamins are not drugs, they are not magic bullets intended for the treatment and prevention of chronic disease. Their role is in helping to maintain good health.

“What must not be forgotten is that B vitamins, including folic acid, B6 and B12 are essential to health. Folic acid is critical for every single process in the body that requires cell division. It is especially important in foetal development and helps to produce key chemicals for the brain and nervous system. Folic acid is a particularly key nutrient for women, yet nine out of 10 women consume too little.”³ **It would be quite wrong to dissuade people from consuming folic acid or B vitamins in recommended amounts (either through their diet and/or via supplements). This must not be allowed to happen.”**

-ends-

³ Henderson L et al. The National Diet and Nutrition Survey. adults aged 19 to 64 years. Volume 3. Vitamin and mineral intake and urinary analysis. London: Stationery Office, 2003.