



# In the News: The Danger of B Vitamins

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May 2010

In the most recent JAMA (Journal of the American Medical Association), a very important trial documented the effects of a specific combination of B-vitamins on people with diabetic kidney disease. Briefly, people with both type -1 or type-2 diabetes and documented kidney disease were followed for three years while either taking a placebo or B-Vitamins (2.5 mg folic acid, 25 mg of B-6, and 1mg B-12, presumably cyanocobalamin as the authors don't specify, per day). The goal was to follow the levels of an amino acid known as homocysteine, observe kidney function, and monitor for cardiovascular events. It was felt that if the B-Vitamin dependent "toxic" amino acid homocysteine was lowered with treatment then all outcomes would be improved.

The truth was much more sobering. The baseline plasma homocysteine was 15.5 micromol/L; that number decreased to 13.3 in the treatment group and increased to 18.1 in the placebo group. Thus the primary goal of the study, to lower homocysteine, was somewhat accomplished. Please note that an optimal homocysteine level is less than 8. Therefore the treatment did lead to a significant difference in homocysteine levels between the two groups, although the final level in the treated group is still considered to be quite dangerous.

Despite lowering homocysteine levels, the B-vitamin group had double the risk of cardiovascular events (heart attack, stroke, and revascularization) although there was no difference in mortality. Furthermore, kidney function deteriorated faster in the group on B-vitamins! If you have been reading these newsletters consistently I bet you have already guessed the fatal flaws in this study, and more importantly the importance of nutritionist-guided treatment regimens.

All nutrients, if taken in high dosages, can lead to imbalances in the body if appropriate measures are not taken. In the past I have discussed with you how women who take calcium supplements (as compared to multimineral supplements) double their risk of stroke! This would be suspected by anyone who understands minerals and how taking only one member of a family of nutrients has to cause imbalances in the other family members. This is why taking only calcium has to cause more harm than good. Similarly if you take only a few B-vitamins (prescriptions like FoTx and others) or take poorly designed B vitamins from your pharmacy or health food store, you can actually do great damage to yourself. Please note that if any drug caused this much disease that the entire natural health industry would be up in arms.

The reason I start most all of my patients on the [Basic Nutritional Protocol](#) is that a potent, well-designed multivitamin provides a full spectrum of B vitamins, antioxidants, and liver support far superior to the regimen tested in this study.

Furthermore the fish oils, EPA and DHA, have been shown to lower homocysteine while dramatically decreasing cardiovascular risk. If my patients still need further homocysteine reduction then well formulated B combinations like Cardio B (Orthomolecular) can lead to the necessary corrections of the metabolic defects which lead to elevated homocysteine levels.

So what is one to conclude from this study? First, if you are a diabetic with kidney disease, do not take this specific vitamin combination. How much can we generalize this information? Well, since nearly every study that looks at the supplementation of singular (or a few) nutrients taken from a family of nutrients leads to poor outcomes, I find this study very generalizable. If you take high dose supplements without a nutritional doctor's guidance, you do so at great peril. If you follow the doctor's advice in exact brands and dosage, while monitoring specific parameters, amazing good can be done.

In my practice every day I see people do great harm to themselves by taking the wrong, usually cheap, supplements. Studies like this confirm my every day experience that people who take supplements without a nutritional doctor's advice usually do serious damage. As everyone knows, I am an exceptional proponent of nutritional supplementation, but I am wondering more each month if our government needs to pull these supplements off the shelf. Since becoming a multi-billion dollar industry, I have found an outpour of poorly designed and poor quality supplements onto the shelves of grocery stores, drug stores, everywhere. This partnered with internet self-diagnosis and self-treatment has the potential to cause severe injury.

One clear conclusion, buyer beware!

Your Journey to Health and Healing,  
Gary E Foresman MD

#### References:

1. House, Andrew A et al. Effect of B-Vitamin Therapy on Progression of Diabetic Nephropathy. JAMA. 2010;303(16): 1603-1609.

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