



Importance of Supplementation

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Scientific Evaluation Finds Benefits in Liquid Vitamin and Mineral Supplements

The Journal of Medicinal Foods published an evaluation on liquid vitamins and minerals. The purpose of the evaluation was to look at the evidence surrounding whether or not there were benefits to vitamin and mineral supplements delivered in liquid form. A wide variety of research studies were reviewed and it was determined that liquid supplements contain nutrients that are highly bioavailable, can be gentler to the stomach and are sometimes more suitable for children and elderly people. For more information, go to the Journal of Medicinal Food, Volume 2, Number 3, page 207.

Major Scientific Review Validates the Importance of Vitamins

In June of 2002, one of the most respected journals in medicine, the Journal of the American Medical Association, published a comprehensive review of almost 40 years' worth of scientific research on the relationship between vitamins and certain diseases. This review, which was conducted by two Harvard researchers, clearly illustrates how vitamin deficiencies are associated with chronic diseases such as cancer, coronary heart disease and osteoporosis. The researchers located many studies that prove taking folic acid during pregnancy helps prevent certain birth defects. Folic acid has also been proven to help prevent heart disease and several types of cancer when taken on a regular basis. Regarding the intake of vitamin E, the researchers located evidence that it is an

important antioxidant necessary for immune function. They also found that vitamin E has a role in the prevention of heart disease and prostate cancer in some people. Vitamin D and its relation to bone mass appeared in the review as well as supportive evidence for the value of vitamins B6 and B12. Based on these findings, and the recognition that Americans are not receiving enough vitamins from their diets, the Harvard researchers recommend that all adults take one multivitamin daily. For more information, go to the Journal of the American Medical Association, June 19, 2002.

Vitamin E and C Together at High Doses Reduce the Risk of Alzheimer's Disease

Johns Hopkins University researchers recently reported that the intake of vitamins E and C in combination reduced both the prevalence and incidence of Alzheimer's disease. Using data gathered from a large group of respondents age 65 and older, the researchers' investigation revealed that high doses of certain antioxidants may mitigate age-related cognitive deterioration by protecting neurons from free radical damage. Free radicals are unstable oxygen molecules that can damage the body from exposure to environmental toxins, intake of chemicals found in processed foods, overexertion, etc. Because of the results of this study, researchers suggest that antioxidant supplements merit further study as agents for the primary prevention of Alzheimer's disease. For more information, go to the Archives of Neurology, Volume 61, January 2004.

Plant Nutrients from the Mangosteen Fruit Inhibit Leukemia Cell Growth

In a recent study, scientists examined the effects of a variety of xanthenes found in mangosteen fruit on human leukemia cells. Xanthenes are plant nutrients or phytochemicals that have been studied for their medicinal and antioxidant potential. All of the xanthenes displayed cell growth inhibitory effects. For more information, go to the Journal of Natural Products, Volume 66, 2003.

Vitamin and Antioxidant Combination Reduces Risk of Heart Disease and Stroke

A recent study conducted at the federal Centers for Disease Control and Prevention indicates that when multivitamins are combined with antioxidant vitamins, such as vitamin E, death risk from heart disease, cardiovascular disease and stroke goes down. The study compared the death rates of persons who used multivitamins in combination with vitamin E and other antioxidants, as well as those persons who used antioxidant vitamins only versus the death rate of those who used no vitamins at all. What was concluded is that persons who took vitamin E and other antioxidants along with multivitamins had a 15 percent lower risk of dying from heart disease than those who used no vitamins at all. For more information, go to the American Journal of Epidemiology 2000; 152: 149-162.

American Diet Lacking in Essential Minerals

USDA statistics show the average American diet is significantly lacking in the essential minerals needed for energy production and protection from free radical damage as well as other vital functions. This is according to statistics from the USDA's 1994-96 Continuing Survey of Food Intakes by Individuals and 1994-96 Diet and Health Knowledge Survey. Additional information is from The Council For Responsible Nutrition Recommended Intakes of Vitamins and Essential Minerals. www.crnusa.org/benpdfs/CRN012benefits_recs.pdf.

Antibacterial Activity of Xanthenes Found in Mangosteen Appears Strong

In a study conducted at the Gifu Pharmaceutical University in Japan, an in-vitro study showed that some of the xanthenes from *garcinia mangostana* (mangosteen) had strong antibacterial activity. Xanthenes are plant nutrients or phytochemicals that have been studied for their medicinal and antioxidant potential. For more information, go to *The Journal of Pharmacy and Pharmacology*, Volume 48, Issue 8.

Aloe Vera May Support Natural Hormone Therapy in Activating Anticancer Immunity

The potential for natural cancer therapy has been suggested recently by advances in the field of tumor immunobiology. It is believed that the body's natural neurohormones, such as pineal indole melatonin (MLT), may activate anticancer immunity. In addition, immunomodulating substances have also been isolated from plants, particularly from aloe vera. A clinical study was conducted to evaluate whether or not the addition of aloe vera to MLT administration may enhance the therapeutic results in patients with certain cancers. Cancer patients were given daily MLT alone or MLT plus aloe vera orally. This preliminary study suggests that natural cancer therapy with MLT plus aloe vera may produce some positive therapeutic benefits in certain cancer patients. For more information, go to *Natural Immunity*, Volume 16, Issue 1.

Aloe Vera in Combination Benefits Patients with Heart Disease

Five thousand patients with angina pectoris were studied over a five year period of time. Angina pectoris is the medical term for chest pain or discomfort due to coronary heart disease. During the five-year period, the patients' diets were supplemented with aloe vera and psyllium husks. What was then observed were numerous indicators showing an improvement in cholesterol balance, such as a reduction in total serum cholesterol. At the same time, the clinical profile of these patients showed reduction in the frequency of anginal attacks and a gradual reduction in the use of drugs. The patients most benefitted were diabetics (without adding any diabetic drug). According to the study's author, the exact reason behind why the above two substances work is unknown, but may be due to their fiber contents. Both substances need further evaluation. For more information, go to the journal *Angiology*, Volume 36, Issue 8.

Green Tea's Anti-Cancer Mechanism Of Action Uncovered

According to research conducted at the University of Rochester Medical Center in New York, a potential new mechanism of action for green tea, particularly with respect to its active compounds' action against cancer, was recently uncovered. Green tea appears to protect against cancer by having an affect on a 'promiscuous' protein that drug industry experts are already targeting in their work on anti-cancer drugs. For details on this research, go to the journal *Biochemistry*, Volume 44, April 2005. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15794642&query_hl=1

Derivative from Mangosteen Has Cytotoxic Effect on Certain Types of Cancer Cells

Results from a research study conducted at the Veterans General Hospital in Taipei, China suggest that a derivative from the fruit mangosteen may be potentially useful in the treatment of certain

types of cancer. For more information, go to the *Journal Planta Medica*, Volume 68, 2002

Multivitamin/Mineral Supplementation May Help Older Adults Reduce Their Risk of Chronic Disease

A recent research trial was conducted to study the effects of multivitamin/mineral supplements on older adults who are already consuming a nutrient-fortified diet. Eighty adults between the ages of 50 and 87 participated in the eight-week double-blind, placebo controlled trial. The objective of the study was to determine whether a daily multivitamin/ mineral supplement could improve the body's micronutrient status and the blood's antioxidant capacity. After measuring various nutrient blood levels and other blood indicators in the participants, researchers concluded that supplementation with a multivitamin formulated at about 100% Daily Value can increase the vitamin status in older adults and improve their micronutrient status to levels associated with reduced risk for several chronic diseases. For more information, go to the *Journal of the American College of Nutrition*, Volume 19, 2000.

Selenium Deficiency May Impact the Body's Ability to Fight Disease

According to a recent research study conducted in the United Kingdom, people deficient in the trace mineral selenium may be less able to fight disease. Participants in the study were given either selenium or a placebo for a period of 15 weeks. Then, after 6 weeks, the whole group was given an oral live attenuated poliomyelitis (polio) vaccine. At the end of the trial the selenium-supplementing participants had test results that showed there was a boost in immunity. They also showed a more rapid clearance of the polio-virus. For more information, go to *The American Journal of Clinical Nutrition*, Volume 80, July 2004.