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# Austin Quan Yin Newsletter

## The Better Health News

### Special Interest Articles:

- Benefits of supplementation
- Nutrition in pregnancy
- Erectile dysfunction
- Time for a better paradigm in health care
- Antioxidants and lung disease
- Probiotics and irritable bowel
- Free radicals

## Probiotics and the Common Cold

Research appearing in the journal, *Vaccine* (Volume 24, Issues 44-46, 10 November 2006, Pages 6670-6674) looked at probiotic (bowel flora) supplementation and its effect on upper respiratory tract infections (colds and the flu). The double-blind, placebo-controlled study took place during two winter/spring periods. The subjects were 479 healthy adults who were supplemented with a vitamin/mineral supplement containing probiotics (lactobacilli and bifidobacteria) or a placebo

that contained only the vitamin/mineral supplement.

Taking the probiotic did not reduce the number of upper respiratory infections, but they did significantly shorten the duration of the illness (by nearly two days, compared to the placebo group). Also, the symptoms were less severe in the probiotic group. Taking the probiotics also increased the number of immune cells (cytotoxic T plus T suppressor cell counts and in T helper cell counts).

## Omega-3 and Childhood Depression

A small, double-blind, placebo-controlled study, published in the *American Journal of Psychiatry* (2006; 163(6): 1098-1100), looked at supplementation with omega-3 fatty acids and its effect on childhood depression. The subjects of the study were 20 children between the ages of six and 12 suffering with depression. They were randomly assigned to receive either an omega-3 fatty acid supplement or a placebo.

The children were evaluated using the Children's Depression Rating Scale, the Children's Depression Inventory and the Clinical Global Impression. Evaluations were taken at the beginning of the study and at weeks 2, 4, 8, 12 and 16. At the end of the study, 70% of the supplemented children showed at least a 50% reduction in depression scores.

## The Benefits of Nutritional Supplementation

Nutritional supplementation may be of benefit to acutely ill, hospitalized patients. A double-blind, placebo-controlled study appeared in the *American Journal of Medicine* (2006; 119(8): 693-9); the subjects were hospitalized individuals between the ages of 65 and 92. The patients were randomly divided into two groups, with one group receiving a liquid nutritional supplement along with the normal hospital diet and the other group receiving a placebo for six weeks. Nutritional status improved significantly in the supplemented group. During the six month period after the intervention, 40% of the subjects in the placebo group were readmitted to the hospital, but only 29% of the supplemented group had to be hospitalized. Also, the hospital stays for the supplemented group were shorter. Fewer of the supplemented group died, compared to the placebo group during the six month period (19 compared to 32). The data suggests that not only is nutrient status improved with vitamin

and mineral supplementation, but general health as well.

According to an article appearing in the *Journal of the American Medical Association* (2002; 287(23):3127-9), many of us may need to be taking vitamin supplements. The article acknowledges that while extreme deficiency syndromes (like pellagra and beriberi) are rare in Western society, sub optimal intake of certain nutrients is a risk factor for disease. The article states that deficiencies of folic, vitamin B6 and vitamin B12 increase the risk for heart disease. These deficiencies also increase the risk for breast and colon cancers, as well as for neural tube defect (a common birth defect) in developing fetuses. Deficiencies of antioxidant, like vitamins A, C and E are also linked to a number of diseases. The article acknowledges that the diets of many Americans are not getting enough of many of these nutrients and sees the wisdom of supplementation.

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## Nutrition During Pregnancy and Childhood Allergies

A longitudinal cohort study looked at nutrient intake during pregnancy, following the health of the 1,861 children born to the subjects for five years. It was published in the *American Journal of Respiratory and Critical Care Medicine* (Vol 174. pp. 499-507, (2006)). The nutrient status of the mothers was evaluated with a food frequency questionnaire and by measuring blood levels of nutrients. Different groups of the children were evaluated with various tests. FEV1 (forced expiratory volume for

1 second) was tested on 478 of the children. Exhaled nitric oxide was checked on 167 of the children (a way to measure airway inflammation), Allergy testing (performed by skin prick), was performed on 700 of the group. The researchers found that high intake of foods containing vitamin E and zinc during pregnancy reduced the chances of the child developing asthma or allergies.

## A Few Words About Erectile Dysfunction

Erectile dysfunction is frequently due to a problem with circulation. Because it is an early indicator of problems with blood flow, the presence of erectile dysfunction may forewarn future cardiac problems. Various herbs and nutrients have been studied. The *Asian Journal of Andrology* (2007; 9(2): 241-4) studied the effect of Korean red ginseng in a double-blind, placebo-controlled study involving 60 subjects with erectile dysfunction. At the end of the 12 week study, the group receiving 1000 mg of Korean Red Ginseng 3x per day had improvement of symptoms according to the five item version of the International Index of Erectile Function (IIEF-5). Those taking placebo did not experience a significant improvement.

Another herb, *Lepidium meyenii* (Maca) was tested on subjects with mild erectile dysfunction. The double-blind, placebo-controlled study appeared in *Andrologia* (2009; 41(2): 95-9). There were 50 subjects who were randomly divided and given either 2400 mg of Maca extract per day or a placebo. The supplemented group also had improvements in the IIEF-5 scores and improvement in the Satisfaction Profile questionnaires.

Other substances like arginine and ginkgo biloba have been researched, each showing some results in studies. It is unlikely that someone can take an herb and do nothing else and expect to improve erectile dysfunction. If we look at the circulation aspect and work to improve it, natural therapy may produce some results. A high proportion of men with metabolic syndrome also have erectile dysfunction. A study appearing in *Diabetes Care* (May 2005;28(5):1201-1203) looked at 100 men with metabolic syndrome and compared them to

matched, healthy, controls. The men with metabolic syndrome had more than double the incidence of erectile dysfunction, compared to the controls (26.7% vs 13% respectively). Clearly giving up refined food is a good strategy for getting erectile dysfunction under control.

Lifestyle, the same thing that reduces the chances for a heart attack, can improve erectile dysfunction. Research appearing in the *Journal of the American Medical Association* (June 23/30, 2004;291(24):2978-2984) looked at 110 obese men (without diabetes, high cholesterol or high blood pressure) with erectile dysfunction were randomly divided into two groups. The intervention group was educated on how to lose 10% or more of their body weight through diet and exercise. The control group was given general information about nutrition and exercise. At the end of two years, the body mass index decreased in the intervention group after two years, from a mean of 36.9 to 31.2 (a reduction of 5.7), compared to a reduction of 0.7 in the control group. Blood markers for inflammation also were reduced in the intervention group. The mean score of the International Index of Erectile Function also improved in the intervention group.

While some studies do show benefit from herbal therapies, it is wise to take a comprehensive approach. The research supports lifestyle change as a way to bring this problem under control. It is always wiser to view your symptoms as a message from your body--telling you that something is wrong--rather than simply treating symptoms.

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## We Need a Better Paradigm for Health Care

Health care costs in the United States exceed \$2 trillion per year, which represents more than 15% of our GDP. Most industrialized nations only spend about 10% of their GDP on health care. The US ranks 15th out of 19 nations with regard to preventable deaths. It is estimated that 115 per 100,000 people die who would have survived if timely and appropriate medical care was administered. France scored highest in this category, with only 75 deaths per 100,000. The US ranks last in infant mortality, with 7 deaths per 1,000 births. The top three countries have 2.7 deaths per 1,000 births—less than half our number. We are at the bottom of the list in life expectancy. American children miss more school for illness than the children from the other industrialized nations. Fewer than half of American adults receive the recommended screening tests appropriate for their age and sex. Preventable hospital admissions for chronically ill patients (e.g.; those with asthma or diabetes) were twice as high compared to the nations at the top of the list. The rate of readmission of Medicare patients ranges from 14-22%.

We spend more on health care and we get much less than other industrialized nations. More utilization of natural health care would reduce this bill. For example, there are a number of studies that demonstrate that asthmatics will have fewer attacks and fewer hospitalizations if they eat a diet that is high in fresh produce and essential fatty acids. Studies have also shown that supplementation with antioxidants, omega-3 fatty acids and magnesium

have all benefited patients with asthma. Such recommendations are not given in medical offices. The reasons given ignoring natural health care include, the studies are too small and inconclusive, a cure has not been proven, and "vitamins don't cure disease".

Treatments for diseases are usually singular: we give Ritalin to children with ADD and ADHD--not essential fatty acids, exercise, or a diet that is free of sugar and additives. We don't even augment the drug therapy with natural approaches that are researched and show promise. Large follow-up studies are usually not performed to "prove" the efficacy of the natural treatments. Even though natural health care treatments are low-risk and high-gain; doctors tend to want them to be proven by large studies.

Doctors generally don't give vitamin C and fish oil to asthmatics--even if it would improve the health of these patients. It is not a "cure", but it does improve symptoms and reduce hospitalizations. They have been taught to use single treatments, usually drugs. CoQ10 can help prevent heart attacks, there are supplements that can speed recovery from surgery and shorten hospital stays, and there are many other natural health approaches that can cut our medical costs. Unfortunately they are largely ignored by the medical community. Supplementation often does not fit in the medical paradigm. But by looking at natural health care as improving the infrastructure of the body, traditional medical doctors could improve the results they get with patients.

## Antioxidants and Lung Disease

COPD stands for "chronic obstructive pulmonary disease". Actually two lung diseases fall under the category of COPD: bronchitis and emphysema. Both conditions are largely caused by smoking and often occur together. A study was published in *Lung* (2006; 184(2): 51-5). The subjects of the study included 30 smokers who were free of diagnosable disease, 30 healthy nonsmokers, 71 patients with stable COPD and 31 COPD patients who were experiencing exacerbation of their symptoms. The study looked into the antioxidant status of these subjects. The amount of plasma malonyldialdehyde (MDA), and the amount of superoxide dismutase (SOD) in the red blood cells was

measured. MDA is a measure of lipid peroxidation (giving an indication of oxidative stress). SOD is an antioxidant enzyme.

MDA, the measure used to determine oxidative stress, was lower in smokers than it was in nonsmokers. MDA was higher in patients with COPD than it was for healthy nonsmokers. SOD activity was considerably higher in the subjects experiencing COPD exacerbation than it was in any of the other groups. The authors concluded that smokers and patients with COPD have an antioxidant imbalance when compared to healthy nonsmokers. Addressing oxidative stress may help prevent COPD.

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## Probiotics and Irritable Bowel Syndrome

Research appearing in the *Korean Journal of Gastroenterology* (2006; 47(6): 413-9) looked at 40 subjects with irritable bowel syndrome (IBS) and the effect treatment with probiotics had on the condition. The subjects were randomly divided into two groups. One group was given a probiotic supplement and the second group was given a placebo. Subjects were evaluated at two weeks

and at four weeks. The group receiving the probiotics (which consisted of *Streptococcus faecium* and *Bacillus subtilis*) had fewer episodes of abdominal pain and a reduction in the severity of the pain. The amount of intestinal gas produced remained the same in both groups.

All who would win  
joy, must share it;  
happiness was  
born a twin.—*Lord  
Byron*

## Free Radicals, Oxidative Stress and Antioxidants

You may have come across terms like “antioxidant”, “free radical” or “oxidative stress”. A free radical is a chemical that readily gives up an electron—it sort of fires the electron like a chemical bullet. Free radicals can damage tissue and produce inflammation; they create oxidation. Sometimes the term “oxidative stress” is used to describe the damage done by free radicals. Oxidative stress has been linked to cancer, aging, atherosclerosis, ischemic injury, inflammation and neurodegenerative diseases (Parkinson's and Alzheimer's).

Flavonoids may help provide protection against these diseases by contributing to the total antioxidant defense system of the human body. Antioxidants are vitamins, nutrients and phytochemicals that act like little

“bullet-proof vests”. Antioxidants, like vitamins C and E, bioflavonoids, lipoic acid, coenzyme Q10 and other substances found in the diet and taken as supplements act to protect the cells.

One of the reasons that fresh fruits and vegetables are so good for you is that they contain flavonoids, which are powerful antioxidants. We take a chemical substance (anti-inflammatory drug) to control inflammation, but few people realize that inflammation is also controlled by our diets. The tendency to have a strong inflammatory response (more pain) or a lower inflammatory response (less pain) is controlled by what you eat. Eating fresh produce, containing antioxidant bioflavonoids, is a great way to help bring pain under control.

