



INTERNATIONAL

NEWS YOU CAN USE

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Whole Food Nutrition Research Continues to Highlight Benefits of abundance and Risks of deficiency of “Bio-Essential” Nutrients.

The inter-relationships and activities of the hundreds of nutrients that our bodies need and are supposed to get from our food are so complex that they challenge any reasonable explanation. The deeper scientists and researchers probe the unknown areas of human biochemistry, the more complex it all becomes. Individual nutrients play roles of their own and interact with other nutrients which interact with yet others in the super-dynamic network of biochemical reactions that is the greatest thing in all of existence—the human body. One simple fact that continues to apply however is that “you are what you eat.” Both the structure and the many functions of the body are all nutrient dependent. Give your body an abundance of those nutrients and it can reward you with a long life of health and vitality. Don’t do this, and all bets are off. And everything we are learning tells us that this starts very early on in life, indeed from the point of conception and every moment thereafter.

Too Much of the Wrong Food Sets a Course for Disease...

The typical “Western-style” diet is one that is identified as being high in meat, fat, refined grains, processed, fast, and convenience foods, and desserts. It is widely recognized as a diet of excess and deficiency—too many calories too little good nutrition. This diet pattern has long been associated with increased risk of disease. A new study published in the August 15, 2007 issue of the *Journal of the American Medical Association* (Volume 298, Number 7, pages 754 to 764) underlines and strongly emphasizes the health risk of the Western-style diet. Looking at people at risk of colorectal cancer recurrence, researchers from the Dana-Farber Cancer Institute in Boston showed that colorectal cancer patients who ate the most western-style diets were 3.3 times more likely to have a recurrence or death than patients with the lowest western-style diet content. The most important element of the study however may be the knowledge that 80% of all colorectal cancer may be preventable through dietary change. Their recommendations: a prudent diet rich in fruits, vegetables, poultry, and fish.

Yet another voice warning of the consequences of the western-style diet is world renowned researcher and pediatrician Dr. Robert Lustig of the University of California, San Francisco. At a health conference in August he stated that research shows the western-style diet to be a “toxic environment” that is a direct cause of the obesity epidemic—particularly in children—by creating hormonal imbalances that drive people to overeat.

...But getting an Abundance of the Right Food Is the Path to Long-Term Health!

In the July 2007 issue of the *American Journal of Clinical Nutrition* (Volume 86, Number 1, Pages 221 – 229) researchers from Monash University and the Cancer Council of Victoria, The University of Melbourne, The University of Cambridge, and St. Vincent’s Hospital Melbourne wrote that the “Mediterranean-style” diet was health protective. This conclusion was drawn from data collected for more than 10 years from 40,653 volunteers showing that a diet with the most fruit, vegetables, and omega-3 fatty acids had lower incidences of heart disease, obesity, and some cancers. They point out that such a diet is rich in antioxidants, monounsaturated fats, omega-3 fatty acids, and fiber. “This combination is believed to have antioxidant, anti-inflammatory and anti-thrombotic properties” that reduce the risk of cardiovascular disease by 30%.

Similar evidence of benefit for such dietary components was published by researchers from the Harvard School of Public Health in the July 2007 issue of the journal *Chest* (Volume 132, issue 1). Their study, based on data from 2,112 students aged 16 to 18 from around the US and Canada, showed that diets rich in fruit, vitamin-C, vitamin-E, and omega-3 fatty acids act to offset the risk of asthma, chronic bronchitis, and “wheeze.” Lead author Jane Burns told colleagues, “Our study, as well as other research, suggests that higher intakes of antioxidant and anti-inflammatory micronutrients are associated with lower reports of cough, respiratory infections, and less severe asthma-related symptoms.” While evidence of benefit was apparent in the results, evidence of risk was also for those who didn’t get enough of these critical nutrients. Results also showed that when dietary intake of fruit, vitamins C, vitamin-E, and omega-3 fatty acids was low, respiratory compromise, including decreases in lung function, increases in the incidence of chronic bronchitis, wheeze, and asthma was elevated.

Throughout our history GNLD has focused decades of research and attention on the importance of whole-food nutrition to health, vitality, and longevity. Finding ways to supplement the diet with both the density and diversity of whole food—human food chain nutrients our bodies need to thrive—has set GNLD apart from other supplement companies and resulted in unique products based on exclusive technologies and proven benefit.

Today, the core of our nutritional supplement product range includes whole-food extracts and concentrates from whole grains, fruits, vegetables, and fish. Literally foods in alternative forms, Tre-en-en® Grain Concentrates, Carotenoid Complex™, Omega-3 Concentrate™, and Salmon Oil Plus™ provide an easy and convenient way to assure your diet contains an abundance of powerful and important whole food nutrients every day.

Broccoli and Cauliflower Help Slow the Progression of Aggressive Prostate Cancer

Epidemiological studies and animal studies have demonstrated that diets high in cruciferous vegetables result in a lower prevalence and reduced incidence of several different types of cancer. These include lung, colon, breast, and ovarian cancer. A recently published study suggests that cruciferous vegetable intake may reduce the progression of prostate cancer.

Prostate cancer is the direct cause of over 200,000 deaths per year and over half a million new cases of prostate cancer are diagnosed every year world-wide. The incidence is also increasing which is further evidence that we are indeed, as a global community, losing the battle against all types of cancer.

In an article published in the *Journal of the National Cancer Institute*, (Prospective Study of Fruit and Vegetable Intake and Risk of Prostate Cancer; Kirsh et al. 2007; 99: 1200-1209) researchers concluded that “a high intake of cruciferous vegetables, including broccoli and cauliflower, may be associated with reduced risk of aggressive prostate cancer, particularly extraprostatic disease.”

In the prospective study of men in the screening arm of a long-term randomized screening trial, researchers from Canada and the U.S. reported an increased intake of cruciferous vegetables was associated with a 40 percent reduction in prostate cancer risk, with broccoli and cauliflower offering most protection.

The cancer-fighting properties of cruciferous vegetables have been known for some time. These effects are thought to be due to the content of sulfur containing phytonutrients known as glucosinolates. Glucosinolates are metabolized by the body into isothiocyanates. They are also found in broccoli as sulforaphane.

Globally, chronic diseases such as cancer account for a greater proportion of global deaths than all infectious disease combined. The prevalence of these chronic degenerative diseases is increasing and global health authorities have stated explicitly that a deficiency of fruit and vegetables is to a large degree, responsible for this alarming trend.

It has been obvious to GNLD for decades that humans have a biological dependency upon certain food components, and cruciferous vegetables represent an important group of them.

In general, we consume lower quantities of cruciferous vegetables than we do other types of vegetables, but the increasing level of evidence of their health-protecting power is telling us things need to change.

Studies such as this confirm what we at GNLD have long understood; daily fruit and vegetable intake is critically important for optimal health, vitality and longevity! Our systems are complex and require a wide range of bio-active substances and providing both the diversity and density of these powerful phytonutrients should be a primary daily goal.

GNLD's Cruciferous Plus™ contains extracts of the following cruciferous vegetables: broccoli, radishes, kale, black mustard, brown mustard, and watercress and other phytonutrients including D-limonene, a citrus terpene, chalcones from licorice root, and isoflavones, such as genistein from soybeans. Tests conducted on following U.S. National

Cancer Institute protocols with human cells in culture show the active constituents in Cruciferous Plus can increase natural cellular protector enzymes and inhibit cancer progression.

Ensure dietary adequacy by choosing cruciferous vegetables frequently and using GNLD whole-food Cruciferous Plus to help assure a dietary abundance of these important nutrients and help reduce your risk of chronic disease.

HOT TOPIC: Green tea shows cancer prevention muscle in mouse trial. Publishing in the journal *Carcinogenesis* (published online ahead of print; doi:10.1093/carcin/bgm161), researchers from the University of North Carolina (UNC), the Medical University of North Carolina and the University of Columbia presented evidence that they felt could have strong benefit for humans for prevention of colon cancer. “Our results suggest that green tea specifically targets initial stages of colon carcinogenesis;” wrote lead researcher Ala Issa of UNC.

When It Comes to Vision, You Really Are What You Eat!

Researchers from Children's Hospital in Boston investigating the causes of vision loss recently showed that the retinas of our eyes are a direct reflection of our diet. Eat a lot of salmon and the good fats (omega-3 fatty acids) it contains will show up in the retina. Eat a lot of hamburgers and the bad fats (saturated, trans-fats) they contain will show up instead. This is more important than it might appear on the surface because while good fats/omega-3 fatty acids support vision longevity, the reverse appears to be true for bad fats.

HOT TOPIC: Green tea spurs “detoxification” processes in the body. The body has a natural protector system built in to its cells called “Phase-II” enzymes. Components in green tea called “catechins” have been shown to “up-regulate” (increase) the production of these cellular protectors in a study coming from the University of Arizona. Publishing their work in the journal *Cancer Epidemiology Biomarkers & Prevention*, researchers stated “Green tea catechins somehow increase the gene expression of these enzymes, which can be an advantage to people with low levels to start with.” (DOI: 10.1158/1055-9965. EPI-06-0830)

Carotenoids Get more Recognition as Vision Defenders!

Over the past decade or so, many studies have pointed to the apparent vision protecting powers of whole food carotenoids; in particular lutein and zeaxanthin. Both have been shown to reduce the risk of vision loss called age-related macular degeneration or AMD. They provide this protection by concentrating in the macula and absorbing potentially harmful “blue” light preventing the creation of free-radicals that could damage the delicate macular tissue. In the June 2007 issue of the journal *Nutrition & Metabolism* (2007, 4:12 doi: 10.1186/1743-7075-4-12) researchers from Florida International University confirmed the vision care benefits once again. “Our study shows that a supplement

containing the macular carotenoids, lutein, zeaxanthin, and meso-zeaxanthin is effective in raising macular pigment and may be an effective way of protecting an aging population from AMD.”

Carotenoids Good for Mental Performance Too!

It has long been known that the level of carotenoids in the diet is directly related to several critical functions. When carotenoids are low in the diet, immune capacity is lower. When carotenoids are low in the diet, risk of heart disease is higher. Now that same sort of relationship has been shown for cognitive function. Publishing their work in the July 2007 issue of the *Journal of Gerontology: Medical Sciences* (Volume 62A, Number 3, Pages 308-316) researchers from the University of Montpellier, the University of Paris and CHU Grenoble showed a direct connection between carotenoids and cognitive capacity. From data gathered from 589 healthy older people they found that those with the lowest dietary carotenoids intakes also had the lowest cognitive function scores,

and vice versa. “In this present study” the researchers commented, “Low levels of specific plasma carotenoids—lycopene and zeaxanthin—were associated with poor cognitive functioning.”

GNLD’s Scientific Advisory Board was amongst the first to identify the importance of direct relationships between dietary carotenoid intake and important body functions. In fact, in the middle 1990’s researchers from the United States Department of Agriculture (USDA) proved that carotenoids have the power to modulate immune function in humans.

They showed that when carotenoids are inadequate in the diet immune capacity is compromised. Conversely when a dietary carotenoid abundance was created using GNLD’s exclusive Carotenoid Complex lost immune capacity was quickly restored and even increased. Their research was published in the *American Journal of Clinical Nutrition* (March 1997: Volume 68, pages 861 -865)

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SAB HAS THE ANSWERS:

Q. Do GNLD’s Aloe Vera beverages contain aloin?

A. No, Both beverages, Aloe Vera Plus™ and the new carbonated Aloe Vera, are made using filleted aloe. Only the inner gel is used to prevent unwanted compounds like aloin, which could cause the irritation in the digestive system.

Q. Why do we need fiber in our diets?

A. Experts recommend a dietary intake of 20-35 grams of fiber per day. A diet rich in fiber and low in fat is a key factor in promoting good health. For years, fiber has been associated with proper elimination and regularity. High fiber diets have also been linked to reduced risk of heart disease, certain forms of cancer, diabetes, diverticulitis, and obesity. To help supplement your diet, GNLD’s All Natural Fiber™ Food and Drink Mix and Multi Fiber Blend™ provide a mixture of soluble and insoluble fibers from a variety of whole-food sources. Both of these products can be mixed with your favorite drink or combined in foods to offer a simple, natural way to increase your fiber intake.

Q. Do any of GNLD’s products contain any free nitrates, pesticides, herbicides?

A. No. Our quality control standards and procedures test for and prohibit the presence of such compounds. All raw materials used in GNLD products must first pass our stringent Quality Control process. Every one of these raw materials requires different types and amounts of tests, which are performed by GNLD and our global quality assurance and control system. Additionally, GNLD requires specification sheets and Certificates of Analysis for all nutritive food raw materials purchased.

Q. GNLD’s Aloe Vera beverages contain fructose; can someone with diabetes drink these beverages safely?

A. GNLD’s Aloe Vera Plus and carbonated Aloe Vera are sweetened with fructose, which, unlike sucrose, does not produce an insulin spike. Many people with diabetes are able to drink these

two aloe vera beverages without difficulty. However, we always recommend that such questions be put to a personal physician. Diabetes is a serious medical condition that can vary from person to person and can be affected by diet and age—so dietary changes should be carefully considered.

Q. What is the function of the licorice in Cruciferous Plus™, and how does it work?

A. Licorice root contains sweet substances known as chalcones. Amongst other things these beneficial compounds have been shown to prevent the formation of a byproduct of testosterone that spurs the growth of prostate cancer. Chalcones are also relatives of antioxidant flavonoids, and as such, help to protect the body’s cells in many different ways.

Q. I read White Willow can cause stomach irritation; is this true?

A. It is highly unlikely the White Willow used in GNLD’s Full Motion would cause stomach irritation at the amount used. White Willow has obtained an undeserved reputation for stomach sensitivity due to the close association with aspirin.

When formulating GNLD’s products, the SAB chooses ingredients less likely to cause undesirable effects.

Q. Many glucosamine products contain MSM, why did GNLD choose not to use it in Full Motion?

A. MSM, Methylsulfonylmethane is a derivative of the solvent DMSO (dimethyl sulfoxide). MSM is not part of the human food chain and there is no dietary need for it. Additionally, there is no evidence MSM promotes cartilage repair or re-growth. In contrast, the combination of ingredients that make up Full Motion are based on leading-edge science that shows direct supplementation of glucosamine, the primary cartilage building block, can support healthy joint function and regenerate lost or damaged cartilage.

More Evidence Shows Omega-3's Benefit Heart Rhythm.

A group of researchers from the University of Athens are the latest to confirm the important role omega-3 fatty acids play in healthy heart rhythm. Using data from electrocardiographs of 3042 study participants they showed that high dietary omega-3 status was equated with healthier bio-electrical cycles in the heart, providing anti-arrhythmic protection. Their work was published in the May 2007 issue of the *American Journal of Clinical Nutrition* (Volume 85, Number 5, Pages 1385-1391).

Anti-Depressive effects of Omega-3's Get More Support!

Two research groups from the Chang Sung University College of Medicine and the China Medical University Hospital, both in Taiwan published in the *Journal of Clinical Psychiatry* (July 2007) that they found a significant anti-depressive effect of dietary omega-3 fatty acids. Their conclusions were drawn from 10 clinical trials.

New Study Shows Omega-3's Protect from Colorectal Cancer.

Publishing in the July 2007 issue of *American Journal of Epidemiology* (Volume 166, Issue 2, Pages 181 – 195), researchers from the University of Edinburgh, the University of Aberdeen and Edinburgh's Western General Hospital report seeing a protective effect of omega-3 fatty acids against colorectal cancer. Using evidence drawn from 1,455 patients with colorectal cancer and 1,455 matched healthy controls, the researchers showed that consumption of omega-3 fatty acids was associated with a 37% reduction in colorectal cancer between the highest and lowest intake levels.

Omega-3 Anti-Inflammatory Potential Greater than Previously thought!

Increasing the consumption of fish oil over vegetable oil delivers more anti-inflammatory power according to researchers from

the University of Michigan. Publishing in the August 2007 issue of the *Journal of Biological Chemistry* (Volume 282, Issue 31) they reported that omega-3's have a greater effect than thought at reducing the formation of "inflammatory" chemicals known as prostanoids. Lead researcher Professor William Smith wrote, "Dietary fish oil containing omega-3 highly unsaturated fatty acids has cardio-protective and anti-inflammatory effects."

More Evidence Supporting Benefits of Omega-3's for ADHD Kids.

Evidence about the importance of omega-3 for children and the behavior challenges so many families are confronted with continues to grow. The most recent evidence of benefit is from a controlled trial published online in the August 2007 issue of *Nutrition Journal* (6:16. doi:10.1186/1475-2891-6-16). A research team from the Inflammation Research Foundation in Massachusetts supplemented a group of children with ADHD (attention deficit hyperactivity disorder) with up to 16 grams of fish oil for eight weeks and then halved the dose for another 4 weeks. The results showed significant improvements in behavior assessment conducted by a behavior psychology specialist. These results are consistent with those from a randomized, double-blind, placebo controlled trial conducted in Australia and published in the April 2007 issue *Behavioral Pediatrics* (Volume 28, Pages 82 - 91).

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