

NEWS YOU CAN USE

Volume #018 2007 U.S.A. & Canada

Consumers are still not getting the message about the importance of whole grain!

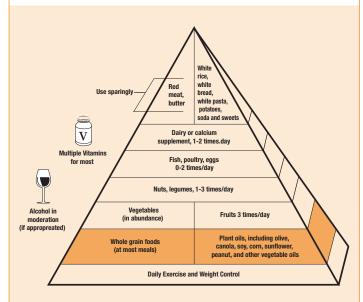
For the last several years, health researchers and institutions like the Food and Drug Administration, Department of Agriculture, Centers for Disease Control, and others have been vigorously promoting the need for the population to consume more whole grain foods. Yet, in spite of all this activity, whole grain consumption by the average person has not risen significantly. As a result, scientists from Wake Forest University, who have just completed a comprehensive review of the potential health benefits of whole grains, are pressing policy-makers, scientists, and clinicians to redouble their effort in getting this important message across. In their combined prospective study that included a total of 149,000 participants, and was published April 24, 2007, in the Journal of Nutrition, Metabolism, and Cardiovascular Disease, they stated, "There is a consistent, inverse association between dietary whole grain and incidence of cardiovascular disease in epidemiological cohort studies." They found that as little as 2.5 servings per day of whole grain can provide a 21% reduction in cardiovascular disease risk. Though fiber plays an important role in this benefit, they specifically point out there is much more involved. They explain that when grains are refined many of their biologically active agents, including fiber, vitamins, minerals, phytosterols, and other plant compounds, are removed. They made special note that: "These biological agents influence cardiovascular risk through effects on glucose homeostasis, lipids and lipoproteins, endothelial function (the function of a special type of cell), and other mechanisms, potentially accounting for much of the observed benefit of high intake of whole grains."

...and people are still not getting enough!

Science has long ago proven the health protection benefits of a diet rich in whole grains and related nutrients. They have been directly linked with reduced risk of heart disease and certain cancers, as well as being identified for their roles in the structure and function of healthy, efficient, and "energetic" cells. Recent research from the US National Health and Nutrition Evaluation Survey (NHANES) shows that despite all the promotional efforts, only 8% of the population gets the recommended amount of 3 servings of whole grain each day. This leaves the other 92% of the population with inadequacies that undermine not just potential cardiovascular health and longevity, but other basic biochemical functions of the body.

The importance of whole grains to a healthy diet has been at the core of the GNLD "nutrition and health" message for nearly 5 decades. In each decade since 1958, scientists have continued to further validate the importance of this key food component of human nutrition and embrace its need more

and more. Certainly this first decade of the new millennium has seen the greatest acceptance and greatest promotion of the fundamental importance of whole grains from scientists and governmental agencies alike. One of the most relevant but perhaps unrecognized expressions of the importance of whole grain and their related biological components can be seen in what is known as "The Harvard Food Pyramid." This modification and clarification of the original "Food Pyramid" developed by the USDA and presented in 1992 was proposed by leading researchers at the Harvard School of Public Health as the most appropriate means of conveying the importance of specific foods and the nutrients they deliver. In the Harvard Food Pyramid, scientists deliberately separated refined grains from whole grains and put a special emphasis on the oils (lipids and sterols) that they and other plants provide that support health, vitality, and longevity.



Reproduced from Eat, Drink, and Be Healthy by Dr. Walter C. Willett

This specific focus on the importance of whole grain and plant lipids by the Harvard team is enthusiastically embraced by GNLD and our Scientific Advisory Board. It is seen as further substantiation and acceptance of a very important message we've been trying to get across for decades: Healthy bodies—composed of healthy, energetic cells—have a basic biological need for whole grains and the lipids and sterols they contain. As scientific evidence continues to emerge in the months and years ahead, we are confident that our message will be embraced by an ever-growing number of health professionals, governmental institutions, and consumers around the world.

Two new studies say we don't eat enough fruits or vegetables!

We've been hearing about it for decades...eat more fruits and vegetables! Tens of millions of dollars have been spent trying to get the message across, but apparently, we're just not listening. Scientists, doctors, and health professionals have all been telling us that our inadequate intake of fruits and vegetables sets us up for a life unnecessarily at risk of disease, disability, and despair. And even though the most recent disease statistics confirm that many of us are on that slippery slope, we cannot seem to do anything about it. In fact, two new studies published in the *American Journal of Preventive Medicine* (Volume 32, Issue 4; April 2007) tell us it's apparently been wasted money and wasted time.

The first study, "Have Americans Increased Fruit and Vegetable Intake?", used data from the USDA's National Health and Nutrition Evaluation Survey and compared intakes in 1994 to those in 2002. Using a total of nearly 24,000 subjects, they found that 62% of the population reported consuming no servings of fruit and 25% consumed no servings of vegetables in their daily diet. They also reported that nearly 90% of the population fell short of the USDA's minimum target of 5 servings of fruits and vegetables each day. "With two thirds of the U.S. population overweight or obese, the implications of a diet low in fruits and vegetables are extensive..." said Dr. Tiffany Gary of the Johns Hopkins School of Public Health.

The second study looked at whether or not improvements have been made across ethnic lines. Previous studies have shown a disparity in diets of blacks and whites—and a more serious disparity in the incidence of heart disease, cancer, and stroke. The report showed no progress there, either. According to study leader Dr. Ashima Kant, lead researcher on the project from Queens College of the City University of New York, "Dietary intake trends in blacks and whites over the past several decades appear similar, suggesting that previously identified dietary risk factors that differentially affect black Americans have not improved in a relative sense."

The huge gap in critical fruit and vegetable phytonutrients that exists in the average diet has been cause for alarm and action at GNLD for nearly 20 years. The facts are the average person goes through day-to-day life needlessly exposed to disease-causing, age-accelerating biological events in the body simply because they do not get enough fruits and vegetables and the powerful protector nutrients they contain. Our message has been consistent: "Eat your fruits and vegetables!" We have been so committed to the idea that we have researched, developed, and delivered a whole line of products that are made from, and draw powerful nutrient content entirely from, the same fruits and vegetables that we humans need and simply aren't getting. As powerful and proven as these products are, we still see them as nutritional "supplements," not "substitutes," and strongly urge everyone to eat more fruits and vegetables. We know that assuring an abundance of these foods and the health-protecting, disease-preventing nutrients they contain is a key to long health and vitality. We also know that the best way to assure an abundance is by eating more fruits and vegetables AND supplementing with GNLD whole food, human food chain products. There simply is no better way...and we have the science to prove it.

Factoid: Talk about fast cellular renewal! Receptor cells in your taste buds are replaced about once every 10 days! The average human has about 10,000 taste buds, and each of these contains 50 to 100 cells. That means 50,000 to 100,000 cells are replaced each day, just in your taste buds!

Omega-3's are POWERFUL!

Six new studies on omega-3 fatty acids drive home the point.

Omega-3 helps kids with behavior challenges: The study was published in the *Journal of Developmental and Behavioral Pediatrics* (Volume 28, pages 82-91; April 2007). It's a double-blind, placebocontrolled, cross-over study conducted by researchers at the University of South Australia on 132 children with ADHD between the ages of 7 and 12, and was a follow-up to a previous study. Like that previous study, this new one showed a powerful, positive effect of omega-3 supplementation. Using the approved and validated Conner's Parents Rating Scales as their means of measure, the researchers showed amazing results. After 15 weeks with their children on the supplement, parents recorded improvements in half of these scales. After 30 weeks, parents rated behavioral improvements in 9 of the 14 scales. The supplement used provided approximately 540 mg of EPA and 180 mg of DHA daily. All children also took a chewable multi-vitamin and mineral supplement.

Omega-3 helps young men build strong bones: Publishing in the March 2007 issue of the *American Journal of Clinical Nutrition*, researchers from the Umea University in Sweden noted that, of the 78 young men they followed from some as young as 16 to the age of 22, those with the highest blood levels of omega-3 fatty acids in general, and DHA (docosahexaenoic acid) in particular, also amassed the highest bone density in the body and spine. This study "nicely adds to a growing body of evidence that omega-3 fatty acids are also beneficial to bone health," Dr. William Connor and Dr. Chaim Vanek noted in an accompanying editorial to the study.

Japanese study gives further evidence that omega-3 fatty acids protect the heart: New evidence from a study known by the name JELIS (Japan EPA Lipid Intervention Study) was published in the 31 March 2007 issue of the medical journal *The Lancet* (Volume 369, pages 1090–1098). The study showed that supplementation with the omega-3 fatty acid EPA (eicosapentaenoic acid) reduced the occurrence of angina by 24% and non-fatal coronary events by 19%. Following 18,645 patients for 4 1/2 years, the study showed significant benefits for cardiovascular health. In an accompanying editorial, Dr. Dariush Mozzafarian of the Harvard Medical School and Harvard School of Public Health commended the JELIS investigators, stating "...and their efforts should inspire additional clinical trials of the effects of fish oils..."

More evidence omega-3's preserve brain function: The Zutphen Elderly Study, conducted by a research group from the Netherlands, compared the cognitive decline of subjects aged 70 to 89 years over a 5-year period. Publishing in the April 2007 issue of the *American Journal of Clinical Nutrition* (Volume 85, pages 1142-1147), it showed that those with the highest consumption of fish (and calculated EPA and DHA levels) had significantly less cognitive decline over 5 years compared to non-consumers. The results were particularly evident in those with high blood pressure or high cholesterol.

And more evidence! Also published in the *American Journal of Clinical Nutrition* (Volume 85, pages 1103-1111), a second study performed by Dr. May Beydoun at the University of North Carolina at Chapel Hill showed less decline of verbal ability when blood levels of EPA and DHA were highest.

And even more evidence omega-3 fatty acids protect our brains: In an editorial that accompanied the above two articles, pioneer omega-3 researchers William Connor and Sonja Connor did a review of this evidence, plus more provided by the "Minneapolis Study." Their conclusion: "In each of these studies, omega-3 fatty acids retarded the decline of cognition over time." They attribute the benefit to the anti-thrombotic and anti-inflammatory properties of EPA and the "correction of DHA deficiencies." (*American Journal of clinical Nutrition*, volume 85, pages 929-930; April 2007)

Continued on page 4.



SAB HAS THE ANSWERS:

Q. If I take Carotenoid Complex TM , why should I also take Cruciferous Plus TM and Flavonoid Complex TM ?

A. Three of the primary fruit and vegetable phytonutrient groups associated with health protection and disease prevention are carotenoids, flavonoids, and cruciferous. These products have different functions within the body. Science has shown that these three different nutrient groups protect us and our cells in different, yet complementary, ways. Carotenoids protect the lipids in the blood and cell membranes; flavonoids protect the watery portions inside and outside of our cells; cruciferous nutrients protect the cell as a whole from the negative effects of certain hormones.

Research has shown that the vast majority of people do not get enough fruits and vegetables in their diet. Carotenoid Complex, Flavonoid Complex, and Cruciferous Plus are complete, whole-food supplements formulated to deliver an abundance of these important protector nutrients. When taken together, they offer the most complete phytonutrient protection possible!

Q. What is the difference between complex and chelated minerals?

A. Chelated minerals are bound to two amino acids. Minerals such as phosphorus, selenium, and potassium can only bind to one amino acid. They are, therefore, technically called complex minerals. GNLD's unique chelated and complex mineral products ensure that you receive the high quality nutrients necessary to maximize mineral absorption.

Q. Are GNLD products safe to take after the "best by" date?

A. The "best if used by" and "best by" dates actually refer to potency, not safety, freshness, or expiration. When stored as suggested, our nutritional products have been proven to meet or exceed the nutritional claims made on the label even after the "best if used by" and "best by" dates. We suggest, however, that all of our products be taken by the recommended dates.

Q. I already take several GNLD nutritional products; is it safe to add GNLD herbals to my daily routine?

A. It is perfectly safe. GNLD Herbal Alternatives were designed to complement our nutritional supplements. The herbal products help to support and maintain your body's normal function, while the nutritional products help to supplement your diet to help make sure you're not missing any critical nutrients.

Q. What is Neo-Plex Concentrate and why does GNLD use it in their products?

A. GNLD's Neo-Plex Concentrate provides all the nutritional elements found in whole oranges, including the juice, rind, pulp, vitamin C, bioflavonoids, flavedo, mesocarp, endocarp, protopectins and other naturally occurring factors to enhance the absorption and utilization of vitamin C. Research shows vitamin C stays in the body longer and is utilized better when consumed with natural, whole-food components

Q. Why did GNLD change the labels to list ingredients such as soy, wheat, milk, and fish? Did the products change?

A. We only changed the labels! A new guideline called "The Food Allergen Labeling and Consumer Protection Act of 2004" requires that the label of a food or food supplement made from two or more ingredients must declare each ingredient by its common or usual name. Additionally, whenever any raw material (no matter how much is present in the product) contains or is derived from such common foods as soy, wheat, milk, and fish, and the common term is not already used in the ingredient disclosure, the common term will be listed in parentheses after the ingredient.

Food allergens have always been a concern for both the SAB and GNLD, and we've gone to great lengths to minimize their presence in our products. Because we know that some people are allergic to common ingredients like milk, wheat, fish, or soy, we applaud the intent of this law. We want to assure you that only the label statements have changed, and that GNLD's product formulas and raw materials have not changed in any manner.

Q. What makes GNLD's Targeted Delivery Technology so important for Garlic Allium Complex?

A. A key component in garlic that provides its benefits is allicin. Allicin comes from the natural reaction of two other garlic components, alliin and the enzyme allinase. Delivering allicin to the intestine for absorption is a challenge since the natural digestive functions in the stomach deactivate the enzyme and thus block the conversion of alliin to allicin. GNLD's exclusive Targeted Delivery Technology protects the garlic, with its alliin and allinase from being destroyed in the stomach by assuring it is delivered to the intestine where the allicin is formed and absorbed.

GNLD has been spreading the word about the importance of omega-3 fatty acids to health, vitality, and longevity—both physical and cognitive—for decades. From our ongoing investigation of the role of lipids in cell structure and function, we have long known that omega-3 fatty acids were of critical importance. We focused our attention specifically on delivering omega-3's when we introduced the first whole food nutritional supplement derived entirely from pure, natural Salmon Oil in the 1970's. Shortly after that, we brought Vitality Omega-3 Concentrate to market, which for the first time targeted heart health with a unique combination of omega-3 fatty acids and "lipotropic factors" to support healthy blood chemistry. Over the decades that have passed since then, we have spread the message about the importance of omega-3 fatty acids to the far corners of the world, empowering millions with the opportunity for better overall health. During all those years, we also continued the rigorous research effort that lead to the introduction of Omega-3 Salmon Oil Plus. Based on the unique and exclusive process called "molecular differentiation," Salmon Oil Plus is the first product to deliver the completeness of all 8 members of the omega-3 fatty acid family.

Factoid: So you think your computer is complicated. Well think again! The human brain has 100 trillion synaptic connections. That's 100,000,000,000,000...a lot of zeros!

Research "Hot Topics"—A quick look at some exciting new research.

Scientists explain how the carotenoid lutein is an anti-inflammatory as well as an antioxidant. The carotenoid lutein has long been known for its ability to reduce the risk of sight robbing AMD (age-related macular degeneration), but how it works hasn't been fully known. Researchers from the State University of New Jersey provided a deeper insight into this important carotenoid when they showed that it reduces chronic inflammation by inhibiting pro-inflammatory events that occur in the body. (*Molecular Nutrition & Food Research*; Volume 51, Issue 3, pages 333-340)

Broccoli and Soy—Researchers shed new light on how they block cancer. University of California, Los Angeles (UCLA),

researchers presented evidence at the 2007 Annual Meeting of the American Association for Cancer Research showing that, when digested, cruciferous vegetables release a component called DIM (diindolylmethane) that interferes with a set of biological actions within the body that are needed for breast cancer cells to spread. These are the same biological actions associated with ovarian cancer. In their paper, the researchers showed that when both DIM and the soy component known as genistein were delivered to cells these pro-cancer events were significantly inhibited. (Annual Meeting of the American Association for Cancer Research; April 2007, Abstract 4217)

The inter-relationships between cruciferous vegetables and soy are something GNLD has known about since the mid-1990's. The "Plus" in our product Cruciferous Plus™ refers directly to the presence of soy and its key isoflavone component Genistein. Though the means by which cruciferous vegetables and related foods provide their protection is still being investigated, science continues to verify the benefit. The study above serves to build on the research done on Cruciferous Plus in the late 1990's that followed a National Cancer Institute protocol using human breast cells in culture and showed inhibition of cancer cell spreading.

Garlic and Vitamin C—Good for your blood pressure.

Publishing in the journal *Nutrition Research*, scientists showed that a combination of garlic and vitamin C is effective in helping those with marginally elevated blood pressure to get it down. They reported that while garlic alone provided some benefit, vitamin C alone did not. But when the two are combined, a significant reduction in blood pressure was noted. They pointed out that the blood pressure of their subject decreased when garlic and vitamin C were delivered together and increased when the supplements were taken away. (*Nutrition Research*; Volume 27, Issue 2, pages 119-123, March 2007)

Factoid: A whisper falls gently on the ear. Near the threshold for hearing, the eardrum moves only 1,000,000th of an inch. That's 0.000001 inches.

PLACE STAMP HERE