

The POWER of Phytonutrients

Nearly every news authority and scientific group has reported the same conclusive findings: Fruits and vegetables help protect us against disease. It is certain nutrients found only in plants, called phytonutrients, that provide us with these health-protective benefits. And the key to reaping all the protective benefits of phytonutrients is eating a variety of fruits and vegetables every single day.



Diversity of Phytonutrients

No phytonutrient ever stands alone in whole foods; it's always surrounded by related phytonutrients. For example, different carotenoid-rich fruits and vegetables contain different groups of carotenoids. Although different carotenoids provide different health protective functions, they are most beneficial when they work together, protecting us from certain cancers and heart disease and enhancing our immune system. Research has consistently shown that we reap more benefits from consuming a broad spectrum of phytonutrients. In fact, scientists have even determined that consuming a large amount of a single phytonutrient may actually lower absorption of other members of the phytonutrient families.



Even though we should eat a variety of fruits and vegetables, most of us don't. We have favorite foods that we stick to—if we really love peaches but hate broccoli, we're getting all the protective benefits of the phytonutrients in peaches, but none of those in broccoli. The greater diversity of foods that we eat, the greater the diversity of protective nutrients our bodies receive.

Density of Phytonutrients

Consuming high enough levels of phytonutrients to assure optimal health protection presents a second challenge. While recommendations for most phytonutrients have not yet been established, the RDA of vitamin E, an important phytonutrient antioxidant, has been set at 30 IUs. To achieve that level of vitamin E, we'd have to eat 124 slices of whole wheat bread, which equals approximately 6,870 calories! And whole wheat bread is considered one of the richest sources of vitamin E in our diet! Plus, most people are not willing to do the meal planning and nutritional evaluation necessary to determine the nutrient diversity and density of the food they eat.

Diversity and Density from GNLD

Golden Neo-Life Diamite's esteemed scientific group, led by the world-renowned Arthur Furst, Ph.D., recognized this dichotomy in most of our eating habits more than a decade ago. Their goal was to develop a line of phytonutrient supplements to help assure we're getting all the density and diversity that fruits and vegetables offer the way nature intended. Their efforts have resulted in three exclusive whole-food supplements that provide key phytonutrient protection: Carotenoid Complex™, Flavonoid Complex™, and new Cruciferous Plus™.



Dr. Furst, Senior Member, SAB

Casi todos los medios informativos y los grupos científicos han reportado los mismos hallazgos concluyentes: Las frutas y verduras nos ayudan a protegernos en contra de las enfermedades, y son precisamente ciertos nutrientes que se encuentran en las plantas, llamados fitonutrientes, los que nos proporcionan estos beneficios protectores para la salud. Y la clave para cosechar todos esos beneficios protectores de los fitonutrientes consiste en consumir una amplia variedad de frutas y verduras todos los días.

La Diversidad de Fitonutrientes

No existe un solo fitonutriente que se encuentre en los alimentos enteros de manera aislada; un fitonutriente siempre se encuentra rodeado de fitonutrientes relacionados. Diferentes frutas y verduras ricas en carotenoides, por ejemplo, contienen diferentes grupos de carotenoides. Y aunque los diferentes carotenoides desempeñan diferentes funciones protectoras de la salud, resultan más benéficos cuando trabajan en conjunto, protegiéndonos de ciertos tipos de cáncer y de las enfermedades del corazón y reforzando nuestro sistema inmunológico. La investigación ha demostrado de manera contundente que sólo es posible obtener mayores beneficios a partir del consumo de un espectro de nutrientes amplio. De hecho, los científicos inclusive han determinado que el consumir grandes cantidades de un fitonutriente por sí solo en realidad lo único que hace es disminuir la absorción de otros miembros de la familia de los fitonutrientes.



Aun cuando en realidad deberíamos comer una amplia variedad de frutas y verduras, la mayoría de nosotros no lo hacemos. Tenemos alimentos favoritos a los que no dejamos por nada – si nos encantan los duraznos pero aborrecemos el brócoli, estamos obteniendo todos los beneficios protectores de los fitonutrientes de los duraznos, pero no los de aquellos en el brócoli. Entre mayor sea la diversidad de los alimentos que comamos, mayor será la diversidad de los nutrientes protectores que nuestros cuerpos recibirán.

La Densidad de Fitonutrientes

El consumir los altos niveles de fitonutrientes necesarios para garantizar una protección óptima para la salud plantea un segundo reto. Aun cuando todavía no se han establecido recomendaciones para la mayoría de los fitonutrientes, el consumo diario recomendado de la vitamina E, un importante antioxidante fitonutriente, se ha fijado en un nivel de 30 UI. Para alcanzar ese nivel de

vitamina E, ¡tendríamos que comer 124 rebanadas de pan de trigo entero, lo cual equivale a aproximadamente 6,870 calorías! ¡Y eso que el pan de trigo entero está considerado como una de las fuentes más ricas de vitamina E en nuestra dieta! Además, la mayoría de la gente no estaría dispuesta a llevar a cabo la planeación alimenticia y la evaluación nutricional que se requerirían para determinar la diversidad y la densidad de los nutrientes de los alimentos que consumen.

Dr. Furst, leading toxicologist and a pioneer of cancer research, explains here how GNLD's three phytonutrient supplements help protect us both as a group and individually from cancer and other degenerative diseases.

"Why do we need all three phytonutrient supplements? Because each one has its own sphere of protection—no one group can do it all."

"Carotenoid Complex™ helps protect the lipid portions of cell tissues. Carotenoids work with vitamin E to help prevent free radical damage in cell membranes. Flavonoid Complex™ helps protect the watery portions inside and outside of the cell. In addition to basic antioxidant protection, flavonoids have been shown to provide cardiovascular protection. Lastly, the phytonutrients in Cruciferous Plus™ are both lipid and water soluble. Some of these cruciferous phytonutrients help interfere with the conversion of "good" estrogen



to "bad" estrogen, which may prevent breast cancer. Another phytonutrient group in Cruciferous Plus™ helps neutralize carcinogens, which may prevent other forms of cancer. Therefore, we used a mixture of cruciferous phytonutrients in Cruciferous Plus™ to maximize prevention from disease."

"Because no single phytonutrient can protect every part of our cells, we developed Carotenoid Complex™, Flavonoid Complex™, and Cruciferous Plus™. Taken together, the three concentrated phytonutrient supplements offer a wide range of protection for your entire cell. This density and diversity of nutrients is the GNLD difference."

The fact is, we're just not getting the density and diversity of phytonutrients that we need from our diets. Supplementation with Carotenoid Complex™, Flavonoid Complex™, and Cruciferous Plus™ can help bridge the gap between what you eat and what you need. Derived from a variety of whole food extracts and concentrates, this trio supplies a broad spectrum of concentrated phytonutrients to help achieve the nutrient density and diversity to support optimal health. Carotenoid Complex™, Flavonoid Complex™, and Cruciferous Plus™ for more life in your years and maybe even more years in your life!

La Diversidad y Densidad de GNLD

El prestigiado grupo científico de Golden Neo-Life Diamite, dirigido por el mundialmente reconocido Dr. Arthur Furst, reconoció esta dicotomía existente en la mayoría de nuestros hábitos alimenticios desde hace más de una década. A partir de ese momento su objetivo fue desarrollar una línea de complementos fitonutrientes que nos permitieran a asegurarnos de que estamos obteniendo toda la densidad y diversidad que las frutas y verduras nos ofrecen en la misma forma en la que la naturaleza lo tenía previsto. Sus esfuerzos dieron como resultado tres exclusivos complementos a base de alimentos enteros que proporcionan una protección fitonutrientes fundamental: Carotenoid Complex™, Flavonoid Complex™ y Cruciferous Plus™.

El Dr. Furst, eminente toxicólogo y pionero en el campo de la investigación sobre el cáncer, nos explica como es que los tres complementos fitonutrientes de GNLD nos ayudan a protegernos, lo mismo en grupo que por separado, en contra del cáncer y otras enfermedades degenerativas.





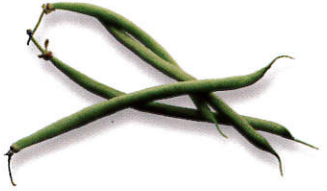
"¿Por qué necesitamos estos tres complementos fitonutrientes? Porque cada uno tiene su propia esfera de protección—ningún grupo por sí solo puede hacerlo todo."

"Carotenoid Complex™ nos ayuda a proteger a las porciones lipídicas de la célula. Los carotenoides funcionan de manera combinada con la vitamina E para ayudar a evitar el daño ocasionado por los radicales libres en las membranas celulares. Flavonoid Complex™, por su parte, nos ayuda a proteger las porciones

acuosas en el interior y el exterior de la célula. Además de proporcionar una protección antioxidante básica, se ha demostrado que los flavonoides proporcionan una amplia protección cardiovascular. Por último, los fitonutrientes de Cruciferous Plus™ son solubles tanto en agua como en lípidos. Algunos de estos fitonutrientes crucíferos ayudan a interferir con la conversión de estrógeno "bueno" en estrógeno "malo," contribuyendo así a evitar la aparición del cáncer de seno. Otro grupo de fitonutrientes de Cruciferous Plus™ ayuda a neutralizar a los carcinógenos, contribuyendo con ello a evitar el surgimiento de otros tipos de cáncer. Es por ello que en Cruciferous Plus™ utilizamos una mezcla de fitonutrientes crucíferos para incrementar al máximo la prevención de enfermedades."

"Como no existe un solo fitonutriente que pueda proteger todas las partes de nuestras células, desarrollamos Carotenoid Complex™, Flavonoid Complex™ y Cruciferous Plus™. Tomados de manera combinada, estos tres complementos a base de fitonutrientes concentrados ofrecen una amplia gama de protección para las células en su conjunto. La densidad y diversidad de nutrientes es la diferencia GNLD."

The Difference in Phytonutrients from GNLD

	Carotenoid Complex™	Flavonoid Complex™	Cruciferous Plus™
What types of phytonutrients are in each product?	Lipid-soluble antioxidants, carotenoids are a natural source of reds, yellows, and oranges in many fruits and vegetables. Many provide pro-vitamin A activity.	Water-soluble antioxidants, flavonoids are a natural source of blues, purples, emerald greens, and some reds and yellows in many fruits and vegetables.	Lipid- and water-soluble health-protecting nutrients from cruciferous vegetables characterized by a pungent, biting taste.
How are these nutrients classified?	Classified by their chemical structure: <ul style="list-style-type: none"> • carotenes (e.g. alpha- and beta-carotene and lycopene) • xanthophylls (e.g. lutein and zeaxanthin) More than 600 known carotenoids.	Polyphenols. Broken into five classes according to their chemical structure: <ul style="list-style-type: none"> • flavones • flavanones • catechins • flavanols • anthocyanins More than 4,000 known flavonoids.	All contain glucosinolates, the cause of the pungent taste. Two principle groups are: <ul style="list-style-type: none"> • indole carbinols • isothiocyanates (e.g. sulforaphane)
Where are these nutrients present in our diet and how much should we eat?	Approximately 3 servings a day: apricots, broccoli, butternut squash, cantaloupe, carrots, greens, kale, mangoes, papaya, peaches, pink grapefruit, pumpkin, red bell peppers, spinach, strawberries, sweet potatoes, Swiss chard, tomatoes.	Approximately 2 servings a day: apples, beets, berries, cherries, endive, French beans, grapefruit, grape juice, green tea, kale, leeks, lemons, oranges, parsley, pears, red onions, red wine. 	Approximately 1 serving a day: bok choy (Chinese cabbage), broccoflower, broccoli, Brussels sprouts, cabbage, calabrese, collard greens, horseradish, kale, kohlrabi, mustard, mustard greens, radish, rutabaga, turnips, turnip greens, watercress. 
What benefits do these nutrients provide?	Research suggests that diets with high levels of carotenoids may offer several health benefits: <ul style="list-style-type: none"> • reduced risk of some cancers • reduced risk of heart disease and cataracts • enhanced immune function. 	Research suggests that diets with high levels of flavonoids may offer several health benefits: <ul style="list-style-type: none"> • reduced risk of some cancers and heart disease • enhanced immune function and anti-inflammatory action. 	Research suggests that diets with high levels of cruciferous compounds may offer several health benefits like preventing hormonally mediated and other cancers, including: <ul style="list-style-type: none"> • breast • digestive tract • colon • prostate • uterine lining • lung
How do these nutrients function in our body?	Antioxidant protection from free radical damage for the lipid portions of the cells and tissues. Carotenoids are most effective when consumed as families. 	Antioxidant protection from free radical damage for the water portions inside and outside of the cells and tissues. Flavonoids are most effective when consumed as families. 	It is likely that cruciferous vegetables and related plants help prevent cancer because they: <ul style="list-style-type: none"> • stimulate enzymes that detoxify carcinogens and flush them from the body. • prevent the conversion of "good" estrogen (correlated with a lower risk of breast cancer) to "bad" estrogen. • neutralize toxins and prevent chemicals from becoming active carcinogens. • block interaction of carcinogens with DNA. 
What is the GNLD difference?	<ul style="list-style-type: none"> • Whole-food ingredients: an exclusive blend of extracts and concentrates from whole tomatoes, carrots, spinach, red bell peppers, strawberries, apricots, and peaches, plus pure olive oil. • Broad spectrum: includes alpha-, beta-, gamma-, and zeta-carotene, lycopene, lutein, cryptoxanthin, and other natural fruit and vegetable carotenoids. • USDA proven to enhance immunity by 37%. 	<ul style="list-style-type: none"> • Whole-food ingredients: an exclusive blend of extracts and concentrates derived from whole cranberries, kale, green tea, beets, berries, red and black grapes, oranges, lemons, and grapefruits. • Broad spectrum: represents all five flavonoid classes. • Added benefit of ellagic acid: closely related to flavonoids. Associated with reduced risk of some cancers. 	<ul style="list-style-type: none"> • Whole-food ingredients: exclusive Cruciferous Blend contains broccoli, radish, kale, black and yellow mustard, and watercress. • Broad spectrum: cruciferous vegetables plus related protector phytonutrients. • Benefit of additional phytonutrients: D-limonene, a citrus terpene from oranges, chalcones from licorice root, and isoflavones from soybeans.
Two more GNLD differences of all three:	<ul style="list-style-type: none"> • Convenient serving: each capsule or tablet provides the full carotenoid or flavonoid profile of an optimal serving of fruits and vegetables or the protective nutrients in an optimal serving of cruciferous vegetables. • Bridges dietary gap: each capsule helps assure you're getting the health benefits of the recommended 5-9 daily servings of fruits and vegetables. 		