

Nutritionals



INTERNATIONAL



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Formula IV

A Product Ahead of Its Time

Between the years 1920 and 1959 scientists began to identify and document the link between nutrition and health. They soon discovered that a number of diseases – pellagra, beriberi, some forms of anaemia, rickets, etc. – were caused by dietary deficiencies of substances called vitamins. This was the start of the science of nutrition.

There's More to It Than Vitamins and Minerals

As the scientists continued their research into nutrition they discovered that the field was becoming increasingly complicated. It seemed as if the more they researched, the more they discovered. In the 1920s, only three vitamins and minerals were known in our diet. In the 1930s this number had grown to 12. By 1950 it was 20 and the research started to show that even other nutrients were significant.

Lipids and Sterols, Cells and Glands

They discovered that particular fats in our diet, called lipids and sterols, affected the nutritional process at the cellular level. Dietary deficiencies in these nutrients were assumed to be a direct cause of tiredness.

Unsatisfactory or slow cellular activity contributed to deteriorated gland function in the endocrine system, which regulates the body's energy levels.

Other nutrients like enzymes, proteins, amino acids and a group of nutrients called "unidentified growth factors" all contributed pieces to the human nutritional jigsaw. It became clear that there was more to it than vitamins and minerals.

Research + Knowledge =

The Food Supplement GNLD Formula IV

At the end of the 1950s it became clear that nutrition was the science of the future. Scientists everywhere concluded that balanced nutrition and nutritional supplements could contribute to better health.

In the beginning of the 1980s, with the backing of science and an insight into the importance of nutrients, our GNLD Formula IV was the first food supplement with four nutritional factors to become available to the health-conscious public. It contained vitamins and minerals, lipids and sterols, protein and a number of other naturally derived nutrients. Our Formula IV was a big step towards an optimal nutritional supply through a food supplement. It was a product ahead of its time.



Unlike any Other Product on the Market Today!

GNLD Formula IV is different from other food supplements: it is more than a multivitamin. It is a unique food supplement that contains four nutrients – a combination of vitamins, minerals, proteins and lipids/sterols, which have all been concentrated into a single formula.

Formula IV is often copied, but no one has done it successfully. This is due to GNLD's unique usage of Tre-en-en Grain Concentrate.

Tre-en-en

Tre-en-en is a combined grain concentrate derived from wheat germ, rice bran and soybeans. But it is more than just wheat germ or soy oil: it contains everything that is found naturally in the lipid portion of the plant. Other

Why a Food Supplement?

The changes in our lifestyle have reduced our opportunities to consume the quantity and quality of essential nutrients the scientific world considers necessary for good health.

Why GNLD Formula IV Food Supplement?

- **More than just a multivitamin.** A unique formula with four ingredients: vitamins, minerals, proteins and lipids/sterols.
- **A complete natural supplement.** The product is based on Tre-en-en, a grain concentrate
- **Soft gelatine capsules that dissolve easily.** The capsules are easy to swallow and provide an optimal amount of nutrients.



natural grain concentrates containing vitamins, minerals and proteins are also added to this highly nutritious grain concentrate.

GNLD's Food Supplements – The Ideal Nutritional Supplement

Six fundamental substances form the complete chain of nutrients needed for the body to work efficiently: carbohydrates, lipids/sterols, proteins, minerals, vitamins and enzymes. GNLD calls these nutrients the “Chain of Life”.

The aim of GNLD's food supplement Formula IV is to provide all the important links in the “Chain of Life” (excluding carbohydrates and enzymes, as carbohydrates are already widely available in our diet). Although enzymes are not added to Formula IV, every capsule contains proteins, which are also readily available in our natural diet and which form the building blocks from which enzymes are created in the body. Every capsule complements the large quantity of carbohydrates and proteins with the remaining four groups of essential nutrients that are often lacking in our daily diet.

GNLD's Formula IV provides nutrients that support all the necessary links in the powerful and nutritious “Chain of Life”. Our exclusive Formula IV product is a superior food supplement that can improve energy levels and well-being. Our confidence in this product is a result of well-documented scientific research, years of satisfied customers and GNLD's commitment to high quality.

The food supplement Formula IV is produced under strict laboratory conditions with the high degree of care for quality, purity and potency that you would expect from GNLD. Everything possible is done to ensure that the natural raw materials are of the highest quality to create balanced formulations and maintain the quality level during production. No other product comes close to this natural and exclusive food supplement Tre-en-en.

After more than a decade on many different markets, GNLD's Formula IV still sets the standard within this field.

DECLARATION OF CONTENT

FORMULA IV – Vitamins & Minerals in selected vegetable oils food supplement.

Capsule 100 capsules – NET WEIGHT 131 g

Please see the label on the product for more precise declaration of content.

Multi

Scientists have repeatedly confirmed that the basis of good nutrition is the right balance between vitamins and minerals. We all know how important vitamins are to good health, but not everyone knows that minerals constitute 4–5% of a person's entire body weight and that these are absolutely essential to normal body function. Multi, the daily multivitamin and mineral supplement, continues GNLD's tradition of first-class nutrition, with an iron-free formula for daily use, providing the vitamins and minerals we need on a daily basis in order to give our cells the best possible nutrition.



Why a Daily Vitamin and Mineral Supplement?

- The human body needs a wide range of nutrients to work efficiently.
- Many diets do not provide the density and diversity of nutrients necessary for good health.
- Modern food processing removes many of the most important nutrients and trace elements from the most common foods in our hectic everyday life.
- The body sometimes gets rid of nutrients as a result of physical or emotional stress, so these nutrients need to be replaced.
- Vitamins and minerals are essential to good health.
- Some substances that are necessary for normal physiological function cannot be produced by the body and may not be found in our diet either.

Why GNLD Multi?

- **Versatile formula.** Our unique formula provides a broad spectrum of key vitamins, important minerals and trace elements essential to maintaining optimal physical function – all the ingredients work together to compensate for deficiencies in our daily diet.
- **Replaces trace elements that are lost in modern food processing.**
- **One tablet a day** provides you with the vitamins and minerals your body needs daily to provide your cells with the best possible nutrition.
- **Iron-free**, for those who already obtain sufficient iron in their diet.
- **Convenient stocks** that last up to 2 months.
- **Preservative-free**, contains no chemical or animal products.
- **Contains vitamins A, B1, B2, B6, B12, C, D and E.**
- **Contains minerals derived from organic sources.** Iodine from kelp.



Questions and Answers

Question: I don't want too much iron, but I still want to take a multivitamin and mineral supplement. What do you recommend?

Answer: GNLD's food supplement Multi is designed for those who already get enough iron in their diet. The tablets are iron-free but still provide the important trace minerals that are lost in modern food processing.

Question: I already take Tre-en-en. How does Multi work in combination with that product?

Answer: Multi was designed to work together with Tre-en-en to give your body the density and range of nutrients it needs to stay healthy. Most multivitamins are, at best, aimed at some of the links in the "Chain of Life", but, when taken together, GNLD's Tre-en-en and Multi provide a supplement that strengthens the important links needed for optimal cell health: lipids and sterols, vitamins and minerals.

Question: I can see that Multi is a tablet. Is it as easy to digest as a gelatine capsule?

Answer: GNLD has worked hard to create a tablet with good bio-access. The Multi tablet has been thoroughly tasted in the "artificial stomach" in our lab to measure the dissolving process, and the tablet showed exactly the same bio-access as our soft gelatine capsules.

"GNLD always goes a long way to ensure that safe and efficient products are delivered to the customer."

DECLARATION OF CONTENT

MULTI – NET WEIGHT 34 g (60 tablets)

Please see the label on the product for more precise declaration of content.



Children's chewable Vita-Squares

Building a foundation of health that will last a lifetime requires a commitment to good nutrition. It's never too early to assure your children receive the lipids, sterols, vitamins, minerals, and other nutrients necessary to lay the protective groundwork for immediate and future good health. Vita-Squares can provide the nutritional building blocks to help growing children reaching their full potential.



Why Multivitamins for children?

- To help provide children with the nutritional building blocks they will need to form **healthy bodies**.
- To help support the **exceptional growth** demands of childhood, when body weight doubles several times over and new cells are created at a phenomenal rate.
- To help meet the **high energy demands** of childhood.
- To help strengthening **the immune system**, which in childhood is called upon to respond to some of its greatest challenges.
- To **fill nutritional gaps** that often are the rule rather than the exception in children's diets.

Why GNLD Children's chewable Vita-squares?

- Vita-Squares provide **optimal cellular nutrition that supports children's growth and development**. The formulation specifically addresses the nutritional needs of children.
- **More than just a multivitamin**. The most complete children's supplement available, Vita-Squares contain vitamins, minerals, lipids, sterols, and other whole-food-based nutrients that are deficient in many diets but that are essential for good health.

- **Contains Tre-en-en Grain Concentrates**. Our exclusive formulation from whole wheat germ, rice bran, and soybeans supplies lipids and sterols that are often processed out of the foods that make up children's dietary staples.
- **Contains a broad spectrum of antioxidant support**.
- **100% natural sweeteners and flavorings**. Sweetened with fruit juice concentrates (apples and grapes) plus fructose, glucose and dextrose. Flavored with natural orange and berry essences. Contains no sucrose. **Tastes great!**
- **Optimal mineral supplementation**. Zinc, chromium, copper, iron, iodine and manganese.
- Contains **cholinell**.
- **Chewable tablets** are easy to digest and absorb.
- **No preservatives or artificial colors**.

DECLARATION OF CONTENT

VITA-SQUARES – Chewable foodsupplements for children.

180 tablets – NET WEIGHT 197 g

Please see the label on the product for more precise declaration of content.



The Children's chewable Vita-Squares Story

Building a Foundation of Health to last a lifetime

If you were going to build your dream house, you'd first create a strong foundation and then assemble the finest building materials available to complete your project. Constructing a foundation of health that will last a lifetime requires the same commitment to quality materials. Good whole foods and good whole-food supplements provide the nutritional diversity and density that can help forming the foundation for good health.

It's never too early to ensure your children receive the building blocks they need to achieve their full potential.

Good nutrition during childhood will help lay the protective groundwork for immediate and future good health.

Why are children's nutritional demands exceptional?

- **Children produce MORE THAN A BILLION new cells each day, and it takes a lot of nutrients to support this extraordinary growth!** Children's body weights double many times over from the time they're born.
- **Young tissues and organ systems need nutrients to develop properly.**
- **Children's metabolic rates are very high** – probably the highest they will ever be and vitamins and minerals are necessary to keep the body's metabolic pathways running smoothly.
- **Children's levels of physical activity, growth, and repair create enormous energy demands.** Vitamins and minerals work together to help the body better absorb and assimilate other nutrients from foods.
- **Children's poor diets** are characterized by inadequate consumption of fruits, vegetables, and whole grains and excessive consumption of highly processed, sugary, and fatty foods.

How poor diets handicap children

Nutritional gaps are the rule rather than the exception in children's diets. Many children fail to get the nutrients they need each day, handicapping their abilities to meet their enormous challenges for physical activity and growth. **Children do not eat enough whole grains, fruits, vegetables, and legumes.** These are some of nature's richest sources of vitamins, minerals, and other key nutrients. Virtually all of the world's major public health organizations recommend high-produce diets. For example, in the United States, the National Cancer Institute, the American Cancer Society, and the National Research

Council all recommend 5–9 servings of fruits and vegetables each day for optimal health.

Even healthy diets have occasional nutritional gaps. Children's preferences also tend to create dietary shortfalls. "Picky eaters" may avoid healthful foods, such as Brussels sprouts and spinach, while sticking to a narrow range of less healthy favorites, such as sugary cereals and high-fat chips. Processed foods, poor in fiber and essential nutrients, often supplant whole grains in the diet. The result? Children aren't getting enough of the essential nutrients they need at a time of exceptional growth and activity.

Nutritional gaps in children

Children's diets are often deficient in:

- vitamin A
- niacin
- calcium
- folic acid
- iron
- vitamin B6
- magnesium
- vitamin C
- zinc
- vitamin E

Supplements are an excellent way to fill dietary gaps

Vita-Squares fill the gap

Vita-Squares can make a positive difference. Since they contain semi-essential nutrients, such as choline and our exclusive Tre-en-en Grain Concentrates, Vita-Squares are more than just a multivitamin. The most complete wholefood children's supplement on the market, GNLD's chewable Vita-Squares provide the nutrient diversity and density cells need for optimal growth, maintenance, and repair. Children love them because they're delicious, but you'll love them because:

- Vita-Squares deliver some of the finest **natural-source ingredients** on the market.
- **All-natural sweeteners and flavourings** create a **great-tasting** supplement without the added sucrose, preservatives or artificial colourings found in other children's chewables.
- Contains a **broad spectrum of antioxidant support.**
- **Tre-en-en Grain Concentrates** from whole wheat germ, rice bran, and soybeans provides whole-grain nutrients that are removed from the processed foods children tend to favor.
- **Zinc, chromium, copper, iron, iodine and manganese,** are essential minerals.
- Contain **Choline.**

In sum, Vita-Squares contain key whole-food nutrients to give your children a head start on health!

Tre-en-en

Cell membranes need lipids and sterols to stay healthy. Unfortunately, grain processing strips lipids, sterols and other vital nutrients from the foods that make up our dietary staples. Tre-en-en Grain Concentrate helps to provide good nutrition at cellular level by providing a unique and exclusive blend of whole food extracts from wheat germ, rice bran and soybeans. Developed and introduced by GNLD in 1958, Tre-en-en was the world's first phytonutrient supplement. It provides phyto-LIPIDS essential for optimal health and cellular function, including omega-6 and omega-3 fatty acids, and phyto-STEROLS, including beta-sitosterol, gamma-oryzanol, stimasterol, campesterol and octacosanol.



DECLARATION OF CONTENT

TRE-EN-EN "Grain Concentrate" – a source of essential fatty acids Encapsulated selected vegetable oils
120 capsules – NET WEIGHT 120 g

Please see the label on the product for more precise declaration of content.

Why Grain Concentrates?

- As grain processing strips away the nutrient-dense and nutrient-diverse outer layers, the foods that make up our dietary staples (i.e. white flour, white rice) often lack significant amounts of the nutrients that are important for cell function – namely lipids and sterols.
- Soybeans, wheat and rice provide key lipids and sterols that are important for cellular health.

Why GNLD Tre-en-en Grain Concentrate?

- **Complete lipids and sterols** from wheat germ, rice bran and soybeans.
- **Diverse phytonutrient extracts** supply the essential nutrients that cells need for optimum health.
- **Natural chlorophyll-coloured, soft gelatine capsules** which protect the nutrients and are easy to digest.
- **Natural vitamin E** for antioxidant protection of phytonutrients.
- **Cold-pressed and cold-processed** to preserve the nutritional value.
- **No gluten.**
- **Includes beta-sitosterol, gamma-oryzanol, stimasterol, campesterol and octacosanol.**



The Story of Tre-en-en

What Food Processing Strips From Dietary Staples

To increase shelf-life, grains are subjected to about two dozen processes before being transformed into dietary staples such as white flour and white rice. Processing removes the nutritious outer layers of the grain. These layers contain most of the grain's vitamins and minerals as well as the "good fats" known as lipids and sterols. Other foods, notably soybeans, provide healthful lipids and sterols.

The world's first phytonutrient supplement, Tre-en-en, supplies plant lipids and sterols which food processing strips from the staple foods that form the basis of our daily diets. Taking its name from the Greek "3-in-1", Tre-en-en provides a unique combination of concentrated extracts from whole wheat berry, rice bran and soybeans. In addition to wheat germ and soy oil, Tre-en-en contains everything naturally available from the lipid portion of the plant.

Lipids and Sterols: Building blocks for each cell membrane in the human body

When it comes to health, not all fats are bad. Some fats are good – even essential. Fats provide energy, essential fatty acids and cellular building blocks, and they have regulatory functions. For instance, fats are necessary for normal growth and development, especially in infants. They are also important to the structure and function of the nervous system. But most importantly, fats make up the greater part of the membranes that surround every cell in the human body.

Healthful lipids and sterols from wheat, rice and soybeans are "good fats". Certain lipids, including omega-6 and omega-3 fatty acids, may increase the fluidity, or "pliability", of cell membranes and help to maintain normal cell function. Lipids and sterols are both found in the bran and the outer layers, which are removed during grain processing (see *The Story of Wheat*, *The Story of Rice* and *The Story of Soy*).

Consequences of an Imbalance in "Good" and "Bad" Fats in the Modern Diet

With consumer preferences shifting to low-fat and fat-free foods, people are eating less fat than before, though the fat content of the Western diet is still far from the 30% recommended by health experts. While there are many positive health effects of reducing the amount of fat in the diet, it also means that people are reducing the total amount of lipids and sterols they are taking in from all sources, not just "bad" fats such as saturated fats. People

are also reducing their intake of "good" fats from whole grains and soybeans. These supply important lipid and sterol nutrients needed to make you feel your best.

In the quest to reduce the fat content of our diet, fat substitutes or "fake fats" have begun to make their way into the marketplace. While these substances may make some foods less caloric and fatty, they do nothing to meet the body's hunger for good nutrition. Whole-food lipids and sterols from wheat, rice and soy will be especially important for the growing group of people who use fat substitutes to reduce the fat content of their diets.

The reduction in total fat consumption is only part of the reason for the imbalance of "good" and "bad" fats in the modern diet. The other part of the story is that the foods that make up the human diet have changed dramatically in the last 50 years. As artificial fats have increasingly displaced natural fats in the foods we eat, the lipid and sterol profile of our diet has changed. While our hunter-gatherer ancestors consumed a diversity of natural fats, mostly from locally gleaned plants, this diversity decreased when people became successful at growing agricultural crops that could be sold at the local farmer's market.

This erosion of nutrient diversity was compounded by a decrease in nutrient density when people discovered that grains could be stored longer before going rancid if their lipid- and sterol-rich outer coatings were removed. And after World War II, the world got its first taste of margarine and other artificially hydrogenated oils, and the global kitchen has never been the same. This relatively rapid displacement of natural fats by artificial fats in all types of foods has created an unhealthy imbalance of "bad" versus "good" fats and has reduced the amount and variety of healthful lipids and sterols in the diet.

This imbalance has consequences: insufficient lipids and sterols may cause alterations in the cell membrane, leading to reduced cellular efficiency throughout the body.

Tre-en-en for Cellular Efficiency

Our bodies are made up of billions of cells that must work efficiently if we are to stay healthy. How do cells stay healthy? The key is their membranes. Like bodies, cells must take in nutrients and eliminate waste.

Every cell in the body is surrounded by a lipid membrane with the discretionary power to allow only the nutrients it needs to enter the cell. By the same token, it only allows waste material and metabolic products (hormones, enzymes, neurotransmitters, etc.) to exit. Deficiencies in lipids, sterols and amino acids can compromise the discretionary power of cells. Cells can become "starved" (inhibited in their ability to take in substances) even though nutrients are available. And



they can become “constipated” (inhibited in their ability to eliminate accumulating waste products or export metabolites). Under these conditions, cells work inefficiently, expending more energy than healthy cells for the same results.

Tre-en-en Grain Concentrate supplies essential lipids and sterols to promote efficient functioning of cells, glandular systems and the whole body. Remember, we are only as healthy as our cells and Tre-en-en strengthens the lipid/sterol “link” in our “Chain of Life”, supporting cellular health and vitality.

Formula IV Plus

Scientists continue to confirm, there's more to nutrition than just the classic vitamins and minerals. As important as these nutrients are to optimal health, we're also learning that phytonutrients, enzymes, trace minerals and others play equally important roles. Original Formula IV®, developed in the 1950s, was the first multifactor food supplement to provide vitamins, minerals, enzymes, and phytonutrients, such as important lipids and sterols. Formula IV Plus carries forward this tradition of nutritional excellence with an Iron Free formulation that also provides additional mineral support and most of the recommended daily intake for zinc. Formula IV Plus also provides more Tre-en-en Grain Concentrates than its predecessor Formula IV, which have provided people throughout the world with decades of nutritional assurance.



Why Food Supplements?

- The human body requires a wide variety of nutrients to be its healthy best.
- Many diets do not provide the density or diversity of nutrients needed to assure optimal health.
- Many modern diets rely on processed staple foods which have been stripped of nutrients, especially lipids and sterols. This applies also to other important trace elements and minerals.

WHY GNLD'S Formula IV Plus?

- **Broad-spectrum supplementation:** Key vitamins, minerals (including 100% of the DV for zinc), enzymes and lipids/sterols all work together to bridge dietary gaps.
- Contains a full serving of **Tre-en-en Grain Concentrates** from wheat germ, rice bran, and soybeans, all rich sources of essential lipids and sterols.
- Strengthens the function of all "links" in the "**Chain of Life**" by providing lipids and sterols, vitamins, minerals, and enzymes, and by providing key nutrients for the body's digestion, synthesis and utilization of protein, and the body's utilization of carbohydrates for energy.
- **Tre-en-en works in synergy with the vitamins, minerals and other nutrients** in the product, and has been scientifically proven to support efficient utilization of nutrients.
- **IRON FREE**, for those who already obtain sufficient iron in their diet.
- Available in individual packets for **take-anywhere convenience**.
- **Preservative-free**.
- Replaces trace elements like selenium and chromium that food processing strips away.
- Natural chlorophyll color.



The Story of Formula IV Plus

Good Nutrition is more than just Vitamins and Minerals

In the 1920s, medical researchers began to identify and document the link between nutrition and health. They soon discovered that several diseases – pellagra, beriberi, some forms of anemia, rickets, etc. – were caused by dietary deficiencies of single vitamins and minerals. As researchers continued their investigations, they found an ever-increasing degree of complexity. It was becoming clear that vitamins and minerals alone were not the only healthful nutritional “links” in the “Chain of Life.” Other nutrients – lipids, sterols, food-related factors (such as phytonutrients), enzymes, proteins, and carbohydrates – were also needed.

Formula IV and Formula IV Plus: the perfect “Chain Of Life” nutrition supplements

In 1958, with great care and attention to the intricacies of human nutrition, researchers developed a revolutionary nutritional supplement, which became the beginning point of GNLD (formerly Neo-Life Company of America). The original product was Formula IV and more recently Formula IV Plus was added to the line. Both products share the goal of strengthening the major nutritional “links” in the “Chain of Life.” Formula IV and Formula IV Plus offer something unique to health-conscious consumers: They contain not just vitamins and minerals, but also lipids, sterols, enzymes, and a complex array of other naturally derived nutrients.

Insightfully formulated with whole-food ingredients, Formula IV was a product ahead of its time and Formula IV Plus is an iron free update of this timeless nutritional supplement. Both versions of Formula IV address the need to provide both nutrient density and nutrient diversity. The original multifactor food supplement, it represented a giant leap forward in the attempt to achieve optimum nutrition through a well-balanced diet with sound supplementation to make up for occasional dietary “gaps.” It was a revolutionary product concept in 1958, and today, even after more than four decades of customer satisfaction, the Formula IV philosophy continues to provide the industry standard for quality leading-edge nutritional supplementation.

Balanced and Potent

Nutrients exist in natural foods in certain balances and potencies. Balance is an important aspect of all GNLD formulations. We strive to create balanced formulations that provide both nutrient density and nutrient diversity. Based on whole-food ingredients, Formula IV and Formula IV Plus deliver balanced ratios of broad-

spectrum nutrients, rather than the mega-doses of isolated nutrients found in many other supplements. These products are produced under strict laboratory conditions with the same care for quality, purity, and potency that has come to be expected of GNLD.

Beyond the Basics

While most multivitamin/mineral preparations address – at best – only a few “links” in the “Chain of Life,” GNLD’s Formula IV and Formula IV Plus offer supplementation to fortify the major nutritional links required for optimal health. And each Formula IV product provides GNLD’s exclusive Tre-en-en Grain Concentrates, providing lipids and sterols that support your health at the cellular level.

The Tre-en-en in Formula IV and Formula IV Plus works in synergy with the vitamins and minerals in the products to insure that the cells in your body are fully able to receive and process these critical nutrients. No matter how good your diet, your vitality and health will not be well supported if your cells do not receive the nutrients they need. Whereas other supplements do not even begin to cover the “basics” of human nutrition, Formula IV and Formula IV Plus clearly go well beyond just the basics.

“Dietary Insurance” to be your healthy best

Superior supplements enhance your body’s general health, energy level, and stress-coping capabilities by addressing dietary “gaps” in the daily diet. For decades literally thousands of GNLD customers have reported increased energy and vitality while using Formula IV.

This effect can be attributed to synergetically filling in dietary gaps with important nutrients and then making certain those nutrients are delivered into the cells where energy is produced by including Tre-en-en. Some report feeling a positive difference in just days, while others may need to “re-nourish” their systems for several months before they notice results. (Just as nutrient deficiencies are not created overnight, neither can they be corrected instantly.) People all around the world turn to Formula IV and Formula IV Plus for their “dietary insurance,” a way they can be sure each day that they are receiving the complete, balanced nutrition their bodies need.

The supplement with something special – TRE-EN-EN Grain Concentrates!

GNLD’s Formula IV and Formula IV Plus are unique multifactor supplements to strengthen nutritional “links” in the “Chain of Life.” Frequently imitated, its formula has never been successfully copied. The main reason?



Formula IV and Formula IV Plus offer something extremely special – Tre-en-en Grain Concentrates.

Providing the complete lipid and sterol profile of wheat, rice, and soy, cold-pressed, coldprocessed Tre-en-en provides phytonutrients that are often stripped from dietary staples during food processing, but which our cells need to be their healthy and energetic best. It's been scientifically proven to support efficient nutrient utilization. Tre-en-en's unique blend of lipid and sterol grain concentrates functions in synergy with the vitamins, minerals and other critical nutrients in Formula IV and Formula IV Plus to support the "links" in the "Chain of Life" with a unique multifactor supplement that no other vitamin/mineral product on the market can match!

DECLARATION OF CONTENT

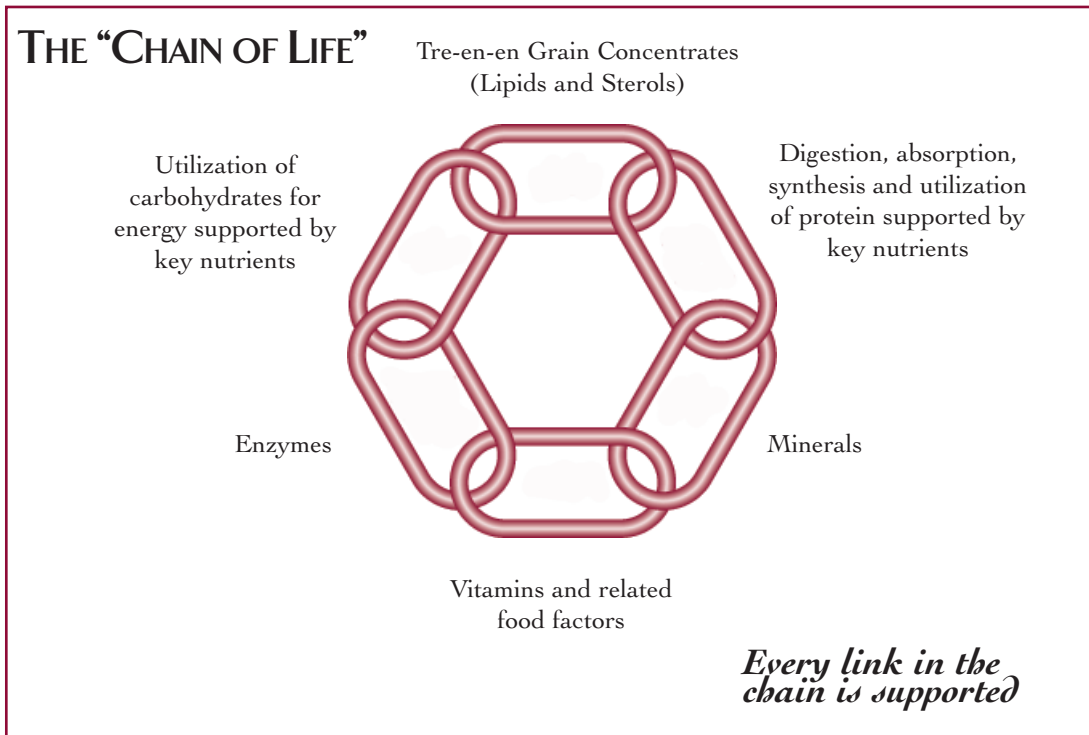
FORMULA IV PLUS consists of TRE-EN-EN and MULTI

60 portions

(60 TRE-EN-EN capsules and 60 MULTI tablets.)

NET WEIGHT 94 g

TRE-EN-EN capsules: 60 g MULTI Tablets: 34 g



Carotenoid Complex

Carotenoids: Nature's Crayons

Sometimes called “nature’s crayons”, carotenoids are a huge family of healthful nutrients in colourful plants. Carotenoids are responsible for the red in tomatoes, the orange in carrots and the yellow in squash. They are also present in green plants such as spinach, where they are obscured, or masked, by green chlorophyll. About 600 carotenoids have been identified so far.

Carotenoid – Health Link Discovered

The first clues linking carotenoids and health appeared in the 1970s. Researchers observing populations around the world found that where diets were high in fruits and vegetables, the rates for certain serious health problems were low. Conversely, in populations where fruit and vegetable intake was low, the rates of these problems were high. These findings spurred many new research efforts, focusing on different aspects of the diet/health equation, including high-fibre versus low-fat intake, vegetarian versus meat diets, and the intake of specific nutrients found in fruits and vegetables – especially beta-carotene.

Beta-Carotene: No Longer the Only Carotenoid in Town!

Beta-carotene quickly became a “star” in both scientific literature and the media, as research showed that diets high in beta-carotene-rich foods clearly offered health benefits distinct from those provided by other dietary factors. Research continues to unravel healthful roles for



the other carotenoid family members – about 600 carotenoids have been identified so far! These findings have led carotenoid to be regarded as one of the most essential nutrients.

Experts Establish Dietary Guidelines

Recognizing the impressive benefits of a diet high in carotenoid-rich fruits and vegetables, health experts have established a series of official dietary recommendations¹⁾:

- The National Academy of Science suggests eating 5 or more daily servings of fruits and vegetables, especially green and yellow/orange vegetables.
- United States Department of Agriculture, together with Department of Health and Human Services recommends consuming 2–3 servings of fruits and 3–5 servings of vegetables every day.

Why Carotenoids?

- Substances that protect from light.
- Powerful antioxidant in the cells: carotenoids neutralize free radicals and reactive oxygen species.

Why GNLD Carotenoid Complex?

- **Natural.** Contains no artificial colours, flavourings, preservatives or sweeteners.
- **Whole-food ingredients.** Our exclusive blend of carotenoid-rich extracts and concentrates is derived from whole tomatoes, carrots, spinach, red bell pepper, strawberries, apricots and peaches. It uses almost 100% pure carotenoid concentrate with olive oil, promoting ingredient stability and helping optimise carotenoid absorption.
- **15 powerful carotenoid members.** Our unique blend has been tested and shown to deliver alpha-, beta-,

cis-beta, gamma- and zeta-carotene, lycopene, cis-lycopene, lutein, zeaxanthin, alpha- and beta-cryptoxanthin, violaxanthin, canthaxanthin, capsanthin and cryptocapsin.

- Pure, natural vitamin E (d-alpha-tocopherol) **prevents oxidation of cellular lipids**
- Contains pure lecithin from soybeans. **Lecithin helps maximize the stability of the carotenoid nutrients and aids their dispersion during digestion.**
- **Greater antioxidant effect** than both vitamins C and E.
- **Convenient servings.** A small capsule is easy to swallow. Each capsule gives you as much carotenoids as a serving of fruits and vegetables – a new way to fulfil the recommended amount of 5 to 8 servings of fruits and vegetables every day.



The “Carotenoid Gap”

Clear as these recommendations are, it remains equally clear that they aren't being met. Recent studies showed²⁾:

- In Scandinavia, 80% of all fresh fruit consumed comes from only four types – apples, citrus, bananas and pears. None of these is rich in carotenoids.
- The most consumed vegetable in Scandinavia is the potato. The potato does not contain carotenoids.

In fact, although some experts recommend consuming at least 6 mg of carotenoids daily, scientists estimate that most of us are actually getting only about 1.5 mg per day – a significant carotenoid gap.

It is also clear that in the United States the average consumer eats far less than the recommended dose of these nutrients. The general health condition in America and other industrial countries would most probably improve considerable if we increased our consumption of fruits and vegetables³⁾. This goes for Europe too.

Carotenoid Complex: The First of Its Kind!

Carotenoid Complex is the first and only product of its kind. Each and every capsule provides the phytonutrient value of an optimal serving of a wide variety of carotenoid-rich fruits and vegetables.

The Difference of Pure Raw Materials

Single carotenoids do not occur in isolation in natural foods; they occur with their other carotenoid “family members”. In fact, the importance and uniqueness of the carotenoid group lies in its family structure – every member contributes protective benefits and works together as a team to provide maximum benefits.

Painstaking research into whole foods found in the human food chain that are naturally rich in carotenoids led to the development of an optimal carotenoid profile based on an ideal serving of fruits and vegetables. Natural fruit and vegetable extracts and concentrates from all over the world were analysed to determine those foods that provided the highest levels of carotenoids, including:

- alpha-carotene,
- beta-carotene,
- gamma-carotene,
- zeta-carotene,
- lycopene,
- lutein,
- cryptoxanthin

and other natural fruit and vegetable carotenoids.

References:

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GNLD's quality ambition

At every stage in production – from raw materials and ingredients processing through encapsulation and packaging – GNLD's Carotenoid Complex is a study in state-of-the-art technology and quality control.

- **Purity.** Carotenoid Complex is manufactured according to the highest pharmaceutical standards. The result is purity you can trust!
- **Meticulous Preparation.** Our whole food ingredients are specially prepared and processed at low temperatures to GNLD's unique specifications to achieve maximum nutritional benefit.
- **Oxygen-Free Encapsulation.** Our wholesome raw materials are encapsulated in a nitrogen-filled environment to prevent oxidation and maintain high nutrient value.
- **Quality Control.** Through surveillance, analyses and approval of every stage in the production we can assure the highest quality possible.

Carotenoid Complex: The Science Behind the Product

The studies made by the US Department of Agriculture (USDA) and many other research institutes at the end of the 1970s act as the basis of the new scientific knowledge of the usefulness of carotenoids in the daily diet. These studies have served as a starting point to researchers who have reached the conclusion that the consumption of fruits and vegetables with high beta-carotene levels¹⁻¹¹⁾²⁰⁻²⁴⁾ has positive effects on health.

During the 1980s the researchers continued to study the connection between health and beta-carotene. Towards the end of the 1980s they discovered other nutrients in fruits and vegetables that were similar to beta-carotene and showed to have their own positive qualities. Research has demonstrated that what all these fruits and vegetables have in common is a large family of nutrients known as carotenoids. Raised awareness of the importance of these will probably lead to new stages and significant progress in the field of nutritional physiology.

Summary of Current Research Into Carotenoids

- Current research shows that carotenoids supply the body with many protective properties.
- Carotenoids are powerful antioxidant agents in the body's cells: carotenoids neutralise free radicals and uncombined oxygen.
- There have also been in-depth studies into these biochemical properties of carotenoids. Known bio-molecules include lycopene, alpha- and beta-carotene, the most effective antioxidants ¹⁷⁾.

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Blood Carotenoid Levels Before and After Supplementation With Carotenoid Complex

Every day, there is new scientific evidence supporting the fact that fruits and vegetables are good for you, especially the richly coloured ones such as apricots, strawberries, carrots, tomatoes and deep green leafy vegetables. Research has demonstrated that what all these fruits and vegetables have in common is a large family of nutrients known as carotenoids. The most famous carotenoid is beta-carotene... and the newest studies show that its many cousins – including alpha-carotene, gamma-carotene, lycopene, lutein and cryptoxanthin – may be of equal or even greater nutritional importance. At cellular level, carotenoids act as potent antioxidants, neutralising free radicals and other reactive oxygen molecules. In this way, carotenoids protect membranes, DNA and other cellular components against damaging oxidation.

New studies have shown a direct, positive relationship between high blood levels of carotenoids and optimal health. Taken together, this body of research strongly suggests that people with the highest blood levels of carotenoid feel better.

Because of this association, leading government health agencies currently recommend diets high in fruits and vegetables. Unfortunately, the average American diet falls short of ideal goals, and a large gap exists between what is recommended and what the average person actually eats. This study answered the question, “Can Carotenoid Complex bridge the gap?”

The Study

The study was designed to scientifically document that Carotenoid Complex could effectively deliver carotenoids into the bloodstream.

Study participants. The eleven healthy male and female volunteers in the study were between 22 and 52 years of age, had no history of chronic disease, took no medications, did not smoke and their weight was ideal when compared to their size. For six weeks, the study participants ate a diet of natural foods, excluding all carotenoid-rich foods. The first two weeks were considered the “depleting period”. For the last four weeks of the study (“supplementation period”), all participants took six (6) Carotenoid Complex capsules each day, with meals containing no carotenoid-rich foods. To ensure that no nutritional deficiencies developed, each participant also consumed 200 mg of Vitamin C, 275 IU of Vitamin E and two Formula IV capsules.

Blood samples were taken from each participant at the beginning of the study period (to establish “baseline” data), again after two weeks of the low-carotenoid diet (depletion period) and weekly during the supplementation period. All blood samples were analysed at an independent laboratory.

Carotenoids Measured. Beta-carotene, alpha-carotene and lycopene were used as indicators of blood carotenoid levels for two reasons:

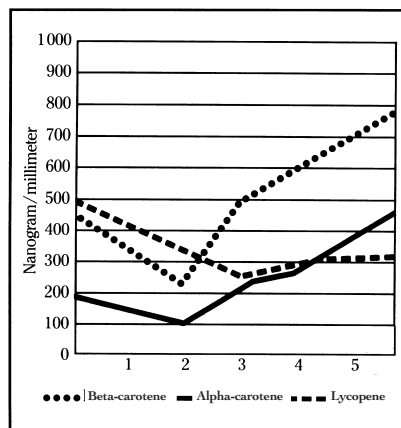
- 1) these nutrients are the ones which are most commonly included in our diet and
- 2) the methodology to quantify blood levels of these carotenoids is reliable and accurate.

Results

The graph below indicates blood carotenoid levels as measured through the study.

- The level of all three carotenoids dropped rapidly and significantly during the initial two-week depletion period.
- After only one week of supplementation, levels of alpha- and beta-carotene had returned to baseline values.
- Alpha- and beta-carotene levels continued to increase throughout the supplementation period, ultimately reaching levels approximately double the baseline values!
- Lycopene levels continued to drop during the first week of the supplementation period and then elevated slightly. NOTE: This result was not unexpected, as it is known that lycopene blood levels are slower to respond to changing levels of lycopene in the diet.

The fact that blood levels of measured carotenoids increased significantly after supplementation demonstrates that the carotenoids in Carotenoid Complex are being absorbed and assimilated in much the same way as carotenoids naturally



occurring in whole fruits and vegetables. Since it is clear that the average intake of fruits and vegetables is well below recommended levels, this study shows that Carotenoid Complex is a valuable means of working toward meeting optimum dietary goals.

DECLARATION OF CONTENT

CAROTENOID COMPLEX – Carotenoids and vitamin E food supplement 90 capsules.

– NET WEIGHT 92 g

See the label on the product for more precise declaration of content.

Daily Carotenoid Complex™ provides a broad Carotenoid spectrum with alpha-, beta-, gamma-, Zeta-, and cis-beta-carotene. It also contains lycopene and cis-lycopene, lutein, alpha-cryptoxanthin, beta-cryptoxanthin, zeaxanthin and other carotenoids balanced to match an optimal serving of fruit and vegetables.

Flavonoid Complex

Flavonoids – The “Cousins” of Carotenoids

If carotenoids are Nature’s “crayons”, creating many of the red, orange, yellow and deep green colours in fruits and vegetables, then flavonoids can be thought of as a vivid layer in the jumbo assortment!

Flavonoids represent a large family of phytonutrients (plant nutrients). More than 4,000 unique flavonoids have been identified so far – even though only a few percent of all plants have been tested to see what their flavonoid content is. Because of their chemical structure, flavonoids are part of a broader family of compounds known as polyphenols.

Flavonoids are plant pigments that provide the more vibrant, brilliant colours in nature, including most of the blue, purple and emerald green hues found in flowers, leaves, fruits and vegetables. In addition, most of the yellow, orange and red colours that are NOT carotenoids belong to the flavonoid family. Another distinction: carotenoids are LIPID-soluble, while flavonoids are predominantly WATER-soluble.

In our diet, flavonoids are found primarily in fruits and vegetables. Significant amounts of flavonoids are also found in teas and wines as well as in citrus fruits and berries.

Flavonoids appear to act as a natural sunscreen, protecting against ultraviolet damage.

One of the primary functions of dietary flavonoids is to act as antioxidant protectors of the watery areas in and around cells and in body fluids such as blood.

BACKGROUND

Flavonoids and Your Health

Whole foods containing flavonoids have a healthy reputation that dates back several centuries or more. The first clinical use of flavonoids was in 1936 when a Hungarian scientist showed that extract of citrus rinds, combined with vitamin C, was effective in strengthening capillaries, the body’s smallest blood vessels¹⁾.

Many of the positive effects of traditional herbal medication are thought to be the result of the flavonoids in the herbs.

References:

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Why Flavonoids?

Effective antioxidants that eliminate free radicals.

Why GNLD Flavonoid Complex?

- **Broad-spectrum, water-soluble nutrient supplementation.** Flavonoid Complex contains flavonoids representative of all flavonoid classes –flavones, flavanols, flavanones, anthocyanins and catechins – as they naturally occur in human-food-chain fruits and vegetables.
- **Whole-food ingredients.** Our exclusive blend of flavonoid-rich extracts and concentrates is derived from whole cranberries, kale, green tea (decaffeinated), beets, elderberries, raspberries, blueberries, red and black grapes, oranges, lemons and grapefruit. Added natural vitamin C enhances absorption.
- **Laboratory-specified amounts of key flavonoids.** Flavonoid Complex has been tested to confirm the presence of specific flavonoids for which substantial research demonstrates benefits.
- **Convenient servings.** Each tablet provides the phytonutrient value of an optimal serving of flavonoid-rich fruits and vegetables.
- **Natural**



“Great Hope for the Future” in Our Current Efforts to Improve Human Health

In the past decade, worldwide population studies have firmly established that diets high in fruits and vegetables are linked to better health. Enormous efforts have been launched to identify the compounds in fruits and vegetables that may help to provide protection.

Because they are potent antioxidants and because they represent the majority of the plant polyphenols, flavonoids were quickly singled out as promising candidates. To date, literally hundreds of published articles report on the broad protective health benefits of flavonoids. Flavonoids have clearly emerged as “hero” phytonutrients, and current research focuses on their role in helping to maintain good health.

The “Flavonoid Gap”

Research continues to show that fruit and vegetable consumption is linked to health. At the same time, it is evident that in many parts of the Europe the intake of fruits and vegetables is far from recommended levels. Since fruits and vegetables supply most of the flavonoids in our diet, it is clear that our intake of flavonoids is far from optimal.

THE GNLD DIFFERENCE IN A FLAVONOID SUPPLEMENT

Flavonoids as Nature Intended

Like carotenoids, flavonoids do not appear in isolation in nature. Specific flavonoids appear in different foods: natural foods invariably contain many flavonoids in groups. The positive effects depend on the DIVERSITY of foods we eat and the DENSITY of nutrients in those foods.

Fruits and vegetables in our diet are protective, and they are lacking in our diet. As part of the human food chain, they have a long history of safe use. For these reasons, GNLD set out to identify those fruits and vegetables that would deliver significant amounts of the different members of the flavonoid family. The result is Flavonoid Complex.

Broad-Spectrum Formula

Through using published analytical data, GNLD developed a formula which would include the same flavonoids and similar compounds as a portion of fruits and vegetables rich in flavonoids. The nutrients that were studied included:

Beets	Green tea	Lemons
Blueberries	Grapes (red and black)	Oranges
Cranberries	Grapefruit	Raspberries
Elderberries	Kale	

Flavonoid Complex was then formulated so each tablet would match the profile of an optimal serving of these foods. Raw materials were carefully selected to contribute representatives of all the members of the flavonoid family, including:

- **Anthocyanins** – These deep purple compounds are found in black grapes, beets, red onions and berries.
- **Catechins** – Catechins such as catechin, epigallocatechin, epicatechin gallate, epicatechin and epigallocatechin gallate are the main polyphenols in green tea. Fruits such as apples also contain catechins.
- **Ellagic acid** – Closely related to the flavonoid family, ellagic acid is abundant in berries (particularly cranberries and raspberries) and nuts.
- **Flavones** – Flavones include apigenin and luteolin. They are found in citrus fruits, red grapes and green beans.
- **Flavonols** – Flavonols such as quercetin, kaempferol and myricetin are found in many fruits and vegetables such as kale, spinach, oranges and lemons.
- **Flavanones** – Flavanones include hesperidin, neohesperidin and naringen. Flavanones are usually found in citrus fruits such as grapefruit, oranges and lemons.

Flavonoids and Vitamin C: The Perfect Combination

Historically, flavonoids have been associated with vitamin C. As early as 1939, flavonoids in citrus fruits, then referred to as vitamin P, were known to enhance vitamin C activity. The formulas of GNLD’s food supplements are always such that they include these citrus compounds to gain the nutritious benefits.

Today even more is known about the interactions of vitamin C and the large family of flavonoids represented in Flavonoid Complex:

Flavonoid Complex is formulated with 30 milligrams of vitamin C in each tablet to contribute the nutritional benefits of vitamin C, maximize the absorption potential of the formula, and to protect the flavonoids from oxidation.



Fruits and Vegetables Rich in Flavonoids

The ideal dietary goal is to consume 5 to 9 servings of fruits and vegetables every day. To help you include flavonoid-rich choices, refer to this list. *The nutrients that include most flavonoids are written in italics.*

Rich in Flavanones (e.g. hesperidin, naringen)

Citrus (grapefruit, oranges, lemons).

Rich in Anthocyanins

Berries (blueberries, cranberries, currants, raspberries, hawthorn berries, blackberries, elderberries)

Red wine

Grapes and grape juice

Beets

Red onions

Cherries

Rich in Catechins

Green tea (by far the richest source)

Apples

Pears

Cherries

Some wines

Rich in Flavonols

Onions

Kale

Parsley

Green (French) beans

Endives

Apples

Rich in Ellagic Acid

Walnuts

Red raspberries

Cranberries

Blackberries

Strawberries

DECLARATION OF CONTENT

FLAVONOID COMPLEX –

Natural Flavonoids with Vitamin C 60 tablets

– NET WEIGHT 45 g.

GNLD's Flavonoid complex provides a broad spectrum of Flavonoids from fruit and vegetable extracts & concentrates, plus catechins, anthocyanins, proanthocyanins, flavones, flavanones, flavonols, elagic acid and 30 mg of vitamin C.

Please see the label on the product for more precise declaration of content.

Cruciferous Plus

An Impressive Amount of Research Results Verify the Useful Qualities of Cruciferous Vegetables

Scientists often disagree amongst themselves, debating the latest theories in journal articles and at research conferences. But fruits and vegetables seem to be one area where the research is so compelling and convincing that it would be hard to find anyone willing to take the “con” side of the debate. Thousands of scientific studies document the health benefits of diets rich in fruits and vegetables. Among this mountain of research, some of the strongest evidence correlates with fewer health problems with increased consumption of cruciferous vegetables, named for their cross-shaped flower petals. Members of this pungent family include:

- bok choy (Chinese cabbage)
- broccoflower (a newcomer that looks like green cauliflower)
- kohlrabi
- broccoli
- Brussels sprouts
- cabbage
- calabrese (sprouting broccoli)
- cauliflower
- collard greens
- horseradish
- kale
- mustard
- mustard greens
- radish
- rutabaga
- turnips
- turnip greens
- watercress

The Lack of Cruciferous Vegetables in Our Diets

We should eat at least one serving of cruciferous vegetables per day. But in reality we only consume one serving of cruciferous vegetables per week.

For instance, the Second National Health and Nutrition Examination Survey (NHANES II, 1976–1980) showed that less than 10% of the population in North-America consumed the recommended amount of produce¹⁾. In fact, the survey revealed that on a given day 45% of the population ate no fruit or juice and 22% ate no vegetables.

Even if you think you’re eating enough of the right stuff, you could be fooling yourself. A study commissioned by the United Fresh Fruit and Vegetable Association revealed that consumers overestimated the amounts of fruits and vegetables they ate by 33%. Examination of food diaries from 2,000 households showed that study participants actually ate 13% fewer vegetable and 56% fewer fruit servings than they reported. On average, people consumed one serving of fruit and two of vegetables daily, far less than the five or more servings recommended by health care experts.



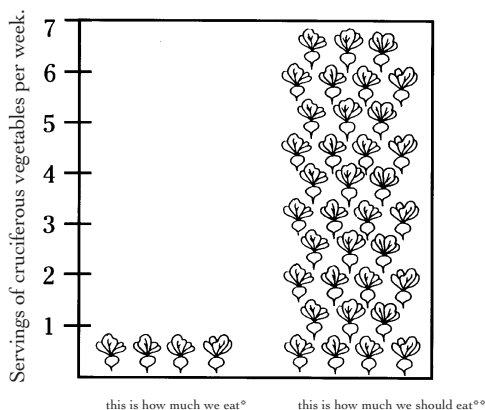
Why Cruciferous Vegetables?

- To satisfy our daily need for nutrients derived from cruciferous vegetables.

Why GNLD Cruciferous Plus?

- **Broad-spectrum cruciferous vegetable supplementation.** Each tablet provides the phytonutrient value of one optimal serving of a wide variety of cruciferous vegetables.
- **GNLD’s exclusive cruciferous blend** contains broccoli, radish, kale, black mustard, brown mustard and watercress.
- Cruciferous Plus supplies other **beneficial phytonutrients**: limonene from oranges, chalcones from licorice root and isoflavones from soybeans.
- **100% natural.** Cruciferous Plus contains no artificial colours or preservatives, flavourings, preservatives or sweeteners.
- **Convenient serving** – just one more way to help you meet the recommendations to consume one serving of cruciferous vegetables every day.

Larger studies confirm that the average consumption of fruits and vegetables ranges from 2.5 to 3.5 servings a day. Cruciferous vegetables are particularly unpopular, with the average North-American eating about one serving per week (instead of per day, as recommended).²⁾ Inhabitants of the United Kingdom fare slightly better with three cruciferous servings per week, but still miss the “one-a-day” mark.³⁾ The Japanese meet the quota by eating eight portions of cruciferous vegetables per week.³⁾ The bottom line is that most of the world’s people, even in developed nations, are not eating anywhere near the amount of crucifers recommended by public health authorities.



- * According to the United States Department of Agriculture.
- ** According to National Cancer Institute, American Cancer Society and National Research Council.

Cruciferous Plus Bridges the Gap

GNLD provides Cruciferous Plus, a unique product which supplies bioactive phytonutrients from cruciferous vegetables and other plants (oranges, licorice root, soybeans).

To achieve this goal we first examined almost two decades of research correlating crucifers with reduced health risks, and identified key protector nutrients. Then, in formulating our exclusive Cruciferous Plus blend, we used all-natural foods as sources of these vital phytonutrients, derived from a wide range of cruciferous vegetables to ensure broad-spectrum supplementation:

- broccoli
- radish
- kale
- black mustard
- brown mustard
- watercress

While eating a serving of Brussels sprouts, cabbage, or broccoli each day is easier said than done, getting the protective phytonutrients you need is now easier than ever. In a convenient tablet, GNLD's Cruciferous Plus provides the nutrient density and diversity of the phytonutrients found in one optimal serving of a combination of cruciferous vegetables. Based in nature and backed by science, Cruciferous Plus offers an excellent means of bridging dietary gaps and supplying unique phytonutrients.

References:

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DECLARATION OF CONTENT

CRUCIFEROUS PLUS -Cruciferous extract with Vitamin E

A Food supplement rich in vegetable extracts from the cruciferous family. Each tablet provides a wide spectrum of concentrates and extracts from Cruciferous vegetables. one tablet is equivalent to one serving of cruciferous vegetables and helps to attain the recommended portion of vegetables every day.

60 tablets – NET WEIGHT 48 g

Please see the label on the product for more precise declaration of content.

Omega-3

A special kind of fat that has positive effects

In the middle of the 1970s researchers studying Greenland Eskimos and Japanese fishermen realized that they had a lower rate of heart disease than other population groups, even though they received up to 70% of their calories in the form of fat. The inevitable question was then “What are the Eskimos and Japanese fishermen doing that we don’t do?”¹⁾

The answer is in the fat they eat. Eskimos eat in average approx 340 grams of fish every day.

N-3 (Omega-3) Fats EPA and DHA Make the Difference

What is the difference between fats in fish and fats in meat? In order to explain this difference we need to look at the chemical process in the blood vessels. Over time, a sticky build-up of cholesterol and other fats accumulates on the inner “walls” of the vessels. The vessels become increasingly cramped until a plug forms and the blood flow to the heart stops. While high levels of fat in red meat contribute to the risk of these artery-plugging blood clots, fish oil seems to prevent or slow down this process.

N-3 (omega-3) fatty acids contribute to “re-balancing” the blood lipids.

N-3 fatty acids are important to the balance in the blood. They can also change the lipoprotein balance in the blood, reduce the amount of lipoproteins with low density (LDL) and lipoproteins with very low density (VLDL)⁵⁾. These two parts of the blood contribute to the accumulation of cholesterol on the walls of the vessels. When these are reduced, the amount of lipoprotein with high density and the disruption of cholesterol increase.

Natural N-3 (Omega-3) Fatty Acids in a Capsule From GNLD

More than 5 years of solid research and tests lies behind the design of GNLD’s own Omega-3 Salmon Oil. The result is a pure, natural, concentrated source of omega-3 fatty acids.

GNLD Omega-3 Salmon Oil contains two valuable n-3 fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Even if these substances exist, to some extent, in all fish and shellfish, cold-water fish like salmon provides much larger quantities of these healthy n-3 fatty acids.



Why N-3 (Omega-3) Fatty Acids?

Through research it has been possible to conclude that omega-3 fatty acids in our diet can:

- Reduce the amount of triglycerides.
- Change the level of the lipoprotein balance in the blood.
- Improve the burning of carbohydrates

Why GNLD Omega-3?

- **Pure salmon oil**, one of nature’s richest sources of omega-3 fatty acids.
- **The effect has been tested in laboratories.**
- **Salmon are “health tested”** and carefully chosen for human consumption.
- **Health-screened.** Fish are certified disease-free and selected for human consumption
- **Convenient serving.** Soft gelatine capsules which are easy to swallow.
- **No hidden vitamin A or D.**



GNLD Omega-3 Salmon Oil uses only pure, natural salmon oil in order to meet GNLD's quality requirements.

When GNLD designed the n-3 fatty acid food supplement, it looked for the highest quality of raw material available. The objective was to find a reliable source that offered a high level of purity and no proven pollutants. After careful research, GNLD chose to use only salmon oil from salmon in the crispy, cold waters of the North Atlantic. The salmon were selected, inspected and handled for human consumption.

Purity Is the GNLD Difference

Many commercial lipid concentrates have been extracted from "whatever comes up in the fishing net".

Our exclusive blend contains only pure, natural salmon oil. No oil is derived from sharks, sea mammals, shellfish, bottom feeders or other fish at high risk of exposure to environmental toxins.

The Specification of "Body Oils" Guarantees Higher Quality

Selecting body oils from only the edible portion of the salmon reduces exposure to substances which may collect in the organs – herbicides, pesticides, heavy metals and cholesterol. It also means that GNLD's Omega-3 Salmon Oil contains no hidden vitamin A or D. The purity of the raw material and the strict quality control of the company guarantee a superior product: GNLD Omega-3 Salmon Oil.

References:

1. J. Dyerberg et al – American Journal of Clinical Nutrition (1975)
2. T.A.B. Sanders – Work Review of Nutrition and Diet (1991)
3. J. Dyerberg & H. O. Bang – Lancet (1979)
4. A. Hirai och andra – American Oil Chemists' Society (1987)
5. A. P. Simopoulos – World Review of Nutrition and Diet (1991)

DECLARATION OF CONTENT

OMEGA-3 SALMON OIL

Polyunsaturated fatty acid of Omega-3 (EPA + DHA) with Vitamin E food supplement.

100 CAPSULES - NET WEIGHT 144 g.

Please see the label on the product for more precise declaration of content.

Omega-3 Salmon Oil Plus

It has long been known and proven that omega-3 fatty acids play critical roles in the human diet. In particular, two omega-3 fatty acids found in fish oil, EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) have been well researched.

Today the latest scientific research not only continues to validate the important roles of EPA and DHA in human health, but it has also shown that there is a whole family of omega-3 fatty acids, a total of eight in all, which contribute to optimal human nutrition. This critically important chain of dietary omega-3 fatty acids starts with ALA (alpha linolenic acid) and ends with DHA (docosahexaenoic acid), taking six important steps along the way. Each is known to have its own unique biochemistry and supporting “synergistic” role in human omega-3 nutrition.

International Health Organizations suggest that all adults eat 2-3 servings of fish each week for optimal health. Unfortunately, the problem for many adults is that they eat very little fish on a consistent basis and rarely meet this important nutritional need. Large portions of the population go without getting any broad spectrum omega-3 supplementation for weeks, sometimes months. Not to mention the fact that much of the fish supply is suspect due to environmental contamination. Pregnant women, who have the highest dietary needs for omega-3 fatty acids, ironically are instructed to limit their fish intake to one serving per week, due to contamination risk.

GNLD solves the problem of inadequate omega-3 fatty acid intake with Omega-3 Salmon Oil Plus. Pure and potent, Omega-3 Salmon Oil Plus provides a complete omega-3 profile of salmon oil with all eight members of the omega-3 fatty acid family, assuring complete omega-3 supplementation in every dose.

Why supplement with fish oil rich in omega-3 fatty acids?

- Fatty fish is the richest source of healthful omega-3 fatty acids, but most of us do not eat the 2-3 servings per week that experts recommend for optimal health.
- Supplementation has been proved to be an effective means of increasing dietary omega-3 fatty acids.
- Omega-3 fatty acids support optimal function of body tissues and organs, notably the heart, blood vessels, brain, nerves, eyes, skin and joints.
- Omega-3 fatty acids, crucial to the development of infant brain and eyes, are naturally present in mother’s milk. Infants, whose mothers consume foods rich in omega-3 fatty acids, have higher omega-3 fatty acid



levels compared to those whose mothers do not consume omega-3 rich foods.

- People who do not like fish can get the omega-3 fatty acids they need for optimal health from fish oil supplements.

Meet the whole family of omega-3 fatty acids

ALA – alpha-linolenic acid

SDA – stearadonic acid

ETA(3) – eicosatrienoic acid

ETA – eicosatetraenoic acid

EPA – eicosapentaenoic acid

HPA – heneicosapentaenoic acid

DPA – docosapentaenoic acid

DHA – docosahexaenoic acid

Why GNLD Omega-3 Salmon Oil Plus?

- **Omega-3 Salmon Oil Plus is based on pure, natural salmon oil**, providing all the benefits of one of nature’s richest sources of omega-3 fatty acids.
- **It includes UHPO3 – Ultra High Potency Omega-3 fatty acids** – an exclusive GNLD technology that boosts, stabilizes, and standardizes

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specific, health-promoting omega-3 fatty acid levels while maintaining the whole food goodness of natural salmon oil.

- **It's the first supplement of its kind** to assure a standardized amount of all eight members of the omega-3 family involved in human nutrition.
- **It's derived by "molecular differentiation"** – leading edge technology that selects specific nutrient molecules from tuna, sardines, and anchovies, while eliminating or reducing others, delivering unsurpassed potency, purity, and consistency.
- **It's safe, with no risk of accumulated toxins.** Only the finest, top quality, health screened, disease-free fish selected for human consumption are used. All sources are screened for more than 160 potential contaminants with an allowable detection limit of ZERO.
- **Potency guaranteed to deliver 460 mg EPA, 480 mg DHA, 50 mg DPA, and 80 mg mixed omega-3 fatty acids with every 3-capsule serving.**
- No hidden vitamins A or D.

DECLARATION OF CONTENT

OMEGA-3 SALMON OIL PLUS

Polyunsaturated fatty acid of Omega-3 (EPA + DHA + DPA) food supplement.

90 CAPSULES - NET WEIGHT 92,34 g.

Please see the label on the product for more precise declaration of content.



Pro Vitality Pack

INCREASING HEALTH PROBLEMS

All over the world health problems related to incorrect diet and overweight are increasing. Many people don't get the nutrition they need through their diet. Without correct nutrition, energy and vitality can be lost.



Protective lipids and sterols are stripped from whole grains to increase their shelf life. Without these essential food factors, the cell membranes can become impermeable.

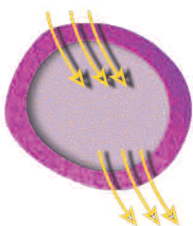
Numerous people don't eat enough vegetables and fruits. Carotenoids found in carrots, tomatoes, spinach etc can help strengthening the immune system and help defending our cells.

Statistics demonstrate that the average eating of fat fish rich in omega-3 fatty acids is at lower levels than nutritionists' recommendations. Omega-3 fatty acids balance the level of fats in the blood and can be beneficial for the heart.

TRE-EN-EN GRAIN CONCENTRATES

Feeds your cells

Good nutrition begins at cellular level. Tre-en-en is the world's first whole grain lipids and sterols supplement proven to enhance energy and vitality by optimizing cell membrane function. It energizes you by helping your cells function more efficiently.



Healthy Cell with Tre-En-En
Whole grain lipids and sterols allow your cell walls to become their flexible best making it easier for high-energy nutrients to get in and waste to get out.

CAROTENOID COMPLEX

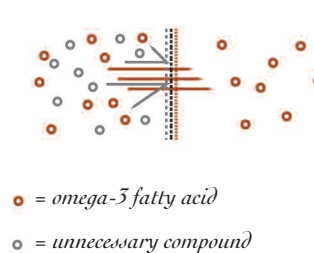
Protects your cells

With the protective power of carotenoids from carrots, tomatoes, spinach, red bell peppers, peaches, strawberries and apricots this patented formula is the result of over 10 years of research and development. Carotenoid Complex is the world's first whole food supplement clinically proven by USDA researchers to help defend your cells and help strengthening your immune power.

OMEGA-3 SALMON OIL PLUS

Balances and regulates your cells

The world's first complete fish oil supplement with guaranteed potency of all eight members of the omega-3 family. It can be beneficial for the heart and the fish oil sources are screened for more than 160 potential contaminants with an allowable detection limit of zero, so they are guaranteed pure!



Molecular Differentiation Isolates Beneficial Oil
Proprietary molecular differentiation process concentrates the beneficial fish oils.



Why these three food supplements together?

- Leading global health authorities like the World Health Organization, American Centers for Disease Control and also the European Union agree that part of the solution to health problems lies in weight management, physical activity and eating a nutrient rich diet.
- Everyone should increase the consumption of whole-grain foods, increase intake of fruits and vegetables, increase the consumption of foods rich in omega-3 fatty acids, and maintain a healthy weight.
- But even those with good intentions to eat a healthy diet face challenges. Busy lifestyles, eating on-the-run, and the prevalence of processed foods all contribute towards nutritional gaps that would benefit from nutritional supplements.

Why GNLDs ProVitality Pack?

- Whole-food nutrition proven to strengthen the perfect foundation for health and vitality
- In convenient on-the-go packets
- Includes three scientifically proven products: Tre-en-en, Carotenoid Complex and Omega-3 Salmon Oil Plus, providing key nutrients from whole grains, fruits and vegetables, and fish.
- Each packet provides powerful nutrients that support:
 - Abundant energy
 - Cellular health
 - Powerful antioxidant protection
 - Immune strength
 - Youthful skin, hair and nails

DECLARATION OF CONTENT PRO VITALITY PACK

TRE-EN-EN “Grain Concentrate” – a source of essential fatty acids Encapsulated selected vegetable oils

CAROTENOID COMPLEX – Carotenoids and vitamin E food supplement.

OMEGA-3 SALMON OIL PLUS
Polyunsaturated fatty acid of Omega-3 (EPA + DHA + DPA) food supplement.

30 SACHETS - NET WEIGHT 91 g.

Please see the label on the product for more precise declaration of content.

Pro Vitality's whole-food nutrition is the core supplement for healthy nutrition — no matter what your health goals!

Betaguard

Indoors or Out, the Air We Breathe Is Cause for Alarm

Oxygen that we breathe is absolutely the most important basic element in our environment. Without it we would pass away in few minutes. Despite this we have filled the air outside with exhaust fumes from millions of cars, lorries, busses, factories and power plants. We have used harmful propellant gases to spray everything from hairspray to whipped cream out of aerosol cans. At our farming areas we have sprayed the ground with very poisonous substances that are now evaporating.

Unfortunately, indoor may be even worse. Inside modern buildings, air pollution can accumulate, combining outside pollutants with additional chemicals from indoor sources. Chemicals may "gas off" from building materials such as plywood, wallboard, carpeting, furniture, paint and varnish, strong cleaners, floor and furniture polish and wax, and personal care products such as hair spray and nail polish remover. Other sources of unwanted chemicals include smoke from barbecues, cigarettes and fireplaces. The risks are so significant that many researchers see indoor air pollution as a significant health hazard.

Impure Food and Water Pose Challenges!

Without us knowing it, we may be drinking water that contains many chemicals dangerous to health. Many foods we eat contain preservatives, additives or artificial colorings. Some can even contain residual pesticides and other poisons.

Scientific research shows that certain nutrients may give the body a certain protection against environmental toxins and strengthen the body's resistance.

GNLD Offers Betaguard

Scientific research indicating a positive effect of some nutrients on the body's immune system led to the development of GNLD Betaguard. An expert in the field of understanding how toxins affect our bodies, late

Why Antioxidants?

- Natural protective nutrients which need to be added to all diets.
- Provide antioxidant protection for cells and tissues.
- Captures and destroys harmful free radical oxygen.
- Protects against oxidation caused by pollution in air, water and food.



Dr. Arthur Furst developed Betaguard to answer his personal and professional concerns regarding the escalation of toxic assaults from our environment.

GNLD's Betaguard contains an appropriate amount of protective beta-carotene, which is one of the nature's most effective antioxidants. This substance can capture and destroy "free oxygen radicals". This form of oxygen is a hyperactive molecule that can cause great damage to cells and is capable of starting reactions which create other free radicals.

Who Needs Betaguard?

A person who smokes, lives with a smoker or works in a smoky environment needs Betaguard. It has been noticed that smoke from cigarettes and other sources, such as

Why GNLD Betaguard?

- Developed by world-renowned toxicologist late Dr. Arthur Furst, Senior Member of GNLD Scientific Advisory Board, SAB.
- A broad spectrum of antioxidants.
- Beta-carotene and vitamin E provide protection for cells and tissues containing fat.
- Vitamin C and selenium provide protection for cells and tissues containing water.
- Supports the body's natural detoxication process with the help of zinc and copper.
- Natural foods from the human food chain, beta-carotene and other natural carotenoids from carrots.
- Convenient serving, easily swallowed and absorbed.
- Perfect complement to Carotenoid Complex.



industrial emissions and household chimneys or gas furnaces, contains large amounts of substances that might prove to be dangerous, including strong oxidants and free radicals. Smokers or people who spend time in smoky environments are in a situation where the body's natural antioxidant protection is constantly under a hard strain. An intake of antioxidants through the diet is essential for people in this situation.

Athletes and other physically active people tend to consume more energy and inhale more oxygen than the average person. Sometimes the risk of oxidation multiplies.

When you run, play tennis or undertake some other physically demanding sport, your body can use up to ten times more oxygen than when you rest. This increased exposure to air pollution, together with an increase in the oxidation of cells, caused by high energy flow, requires more solid antioxidant protection in the cells.

GNLD Betaguard – A Natural Difference

GNLD's beta-carotene is derived from natural carrot oil which turns into vitamin A in the body. Beta-carotene has been proven to play an active part in protecting the bladder and the surface of the lungs from pollution. Betaguard also contains the powerful antioxidant vitamin E, from a natural plant. The latest scientific research into vitamin E shows that the vitamin can protect from ozone in smog. The vitamin also protects the cell membrane from oxidation by reducing the harmful effects of free radicals.

Vitamin C is a water-soluble vitamin which provides antioxidant protection for the parts of the cells that consist of water. It also plays an important role in the reconstruction of vitamin E.

Zinc works to protect the body against the effects of toxic heavy metals, including mercury and cadmium. Cadmium is one of the most poisonous elements in our environment. It can inhibit the function of many of the body's enzymes.

Betaguard also contains copper to ensure there is enough zinc, which can affect the body's ability to assimilate copper. Together with zinc, copper creates new antioxidants in the form of important enzymes.

In addition to zinc, Betaguard also supplies selenium, an important trace element required by the body to defend against heavy-metal poisons such as cadmium, mercury and lead. Recent research has shown significant benefits from a selenium intake.

Together vitamins E and C, beta-carotene, selenium and zinc form a powerful team of antioxidants.

The GNLD Betaguard product has been developed to support the body's ability to counteract the harmful effects of pollution. This kind of protection is essential for us all, but even more important in urban areas and for people who smoke.

Betaguard and Carotenoid Complex – A Powerful Team of Antioxidants - We Need Them Both

A frequently asked question by people interested in increasing their intake of antioxidants is: which is more effective, Betaguard or Carotenoid Complex? The answer is that we need both in our diet. Both provide valuable nutrients, which contribute in different ways to give the body the protection it needs.

- Carotenoid Complex and Betaguard compensate for different kinds of nutritional deficiencies in our daily diet.
- Betaguard is a combination of an antioxidant with synergy effects and a detoxifying nutrient developed to provide maximum protection against toxins in our environment.
- We need carotenoids and we do not get enough. Every capsule of Carotenoid Complex helps to bridge the gap by providing the same amount of carotenoids as an optimal serving of fruit and vegetables. It is obvious that we need both Betaguard and Carotenoid Complex.

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DECLARATION OF CONTENT

BETAGUARD

100 tablets - NET WEIGHT 47 g

Food supplement with α -carotene, vitamin E, vitamin C, selenium, zinc and copper

Please see the label on the product for more precise declaration of content.

Acidophilus Plus

Beneficial (“good”) intestinal bacteria promote health, discourage the growth of disease-causing (“bad”) bacteria and pathogenic fungi, and improve the balance of microbes which normally inhabit our intestines. For thousands of years everywhere in the world people have used dairy products that have been produced through the actions of these beneficial bacteria (yogurt, cheese, fermented milks). Both science and folklore support healthful roles for these foods. GNLD’s supplement of beneficial bacteria, Acidophilus Plus, combines potency with technology to guarantee that live organisms survive the stomach acid and reach the intestines to deliver five milliard viable organisms capable of supporting optimal digestive tract function.



THE ACIDOPHILUS STORY

Beneficial Bacteria Make Good Foods Better

Long before it became possible to see bacteria with the aid of microscopes, people used these minute organisms to produce cultured dairy products such as cheese, sour cream, and yogurt.

Fermented milks have been safely consumed throughout the world for thousands of years, as evidenced by their depiction in Sumerian wall paintings dating back to

2500 B.C. Yogurt consumption is part of the folklore of many long-lived populations, including the Ural Mountain people, many of whom live more than 100 years! Widely recognized as an important part of a healthy diet, cultured dairy products have grown in popularity, with more cultured dairy foods available today than ever before.

Why Beneficial Bacteria?

- Beneficial bacteria help maintain a healthy balance of a variety of microorganisms in the intestines.
- Beneficial bacteria help produce vitamins.
- Cultured dairy products (yogurt, cheese, fermented milks), produced through the actions of beneficial bacteria, have been used throughout the world for centuries to support health.
- These microscopic organisms (lactobacillus) have been named after their capability to transform naturally occurring sugars, especially lactose, into lactic acid. As milk is one of the most abundant sources of lactose, it is natural that these bacteria have been used for centuries in producing yogurt and cheese.

Why GNLD Acidophilus Plus?

- **Whole-food-derived.** Contains beneficial bacteria isolated from cultured dairy foods to support a healthful balance of microorganisms in the gastrointestinal tract.
- **Broad-spectrum.** Delivers five types of beneficial, lactic acid-producing bacteria: *Lactobacillus acidophilus*, *Lactobacillus bulgaricus*, *Lactobacillus paracasei*, *Bifidobacterium animalis* and *Streptococcus thermophilus*.
- **Concentrated.** As many beneficial bacteria as large servings of yogurt or *Acidophilus* milk!
- **Potency guaranteed.** Each capsule is filled with five milliard live organisms and protected for delivery to the intestines.
- **Active cultures.** Exclusive protection system assures that the maximum number of live bacteria survive the stomach acid and reach the site of action, the intestines.
- **Convenient.** Each bottle contains a 60 day supply.



Food Sources of Lactobacilli* From Around The World

Cultured Dairy Products	Beneficial Bacteria
Yogurt	<i>Streptococcus thermophilus</i> <i>Lactobacillus bulgaricus</i> <i>Lactobacillus acidophilus</i>
Buttermilk	<i>Lactobacillus lactis</i> <i>Streptococcus cremoris</i>
Sour cream	<i>Streptococcus cremoris</i>
Kefir	<i>Lactobacillus acidophilus</i> <i>Lactobacillus caucasicus</i>
Cheeses	<i>Lactobacillus acidophilus</i> <i>Lactobacillus brevis</i> <i>Lactobacillus casei</i> <i>Lactobacillus caucasicus</i> <i>Lactobacillus helveticus</i> <i>Lactobacillus lactis</i> <i>Lactobacillus plantarum</i> <i>Streptococcus cremoris</i> <i>Streptococcus faecium</i>
Cottage cheese	<i>Lactobacillus lactis</i> <i>Streptococcus cremoris</i>
Acidophilus milk	<i>Lactobacillus acidophilus</i>
Bulgaricus milk	<i>Lactobacillus bulgaricus</i>
Yakult	<i>Lactobacillus casei</i>
Bifidus milk	<i>Bifidobacterium bifidus</i> <i>Bifidobacterium longum</i>

* Bacteria that produce lactic acid as an end product of milk fermentation.

The Birth Of Probiotics

Most people are familiar with *antibiotics*, which physicians prescribe to combat strains of bacteria which cause disease. In contrast, other strains of bacteria promote health and are called *probiotics*, from the Greek meaning “for life.” Probiotics are live microbial supplements which beneficially affect the host by improving its intestinal balance. Although anecdotal health claims for the regular consumption of cultured dairy products have circulated for centuries, only in this century have scientists begun to understand how these foods support health.

In 1908, Nobel Prizewinning scientist Elie Metchnikoff of the Pasteur Institute in Paris provided the first evidence that microorganisms may be responsible for the health-promoting effects of fermented milks. After observing that Bulgarian peasants lived to ripe, old ages, Metchnikoff became convinced that their health and longevity were linked to microbes in the soured milk they copiously drank. In his book *The Prolongation of Life*, he suggested that disease-causing (“bad”) bacteria could be eliminated by ingesting large amounts of Bulgarian sour milk, which contained a beneficial (“good”) bacterium later identified as *Lactobacillus bulgaricus*. These organisms were part of a group called

Lactobacilli, or bacteria that produce lactic acid as an end product of milk fermentation.

Lactic Acid-Producing Bacteria Tip The Scales Towards Health

The human gastrointestinal tract is a diverse and complex ecosystem harboring more than 400 species of bacteria. Their importance is demonstrated by their impressive presence: The large intestine alone contains about 3.3 pounds (1.5 kilograms) of bacteria! This quantity of bacteria is not surprising given the tremendous effect of bacterial growth and metabolism on human health.

Not all bacteria are created or act equally, however. Some benefit the body and are required for optimal health, whereas others harm the body by producing toxins. Those producing lactic acid promote health. By turning lactose (milk sugar) into lactic acid, they lower the pH of the colon and inhibit the growth of harmful bacteria. When lactic acid-producing bacteria are in short supply, undesirable bacteria can increase in number. Imbalance – a scarcity of “good” bacteria or a surplus of “bad” bacteria – can set the stage for a cascade of events that may ultimately lead to serious problems.

Examples Of Lactic-Acid Producing (“Good”) Bacteria

Bifidobacterium animalis
Lactobacillus acidophilus
Lactobacillus paracasei
Lactobacillus bulgaricus
Streptococcus thermophilus

Did you know... some good bacteria have names that sound like bad bacteria? *Streptococcus*, for instance, can be a beneficial bacterium, although most people think of strep throat when they hear the word. *Streptococcus* refers only to the shape of the bacterium, and has nothing to do with its ability to promote health or cause disease. *Streptococcus thermophilus*, *Streptococcus cremoris*, and *Streptococcus faecium* have been safely used for centuries to produce cultured dairy products.

Examples Of Potentially Pathogenic (“Bad”) Bacteria

Clostridium
Escherichia coli
Salmonella typhimurium
Shigella dysenteriae

Normally, there is a balance among the various bacteria inhabiting the intestine. However, with the onset of disease or the use of antibiotics, this balance is upset and the Lactobacilli are among the first to become depleted.



How Beneficial Bacteria Promote Health

Lactic acid-producing bacteria tend to healthfully combine with toxins and bile acids. While this action prevents toxic products from being reabsorbed, it kills the microorganisms, which are then eliminated from the body as solid waste.

Lactobacillus acidophilus ("acid-loving, lactic acid-producing bacterium"), the most well-known bacterial hero, first gained attention as a dietary supplement in the 1920s. In 1935 the first results of clinical trials were published that showed that *acidophilus* normalized bowel function¹⁾

Since then, scientists have identified many other health benefits of lactic acid-producing bacteria, presumably resulting indirectly from their ability to:

- produce lactic acid, thereby increasing the acidity of the intestines and inhibiting bacterial villains such as *Clostridium*, *Salmonella*, *Shigella* and *E. coli*.
- decrease the production of a variety of toxic or carcinogenic metabolites.
- aid absorption of minerals, especially calcium, due to increased intestinal acidity.
- use lactose, to which many people are intolerant, to produce lactic acid. Because cultured milk products are much lower in lactose, they are better tolerated than milk alone. Additionally, Lactobacilli are capable of producing enzymes that break down lactose.
- produce a wide range of antibiotic substances (acidophilin, bacteriocin, etc.)
- produce vitamins, especially B-vitamins and vitamin K.
- act as barriers against "bad" bacteria.

Each strain of beneficial bacteria is unique: Each produces special enzymes, detoxifies different substances, and colonizes distinct territories in the intestines. For this reason, a broad spectrum of organisms is desirable.

Good bacteria increase the gastrointestinal tract's resistance against the attacks of non-wished-for bacteria. When resistance is low, the content of lactic acid bacteria in the intestines is considerably lower than usual.

The Probiotic Gap

The following factors can deplete good bacteria and upset their balance in the intestines:

- antibiotics, which can kill good as well as bad bacteria
- other drugs
- diet (highly processed, low-fiber foods)
- chronic diarrhea
- stress

The intestinal balance between good and bad bacteria in turn can affect:

- nutritional status
- efficacy of medications
- infection
- comfort

It is often difficult to obtain beneficial bacteria in foods alone. And even if live bacteria are present, you'd have to eat a lot of yogurt to consume enough bacteria to achieve an effect, especially considering the following:

- Due to pasteurization, most popular brands of yogurt do not contain live cultures.
- Laboratory tests of various cultured milk products have shown that the bacterial strains that are supposed to be there often are not present or are present in very low levels.
- Cooked foods do not contain live organisms. All cultured dairy products should be eaten raw to take advantage of any probiotic benefits.
- Beneficial bacteria cannot survive the acidic environment of the stomach. Therefore few live organisms make it to the intestines to exert their beneficial effects.

Acidophilus Plus Supports a Healthful Balance!

Broad spectrum of organisms from the human food chain! Eating many types of cultured milk products from around the world on a daily basis would be an ideal – but impractical – way to consume diverse microorganisms. To provide broadspectrum support for the health of the gastrointestinal tract, GNLD has selected and isolated only the best strains used to prepare whole foods: European yogurt, *acidophilus*-fermented milk, *bifidus*-fermented milk, and Yakult, a popular Japanese fermented milk. The identity of all the strains is strictly and continuously controlled to insure that exactly the right strain is present every time. The product delivers five types of lactic acid-producing bacteria in a 1:1:1:1:1 ratio:

- *Lactobacillus acidophilus*
- *Lactobacillus bulgaricus*
- *Lactobacillus paracasei*
- *Bifidobacterium animalis*
- *Streptococcus thermophilus*

Convenient!

Whereas dairy products are limited in their shelf-life, GNLD's Acidophilus Plus has an extended shelflife if stored as recommended (i.e., stored in a cool, dry place and refrigerated after opening). And while cultured dairy



products can be inconvenient to transport, store, and sometimes, even locate, Acidophilus Plus is easy to take anywhere your busy lifestyle takes you! Taking just one capsule of Acidophilus Plus each day is a convenient way to help maintain a constant, healthful balance of intestinal flora.

Potency guaranteed!

GNLD's bacterial strains are cultivated under strict conditions to guarantee high levels of active bacteria – much higher numbers than are found in a serving of cultured dairy foods! Maintaining gastrointestinal health requires the presence of between 100 million and one milliard bacteria per day. Each capsule of Acidophilus Plus is filled with five milliard viable beneficial bacteria.

Targeted Delivery Technology!

Our exclusive Targeted Delivery Technology protects the beneficial bacteria from the harsh, acidic environment of the stomach and maximizes the number of live bacteria that reaches the intestines. To produce Acidophilus Plus, diverse types of lactic acid-producing bacteria are specially processed together with gel-forming polysaccharides, which are insoluble in acidic conditions, and encapsulated in a hardgelatin capsule. When the capsule encounters the acidic environment of the stomach, it dissolves, and the contents of the capsule form an insoluble matrix which protects the bacteria. When the stomach contents reach the intestines, the Gel-Gard matrix is dissolved, and the bacteria are released. The active cultures are delivered exactly where they must act to exert their healthful effects!

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16. Speck, M.L., Dobrogosz, W.J. and Casas, I. A. Lactobacillus reuteri in Food Supplementation. Food Technology, pp. 90-94, July 1993.

DECLARATION OF CONTENT:

Acidophilus Plus

Lactobacillus Proprietary Blend
60 capsules / bottle

Please see the label on the product for more precise declaration of content.



Garlic Allium Complex

Numerous studies show that Allium vegetables – garlic, onion, chives, leek, etc. – are good for you. A huge family of sulfur compounds is largely responsible for the pungent smell and benefits of Allium vegetables. GNLD's Garlic Allium Complex is a state-of-the-art, whole-food supplement delivering standardized amounts of allicin, the key active sulfur compound in garlic, plus other beneficial Allium nutrients. Our Targeted Delivery Technology insures that bioactive allicin reaches the intestines, where it is absorbed.



Why garlic and other allium vegetables?

- Allium vegetables (garlic, onion, chives, leek, etc.) have been **used world-wide for thousands of years as foods, spices, and folk medicines.**
- Studies show that Allium vegetables **can be good for you.**

Why GNLD Garlic Allium Complex?

- **Broad-spectrum, whole-food supplementation.** Garlic Allium Complex features extracts and concentrates from a variety of Allium vegetables – **garlic, onion, chive, and leek** – and assures your daily intake of diverse, beneficial nutrients from the Allium "family."
- **Unique process to protect natural enzymes.** The enzyme allinase is required for the formation of allicin, the critical sulfur compound responsible for many of garlic's benefits. GNLD's special technology protects allinase from destruction by stomach acid.
- **Guaranteed allicin content.** Two tablets provide 4.2 milligrams of active allicin from high-yield garlic extracts which is equivalent to that found in one clove of fresh garlic.
- **Nutrient family approach.** Includes not only allicin, but also other bioactive compounds (for example, oil-soluble substances from fresh garlic and onion), which exist naturally in Allium vegetables are good for you in different ways.
- **Targeted Delivery Technology.** A special coating maximises the product's stability and absorption and assures the formation of active allicin in the intestines. As a result, Garlic Allium Complex does not cause repeating or garlic breath!
- **Contains rosemary,** a potent, antioxidant herb which helps protect the tablet contents.
- **Convenient.** Provides an easy way to reap the benefits of Allium vegetables without having to eat a fresh clove of raw garlic every day.



The story of garlic and other allium vegetables

Garlic: “Stinking Rose” or “Spice of Life”?

“Garlic then have the power to save from death. Bear with it though it maketh unsavory breath” – Sir John Harington in “The Englishman’s Doctor”.

No one is neutral about garlic. While some treasure it for its pungent aroma, others detest it for the same reason. The “stinking rose” is actually a member of the sweet-smelling lily family. It belongs to the *Allium* genus, an acrid-smelling group of vegetables whose odour derives from active sulfur compounds. *Allium* vegetables include:

- Garlic (*Allium sativum* L.)
- Onion (*Allium cepa* L.)
- Leek (*Allium ampeloprasum* L. var. *porrum*)
- Scallion (*Allium fistulosum*)
- Shallot (*Allium ascalonicum* auct.)
- Great-headed (“elephant-”) garlic (*Allium ampeloprasum* L. var. *holmense*)
- Wild garlic (*Allium ursinum*)
- Chive (*Allium schoenoprasum* L.)
- Chinese chive (*Allium tuberosum* L.)
- Rakkyo (*Allium bakeri* Regel)

Alliums have been prized throughout the ages

Despite their ability to produce socially undesirable effects (bad breath, belching, etc.), *Allium* vegetables—especially garlic—have been prized throughout the ages by virtually every culture as foods, spices, and folk medicines.

Alliums have always been a natural part of the diet. In ancient Egypt, Pharaohs were entombed with garlic and onions to ensure well-seasoned meals in the afterlife. The slaves who built the pyramids ate garlic to prevent parasitic infection and disease and to bestow strength and endurance.

Allium vegetables have a complicated chemistry and, as a result, a huge range of effects. The ability of onions to induce tears is one example.

Throughout history, people world-wide—the Chinese, Egyptians, Greeks, Indians, Koreans, Romans, Babylonians, and Vikings—have used *Allium* vegetables to enhance health:

- In Greece, Hippocrates, the Father of Medicine, recommended garlic for its medicinal effects, and

athletes ingested garlic as a stimulant during the first Olympic games.

- In India, garlic was used as both an Ayurvedic remedy and an antiseptic lotion.
- Eastern and Western cultures alike have used garlic and onion to free the respiratory tract of phlegm.
- Several North American Indian tribes used garlic and onions to relieve the pain of insect stings.

Hundreds of active compounds in each bulb!

Scientists have yet to credit a single compound as responsible for the benefits of *Allium* vegetables. Garlic, for instance, contains more than 200 different compounds! Of vitamins and minerals, garlic supplies high levels of phosphorus, potassium, sulfur, and zinc; moderate measures of selenium and vitamins A and C; and lesser amounts of calcium, magnesium, sodium, iron, manganese, and B-vitamins. Alliums also contain flavonoids and other antioxidants, essential oils and fatty acids, amino acids, pectin, carbohydrates, and sulfur compounds (notably allicin). Allicin alone reacts with oxygen to produce more than 70 sulfur compounds!

Compounds dormant until bulb is cut or crushed

Have you ever wondered why an intact garlic clove or onion bulb is relatively odourless compared to the diced vegetable? The answer is in the chemistry!

In garlic, unbroken cloves contain a stable, odourless chemical called **alliin**, which has no known biological activity. Cutting or crushing garlic, however, causes the release of an enzyme called **allinase**, which quickly converts odourless alliin to **allicin**, the smelly sulfur compound that gives garlic its characteristic scent and taste.

The nose knows the power of garlic

To reap the benefits of *Allium* vegetables, you have to eat them consistently and in quantities that can cause painful or socially undesirable consequences—bloating, flatulence, heartburn, belching, and bad breath. Allicin, the key to many of garlic’s benefits, is what makes garlic smell. But sometimes it’s hard to take the good along with the bad. Case in point: Allicin is the subject of two U.S. patents held by its discoverer, Chester Cavallito, but its clinical use as an antibacterial agent was abandoned



after a brief trial because of the substance's odour. Why did Mother Nature produce such foul-smelling chemicals? Since allicin is an antifungal agent, it protects garlic bulbs from decay. And lacrimatory factor, the substance in cut onions that makes people cry, can irritate and repel animals. Scientists believe that these compounds confer a survival benefit to Allium plants.

The benefits of garlic and onions are well-known. Yet many people avoid Alliums because they don't like their taste or smell, don't want garlic or onion breath, or reject these natural treasures for other reasons.

Those who do consume Allium vegetables or supplements may find they are not reaping full benefit. Aged garlic, for instance, contains *only 5%* of the active compounds in raw garlic. Cooked or deodorized garlic does not contain significant allicin. In addition, crushed Allium vegetables or supplements without a suitable coating may fail to deliver much allicin.

GNLD's Garlic Allium Complex has allium power!

GNLD has long recognised the valuable dietary role that garlic and onions play. GNLD scientists developed Garlic Allium Complex as a convenient way of increasing the benefit of garlic and other diverse Allium vegetables in the diet. Garlic Allium Complex is an easy, odour-free alternative to eating a fresh clove of raw garlic every day.

Broad-spectrum, whole-food supplementation. No other product boasts as complete a sampling of Allium vegetables. Our Garlic Allium Complex contains bioactive portions of garlic, onion, leek, and chive, *plus* the antioxidant power of the herb rosemary.

Nutrient family approach. Scientists have yet to identify one ingredient responsible for all of garlic's benefits. In fact, they have shown the opposite: *Many* Allium compounds are active. For this reason, GNLD scientists used whole foods to deliver families of nutrients as they exist in nature. Garlic Allium Complex includes not just allicin, but also other beneficial nutrients (S-allylcysteine, vinylidyls, di- and tri-sulfides, etc.) that work together.

Targeted Delivery Technology. Laboratory tests prove that the coated Garlic Allium Complex is insoluble in stomach acid. When the tablet reaches the alkaline environment of the intestines, however, it rapidly dissolves to deliver bioactive compounds for maximal stability and absorption. Targeted delivery avoids the breath odour and aftertaste problems that can follow consumption of Allium foods.

Guaranteed high allicin yield. Our potent formula delivers the highest possible yields of key active compounds of Allium vegetables. For example, each dose is guaranteed to deliver 4,200 micrograms of allicin (the amount found in a clove of fresh garlic). Exclusive 10X extracts from garlic and onions provide S-allylcysteine and a complete lipid profile of Allium oleoresins

(equivalent to 1,800 milligrams fresh garlic and 900 milligrams fresh onion per dose). These compounds plus chive and leek powders make Garlic Allium Complex potent and diverse.

The GNLD challenge: deliver allicin

GNLD's Garlic Allium Complex is a superior product. For a garlic supplement to be effective, it must meet *at least 3* criteria

- | | <u>GNLD</u> |
|---|-------------|
| 1. It must contain alliin . | ✓ |
| 2. It must contain allinase . | ✓ |
| 3. It must deliver allicin to the intestinal tract | ✓ |

With GNLD, you never have to wonder if your supplement is a global contender. Guaranteed to deliver allicin, Garlic Allium Complex sets the industry standard for quality and efficacy.

Suggested reading

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3. Koch, H.P. & Lawson, L.D. (Julkaisija). *Garlic: The Science and Therapeutic Application of Allium sativum L. and Related Species*. 2. painos. Williams & Williams, Baltimore, 1996.

**Garlic allium complex:
Allicin is the difference!**

You may have heard that if a garlic supplement doesn't stink, it's no good, as the lack of odour indicates that allicin, the compound responsible for garlic's characteristic odour and many of its healthful effects, is absent or inactive. This is not always the case. In fact, if a garlic supplement stinks a lot, it usually means that the chain reaction leading to the formation of allicin has already begun.

In this case, allicin is unlikely to survive the stomach's acidic environment and make it intact to the intestines, where it exerts many of its effects. On the other hand, any supplement that is odourless throughout the entire digestive tract lacks active allicin and as a result will not maximally benefit the body. As GNLD's Garlic Allium Complex targets allicin to the intestines, the product avoids the problems of repeating or "garlic breath" while delivering bioactive compounds where they are most useful.

How does GNLD use recent scientific breakthroughs and technical innovations to assure that Garlic Allium Complex delivers allicin? In a sophisticated process that has its origins in freeze-drying, water is gradually removed from Allium vegetables at a cool temperature. The remaining powder is rich in alliin (the odourless precursor required to form allicin) and allinase (the enzyme required to convert alliin to allicin). These compounds are encapsulated in an acid-stable coating to protect the enzyme allinase from destruction by stomach acid. After the beneficial ingredients have passed safely to the alkaline environment of the intestines, the coating dissolves, and the contents make contact with water, which allows the allinase to convert alliin to allicin.

**DECLARATION OF CONTENT
GARLIC ALLIUM COMPLEX**

Garlic-onion product
60 tablets/bottle

Please see the label on the product for more precise declaration of content.

Sustained Release Vitamin C

Scurvy Caused Suffering for Centuries

At the 15th and 16th century scurvy was so wide spread in Europe that medical experts speculated that all diseases had a connection with it. The population in towns suffered immensely during the years of crop failure when there was a lack of fresh food. The early explorers were also badly nourished during their long sea voyages. Old notes tell about many people who drowned at seas because of scurvy.

It was the 18th century before it was realized that scurvy had a connection with deficient nutrition.

In 1753 the Scottish marine doctor James Lind could rapport that his experiments showed that oranges and lemons prevented or cured the disease. His studies are commonly seen as the first scientific proof that a nutrient could prevent a disease. By 1975, the British Royal Navy was required to provide one ounce of limejuice in every sailor's daily ration - hence the nickname limeys.

The early explorers returned from the New World with potatoes and since potatoes (which include large amounts vitamin C) became basic food in Europe, also scurvy disappeared. It returned only occasionally when the crops failed.

The unknown nutrient that prevented or cured so many chronic diseases and suffering was finally identified as "vitamin C" in 1920. 1933 it was named again as ascorbic acid. It is still known with both names.

One of the Most Fragile Vitamins

Vitamin C is water soluble and among the most fragile of our nutrients. It is easily destroyed in normal handling and preparation. Soaking, slicing, steaming, baking or cooking all break down the structure of this important vitamin. Also time lowers the amount of vitamin C: the time its sitting in a shop, time in the refrigerator or in the pantry. For every hour that is passed from the harvest to the time its consumed, important nutrition is being lost (see chapter on Food).

Why Vitamin C?

- During cooking and processing most of the natural vitamin C gets destroyed.
- Cannot be produced in the body and has to be added.
- Needed to form collagen, the major protein of connective cartilage and bone.
- Part of the body's immune system.



Vitamin C: Part of the "Cellular Cement" That Keeps Us Together

Humans are one of the few species that cannot make vitamin C. All animals require vitamin C, however, so those whose bodies cannot biosynthesize it must obtain a steady supply in the diet.

Vitamin C is an integrated part of collagen synthesis, "cellular cement" that keeps our cells together and gives muscles, bones and vascular system their structure. It helps to keep teeth, gums and eyes healthy.

Why GNLD Sustained Release Vitamin-C?

- **Contains GNLD's exclusive citrus bioflavonoid complex.** Whole, dried citrus concentrates containing juice, vitamin C, bioflavonoid complex and other naturally occurring P factors in citrus fruit.
- **Contains acerola cherries and rose-hips.** Acerola (a cherry-like fruit) and rose-hips (the fleshy fruit below the rose-hip flower fam. Rosaceae) are two of the richest natural sources of vitamin C.
- **Provides Vitamin C as nature intended.** Contains vital substances occurring naturally in whole citrus fruits.
- **Sustained Release C** has a sustained release mechanism that ensures release over 6 to 8 hours with a single tablet.



Symptoms of Vitamin C Deficiency

Many nutritional experts believe that the recommended daily dose of vitamin C does not fulfil our actual need. Some people require a larger quantity in order to cope with certain strains connected with their lifestyle.

Stress and cigarette smoking drain the body's natural stores of this essential vitamin. People continuously exposed to minor injuries and bruises (athletes, construction workers, etc.) are among those who probably need additional vitamin C. People exposed to toxic substances during work could also need an additional dose. In fact, we could all use more, as our environment is getting increasingly polluted.

A small deficiency can go on unnoticed for years and lead to general poor health.

GNLD Sustained Release Vitamin C

GNLD's delicious Sustained Release Vitamin C is literally a concentrate made of many important substances that nature intended to provide in addition to vitamin C, plus two rich sources of ascorbic acid: rose-hip and acerola cherries

GNLD's Sustained Release Vitamin C is tailor-made to meet your individual needs.

A continuous supply of nourishment during the day through a sustained release mechanism that maintains a constant level of vitamin C in the whole body for a period of 6 to 8 hours.

DECLARATION OF CONTENT

SUSTAINED RELEASE VITAMIN – C

Once swallowed, the tablets slowly and progressively release the vitamin C, which is absorbed gradually by the body.

120 tablets = 84 g.

Please see the label on the product for more precise declaration of content.

All C

GNLD All C

GNLD's exclusive All C is, literally, a concentrate of many important substances that nature intended to be supplied together with vitamin C.

GNLD All C is designed to contain all the natural wholesomeness of an orange. The sweetening agents are balanced in the same proportions as in a fresh orange. The great orange taste comes from natural orange juice.

The practical, chewable tablet makes it possible to have vitamin C all day. The chewable tablet GNLD All C is also the perfect vitamin C supplement for children who find it difficult to swallow tablets.

Vitamin C – A Water-Soluble Antioxidant

Vitamin C can react directly with free radicals in water and stop their reactivity. As free radicals are linked to damage both inside and outside the cell structures, vitamin C is a particularly important antioxidant as it protects many cell functions.

The fat-soluble antioxidant vitamin E is reactivated by vitamin C and can thereby offer better protection for cell membranes.

For more information on vitamin C, read GNLD Sustained Release Vitamin C.

DECLARATION OF CONTENT

All C

Vitamin tablet
120 tablets/can

Please see the label on the product for more precise declaration of content.



Why Vitamin C?

- Natural vitamin C is destroyed during food preparation.
- It cannot be produced by the body and therefore has to be supplied from an external source.
- It contributes to the formation of collagen, which binds together the cells, a kind of "cell cement".
- It is part of the body's immune system.
- It is a very good water-soluble antioxidant.

Why GNLD All C?

- **Contains GNLD's exclusive citrus bioflavonoid complex.** Whole, dried citrus concentrate that occurs naturally in citrus fruit and improves the bioaccessibility of vitamin C.
- **Great orange taste.** Contains natural orange juice.
- **Provides vitamin C, just as nature intended.** Contains vital substances that occur naturally in whole citrus fruit.
- **Naturally sweetened.** Well-balanced sweetness in the same proportions as in fresh oranges.
- **Chewable tablet.** A nice and easy way to have vitamin C all day.
- **Easy for children to take.**



Wheat Germ Oil with Vitamin E

Vitamin E – The Controversial Vitamin

Since its discovery in 1921, vitamin E has been claimed to be a cure for everything from baldness and impotence to cancer and heart and cardio diseases. Critics maintain, however, that so far there is no proof to support the claims that supplements with added vitamin E have any useful effects.

Even if vitamin E is not a cure-all, today the truth seems to be that it is used in the treatment of an increasing number of illnesses and ailments. There is currently research around the world into vitamin E to discover new possible functions and areas of use.

The Vitamin E Family in Nature

Vitamin E is a fat-soluble vitamin that consists of compounds. The eight biggest compounds that make up the vitamin E family can be divided into two groups: tocopherols and tocotrienols. Both groups have an alpha-, beta-, gamma- and delta-components. Alpha-tocopherol was discovered first, but research shows that the other fractions can have a meaning that has not been known earlier.

How can you recognize artificial vitamin E?

Natural-source vitamin E can be an expensive raw material. That is why the manufacturing and usage of synthetic versions has always been much more profitable for many companies. Because of this, there are many products in the market that are either 100% synthetic or a mixture of synthetic and natural substances.

If a product is labeled correctly, it is actually quite easy to see whether it is natural or synthetic. All natural vitamin E is stated as d-alpha-tocopherol. Synthetic vitamin E should be labeled as dl-alpha, as in dl-alpha-tocopherol. In other words, “d” stands for natural and “dl” for synthetic vitamin E.

The Antioxidants of Nature

Vitamin E functions mainly as an antioxidant in the body and adds the cells' capability to protect themselves from reactions with oxygen that are unwished for. This vitamin protects especially the fatty cell membranes of nerves, muscles and blood arteries. It improves the body's ability to utilize vitamin A.

Wheat Germ Oil with Vitamin E –not only alpha-tocopherol but the whole vitamin E family

Many natural-source vitamin E products only consist of alpha-tocopherol and even if these products are natural they only provide one member of the vitamin E family.



However, GNLD's natural vitamin E contains the whole vitamin E family exactly as it appears in nature.

GNLD's natural vitamin E is formed of specially chosen natural wheat germ oil that contains all tocopherols. This oil has all the benefits of E complex – a balance between tocopherols and tocotrienols in the proportions that they appear in nature. Added to that, it includes all other factors that are present in our diet together with vitamin E. Factors that can be important for the whole vitamin E complex.

Why Wheat Germ Oil With Vitamin E?

- Vitamin E is an antioxidant.
- Wheat germ oil provides the entire vitamin E family, tocopherols and tocotrienols.

Why GNLD Wheat Germ Oil With Vitamin E?

- **Natural.**
- **Complete** – Contains the entire vitamin E family. Utilizes the benefits of tocopherols and tocotrienols exactly as they appear in nature.
- **Genuine cold pressed wheat germ oil is the main ingredient.**
- **Rich in vitamin E** – one capsule contains pure natural vitamin E (10 mg).
- An important source of polyunsaturated fatty acids (linoleic and linolenic).
- GNLD's gelatine capsules are **easy to swallow.**



The Starting Point Is Pure Natural Wheat Germ Oil

GNLD's unique vitamin E really is a more effective vitamin E. Through knowledge, understanding and a striving to always be the best, GNLD is now able to offer the complete vitamin E family in one soft gelatine capsule.

The main ingredient is the nature's own natural vitamin E – wheat germ oil - but not any wheat germ oil. Through a special selection method, based on GNLD's thorough knowledge of the extraction of grain lipids, the best available wheat germ oil has been selected. This unrefined, cold pressed and cold processed oil is the best that can be produced with technology and the best value for money. This main ingredient in each vitamin E capsule guarantees that it contains all vitamin E nutrients that appear in nature.

Besides that, we have added specially chosen and pure, 100% natural and isolated vitamin E complex, that contains relatively little of d-alpha-tocopherol but which contains plenty of beta-, gamma- and delta-tocopherols and all tocotrienols.

At the end we have added 100% genuine and natural d-alpha-tocopherol of the highest quality. D-alpha-tocopherol part forms the nutritional core of GNLD's all including vitamin E formula.

GNLD's wheat germ oil with vitamin E is in a class of its own.

If the goal is to develop the best possible dietary supplement of vitamin E for people, then GNLD has achieved it.

- The best pure wheat germ oil.
- The richest, naturally isolated vitamin E complex.
- The purest natural tocopherol concentrate.

DECLARATION OF CONTENT

WHEAT GERM OIL WITH VITAMIN E

Cold pressed Wheat Germ Oil. Food supplement with natural Vitamin E.

100 capsules – NET WEIGHT 104 g.

Please see the label on the product for more precise declaration of content.

Kal-Mag Plus D

Calcium – The Most Abundant Mineral in the Body

Ninety eight per cent of the body's calcium is in the bones to which it gives strength and structure. One per cent is in the teeth and the remaining one per cent of the body's calcium is widely distributed in our tissues and bodily fluids.

Calcium Is More Than Just Bones and Teeth

Calcium is needed for all muscle formation and for muscle activities. Heartbeat, respiration and our capability to move are dependent on calcium. Impulses cannot be sent through the nervous system without the help of calcium. Calcium participates also in the blood's coagulation process, in activating many enzymes and functions as the canal through the cell membrane for nutrients and waste material.

Calcium Deficiencies Are Real

Of the nutrients that must be provided by the foods we eat, calcium is the most likely to be lacking. A normal adult male consumes only about 50% of the recommended daily dose, and women usually even less. Although milk and dairy products are reliable sources of calcium, they often also contain a lot of calories, fats and cholesterol, which many try to avoid. In addition, coffee and alcohol consumption also drain calcium from the system. Stress can affect the calcium supply as it reduces the absorption of calcium while increasing the body's need for calcium.

The first symptoms of calcium deficiency lead to what is known as tetany, which is characterised by muscle cramp, numbness and tingling in the arms and legs. In children, calcium deficiency leads to deformation of the legs and reduced development potential. In later life it can also lead to brittleness of the bones.

Worry Over Brittleness of Bones Directs Attention at Calcium

Osteoporosis (brittleness of the bones) is no longer seen as an unavoidable part of the ageing process. It is very likely to be a result of long-term calcium deficiency in the diet. Millions of people all over the world suffer from this debilitating disease, at a cost of millions of pounds every year. Osteoporosis has been called "the silent epidemic" because it does not give any warning signals before it sets in. Statistically 50% of women over 60 will be affected. The disease sets in when calcium disappears from the bones quicker than it is replaced. The loss of bone mass leads to the bones coming porous and brittle, increasing the chance of fractures. As the disease progresses, the



spine is compressed and becomes bent, giving the hunched posture that is characteristic of the disease.

After careful studies of women who have gone through the menopause, an increasing number of doctors have be-

Why Calcium?

- Gives strength and structure to bones and teeth.
- Needed for muscle formation.
- Plays a role in the transmission of nerve impulses.

Why Magnesium?

- Cardiovascular regulation.
- Needed for muscle contraction.
- A co-factor in many enzymatic reactions.

Why Vitamin D?

- Needed to absorb and utilize calcium from the diet.

Why GNLD Kal-Mag Plus D?

- Pure pharmaceutical calcium carbonate, **healthy and easily dissolved**.
- **Double benefit.** Combines calcium, magnesium, and vitamin D for better utilization.
- **Generous dose at a ratio of 2-1.** Three tablets of GNLD Kal-Mag provide 450 mg of calcium together with 225 mg of magnesium for an optimal supplement.
- Bridges the nutrient gap with 3µg of vitamin D₃ per three tablet serving.



gun to prescribe oestrogen as a drug against osteoporosis. The reason is that doctors know that when a woman goes through the menopause, there is a continuous and strong reduction in the body's natural oestrogen production. They also know that oestrogen plays an important part in the body's use of calcium and building up of the bone mass. Without oestrogen, the body simply cannot add sufficient quantities of calcium to the bone mass to keep pace with the amount being lost.

All the oestrogen in the world cannot help the body to use and build up calcium, however, if it does not have any. To counteract osteoporosis effectively, the body needs calcium and oestrogen. The doctor can decide if oestrogen is appropriate, but it is up to each and every one of us to make sure we consume enough calcium.

To Be Effective Other Nutrients Are Required

For the calcium to function satisfactorily, other nutrients need to be available in the body. For example, calcium cannot be absorbed without sufficient quantities of vitamin D. In addition, vitamins A and C must be present. Magnesium and calcium work as a team for health, and a calcium/phosphorus balance must be maintained to build bone tissue effectively. A deficiency in any of these related nutrients will prevent calcium from being used.

Calcium And Vitamin D

The body needs vitamin D in order to absorb and utilize calcium from the diet. However, as people age, the amount of vitamin D made in the skin after exposure to sunlight declines, and the body loses some of its ability to convert vitamin D into the active hormone needed for proper calcium metabolism.

According to the *American Journal of Clinical Nutrition*, there is a "silent epidemic" of vitamin D deficiency in the elderly in the U.S., and this increases the risk of skeletal fractures. What's more, use of heavy sunscreens – as a precaution against premature aging and increased risk of skin cancer – also decreases the ability of the body to produce sufficient quantities of vitamin D. In fact, the Osteoporosis Society of Canada has recommended that elderly people and those who use heavy sunscreens should have a dietary intake of 400 to 800 IU of vitamin D per day.

CALCIUM IN KAL-MAG PLUS D

Unequalled Degree of Purity

GNLD always strives to use the purest raw materials and those that best agree with the body's natural processes. Calcium carbonate provides the highest degree of purity in a form that is easy for the body to dissolve and absorb. This source also gives GNLD greater control over the quality of the raw material than other sources.

Not All Calcium Is the Same

Some of the dietary supplements available on the market today use dolomite or bone meal as a source of calcium. FDA (Food & Drug Administration) in the USA has warned that these supplements may contain lead, which can damage the liver, adrenal gland and kidneys of the elderly. These raw materials also do not provide the readily soluble form of calcium that the body can easily absorb. Treated bone meal can contain a surplus of phosphorus, which can disrupt the calcium/phosphorous balance in the body and counteract the effect of both minerals.

Your Calcium/Phosphorous Balance Is Important

GNLD's calcium supplement has been designed to contribute to the correct calcium/phosphorus balance in the body. While the average diet lacks calcium, it provides too much phosphorus and, unlike calcium, the body absorbs a relatively large amount of the phosphorous. This imbalance counteracts the effect of the minerals. GNLD's calcium supplement helps to restore the balance by not adding any phosphorus but instead significantly boosting calcium absorption.

GNLD Kal-Mag Plus D

A daily dose of three Kal-Mag Plus D tablets provides our unique composition of 450 mg pure calcium carbonate boosted with 225 mg magnesium and 3 µg vitamin D added.

It is becoming increasingly clear that magnesium plays an important role in regulating the muscle contractions. It is known that stress breaks down the body's stores of magnesium, and attempts are now being made to determine whether this breaking down leads to the contraction of blood vessels. GNLD Kal-Mag Plus D is one of the most valuable supplements available as it provides two minerals that can affect your health.

References:

1. B.E.C. Nordin, In – Calcium in Human Biology (1988)
2. National Institutes of Health, Journal of the American Medical Association (1984)

DECLARATION OF CONTENT

KAL-MAG PLUS D

Food supplement with calcium, magnesium and vitamin D3.

180 tablets – NET WEIGHT 126 g

Please see the label on the product for more precise declaration of content.

Aloe Vera Plus

The Aloe vera plant, a traditional herb and an ingredient in natural drinks, has been used in different parts of the world for internal and external use for approx 4000 years to promote health and well-being. Researchers are now beginning to show that this succulent plant really is effective. GNLD's refreshing Aloe Vera Plus contains pure sap from Aloe Vera and GNLD's special mixture of herb teas (tea, ginseng, camomile and lemon). Aloe Vera Plus, which is sweetened with fructose, is a great-tasting drink that provides energy in a natural way to meet the day's challenges.



Why an Aloe Vera Drink?

- Aloe vera has been used internally and externally for 4000 years to improve health and boost energy.

Why GNLD Aloe Vera Plus?

- **Delicious aloe vera juice.** Our aloe vera juice meets all the requirements of the International Aloe Science Council, a voluntary association of industrial companies in the USA that sets standards for aloe vera products.
- **“Only gel” process.** The leaves are cut carefully to separate the pure gel from the other parts of the aloe leaves.
- **GNLD's special mixture of herbs.** It contains tea, ginseng, camomile and lemon, purely to give the drink a great taste.
- **A drink that provides a stable blood sugar response.** Sweetened with fructose for quick and lasting energy.
- **Wonderful, natural aroma.** Great-tasting aloe vera gel and a delicate mixture of herbs, natural lemon and natural sweeteners contribute to the delicious taste.
- **Only 13 calories** per 50 ml serving.
- **Alain-free.** The Aloe vera gel used in the drink does not contain any alain.

DECLARATION OF CONTENT

ALOE VERA PLUS

**Ready to drink. A naturally flavoured Aloe Vera Drink.
1000 ml.**

Please see the label on the product for more precise declaration of content.

The Story of Aloe Vera

Aloe Vera: A Long History of Use

The *Aloe vera* plant has always been a highly prized product from nature's own stores. It is a lily, like asparagus, garlic and yellow onion, and has been used to improve health and boost energy for approx 4000 years.

Although research into *Aloe vera* has hardly begun, this traditional herb has a long history, and it has been used in, among other things, natural drinks. It has been used externally on small wounds and to soothe sunburn and minor skin irritations, and internally to preserve health. Although researchers have published more than 1000 articles on *Aloe vera*, we still do not know in detail how the beneficial effect of this plant comes about. Nonetheless, new facts about this soothing plant are being discovered all the time, and the facts seem to confirm popular beliefs.

Just consider the importance attached to *Aloe vera* right back through history. The use of *Aloe vera* is mentioned in the Ebert Codices from 1500 BC, a papyrus text from ancient Egypt. Its beneficial properties were so well known that when Alexander the Great started on his conquests, Aristotle commanded him to take the island of Socotra outside East Africa first, so that he would always have enough *Aloe vera* to treat his soldiers when they were wounded.

Merchants, explorers and missionaries travelling under uncertain conditions and with limited cargo space used to take *Aloe vera* together with other valuable goods to be sold or handed out in faraway countries. Since then, this plant has spread all over the world and is cultivated in hot areas such as Africa, the Caribbean, "The Sun Belt" in the USA, Mexico, Central and South America, India and other parts of Asia.

Aloe Vera Usage Today

Many grow *Aloe vera* as a pot plant at home and apply the gelatinous sap in the *Aloe vera* leaf as a soothing gel to scratches and burns.

Today, an increasing number of people use *Aloe vera* internally in the form of natural, refreshing and nutritious Aloe Vera drink.

What Does Aloe Vera Contain?

Aloe vera leaves contain two chemically and physically different substances. The surface of the leaves contains a bitter sap that is an irritant and laxative. This appears to protect the plant against animal attack and thereby help it to survive. The internal part of the leaf, the gel, has a pleasant taste. It is this gel that is used in drinks and herb mixtures. *Aloe* gel has been thoroughly tested and found not to be toxic.

The gel consists of 95% water and contains more than 200 different substances, in particular, mucopolysaccharides, enzymes, sterols, prostaglandins, fatty acids, amino acids, proteins, vitamins (A and C, thiamine, riboflavin, niacin, etc.) as well as minerals (calcium, phosphorus, potassium, magnesium, iron, boron, copper, zinc, manganese, chromium, etc.).

How can *Aloe vera* have so many different functions? According to some researchers, the polysaccharides are the decisive factor. They form the largest group of substances by far in *Aloe vera*. Polysaccharides can be thought of as simple sugar molecules joined together like pearls on a necklace. The necklaces can be of different lengths and the pearls may be different colours. In the same way, the simple sugar molecules can differ in type (glucose or mannose), and the polysaccharide molecules can be of different lengths and have different biochemical properties.

Energy From GNLD's Aloe Vera Plus

What makes Aloe Vera Plus one of GNLD's most popular products? The excellent quality, taste and nutritional value of the Aloe Vera Plus drink set an example for natural drinks. Aloe Vera Plus is produced from pure *Aloe vera* juice, which has been extracted from the soothing, pleasant-tasting inner part of the *Aloe vera* leaf. And we have added GNLD's delicious special mixture of herb teas to the juice.

We cannot explain all the beneficial properties *Aloe vera* has been considered to possess for hundreds of years, but we do know that the refreshing drink Aloe Vera Plus is an excellent way to boost energy levels.

Our Raw Material: Pure Aloe Vera Juice of the Best Quality

We produce Aloe Vera Plus using a carefully worked out method in order to offer you *Aloe vera* juice of outstanding quality. We use only 60-90 cm long leaves of cultivated *Aloe barbadensis* Miller. After cleaning the outside, the leaves are cut into strips to access the pure jelly inside them. The *Aloe vera* polysaccharides remain intact during this procedure; there is virtually no breaking down.

Citric acid is added to stabilise the *Aloe vera* juice, and a small quantity of conservation agent, benzoic acid, is added to improve the lasting qualities of the product, especially once the bottle has been opened. Without preservatives, the natural aroma of the drink quickly breaks down. The body uses the preservative in the same way as those we get from natural sources. Benzoic acid occurs naturally in, for example, berries. Nature lets benzoic acid form in berries to protect them from bacterial attacks.



We are proud of our absolutely pure *Aloe vera* gel. GNLD's Aloe Vera Plus meets all the requirements for *Aloe vera* juice formulated and laid down by the International Aloe Science Council, a voluntary association of industrial companies formed to set guidelines for the definition of *Aloe vera* products.

A Great Drink With a Low Glycemic Index

GNLD's Aloe Vera Plus has been sweetened with fructose for a stable blood sugar response and it provides quick and lasting energy. Only a very small amount of sugar has been added. The product contains fructose and a small amount of the simple sugars that occur naturally in the *Aloe vera* plant. (*Aloe vera* contains more mannose than glucose). A 50 ml serving of Aloe Vera Plus contains just 13 calories. This quantity does not lead to a big insulin response in the body. Together, the natural lemon aroma, the great taste of *Aloe vera* juice and the refreshing herb mixture form a fantastic drink!



Introduction to Protein

Protein: Vital to Life and Growth

Protein is one of the most widely occurring substances in the body and makes up approximately 18% of body weight. Protein provides the body with the components it needs to create, maintain and repair all cells and tissue. Protein is an important component of muscles and skin, hair and nails, blood and organs, the brain and nerves, and even our genes. The metabolism that keeps the body going is regulated by certain proteins (hormones) and catalysed by other proteins (enzymes), and yet others (antibodies) protect the body against infections. At the same time as protein is used primarily to build up and repair tissue, it can also provide warmth and energy when there is insufficient access to fats and carbohydrates for this function.

The Diet Should Supply Protein Every Day

The body cannot store protein, so we need a continuous supply from our diet. When protein is supplied to the body, it uses what it needs to build up cells and make repairs at the time; the rest is turned into fuel for metabolic energy. Once the protein has been converted into energy, the body can no longer use it to build cells, however great the body's need for protein.

Protein Is Made up of a String of Amino Acids

Protein consist of a pleated string of small chemical units called amino acids. The body breaks down proteins in the diet into amino acid components and combines and recombines them to produce the protein combinations it needs to create cells, body tissue, enzymes, etc. Of the 22 amino acids included in the human diet, 9 are known as "essential" because they cannot be produced by the body and have to be supplied through the daily diet. The others, which the body can synthesise, are called "non-essential". Arginine is an essential amino acid in the diet of children only.

ESSENTIAL AMINO ACIDS IN THE DIET

Arginine*	Histidine
Isoleucine	Leucine
Lysine	Methionine
Phenylalanine	Threonine
Tryptophan	Valine

NON-ESSENTIAL AMINO ACIDS

Alanine	Asparagine
Aspartic acid	Cysteine
Cystine	Glutamic acid
Glutamine	Glycine
Hydroxyproline	Proline
Serine	Tyrosine

* Essential for children

Not All Protein Sources Are the Same

There are many forms of proteins. The amount of essential amino acids determines the "quality" of the protein.

As the body puts together the available amino acids into the required combinations, the nutritional value of the protein is limited to the least occurring essential amino acid. If the diet supplies a large quantity of eight essential amino acids but only a small amount of the ninth, the body can only construct the proteins required until the ninth amino acid runs out. Gelatine, for example, is 100% protein, but as it lacks the essential amino acid tryptophan, it has little nutritional value in itself.

Measure the Value of the Protein

The nutritional value of a protein is determined by the degree to which the amino acid profile of the protein corresponds to the body's amino acid requirement, the better the match the higher the value. The value is expressed as a Protein Digestibility Corrected Amino Acid Score (PDCAAS).

PDCAAS is based on the human amino acid requirement. The value gives the amino acid profile of the protein in relation to that of a high-grade protein standard and the completeness of protein metabolism. An excellent PDCAAS value is 1.0. PDCAAS is calculated by looking at the composition of amino acids in the diet. As the least available essential amino acid in the diet is the limiting factor of protein synthesis, this amino acid represents the general quality of the protein. An adjustment is then made by taking into account the digestibility of the protein that was looked at. The result is given as a number. For example, proteins from milk (caseins) – which are very high-grade proteins – have a PDCAAS of approx 1.0. All of GNLD's protein products have a PDCAAS of 1.0 or higher.

Protein-Rich Foods Often Contain a Large Amount of Fat and Cholesterol

Modern nutritional research recommends food with a low fat and cholesterol content for good health and long life. However, most foods with a high fat and cholesterol content are also among the best protein sources: eggs, red meat and dairy products. If we stop eating these foods to reduce the fat and cholesterol in our diet, we risk limiting our protein intake.



GNLD's Protein Products Are Superior

GNLD mixes proteins from several natural sources in a scientific way to produce better amino acid profiles. The result is high-grade protein products with very little fat and cholesterol.

The Advantages of GNLD's Protein Technology

The Protogard Process

To produce a high-grade protein, the processing method used is at least as important as the quality of the raw materials. If the temperature is too high, the structure of the protein can be damaged and the nutritional value reduced. GNLD's exclusive Protogard Process protects the amino acids by mixing high-grade raw materials at low temperatures.

Glycemic Edge

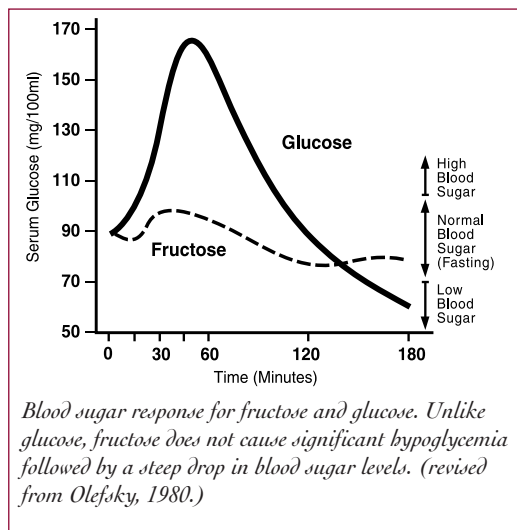
GNLD's GR² Control Meal Replacement Protein Shake and NutriShake contain fructose to give natural sweetness and lasting energy value. Fructose is a simple carbohydrate from natural fruit sugar. Fructose provides more lasting energy than other sugar such as glucose and saccharose. In GNLD's protein supplements, fructose provides an important "glycemic edge" by continually adding energy without the ups and downs in the energy

Saving Protein

The body's most important requirement in all situations is energy. If the energy in the diet (carbohydrates and fat) does not meet the body's energy requirements, the body converts protein into energy. When carbohydrates and fat are available, the protein is saved and stored for special body functions such as maintenance, repairs, growth and endurance. GNLD's protein supplement provides "lasting energy" carbohydrates that are absorbed slowly for this important protein-saving function.

All 22 Amino Acids

For maximal protein effect, GNLD's protein supplement supplies all 22 amino acids that form part of human nutrition so that the essential amino acids can be used fully for building tissue, repairs and enzyme synthesis, etc. This perfect balance is not found in all protein foods.



level associated with saccharose. As shown in the diagram, glucose provides a quick boost of energy but at the same time sets off insulin production. This in turn, increases use of muscle energy (glycogen) and reduces the conversion of fat to energy. The result is an explosion of energy followed by tiredness and hunger. Fructose, however, provides a more even supply of blood sugar and delays the reduction in muscle glycogen, improving endurance during training or providing more energy during the day!

NutriShake

NutriShake is pleasant-tasting and offers naturally good nutrition in every glass, in short, ideal for the whole family. NutriShake is designed to provide optimal cell nutrition with a balanced quantity of protein, carbohydrates and fat at the same time as supplying all 22 amino acid that form part of human nutrition.



Why a Nutritional Drink for Energy?

- **Skipped meals**, a diet based on fast food or reduced calorie intake can all lead to a loss of energy and vitality. Consuming the correct amount of protein and carbohydrates can provide lasting energy and prevent a fall in the blood sugar level and tiredness between meals.
- **Those with greater than average energy needs – including children, physically active persons or those suffering from stress – need high-grade “fuel”.** High-grade protein and a balanced mixture of simple and complex carbohydrates are needed to satisfy the body’s requirements.

Why GNLD NutriShake?

- **Tastes great!** A complete food the whole family will like.
- **Quick and easy!** Mix with milk or alternatively with juice or water for variation.
- **Four great tastes.** Vanilla, chocolate, strawberry and coffee.
- **Exceptionally high-grade protein.** NutriShake has been tested and shown to have a high Protein Digestibility Corrected Amino Acid Score (PDCAAS) value, making it an excellent source of protein.
- **Complete protein.** Supplies the right quantity of all 22 amino acids that form part of human nutrition. GNLD’s exclusive Protogard Process contributes to a high PDCAAS value of over 1.0.
- **“Glycemic edge”** gives quick and lasting energy.
- **A single portion contains calcium to meet half the day’s requirement** when mixed with milk.
- **Low fat content, low cholesterol content.**

THE STORY OF NUTRISHAKE

NutriShake for Everyone!

NutriShake – a high-grade protein the whole family will love. It is delicious and mild with four great flavours. NutriShake is specially produced with the family in mind. GNLD wanted to produce a protein drink the whole family would want every day, a protein drink that is so quick and easy to prepare that the children can make it themselves, a protein drink that provides a balanced supplement of all 22 amino acids the body needs every day. With NutriShake, GNLD has succeeded with this and more. NutriShake has a great taste, it is quick and easy and a first-class source of protein, making it perfect for every family, every day. Take NutriShake in the morning for lasting energy and avoid morning tiredness. In the afternoon it is an excellent snack at school instead of high-calorie sweets and fast food

NutriShake provides a lot of high-grade protein for renewal and repairs.

NutriShake's unique composition starts with "perfect" protein sources such as caseins or milk proteins. The digestibility of NutriShake is further improved with GNLD's own Protogard Process. With this process, NutriShake can achieve a PDCAAS value in excess of 1.0 – an exceptionally high value!

In addition, NutriShake contains all 22 amino acids that form part of human nutrition, including all essential amino acids.

NutriShake Supplies Carbohydrates as Fuel for Cell Energy.

Carbohydrates, which are found in all plant food (including dairy products), are the body's main source of energy. Plants produce carbohydrates from carbon dioxide and water, and the body uses carbohydrates by breaking them back down into these two component parts and releasing the energy that holds them together.

Simple carbohydrates are sugar from foods such as, for example, fructose, glucose, maltose and lactose. Simple carbohydrates dissolve quickly and are absorbed into the blood circulation.

NutriShake – the Whole Family's Favourite

From GNLD's own kitchen/laboratories come SAB-approved recipes that can be adapted to your individual nutritional requirements (see next page).

Use NutriShake as a base for:

- Energy-rich breakfast drinks.
- Fruit- and vegetable-rich shakes for children.
- Carbohydrate-rich drinks for sports enthusiasts.
- A low-fat protein drink with a low salt content.

- A good source of protein when mixed with juice or water.
- An excellent source of protein when mixed with milk, providing half of the bone-building calcium the body needs every day.
- A perfect start to every person's day!

Four Flavours

NutriShake is available in four delicious flavours – vanilla, chocolate, strawberry and coffee.



NUTRISHAKE MIXER RECIPES

General description: all the recipes are prepared in the same way.

1. First, place fruit, nuts, seeds, grain and ice-cubes (2–4), if required, in the mixer. Frozen fruit should not be defrosted.
2. Add the measured liquid (milk, juice or water).
3. Start at the lowest speed, mix well and increase the speed gradually until the mixture is completely smooth.
4. Reduce the speed to low or half-speed. Add one sachet of NutriShake and mix for a further 10 to 20 sec.

All recipes make approx 0.6 litres of shake

Fruit and juice may be fresh, preserved (in water or juice; drained) or frozen (unsweetened), unless specified otherwise. Vegetables may be cooked, preserved (drained) or frozen. Fruit and vegetables should be cut into small cubes or pieces before being measured.

RECIPE CATEGORIES

Each of the following recipes provides all the necessary nutrition in NutriShake plus further nutrients to satisfy your individual nutritional requirement. Whether you choose the carotenoid-rich, general benefit or carbohydrate-packed alternative, every scientifically designed shake guarantees to offer a great taste and nutritional supplement.

The recipes that follow should be seen as suggestions of ways to vary NutriShake. Use your imagination and experiment to find your favourite shake with the help of NutriShake and different fruit and vegetables. Even if the supply of fruit and vegetables varies depending on the time of year and local differences, we are convinced that you will find your own favourite shake.

Treat Yourself to Wholesome Nourishment With NutriShake... Just Because It Is so Healthy!

Full of Carotenoids

Research shows that a carotenoid-rich diet (the “nutrient family” that includes beta-carotene) contributes to increasing your well-being. This information has led to important health authorities such as the National Research Council in the USA recommending 5 to 9 portions of fruit and vegetables per day for optimal nutritional protection. Each of the following recipes makes one portion of carotenoid-rich food to help you reach the optimal intake of 5-9 portions of fruit and vegetables per day. The ingredients in the recipes have been chosen to provide vitamin A, vitamin C and natural fruit fibres.

STRAWBERRY-CANTALOUPE MELON

1.2 dl cantaloupe melon (approx 1/4 of a small fruit)
1.6 dl strawberries
2.4 dl low-fat milk
1 sachet of NutriShake (strawberry, chocolate or vanilla)

APRICOT - PEAR - STRAWBERRY

1.8 dl apricots
0.8 dl pears
0.6 dl strawberries
2.4 1% milk
1 sachet of NutriShake (optional flavour)

STRAWBERRY-CHERRY

1.8 dl strawberries
0.6 dl sour (acidic) cherries
2.4 dl pineapple juice
1 sachet of NutriShake (optional flavour)

PINEAPPLE-CARROT

2.4 dl pineapple
0.6 dl carrots
2.4 dl orange juice
1 sachet of NutriShake (optional flavour)

Beneficial for Everyone

High blood pressure, high cholesterol and a diet rich in fats and salt are all considered to be big risk factors to health. A diet for general benefit that reduces the fat and salt in the daily food intake will contribute to reducing the risks.

Each of the recipes below is low in fat and salt and provides potassium, calcium and natural fruit fibres.

PAPAYA- STRAWBERRY

1.8 dl papaya (approx. 1/2 fruit)
1.2 dl strawberries
2.4 dl orange juice
1 sachet of NutriShake (vanilla, strawberry)

CHERRY-APPLE

2.4 dl sweet cherries
2.4 dl apple juice
1 sachet of NutriShake (vanilla, chocolate or strawberry)

MANDARIN- RASPBERRY- PEAR

1.2 dl mandarins or tangerines
0.6 dl ripe raspberries
1.6 dl pears
2.4 dl orange juice
1 sachet of NutriShake (optional flavour)

PUMPKIN-BERRIES

1.2 dl mashed pumpkin (not pie filling)
0.8 dl. blackberries or raspberries
2.4 dl 1% milk
1 sachet of NutriShake (vanilla, strawberry)



Packed with Carbohydrates

Carbohydrates are an important source of energy during hard training. A diet rich in carbohydrates provides higher than normal stores of carbohydrates in the muscles for greater endurance. An athlete's diet must consist of 60-70% carbohydrates to get the most out of training and speed up recovery. It is particularly important to stock up on carbohydrates after training during competitions that last several days. Significant amounts of magnesium, potassium, salt and chloride are lost during heavy and prolonged sweating; endurance athletes risk suffering from an imbalance or deficiency in these nutrients, which can affect their performance.

Each of the recipes below provides carbohydrates, very little fat, and magnesium potassium, salt and chloride.

PEAR-CARROT

2.4 dl pears
0.6 dl carrots
2 tbs white rice (boiled)
2.4 dl orange juice
1 sachet of NutriShake (optional flavour)

MANDARIN-PEAR-BANANA

1.6 dl mandarins or tangerines
1.2 dl pears
0.8 dl bananas
1 tbs porridge oats (normal, cooked)
2.4 dl 1% milk
1 sachet of NutriShake (optional flavour)

MANDARIN-MANGO

1.6 dl mandarins or tangerines
1.2 dl mangoes
1 tbs porridge oats (normal, cooked)
2.4 dl 1% milk
1 sachet of NutriShake (optional flavour)

BANANA- APRICOT

1.2 dl bananas
1.6 dl apricots
3 tbs white rice (boiled)
2.4 dl pineapple juice
1 sachet of NutriShake (vanilla, strawberry)

DECLARATION OF CONTENT

NutriShake – Coffee-Flavoured Protein Drink

NutriShake – Chocolate-Flavoured Protein Drink

NutriShake – Strawberry-flavoured protein drink

NutriShake – Vanilla-flavoured protein drink

Contains fructose and sweetening agent, ideal for all the family. Every glass of tasty NutriShake is full of nutrients. Excellent, nutritional, perfect start to a day packed with energy.

Please see the label on the product for more precise declaration of content.



Glossary

A

ABSORPTION

The 3rd step in the 6 stages of nutrition. The process by which substances (including nutrients) are taken up by the intestine and are passed into the circulatory system (bloodstream).

ACEROLA

A tropical fruit high in vitamin C (acerola cherry).

ACID

Not all acids are dangerous liquids; in the case of nutrients (essential fatty acids, ascorbic acid for instance), the word acid merely denotes chemical structure.

ADRENAL GLAND

A triangular-shaped organ located on the top of each kidney which produces the hormone adrenaline.

ALKALI

A substance that will neutralise an acid to form a salt; a base.

ALLERGY

A reaction of body tissues to a specific substance.

ALOIN

An irritant laxative contained in the yellow sap of aloe.

AMINO ACIDS

A class of organic compounds known as "Building Blocks of the protein molecule". Natural Amino Acids are preceded by the letter "L" (L-Methionine), while synthetics use the letter "D" (D-methionine).

ANTIBODY

A substance produced in the body which reacts against bacteria, disease, or other foreign material in the bloodstream.

ANTIOXIDANT

An agent which prevents oxidation reactions from occurring. In the diet, this includes Beta Carotene, Vitamin C, Vitamin E, Selenium and others.

ASCORBIC ACID

The chemical name of Vitamin C.

ASSIMILATION

The 5th step in the 6 stages of nutrition. Absorb into the system; transform food into living tissues; become one with the body.

ATROPHY

A wasting away of a cell, tissue, organ or part.

AVITAMINOSIS

A condition due to the lack or deficiency of a vitamin in the diet or to the lack of absorption or utilisation.

B

BACTERIA

One-celled organisms that may be either harmless or harmful to the body.

BASAL METABOLIC RATE

The rate at which our bodies burn calories for energy production while at rest.

BETA CAROTENE

A member of the carotenoid family. The pro-vitamin or building block the body uses to make vitamin A.

BIOFLAVONOIDS

A naturally occurring group of micronutrients associated with vitamin C and found in citrus fruit.

C

CALCIFICATION

Process by which organic tissue becomes hardened by a deposit of calcium salts. Normally occurs in the formation of bones and teeth.

CALORIE

A measure of a unit of heat or energy. In food, the energy value.

CAPILLARY

A minute, thin-walled blood vessel.

CARBOHYDRATES

Organic molecules of carbon, hydrogen and oxygen. A primary energy source to animals. Includes such common constituents as starch, cellulose, glucose and sugar.

CARCINOGENIC

Cancer producing.

CAROTENE

A member of the carotenoid family. A natural plant-produced orange pigment that exists in several forms: alpha, beta and gamma carotene are provitamins that may be converted into vitamin A in the body.

CAROTENOID

A group of naturally occurring food nutrients that includes carotenes, beta-carotene and xanthophylls.

CATABOLISM

The aspect of metabolism which converts nutrients or complex substances in living cells into simpler compounds, often with the release of energy. May also require energy.

CELL

The smallest structural unit of living material.

CELLULOSE

One of 5 types of fibre found in plants. A non-digestible, non-caloric carbohydrate when consumed by man.

CELLULAR

Having to do with activity or function at the individual cell level.

**CENTRAL NERVOUS SYSTEM**

The brain and spinal cord.

CHAIN OF LIFE

6 dietary factors required for optimum nutrition : 1)vitamins, 2)minerals, 3)enzymes, 4)protein, 5)lipids and sterols, and 6)carbohydrates.

CHOLESTEROL

A fat-like, waxy substance found in all animals fats, bile, skin, blood and brain tissue. Too much cholesterol can plug up arteries and often lead to heart disease. Has 3 primary forms of being transported in human blood; HDL-High Density Lipoprotein, LDL-Low Density Lipoprotein and VLDL-Very Low Density Lipoprotein.

CHOLINE

A member of the B-vitamin family present in lecithin as phosphatidyl choline.

CHYME

The thick, grayish, semiliquid mass into which food is converted by gastric digestion in the stomach.

CIRCULATION

The 4th step in the 6 stages of nutrition. The body's transport system for cellular nutrients and waste.

CIRCULATORY SYSTEM

The means of transportation of fluids within the body (eg. blood is transported by the veins, arteries and heart).

COAGULATION

The process of clotting in the blood.

COBALAMIN

vitamin B12.

COENZYME

An assistant or helper, usually a vitamin or mineral, which is necessary for the enzyme to do its work.

COLD PRESS

To use pressure without heat; a method used to extract certain oils from foods, helps preserve nutrient content.

COLLAGEN

The main organic constituent of connective tissue and of the organic substance of bones and cartilage.

COLON

Large organ at the end of the intestinal tract where the elimination process starts.

COMPOUND

Made up of two or more parts.

CONGENITAL

Existing at or before birth.

CYTOPLASM

The protoplasm of a cell outside the nucleus.

D**DEFICIENCY**

The lack of a specific nutrient or nutrients.

DEHYDRATION

The abnormal depletion of body fluids from tissues; the condition that results from undue loss of water or inadequate water intake.

DETOXIFICATION

Reduction of the toxic or poisonous properties of a

substance (removal or elimination of a toxic substance).

DEXTROSE

A sugar found in plants and animals and in the human blood; glucose.

DHA

Abbreviation for Docosahexaenoid Acid, an omega-3 fatty acid found primarily in the oil of certain fish.

DIET

All the food and fluids we consume each day, good or bad.

DIGESTION

The processes by which foods are broken down in the digestive system so nutrients can be absorbed.

DNA

Abbreviation for "deoxyribonucleic acid"; nucleic acid present in chromosomes in nuclei of cells; chemical basis of heredity and carrier of genetic information.

DOCOSAHEXAENOIC ACID

See DHA.

E**EIKOSAPENTAEN ACID**

See EPA.

ELIMINATION

The 6th and final stage of nutrition. The means by which the body rids itself of the waste products of metabolism.

EMULSION

A finely divided mixture or suspension of two liquids not mutually soluble; ie. oil in water.

ENDOCRINE GLANDS

A system of ductless glands throughout the body that secrete hormones directly to the bloodstream.

ENTERIC COATING

A special coating designed to "break up" in the digestive system at the desired point of nutrient delivery.

ENVIRONMENT

All the physical, social, and cultural factors and conditions influencing the existence or development of an organism or assemblage of organisms.

ENZYME

A specialised protein formed in living cells which brings about chemical changes.

EPA

Abbreviation for Eicosapentaenoic Acid, an omega-3 fatty acid found primarily in the oils of certain fish.

ESSENTIAL FATTY ACIDS

Fatty acids which the body requires and cannot manufacture; must be supplied by the diet.

ESTERS

Compounds formed by the combination of an organic acid with alcohol.

EXCRETION

The process of eliminating waste products from the body.

F**FAO**

Food and Agriculture Organisation of the United Nations, headquarters in Rome, Italy.

FAT

Essential for concentrated energy storage. It's also necessary for the absorption and transport of fat-soluble nutrients within the body.

FAT-SOLUBLE VITAMIN

Vitamin able to dissolve in fats or oils, usually found in fatty tissues of animals (vitamins A, D, E and K).

FATTY ACIDS

The basic components of triglycerides, of which fats are primarily comprised.

FIBRE

A non-digestible, non-caloric carbohydrate consisting of the cellular matrix of plants.

FIBRIN

Protein formed by action of thrombin and fibrogen; basis for blood clotting.

FOLIC ACID

A member of the B-vitamin family.

FRUCTOSE

A natural fruit and sugar found abundantly in ripe fruits and honeys.

G
GASTROINTESTINAL

Pertaining to the stomach and intestine.

GLUCOSE

The simple sugar (a carbohydrate) which can be absorbed and can be manufactured by the body; blood sugar.

GLYCEMIC EDGE

The ability of the simple sugar fructose to provide readily available energy without causing excessive insulin production which can result in hypoglycemia.

GLYCOGEN

Form in which energy is stored in the body. Storage form of glucose.

GUMS

One of the "soluble" dietary fibres primarily produced and secreted by plant cells.

H
HAEMOGLOBIN

The iron-containing pigment of red blood cells.

HERB

A plant or plant part valued for its medicinal, savoury or aromatic qualities.

HESPERIDIN

A member of the "vitamin P" family and believed to prevent capillary fragility. Found in some natural vitamin C containing fruits or vegetables.

HORMONE

A chemical substance that is secreted into body fluids and transported to another organ where it produces a specific effect.

HYDROCHLORIC ACID

An acid that is a normal part of gastric juice.

HYDROGENATION

The process of introducing hydrogen into a compound, as when oils are hydrogenated to produce solid fats.

HYPERVITAMINOSIS

A condition caused by an excess intake of a vitamin or vitamins.

I
IMMUNE SYSTEM

The body's natural defence system against diseases.

INFECTION

A condition resulting from the invasion of tissue by harmful bacteria or virus.

INFLAMMATION

The reaction of tissue to any type of injury.

INORGANIC

Occurring independently of living things.

I.U. (International units)

A unit of activity measure applied to a product that conforms to international standards (vitamins A, D, and E).

L
LACTO-VEGETARIAN

One who consumes no animal products except milk.

LECITHIN

A fatty substance found in blood, milk, egg yolk, soy beans, and certain vegetables. Widely used as an emulsifier and as an aid in the assimilation of fats. Known for its lipotropic properties and content of phosphatidyl choline.

LEGUMES

Plants having seed-containing pods that are used as foods.

LIGNIN

One of the insoluble fibres obtained primarily from cereals and fruits.

LIPID

A fat or fat-like substance vital to the diet and important to cellular activity.

LYMPH

A clear, alkaline body fluid found in the lymph glands and tissue spaces.

LYCOPENE

Carotenoid are responsible for the red in tomatoes. The most efficient carotenoid that helps neutralize free radicals.

M
MALNUTRITION

The condition of a person who does not receive a proper proportion of all essential nutrients.

MEGADOSE

Term used to describe massive quantities of a specific nutrient when given for therapeutic purposes.

METABOLISM

The chemical changes in living cells by which energy is produced and new material is assimilated for the repair and replacement of tissues. The conversion of large mole-



cules into smaller ones and smaller ones into larger ones. The sum of the changes that occur.

MINERAL

Inorganic material found in the earth's crust.

N

NERVOUS SYSTEM

A network of nerve cells, brain and spinal cord which regulates and coordinates body activities.

NIACIN

A member of the B-vitamin family. Vitamin B3.

NUTRIENT

A substance needed by a living thing to maintain life, health and reproduction.

O

ORGANIC

Being composed of or containing matter of plant or animal origin. Something that is or was alive.

OSTEOMALACIA

Softening of bone tissue due to a lack of calcification.

Usually caused by a deficiency of vitamin D.

OSTEOPOROSIS

A degenerative disease of the bone caused by inadequate calcium intake, absorption or deposition. A reduction in the quantity of bone material.

OVO-VEGETARIAN

One who consumes no animal products except eggs.

OXIDATION

The chemical process by which a substance combines with oxygen, resulting in a change to another form and usually accompanied by the release of energy. Burning of wood, gas, etc, is a form of oxidation. Metabolic energy production is oxidation.

P

PABA

Paraamino benzoic acid. A member of the B-vitamin family.

PECTIN

One of the "soluble" dietary fibres that acts as a binding agent for the fibre structure within plants.

PLACEBO

An inactive substance used in place of the active substance; often used as a control in experiments.

PLATELET

A small, irregularly shaped disk that plays an important role in blood coagulation.

POLYUNSATURATED

Includes safflower oil, sunflower oil, corn oil, soybean oil. Fats that are usually liquid at room temperature. Fats that contain two or more unsaturated chemical bonds.

PRESERVATIVES

Substances added to medicines, foods or other products to prevent spoilage.

PROTEIN - Complex organic molecules made of repeating amino acids. Serves as a source of amino acids in the diet. Essential for the formation of tissue, enzymes, hormones and essentially all life functions.

PROTEIN SPARING - A dietary balance that precludes protein being used as an energy source, sparing it for tissue regeneration and biosynthesis.

PROTOPLASM - A thick, mucus-like substance that constitutes the physical basis of all living cells.

PYRIDOXINE - A member of the B-vitamin family. Vitamin B6.

Q

QUADRI EXTRACT

See Tre-en-en.

R

R.D.A

An abbreviation for Recommended Dietary Allowance. The amount of nutrients suggested as being necessary to maintain life processes and prevent the appearance of symptoms of deficiency diseases.

RED BLOOD CELL

Cell that contains haemoglobin (which make it red) and carry oxygen to the tissues.

RESPIRATORY SYSTEM

The system of breathing apparatus including the nose, pharynx, larynx, tonsils, bronchi and lungs.

RETINOL

The active form of vitamin-A.

RIBOFLAVIN

A member of the B-vitamin family. Vitamin B2.

RNA

The abbreviation for "ribonucleic acid", which carries genetic information from the nucleus to cytoplasmic sites in the cell.

ROSE HIPS

The fruit of the rose, which consists of a fleshy, bulb like receptacle located at the base of the rose. Rich in vitamin C.

ROUGHAGE

A coarse, bulky food, high in fibre, which is nondigestible and stimulates bowel movement; eg. cellulose.

S

SATURATED FATS

Those fats that are usually solid at room temperature. Found primarily in animal-source foods. Associated directly with high blood cholesterol.

SUCROSE

Commonly known as cane, beet or table sugar.

SUGAR

See sucrose.

**SUPPLEMENT**

Nutrient taken in addition to regular food in one of many forms, such as tablets, capsules, powder or liquid.

SYMPTOM

Something that indicates the presence of a body disorder.

SYNERGIST

Something that enhances the effectiveness of another.

SYNTHESIS

Process of building up, producing.

SYNTHETIC

Something that is produced by the combination of 2 or more different elements.

T**THIAMINE**

A member of the B-vitamin family. Vitamin B1.

TISSUE RESPIRATION

The process of using oxygen and other substances to build cells and release energy.

TOCOPHEROL

Vitamin E, in forms such as alpha, beta, gamma and delta.

TOCOTRIENOL

Secondary members of the tocopherol (vitamin-E) family; ie. Alpha, Beta, Gamma or Delta Tocotrienol.

TOXICITY

Poisonous effect produced when a person ingests an amount of a substance that is above his or her level of tolerance.

TRACE MINERAL

A mineral present in minute quantities.

TRE-EN-EN (QUADRI EXTRACT)

A unique blend of extracts of whole wheat, rice bran and soybeans.

U**UNSATURATED FATS**

Those fats that are liquid at room temperature. Found mainly in vegetable food.

V**VEGETARIAN**

One who consumes no animal products.

VITAMIN

An organic substance found in foods which performs specific and vital functions in the cells and tissues of the body. Not produced by the body and must, therefore, come from an external source.

W**WATER BALANCE**

The ratio between the water absorbed by the body and that which is excreted.

WATER SOLUBLE VITAMINS

Vitamins able to dissolve in water. Cannot be stored in the body and must be supplied on a regular basis.

WHITE BLOOD CELL

Cell that does not contain haemoglobin and which helps defend the body against disease.

W.H.O.

World Health Organisation.