Biotransformation Formula



864mg

852mg

1,050mg

1,727mg 874mg

1,165mg

815mg

771mg

158mg

877mg

220mg

204mg

501mg

1,554 mg

1,747mg

4,059 mg

500 mg

2,473mg 1,085mg

Glycine

Alanine

Leucine

Serine

Isoleucine

Threonine

Aspartic Acid

Phenylalanine

Tryptophan

Methionine

Proline

Cystine

Lysine

Histidine

Arginine

Glutamine Taurine

Tyrosine

Valine











15™ Vanilla Delight Nutrition Info- additional flavors on pg. 77 Typical Amino Acid Profile:

Serving Size: 2 Scoops (45 g) Servings Per Container: 14 Amount Per Serving Calories From Fat 30 Calories 160 % Daily Value* Total Fat 3g 5% Saturated Fat 1.5g 7% Cholesterol Omg 0% Sodium 200mg 8% Potassium 200mg 6% **Total Carbohydrate 15g** 5% Dietary Fiber 4g 14% Sugars 8g Protein 21g Vitamin A 0% Calcium 2% Vitamin C 2% . Iron 0% * Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs: Calories: 2,000 2,500 Total Fat Less than 65g 80g Saturated Fat Less than 20g 25g Cholesterol 300mg Less than 300mg

Less than

Fat 9 • Carbohydrate 4 • Protein 4

2,400mg

3,500mg

300g

25g

2,400mg

3,500mg

375g

30g

(XYMOGEN®'s proprietary blend of Rice Protein Concentrate and Pea Protein Isolate, Aminogen®, L-Glutamine, Glycine, and Taurine), Evaporated Cane Juice, Fiber Complex (Inulin (from Chicory), Beta Glucans, and Oat Fiber), Sunflower Oil, IgG 2000 DF™, Natural Flavors, Medium Chain Triglycerides, Arabinogalactan, Broccoli Seed Extract (SGS™). Sodium Chloride, Xanthan Gum, Guar Gum, Potassium Citrate, Sodium Citrate, and Stevia Leaf Extract.

INGREDIENTS: VegaPro™

Supports Improved Body Composition

Supports Immune Function

Supports Anti-Inflammatory Response

Supports Intestinal Health

Supports Detoxification

XYMOGEN®'s i5™ represents an innovative, unparalleled approach to biotransformation for the patient whose health is constantly challenged. This clinically validated, all natural, fructose-free formula comprises ingredients that promote overall gastrointestinal health and optimize the body's ability to detoxify harmful substances and respond to inflammation. XYMOGEN's i5, which features patented and proprietary ingredients, provides 21 grams of XYMOGEN's new VegaPro™ all natural, vegetable-based protein, along with XYMOGEN's IgG 2000 DF™ and OncoPlex™ (SGS™ - sulforaphane glucosinolate) in clinically relevant doses.

Sodium

Potassium

Total Carbohydrate

Calories per gram:

Dietary Fiber

For optimal results, use in conjunction with a Modified Elimination diet or as directed by your healthcare professional.

VegaPro™: Proteins for functional foods need to possess a good basic nutritional quality. This includes a high protein level, a well-balanced Amino Acid profile, and good digestibility. XYMOGEN's proprietary VegaPro meets these guidelines. In addition, pea and rice proteins are free of gluten and lactose, are generally considered hypoallergenic foods, and have a low level of flatulent sugars, negating the concern of intestinal gas. The blend also contains non-GMO chicory, a source of soluble fiber.

The pea protein isolate in VegaPro™ is non-GMO and naturally obtained by simple water extraction, keeping all the nutritional qualities intact. It has a protein content of 90%, excellent digestibility (98%), and a well-balanced amino-acid profile, including a particularly high content of lysine, arginine, and branched-chain amino acids. The combination of rice protein and pea protein achieves an Amino Acid Score of 100%.

Arabinogalactan, present in many plants, is a non-digestible, soluble dietary fiber containing mainly the monosaccharides, galactose and arabinose. The GRASdesignated source of arabinogalactan in 15 is the Larch tree. In addition to involvement in cellular communication and possession of immuno-stimulatory properties, arabinogalactan minimizes ammonia synthesis and absorption, enhances production of short-chain fatty acids, and favorably alters the gut microflora. Arabinogalactan is considered a prebiotic.

Directions: Blend, shake or briskly stir 2 level scoops (45 grams) of i5™ into 10-12 oz chilled water or as directed by your healthcare practitioner. Adjust amount of water according to thickness desired.

CAUTION: Consult with healthcare practitioner before use. Keep out of reach of children.

STORAGE: Keep tightly closed in a cool, dry place.

DOES NOT CONTAIN: Wheat, gluten, corn protein, yeast or dairy products, artificial sweeteners, colors, or preservatives. i5™ is available in Creamy Chocolate and Vanilla Delight



i5™ Contains:

IgG 2000DF™	2.5 g
Sgs (OncoPLEXTM)	30 mg
Arabinogalactan	1000 mg

Produced under U.S. Patents 5,725,895; 5,968,505; 5,968,567; 6,277,122 and 6,242,018 licensed from Brassica Protection Products LLC; SGS™ is a trademark of Brassica Protection Products

LLC. IgG 2000 DF™ source is Patent Pending.

IgG 2000 DF™

Proprietary Immunoglobulin Concentrate High Potency IgG





Directions: Take 2 capsules twice daily or as directed by your healthcare practitioner.

Serving Size: 4 Capsules
Servings Per Container: 30

Amount Per Serving %DV*

IgG 2000 DF™
(serum-derived immunoglobulin concentrate)

Immunoglobulin G (IgG) 1000 mg **

* Daily Value
** Daily Value not established.

Other Ingredients: HPMC (capsule), stearic acid, microcrystalline cellulose and magnesium stearate.



Directions: Take one tablespoon (5 g) mixed in unchilled water daily, or as directed by your healthcare practitioner.

IgG 2000™ 150g Powder

Supplement Facts		
Serving Size: 1 Tablespoon (5g) Servings Per Container: 30		
	Amount Per Serving	%Daily Value
IgG 2000 DF™ (serum-derived immunoglobulin concentra	5,000 mg	**
Immunoglobulin G (IgG)	2,000 mg	**
Other Immunoglobulins (IgA, IgM, IgE, IgI	0) 600 mg	**
Also, typically provides:		
Transferrins	375 mg	**
IGF-1	16.4 mcg	**
TGF8-1	.54 mcg	**
Daily Value not established.		

Other Ingredients: Serum-derived immunoglobulin concentrate

- Supports immune function (including during chemotherapy or strenuous physical activity)
- Binds and neutralizes major foreign microbes
- Reduces G.I. inflammation / lessens gut permeability
- Supports lean muscle mass
- Reduces cholesterol

A breakthrough in immunoglobulin supplementation, IgG 2000 DFTM is a highly concentrated, non-dairy source of serum-derived immunoglobulin antibodies and immuno-proteins. It possesses three times more IgG and total immunoglobulins than colostrum and has twice as much cysteine, an important amino acid for maintaining glutathione levels. IgG-2000 DFTM delivers fifteen times the level of transferrin and lactoferrin provided by colostrum, alone. One daily dose of IgG 2000 DFTM supplies more than 2,000 mg of IgG. These and other immune proteins contained in IgG 2000 DFTM have been shown to demonstrate enhancement of immune function by directly boosting immunoglobulin levels in the gastrointestinal tract. IgG-2000 DFTM also contains transferrin and the immunomodulating cytokine TGF6-1.

The basic functions of immunoglobulins are the neutralization and opsonization of foreign microbes. Unlike antibiotics, immunoglobulins enable the immune system to differentiate between foreign microbes and the body's healthy microflora.

The transfer of immunity through oral supplementation is a natural, logical, and effective process for obtaining immunity. In adults, the concentration of immunoglobulin in the digestive tract and on mucosal surfaces predicts the risk of infection.

Almost 80% of all foreign microbes enter the body through mucosal tissue or stay localized on mucosal surfaces. Each day, the G.I. tract immune cells produce roughly five grams of immunoglobulins. However, secretion is significantly reduced during times of stress. Supplemental immunoglobulins act first in the intestinal tract to eliminate or inhibit the proliferation of disease-causing organisms and toxins. This reduces the stimulation of the immune response in the gut so that the body's resources can be redirected toward challenges elsewhere.

Many of the studies on immunoglobulins involving immune challenge have involved animals, due to the expense and difficulty of using human subjects. Studies have shown that oral immuno-protein supplementation restores appetite, reduces inflammation, and promotes improved protein metabolism under immunological stress. Oral supplementation has been shown to preserve gut wall integrity and provide intestinal humoral immunity.

Transferrin, a family of iron-binding, bacteriostatic proteins, regulates and reduces the amount of free iron available to the invading pathogen.

Growth Factors, in proper combination, are thought to play an important role in digestive health and nutrient utilization. The growth factors in IgG 2000 DF[™] are similar to the level and balance found in healthy individuals. TGFB-1 and IGG-I are involved in the restitution of cells damaged in the digestive tract. An increase in the level of IGF-I in serum has been associated with increases in lean tissue mass and greater protein efficiency. TGFB-1 is known to stimulate the secretion of IgA.

CAUTION: Consult your healthcare practitioner before use. Keep out of reach of children.

STORAGE: Keep tightly closed in a cool, dry place.

DOES NOT CONTAIN: Corn protein, yeast, soy, dairy products, artificial colors, sweeteners, or preservatives. Gluten-containing ingredients (including wheat) are not added to this formula.

Available in 150 gram powder, 450 gram powder, 120 capsules & 360 capsules



EXCLUSIVE PROFESSIONAL FORMULAS



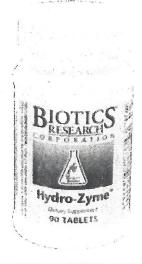
Supplement FAQ's

Biotics Research Corporation • 6801 Biotics Research Drive • Rosenberg TX 77471 (800) 231 - 5777 • Email: biotics@bioticsresearch.com

Hydrozyme™

Why you may need Hydrozyme. Good health depends on adequate digestion. From a nutritional point of view, the level or quality of health can be traced to the level of digestive functioning. The stomach produces a variety of substances that promote digestion and assimilation; gastric juice contains hydrochloric acid and pepsinogens - precursors of the family of proteolytic enzymes called pepsins. Parietal cells produce both stomach acid and intrinsic factor, a protein required to bind vitamin B12 prior to its absorption in the small intestine. Not to solely single out vitamin B12, inadequate production of hydrochloric acid can result in impaired uptake or deficiency of all B-vitamins, potentially leading to muscle weakness and neurological deficit. Hydrochloric acid (HCI) is a strong mineral acid which functions to maintain acidic gastric pH levels (between 1.5 and 2.5). This acidity serves several roles including the fact that low pH kills bacteria in food such as salmonella and e-coli, and is key to the digestion of proteins, making them more accessible to proteolytic degradation. While impaired digestion may result from mechanical means, such as improperly chewed food, it is far more likely to be the result of poor diet, nutritional deficiency, as a direct result of antacids and similar medications, or inadequate HCI production. Compounding this decline, the incidence of low stomach acid increases with age, with studies estimating it impacting 30-60% of people over the age of 50. Among other things, functional deficits of HCL have been associated with gas, bloating, indigestion, malodorous breath and sweat excretions, anemias resulting from nutrient deficiency, leaky gut, food allergies, joint inflammation, hair loss, and environmental sensitivities.

Why your Healthcare Professional recommends Hydrozyme™ from Biotics Research Corporation. Hydrozyme™ is yet another unique product brought to you by Biotics Research Corporation. Hydrozyme™ was specifically formulated to support optimal digestive functioning. Each tablet of Hydrozyme™ supplies a balanced mixture of vitamin B6, Betaine Hydrochloride, Glutamic acid, Ammonium Chloride, Pancreatin 4x, and Pepsin in our proprietary biologically active vegetable culture tableting base. The low cost and simple ease of use of Hydrozyme™ makes it a natural choice for healthcare professionals to turn to when optimal digestive function is required. As always, you can count on Biotics Research Corporation to offer superior nutritional products supplying "The Best of Science and Nature".



	Amount Per Serving	% Daily Value
Vitamin Be (as pyridoxine hydrochloride)	2 mg	100%
Betaine Hydrochloride	150 mg	•
Glutamic Acid (as L-glutamic acid hydrochloride)	50 mg	
Ammonium Chloride	35 mg	
Pancreatin 4X (from porcine)	10 mg	,
Pepsin (1:10,000)	10 mg	

Other ingredients: Vegetable culture (specially grown, biologically active containing naturally associated andfor organically bound phytochemicals including polyphenolic compounds with SOD and catalase, delhydrated at low temperature to preserve associated enzyme factors); collulose, stearic acid (vegetable source), modified cellulose gum, silica and food glaze.

RECOMMENDATION: One (1) tablet with each meal as a dietary supplement or as otherwise directed by a healthcare professional.

KEEP OUT OF REACH OF CHILDREN
Store in a cool, dry area.
Sealed with an imprinted safety seal for your protection.

NDC# 55146-01262 Rev. 5/08

Drainage

Formulated for Liver, Kidney, and Colon Functions and for Symptoms Associated with Toxic Conditions



Available in 1 fl oz bottle

Detailed Description

Drainage combines homeopathic liver "drainers" with homeopathic remedies that are known to support excretory function. Drainage focuses on the liver, kidney, and colon functions while addressing symptoms associated with toxicity.

According to the Materia Medica, the following remedies in Drainage may be administered for the following conditions:

Benzoicum acidum: Marked action on metabolism; kidney insufficiency; excess of uric acid.

Berberis vulgaris: Inflammation of kidneys; radiating pains; burning soreness in kidney region; affects liver, promotes flow of bile; cases where renal or vesicle symptoms are prominent.

Bryonia: Mucous membranes are all dry; liver region swollen, sore, tensive; biliousness; irritability, nausea, and faintness; polycrest (commonly used) remedy; liver disorders.

Cantharis: Violent inflammations; raw, burning pain; dysuria (painful urination); difficulty swallowing liquids; tenacious mucous.

Carduus benedictus: Sensation of contraction which occurs in many parts; gastrointestinal disturbances; affections (maladies) of the eyes.

Carduus marianus: Liver and spleen disorders; swelling of gallbladder with tenderness; hyperemia of liver with jaundice; cirrhosis; cloudy urine, golden colored; despondency, forgetfulness; apathy.

Ceanothus americanus: Affinity for spleen; splenitis (enlarged spleen); deepseated or cutting pains; pain in liver and back; dull pain in liver immediately after dinner.

Chelidonium majus: Liver remedy; pain under right scapula; liver enlarged, tender; lethargy; headache; fermentation and sluggish bowels.

Chionanthus virginica: Prominent liver remedy; periodic sick headaches; jaundice; pancreatic diseases; enlarged spleen.

Cinchona officinalis: Circulation; liver and spleen swollen, enlarged; jaundice; gas and bloating of abdomen; irritable, sensitive, and touchy; capricious appetite.

Cynara scolymus: Hepatic and bile drainage in all cases of hepatic insufficiency with stones or rheumatic disorders.

Dioscorea villosa: Acts on nerves, abdominal organs, sciatic nerve, and spinal cord; pains are unbearable, sharp, cutting, twisting, griping, and grinding; gallstones; kidney stones; colic; abdomen distended; atypical body odors.

Dolichos pruriens: Intense itching without eruption; bloated abdomen; a right-sided remedy (i.e., addresses symptoms that may be worse on the right side of the body) for pronounced liver and skin symptoms.

Iris versicolor: Disorders of the pancreas; migraine and sick headaches; increases flow of bile; bilious attacks.

Juniperus communis: Allergies; coughs; catarrhal inflammation of kidneys; dropsy with suppression of urine; older persons with poor digestion; kidney hyperemia.

Nux vomica: Toxic liver; irritable nervous system; digestive disturbances; biliousness; liver engorged, with stitching pains and soreness; irritable bladder.

Ptelea trifoliata: Stomach and liver symptoms associated with pain in the limbs; edema of feet and legs; stomach pain.

Solidago virgaurea: Kidneys sensitive to pressure; urinary disturbances; feelings of weakness.

Taraxacum officinale: Bitter, sour taste; impatient and irritable; copious and frequent urination; headaches from liver disturbances; gallstones.

Uricum acidum: Most useful in cases where deposits persist, it stirs them up and helps to eliminate them; gout; lipoma.

Drainage

 $\begin{tabular}{ll} \textbf{DIRECTIONS:} Ages 12 and up, take 6 drops by mouth (ages 0 to 11, give 3 drops) at bedtime, or use as directed by your healthcare practitioner. \\ \end{tabular}$

ACTIVE INGREDIENTS: Carduus mar. 3x, Cynara 3x, Solidago 3x, Taraxacum 3x, Benzoicum ac. 15x, Berber. vulg. 15x, Bryonia 15x, Cantharis 15x, Carduus ben. 15x, Ceanothus 15x, Chelidonium maj. 15x, Chionanthus 15x, Cinchona 15x, Dioscorea 15x, Dolichos 15x, Iris vers. 15x, Juniperus com. 15x, Nux vom. 15x, Ptelea 15x, Taraxacum 15x, Uricum ac. 15x.

INACTIVE INGREDIENTS: USP purified water; USP gluten-free, non-GMO, organic cane alcohol 20%.

WARNING: Keep out of reach of children. Do not use if tamper-evident seal is broken or missing. If symptoms worsen or persist for more than a few days, consult a doctor. If pregnant or breast-feeding, ask a doctor before use.

Candicidal™

Natural Support for GI Balance*



Available in 60 capsules

Clinical Applications

- » Supports Healthy Microbial Balance*
- » Provides Nutrients That Support Antioxidant Activity*
- » Supports Gastrointestinal Health*

Candicidal[™] offers a complementary blend of herbs, essential oils, and sodium caprylate, a naturally occurring fatty acid. Candicidal is formulated to support the body's immune system as well as a healthy gastrointestinal (GI) flora. This comprehensive formula contains Origanox[™] WS—a GRAS, phenolic-rich ingredient extracted from the edible herb Origanum vulgare—as well as herbs to support digestion and a healthy GI system.*

Discussion

Candicidal[™] offers a functional approach to achieving and maintaining balance in gastrointestinal flora, a primary component of GI health.^[1] The complementary blend of ingredients is formulated to support antioxidant activity, microbial balance, and gastrointestinal function.*

Origanox^{™†}WS The water-soluble form of Origanox (Origanox WS) is a natural plant extract from the edible herb *Origanum vulgare* (oregano). Essential oils and phytonutrients from oregano, including rosmarinic acid and quercetin, have been studied closely for their role in supporting antioxidant mechanisms and healthy microbial balance in the body.^[2,3] The ORAC (oxygen radical absorbance capacity) value of Origanox is 5,800 units per gram.^[4] The ORAC scale, developed by scientists at the National Institute of Aging, is a measure of the scavenging capacity of antioxidants against free radicals that cause oxidative stress.*

Sodium Caprylate, a derivative of caprylic acid, is a medium-chain fatty acid with a long research history. Research indicates that it has the potential to support healthy microbial balance in the intestines without adversely affecting beneficial GI flora. Studies also suggest that it may have direct effects on cellular integrity and growth, further supporting gastrointestinal health. *[5,6]

Ginger (*Zingiber officinale*) plays an important role in Candicidal, offering support for gastrointestinal, immune, and antioxidant systems. [7-9] Ginger has been used for centuries for support of normal gastric function and activity.*

Turmeric Extract Turmeric (*Curcuma longa*) has been used historically to support normal muscular contraction/relaxation and digestion. This ancient herb is rich in curcumin, which has been researched considerably for its protective effects, [10,11] as well as its ability to support healthy cytokine balance. [12,13] The addition of turmeric to Candicidal provides additional support for GI function and balance.*

Olive Leaf Extract from the traditional medicinal plant *Olea europaea* is known for its array of healthful attributes, including support for immune and antioxidant activities. While studying the attributes of olive leaf, scientists in the late 19th century isolated oleuropein, ^[14] which is converted in the body to the active component elenolic acid. By the late 1960s, research focused on the role of both oleuropein and elenolic acid. Oleuropein and rutin in olive leaf may contribute to maintaining healthy gastrointestinal microflora. ^[15] Olive leaf extract in Candicidal is standardized to 20% oleuropein, while less concentrated formulas are standardized to as little as 6% oleuropein.*

Candicidal is a comprehensive formula designed to support GI tract health and microflora balance while concurrently supporting antioxidant systems and tissue health.*

Candicidal™ Supplement Facts

Serving Size: 2 Capsules		
	Amount Per Serving	%Daily Value
Oregano Extract (<i>Origanum vulgare</i>)(herb) (≥23% phenolics) (Origanox [™] WS)	300 mg	**
Sodium Caprylate	300 mg	**
Ginger (Zingiber officinale)(rhizome)	300 mg	**
Turmeric Extract (Curcuma longa)(root)(95% curcuminoids)	200 mg	**
Olive Extract (Olea europaea)(leaf)(20% oleuropein)	100 mg	**
** Daily Value not established.		

Other Ingredients: HPMC (capsule), dicalcium phosphate dihydrate, stearic acid, calcium silicate, magnesium stearate, silica, and medium-chain triglyceride oil.
Origanox™ is a trademark of Barrington Nutritionals.

DIRECTIONS: Take one to two capsules, once daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged. The labeling on this product does not comply with California's Proposition 65. Therefore, this product may not be sold in California.

CAUTIONS: Do not use if you are pregnant or lactating.

DOES NOT CONTAIN: Wheat, gluten, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

STORAGE: Keep closed in a cool, dry place out of reach of children.



References:

- Pizzorno LU, Pizzorno JE, Murray MT. Natural Medicine Instructions for Patients. London, England: Churchill Livingstone; 2002.
- Tampieri MP, Galuppi R, Macchioni F, et al. The inhibition of Candida albicans by selected essential oils and their major components. *Mycopathologia*. 2005 Apr;159(3):339-45. [PMID: 15883716]
- Chun SS, Vattem DA, Lin YT, et al. Phenolic antioxidants from clonal oregano (Origanum vulgare) with antimicrobial activity against Helicobacter pylori. Process Biochem. 2005;40(2):809-16.
- 4. www.origanox.info. Accessed August 9, 2011.
- Adams JN, Painter BG, Payne WJ. Effects of Sodium Caprylate on Candida Albicans. I. Influence of Concentration on Ultrastructure. *J Bacteriol*. 1963 Sep;86:548-57. [PMID: 14066435]
- Payne WJ, Bannister ER. Effects of Sodium Caprylate on Candida Albicans. II. Influence of Various Concentrations on Biochemical Changes. *J Bacteriol*. 1963 Sep;86:558-62. [PMID: 14066436]
- Lantz RC, Chen GJ, Sarihan M, et al. The effect of extracts from ginger rhizome on inflammatory mediator production. *Phytomedicine*. 2007 Feb;14(2-3):123-8. [PMID: 16709450]
- Ernst E, Pittler MH. Efficacy of ginger for nausea and vomiting: a systematic review of randomized clinical trials. Br J Anaesth. 2000 Mar;84(3):367-71. [PMID: 10793599]
- Ali BH, Blunden G, Tanira MO, Nemmar A. Some phytochemical, pharmacological and toxicological properties of ginger (Zingiber officinale Roscoe): a review of recent research. Food Chem Toxicol. 2008 Feb;46(2):409-20. [PMID: 17950516]
- Neelofar K, Shreaz S, Rimple B, et al. Curcumin as a promising anticandidal of clinical interest. Can J Microbiol. 2011 Mar;57(3):204-10. [PMID: 21358761]
- Martins CV, da Silva DL, Neres AT, et al. Curcumin as a promising antifungal of clinical interest. *J Antimicrob Chemother*. 2009 Feb;63(2):337-9. [PMID: 19038979]
- Jurenka JS. Anti-inflammatory properties of curcumin, a major constituent of Curcuma longa: a review of preclinical and clinical research. Altern Med Rev. 2009 Jun;14(2):141-53. [PMID: 19594223]
- Jagetia GC, Aggarwal BB. "Spicing up" of the immune system by curcumin. J Clin Immunol. 2007 Jan;27(1):19-35. [PMID: 17211725]
- Ritchason J. Olive Leaf Extract. Salt Lake City, UT: Woodland Publishing Incorporated; 2007.
- Pereira AP, Ferreira IC, Marcelino F, et al. Phenolic compounds and antimicrobial activity of olive (Olea europaea L. Cv. Cobrançosa) leaves. *Molecules*. 2007 May 26;12(5):1153-62. [PMID: 17873849]

Additional references available upon request

ProbioMax ENT™ and ProbioMax ENT™ for Kids

Probiotic for Ear, Nose, and Throat Health*



Available in 30 tablets

Discussion

The oral cavity is home to a plethora of naturally occurring bacteria. Some of these microorganisms are an important aspect of maintaining good health and serve as a first line of defense. *Streptococcus salivarius* is one of the most numerous of these "good" bacteria found in the mouths of healthy individuals. It is becoming more evident that a healthy balance of bacteria in the mouth and promoting the presence of specific strains of certain bacteria in it may be important for throat, nasopharyngeal, and middle ear health.*[1-4]

Strain ENT-12™ *S salivarius* ENT-12™ (also known as ATCC BAA-1 024 or DSM 13084), found in ProbioMax ENT and ProbioMax ENT for Kids, was discovered and isolated by renowned microbiologist Professor John Tagg at the University of Otago in New Zealand. Spurred by his own experiences as a youth, he was determined to find a natural and proactive way to help support throat health, especially in children. Dr. Tagg followed New Zealand school children for many years, analyzing their saliva samples and looking for differences. A breakthrough came when Dr. Tagg and his team isolated the unique ENT-12 strain of *S salivarius* from a healthy child who, over a six-year period, exhibited remarkable throat health. Work was then begun to develop this strain for use as an advanced probiotic in the wellness market. ENT-12 is an extremely safe yet powerful strain that has been deposited in culture collections.*

ENT-12 has been shown to adhere to cells of the oral cavity and populate therein. [4,8-10] Not only does this strain exert its benefits through the typical colonization or "power in numbers" method, but it also produces several bioactive peptides, including salivaricin A and salivaricin B, that support oral health. *[4,8,11,12]

Ear, Nose/Nasopharynx, and Throat Health ProbioMax ENT and ProbioMax ENT for Kids represent a new "bioprotic" approach; that is, using probiotics to enhance health in non-intestinal sites for specific applications. [8] ENT-12 promotes healthy levels of beneficial oral microorganisms, and thereby supports upper respiratory health. [9] Studies suggest that children with naturally occurring *S salivarius*

Clinical Applications

- » Promotes Oral Health*
- » Supports the Natural Immune Defenses of the Ears, Nose/ Nasopharynx, and Throat*
- » Supports Healthy Immune Function*
- » Naturally Promotes Fresh Breath*

ProbioMax ENT™ and ProbioMax ENT™ for Kids are chewable, strawberry-flavored probiotic formulas that activate in the oral cavity for support of ear, nose, and throat health and to naturallypromote fresh breath. As you chew, each tablet releases the ENT-12™ strain of Streptococcus salivarius, a beneficial bacterium that normally occurs in a healthy oral cavity. S salivarius adheres to cells in the cavity and positively affects the bacterial population and natural immune defenses therein. Once established, S salivarius ENT-12 also naturally counteracts the production of volatile sulfur compounds that can cause bad breath.*

ENT-12—like strains are better able to maintain healthy mouth and throat microbial populations. Preliminary studies performed in children and adults have shown that supplementation with ENT-12 has a statistically significant impact on throat, tonsil, and middle ear health. ^[4,8] In addition, preliminary in vitro and animal data from a 2012 study suggest that ENT-12 positively affects the presence of *Candida albicans* in the oral mucosa and may inhibit its attachment to denture acrylic resins.*^[13]

Fresh Breath The predominant microbiota on the tongue of subjects with and without bad breath differs. [14] When certain bacteria break down proteins on the tongue, volatile sulfur compounds (VSC) that cause bad breath are released. In a placebo-controlled trial, Burton et al showed that administration of the ENT-12 strain in 13 subjects resulted in a substantial decrease in VSC levels compared to controls. [15] The introduction of ENT-12 helps balance the microflora of the mouth because it competes with the sulfur-producing bacteria for space while leaving room for more good bacteria to flourish. [15-17] This method of supporting a microbial population that limits the activities of sulfur-producing bacteria gets to the source of bad breath. [15,16] Addressing bad breath at its source can provide longer-lasting results than methods that simply mask odors.*

For Best Results ProbioMax ENT or ProbioMax ENT for Kids tablets should be chewed slowly and thoroughly, ideally after the patient's oral hygiene routines (e.g., brushing, flossing, rinsing). Waiting until the tablet is completely dissolved before swallowing is optimal. The tablets do not contain cariogenic sugars or other ingredients that could negatively affect dental health.

Oral/Deniral Health

ProbioMax ENT™ Supplement Facts

Serving Size: 1 Tablet

	Amount Per Serving	%Daily Value
ENT-12™ (Streptococcus salivarius DSM 13084)	10 mg [†] (1 Billion CFU [‡])	**
** Dally Malya and addallahad		

Other Ingredients: Xylitol, natural strawberry flavor (no MSG), ascorbyl palmitate, microcrystalline cellulose, citric acid anhydrous, and silica. †Formulated with 20 mg (2 Billion CFU) at time of manufacture

[‡]Colony-Forming Units

DIRECTIONS: As a maintenance dose, after your bedtime oral hygiene routine chew one tablet slowly and completely before swallowing. During periods of increased need, chew up to five tablets per day in divided dose for 90 days, or as directed by your healthcare professional.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if foil is punctured.

DOES NOT CONTAIN: Wheat, gluten, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or preservatives.

STORAGE: No refrigeration necessary. Store in a cool, dry place out of reach of

ProbioMax ENT™ for Kids Supplement Facts

Serving Size: 1 Tablet

Amount Per Serving %Daily Value 10 mg[†] (1 Billion CFU‡

** Daily Value not established.

ENT-12™ (Streptococcus salivarius DSM 13084)

Other Ingredients: Xylitol, natural strawberry flavor (no MSG), ascorbyl palmitate, microcrystalline cellulose, citric acid anhydrous, and silica.

Formulated with 20 mg (2 Billion CFU) at time of manufacture

Colony-Forming Units

DIRECTIONS: As a maintenance dose, after your bedtime oral hygiene routine chew one tablet slowly and completely before swallowing. During periods of increased need, chew up to five tablets per day in divided dose for 90 days, or as directed by your healthcare professional.

Not recommended for children aged 4 or younger without the direct recommendation and supervision of a healthcare practitioner. This product should be administered by an adult. Pregnant or lactating women should consult their healthcare practitioner prior to use. Do not use if foil is punctured.

DOES NOT CONTAIN: Wheat, gluten, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or preservatives.

STORAGE: No refrigeration necessary. Store in a cool, dry place out of reach of children.

References

- Marchisio P, Claut L, Rognoni A, et al. Differences in nasopharyngeal bacterial flora in children with nonsevere recurrent acute otitis media and chronic otitis media with effusion: implications for management. Pediatr Infect Dis J. 2003 Mar;22(3):262-68. [PMID: 12634589]
- Tagg JR, Dierksen KP. Bacterial replacement therapy: adapting 'germ warfare' to infection prevention. *Trends Biotechnol*. 2003 May:21(5):217-23. [PMID:
- Wescombe PA, Hale JD, Heng NC, et al. Developing oral probiotics from Streptococcus salivarius. Future Microbiol. 2012 Dec;7(12):1355-71. [PMID:
- Di Pierro F. Donato G. Fomia F. et al. Preliminary pediatric clinical evaluation of the oral probiotic Streptococcus salivarius K12 in preventing recurrent pharyngitis and/or tonsillitis caused by Streptococcus pyogenes and recurrent acute otitis media. Int J Gen Med. 2012;5:991-97. [PMID: 23233809]
- Burton JP, Cowley S, Simon RR, et al. Evaluation of safety and human tolerance of the oral probiotic Streptococcus salivarius K12: a randomized, placebocontrolled, double-blind study. Food Chem Toxicol. 2011 Sep;49(9):2356-64.
- Guglielmetti S. Taverniti V. Minuzzo M. et al. Oral bacteria as potential probiotics for the pharyngeal mucosa. Appl Environ Microbiol. 2010 Jun;76(12):3948-58.[PMID: 20418429]
- Burton JP, Wescombe PA, Moore CJ, et al. Safety assessment of the oral cavity probiotic Streptococcus salivarius K12. Appl Environ Microbiol. 2006 Apr;72(4):3050-53. [PMID: 16598017]
- Di Pierro F, Adami T, Rapacioli G, et al. Clinical evaluation of the oral probiotic Streptococcus salivarius K12 in the prevention of recurrent pharyngitis and/or tonsillitis caused by Streptococcus pyogenes in adults. Expert Opin Biol Ther. 2013 Mar;13(3):339-43. [PMID: 23286823]
- Horz HP, Meinelt A, Houben B, et al. Distribution and persistence of probiotic Streptococcus salivarius K12 in the human oral cavity as determined by realtime quantitative polymerase chain reaction. Oral Microbiol Immunol. 2007 Apr;22(2):126-30. [PMID: 17311636]
- 10. Streptococcus salivarius K12 colonisation dose response. BLIS Technologies Ltd. June 9, 2009, Data on file.
- 11. Power DA, Burton JP, Chilcott CN, et al. Preliminary investigations of the colonisation of upper respiratory tract tissues of infants using a paediatric formulation of the oral probiotic Streptococcus salivarius K12. Eur J Clin Microbiol Infect Dis. 2008 Dec;27(12):1261-63. [PMID: 18560907]
- 12. Tagg JR. Prevention of streptococcal pharyngitis by anti-Streptococcus pyogenes bacteriocin-like inhibitory substances (BLIS) produced by Streptococcus salivarius. Indian J Med Res. 2004 May;119 Suppl:13-16. [PMID: 15232154]
- 13. Ishijima SA, Hayama K, Burton JP, et al. Effect of Streptococcus salivarius K12 on the in vitro growth of Candida albicans and its protective effect in an oral candidiasis model. Appl Environ Microbiol. 2012 Apr;78(7):2190-99. [PMID:
- 14. Kazor CE, Mitchell PM, Lee AM, et al. Diversity of bacterial populations on the tongue dorsa of patients with halitosis and healthy patients. J Clin Microbiol. 2003 Feb;41(2):558-63. [PMID: 12574246]
- 15. Burton JP, Chilcott CN, Moore CJ, et al. A preliminary study of the effect of probiotic Streptococcus salivarius K12 on oral malodour parameters. J Appl Microbiol. 2006 Apr;100(4):754-64. [PMID: 16553730]
- **16.** Burton JP, Chilcott CN, Tagg JR. The rationale and potential for the reduction of oral malodour using Streptococcus salivarius probiotics. *Oral Dis.* 2005;11 Suppl 1:29-31. [PMID: 15752094]
- 17. Masdea L, Kulik EM, Hauser-Gerspach I, et al. Antimicrobial activity of Streptococcus salivarius K12 on bacteria involved in oral malodour. Arch Oral Biol. 2012 Aug;57(8):1041-47. [PMID: 22405584]

Additional references available upon request



MIND

EHT®

Age-Defying Supplement

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Benefits of Nerium Age-Defying Supplement: EHT®

better cognitive function & overall brain health

improves memory and recall

boosts the body's immune system

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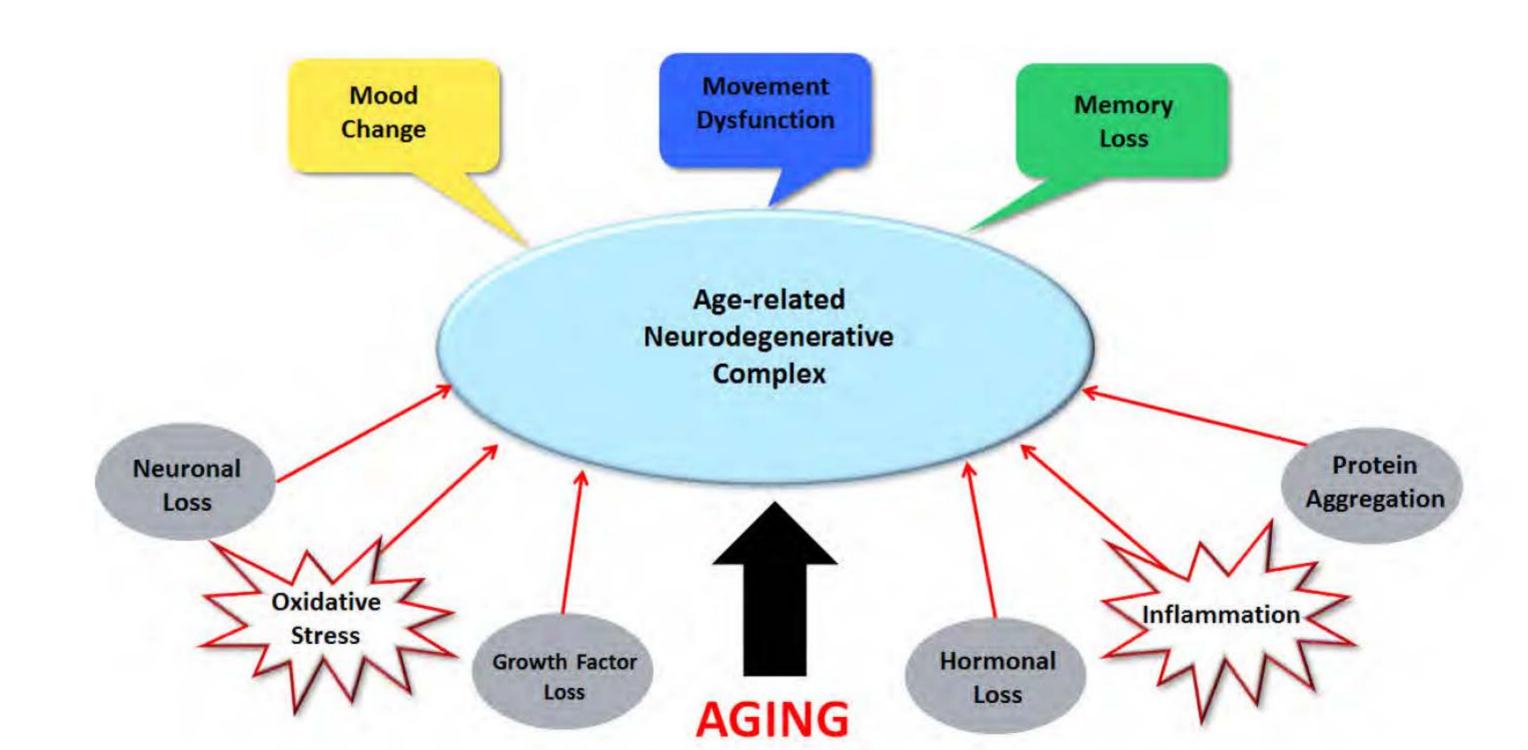
Protects and supports neuronal networking

fortifies and strengthens natural brain functions

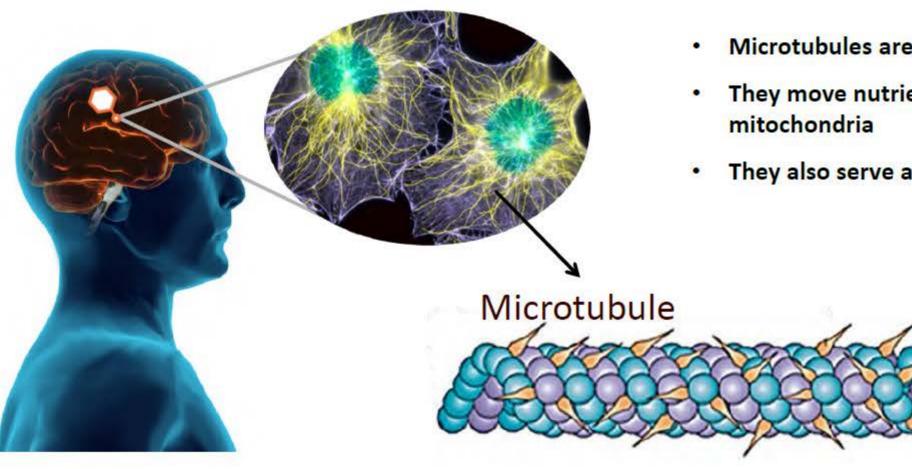
enhances the body's natural energy stores



The Problem - Aging of the brain



EHT® targets microtubules in neurons

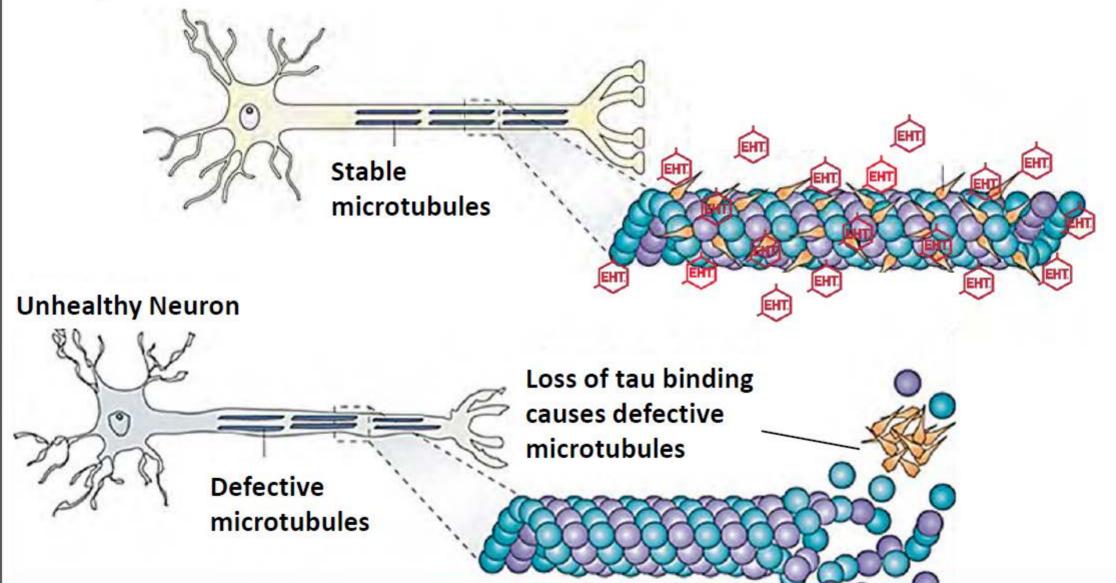


- Microtubules are conveyer belts inside the neuron
- They move nutrients, neuro-transmitters, and organelles like mitochondria
- They also serve a cytoskeletal role in the neuron



EHT® protects and stabilizes tau protein

Healthy Neuron



Neuroscience Journals and Conferences

EHT® has been published in the following journals:

- Neurobiology of Aging
- Neurotherapeutics
- Journal of Neuroscience

EHT® has been presented at the following conferences:

- ICAD
- Neuroscience Annual Meeting
- International Conference of Alzheimer's Drug Discovery
- Protein Phosphatases Conference
- Inge Grunde-Iqbal Symposium on Tau Therapeutics
- AAN American Academy of Neurobiology (April 2015)





Greens First® Provides 15+ Servings of Fruits & Vegetables**

Greens First® is a nutrient-rich, phytonutrient & antioxidant super-food. It balances, supports and nourishes your whole body...plus, it gives you something unexpected...**GREAT TASTE!**

Help Alkalize Your Body's pH Levels*

Greens First® may be the perfect source to help alkalize your body's pH level for energy & vitality without stimulants. **Greens First®** is a complete phytonutrient and antioxidant supplement that works synergistically in your body providing 49 different super foods, extracts and concentrates including supergreens, organic fruits & vegetables, probiotics, soluble and insoluble fibers, herbs, spices, natural flavonoids and enzymes.





Greens First® is good for the whole family!

Adding Greens First® to your diet may help to:

- Alkalize and Balance Your Body's pH Levels
- Reduce Inflammation & Promote Healing
- Relieve Achy Joints & Build Strong Bones
- Increase Energy Levels without Stimulants
- Boost the Immune System & Improve Digestion
- · Assist in Weight Management
- Balance Healthy Blood Sugar Levels
- Promote Mental & Cognitive Acuity
- Promote Healthy Heart & Liver Function
- Maximize Your Health & Improve Overall Well-Being*

More Than Vitamins & Non-GMO Too!

Greens First® contains all-natural, health building ingredients. It's more than just a greens product and goes far beyond regular nutrition in maintaining your health and promoting anti-aging and overall wellness.* It's fortified with a proprietary OxiSure Blend so each serving surpasses the raw food nutrition of more than 15+ servings of organic fruits and vegetables.**

Nourish, rebalance & rejuvenate your body and your health with a daily serving of the organic goodness in Greens First®!

Mixes easily without a blender!

Your Entire Body Will Love It. Taste Buds Included!





Vegan • Non-GMO • No Dairy • No Soy • No Whey • No Sugar Added • No Aspartame

Greens FIRST®

The Bad News - The Standard American Diet

The USDA announced that Americans need to eat approximately 50% more vegetables, 150% more fruits, 250% more orange vegetables and 350% more green vegetables every day! That's a recommendation of 7 to 13 servings per day to improve health and prevent chronic disease. But, with today's busy lifestyles and fast food eating habits, few American adults, and far fewer children, even eat the recommended minimum of 5-A-Day!

The Good News - Greens First®

Greens First[®] is the delicious and fast way for the entire family to enjoy the phytonutrient and antioxidant benefits of a diet rich in dark greens and brightly colored fruits and vegetables in one, easy-to-use product.

Greens First® contains Certified Organic fruits and vegetables which are first juiced, then spray dried at low temperatures, leaving all the important nutrients and live enzymes intact.

Replenish • Revitalize • Recharge

- · Fruits, Vegetables & Superfoods!
- Contains Certified Organic Fruits & Vegetables
- Non-GMO
- Sweetened with Stevia a Calorie Free Herb (Greens First)
- Sweetened with Lo Han (Greens First Berry)
- Vegetarian & Vegan
- Easy to Digest
- · No MSG or Yeast
- No Soy Protein
- · No Corn, Rye, Wheat or Nuts
- · No Dairy, Eggs or Animal By-products
- No Artificial Ingredients, Sweeteners or Preservatives
- Rich in Alkaline Nutrients to Balance Your Body's pH Levels

Directions for Use:

Mix one level scoop of **Greens First** (*Original or Berry*) with 6-8 ounces of cold water. Shake well & enjoy. Refrigerate after opening.



*These statements have not been evaluated by the Food and Drug Administration This product is not intended to diagnose, treat, cure or prevent any disease.

** Based on ORAC Testing

GREENS FIRST ORIGINAL

Supplement Facts

Serving Size 9.4 g (1 Scoop) Servings Per Container: 30

Amount Per Serving		
Calories 40 Calories from fat 10		
% D a	ily Value*	
Total Fat 1g	2%	
Saturated Fat 0g	0%	
Trans Fat 0g		
Cholesterol 0g	0%	
Sodium 15mg	1%	
Total Carbohydrate 6g	2%	
Dietary Fiber 1g	4%	
Sugars 1g		

Protein 1g

Greens Blend-Proprietary 2500 mg
Barley Grass Juice Powder (Certified Organic)
Chlorella (Cracked Cell Wall)
Spirulina, USA (Certified Organic)

Vegetable Blend-Proprietary 1500 mg (Certified Organic)

Carrot Juice Powder, Cauliflower Juice Powder, Broccoli Juice Powder, Spinach Juice Powder, Parsley Juice Powder, Kale Juice Powder

OxiSure TM Blend-Proprietary 300 mg †
Carrot Powder, Green Tea Extract, Blueberry Powder,
Plum Powder, Grape Seed Extract 95%, Cranberry
Powder, Raspberry Powder, Tart Cherry Powder, Pine
Bark Extract 95%, Broccoil Powder, 'HiActives' Tomato
Powder 2000, 'HiActives' Carrot Powder 1200, 'HiActives
Spinach Powder 700, 'HiActives' Kale Powder, 'HiActives
Brussels Sprout Powder.

Amount Pe	r serving	% DV
Fiber Blend-Proprietary Oat Betaglucan (Certified Organic Apple Fiber Pectin, Brown Rice B		†
Lecithin (Non GMO Soy)	1800 mg	Ť
Enzyme Blend Bromelain Extract (80 GDU Per G Papain, Protease, Amylase, Lipas Cellulase, Lactase		Ť
Probiotics (Dairy Free) L. Acidophilus, B. Longum, L. Casei, I	200 mg Rhamno	† sus.
Sprouted Barley (Certified Organic)	200 mg	†
ResveraMax™ Blend-Proprietary Polygonum Cuspidatum Extract (¿ Resveratrol), Acerola Cherry Pow Organic), Concord Grape Powder Green Tea Extract (Decaffeinated)	25% trans der (Certif	ied
(60% Polyphenols)		
Quercetin (98% Dihydrate)	100 mg	<u>†</u>
Milk Thistle Seed Extract (80% Silymarin)	75 mg	†
Red Beet Root (Certified Organic)	50 mg	†
Cinnamon Powder (Certified Organi	c) 50 mg	<u>†</u>
Aloe Leaf Powder (Certified Organic)	50 mg	Ť
Turmeric Rhizome Extract (85% Curcuminoids)	20 mg	Ť

Amount Per Serving %D\

Percent Daily Values are based on a 2,000 calorie diet

15 mg

5 mg

Amount Per Serving %DV

† Daily Value not established

Atlantic Kelp Powder

Licorice Root Extract

Certified Organic)

Other Ingredients: Stevia, Citric Acid, Natural Flavors (Spearmint & Orange)
This product contains natural ingredients which may vary by season resulting in minor variances in the specific

GREENS FIRST BERRY

Supplement Facts

Serving Size 9.6 g (1 Scoop) Servings Per Container: 30

Amount Per Serving		
Calories 35 Calories from Fat 0		
% Da	aily Value*	
Total Fat 0g	0%	
Saturated Fat 0g	0%	
Trans Fat 0g	0%	
Cholesterol 0g	0%	
Sodium 25mg	1%	
Total Carbohydrate 8g	3%	
Dietary Fiber 1g	4%	
Sugars 3g		
Protein 0g		

Amount Per Serving %DV

VEGETABLE POWER™ BLEND -Proprietary 1,085 mg [†]

Carrot Powder (Certified Organic), Beet Powder (Certified Organic), Tomato Powder (Certified Organic), Broccoli Powder (Certified Organic), Spinach Powder (Certified Organic), Lycopene (Lyc-o-mato), Lutein (Floraglo). SUPER ANTIOX™ FRUIT BLEND Proprietary 5,805 mg †

Red Raspberry Powder (Certified Organic), Strawberry Powder (Certified Organic), Strawberry Powder (Certified Organic), Cherry Powder (Certified Organic), Blackberry, Plum, Pomegranate Powder (Certified Organic), Blueberry Powder (Certified Organic), Pear, Apple Pectin, Mango Powder (Certified Organic), Papaya, Watermelon, Blood Orange, Peach, Red Currant, Elderberry, Pineapple,

Acerola 450 mg †
Rice Bran 225 mg †
Flax Seed 200 mg †

Grape Seed Extract (95%), Noni,

Bilberry, Kiwi, Guava.

HEALTHY DIGEST™ PROBIOTIC BLEND - 200 mg †

LACTOBACILLUS ACIDOPHILUS, LACTOBACILLUS CASEI, LACTOBACILLUS RHAMNOSUS, LACTOBACILLUS PLANTARUM, BIFIDOBACTERIUM BREVE, BIFIDOBACTERIUM LONGUM.

POLYGONUM CUSPIDATUM 15 mg † (RESVERATROL 25%)
ASTAXANTHIN (1%) 1 mg †

* Percent Daily Values are based on a 2,000 calorie diet. † Daily Value not established

Other Ingredient: Lo Han

This product contains natural ingredients which may vary by season resulting in minor variances in the specific supplement facts.



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