

# Detox Renewal Kit

## Biotransformation Program



Includes OptiCleanse GHI, ColonX 60c, ProbioMax Daily DF 30c, Drainage 1 fl oz, and Shaker Bottle 20 oz.

### Discussion

While other detoxification kits that are found in the marketplace focus simply on liver detoxification, the reach of XYMOGEN's Detox Renewal Kit extends far beyond the liver. Of course, supporting phase I and phase II liver detoxification pathways and antioxidant activity, as accomplished by OptiCleanse GHI, is critical; but there are multiple systems and organs involved in detoxification. For this reason, a detox program cannot be truly comprehensive without addressing the whole body.\*

For instance, the movement of food and waste through the digestive system is an important aspect of cleansing and detoxification. Food must be well-digested, and it must move at a healthy pace through the intestines and colon. The longer the transit time, the longer the toxic waste matter sits in the bowel, and the more likely that toxins will be reabsorbed. XYMOGEN's Detox Renewal Kit includes the regularity-supporting action of ColonX not only to complement the liver-detoxing functions of OptiCleanse GHI but also because bowel movements should be regular before the start of a detox program.\*

Probiotics are another critical aid to the detoxification process. Probiotics may help reduce toxin production in the intestines, and they also help directly eliminate toxins. An animal study showed that compared to controls, rats supplemented with probiotics had a significant decrease in blood BPA (bisphenol A) concentration after BPA administration, a 2.4 times greater excretion of BPA in feces, and a significantly higher percentage of BPA bound to the sediment fraction of the feces.<sup>[1]</sup> Laboratory tests suggest that probiotics are able to adsorb or metabolize NMDA (N-nitrosodimethylamine), nitrate, HCA (heterocyclic aromatic amines), and a variety of organophosphorus pesticides.<sup>[2-5]</sup> Furthermore, certain gut microbiota, such as lactobacilli, can bind and sequester heavy metals,<sup>[6,7]</sup> which can result in eventual removal of the metals through defecation.\*<sup>[6,8]</sup>

By including probiotics with formulas that specifically promote good digestion, drainage, regular bowel elimination, GI health, balanced

## Clinical Applications

- » Supports Natural Detoxification Mechanisms\*
- » Helps Maintain a Healthy Intestinal Microecology\*
- » Supports the Body's Natural Immune Response\*
- » Supports a Balanced Cytokine Profile\*
- » Supports Digestion, Assimilation, and Elimination\*
- » Supports Lactose Digestion\*
- » Promotes Gastrointestinal Health, Motility, Stool Bulk, and Bowel Regularity\*

*Detox Renewal Kit is designed to renew and enhance the body's cleansing and detoxification capabilities. It combines four specially selected XYMOGEN formulations: ColonX™, Drainage™, ProbioMax™ Daily DF, and OptiCleanse™ GHI. When taken together, as recommended within the 6-Day Detox Guide, these complementary formulas work in concert to encourage the various detox-linked systems and organs of the body to process and eliminate waste and toxins.\**

phase I and phase II detoxification, and powerful antioxidant protection, Detox Renewal Kit is a truly complete and thoughtful approach to detoxification. Each formula addresses different aspects of whole body detoxification:

**OptiCleanse GHI** is a comprehensive, fructose-free, low-allergy-potential dietary supplement designed to support GI function and balanced detoxification.<sup>[9-12]</sup> OptiCleanse GHI contains macro- and micronutrients, as well as a host of specialized ingredients (some patented or proprietary) that help moderate phase I detoxification and upregulate and support phase II pathways.<sup>[13-15]</sup> Generous antioxidant support combats the free radicals produced during phase I activation; and activated cofactors support mitochondrial energy production, which is needed for biotransformation and detoxification. Additionally, this multifaceted formula supports healthy eicosanoid metabolism and cytokine production.\*

In addition to a host of phytonutrients, amino acids, and antioxidant nutrients, OptiCleanse GHI features VegaPro™, XYMOGEN's proprietary amino acid and pea/rice protein blend; Aminogen®, an enzyme matrix that facilitates protein absorption; Preventium®, a patented form of potassium hydrogen d-glucarate that supports glucuronidation; Albion mineral amino acid chelates; and activated B vitamins, including Quatrefolic® and methylcobalamin.\*

**ColonX** is designed to support GI regularity and complement dietary fiber intake. GI regularity and function is vital to physiological balance and overall well-being. How well the body digests and assimilates metabolic fuel and eliminates metabolic waste determines health at the cellular level. Toxins that enter the body must be detoxified and their metabolites must exit the body. Gastrointestinal elimination plays a major role in detoxification by expelling the remnants of toxic molecules. If these harmful remnants are not eliminated, they can recirculate throughout the body.\*

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\*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.

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Antioxidant Activity

Detoxification

Cytokine Balance Support

Gastrointestinal Support

Immune System Support

Liver Support

## OptiCleanse™ GHI Vanilla Delight Supplement Facts

Serving Size: 2 Scoops (about 58 g)  
Servings Per Container: About 14

Amount Per Serving	%Daily Value*
<b>Calories 240</b>	
Calories from Fat 70	
<b>Total Fat 8 g</b>	12%
Saturated Fat 2.5 g	13%
<b>Total Carbohydrate 16 g</b>	5%
Dietary Fiber 3 g	12%
Sugars 6 g	**
<b>Protein 26 g</b>	52%
Vitamin A (as natural beta-carotene)	2500 IU 50%
Vitamin C (as sodium ascorbate)	250 mg 417%
Thiamin (as thiamine HCl)	15 mg 1000%
Riboflavin (as riboflavin 5'-phosphate sodium)	5 mg 294%
Niacin (as niacinamide and niacin)	40 mg 200%
Vitamin B6 (as pyridoxal 5'-phosphate)	5 mg 250%
Folate (as Quatrefolic® (6S)-5-methyltetrahydrofolic acid, glucosamine salt)	200 mcg 50%
Vitamin B12 (as methylcobalamin)	50 mcg 833%
Biotin	150 mcg 50%
Pantothenic Acid (as d-calcium pantothenate)	35 mg 350%
Calcium (as DimaCal® di-calcium malate and ingredients with naturally occurring calcium)	240 mg 24%
Iron (naturally occurring)	7 mg 38%
Iodine (as potassium iodide)	60 mcg 40%
Magnesium (as Albion® di-magnesium malate)	140 mg 35%
Zinc (as TRAACS® zinc bisglycinate chelate)	10 mg 67%
Selenium (as Albion® selenium glycinate complex)	100 mcg 143%
Manganese (as TRAACS® manganese bisglycinate chelate)	2 mg 100%
Chromium (as TRAACS® chromium nicotinate glycinate chelate)	60 mcg 50%
Molybdenum (as TRAACS® molybdenum glycinate chelate)	35 mcg 47%
Sodium (naturally occurring)	490 mg 20%
Potassium (naturally occurring)	510 mg 15%
MeadowPure® Stabilized Flaxseed Complex	5.6 g **
Alpha-Linolenic Acid	1.28 g **
Linoleic Acid	392 mg **
Pomegranate Extract ( <i>Punica granatum</i> )(hull)(40% ellagic acid)	400 mg **
Betaine Anhydrous (trimethylglycine)	250 mg **
Lemon Bioflavonoid Complex ( <i>Citrus x limon</i> )(fruit peel)(25% bioflavonoids)	250 mg **
Quercetin (as quercetin dihydrate from <i>Dimorphandra mollis</i> )(pod)	250 mg **
Preventium® (potassium d-glucarate)	250 mg **
Rutin (from <i>Sophora japonica</i> )(bud)	200 mg **
Turmeric Extract ( <i>Curcuma longa</i> )(rhizome)(95% curcuminoids)	200 mg **
N-Acetyl-L-Cysteine	150 mg **
Ginger ( <i>Zingiber officinale</i> )(rhizome)	150 mg **
Methylsulfonylmethane (MSM)	120 mg **
Choline (as choline bitartrate)	100 mg **
Sodium Sulfate Anhydrous	100 mg **
Watercress ( <i>Nasturtium officinale</i> )(herb)	100 mg **
Green Tea Aqueous Extract ( <i>Camellia sinensis</i> )(leaf)(80% polyphenols, 60% catechins, 30% EGCG, 6% caffeine)	82 mg **

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

\*\* Daily Value not established.

**Other Ingredients:** VegaPro™ (XYMOGEN's proprietary blend of pea protein concentrate, pea protein isolate, taurine, glycine, rice protein concentrate, and L-glutamine), dried cane syrup, sunflower oil, natural flavors (no MSG), medium-chain triglyceride oil, tripotassium citrate, cellulose gum, xanthan gum, Aminogen®, stevia leaf extract, guar gum, and silica.

**DIRECTIONS:** Blend, shake, or briskly stir 2 level scoops (58 g) into 10-12 ounces chilled, pure water (or mix amount for desired thickness) and consume once daily, or use 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.

**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.

Albion, DimaCal, TRAACS and the Albion Medallion design are registered trademarks of Albion Laboratories, Inc. Medals covered by US patent 6,706,904.

Quatrefolic® is a registered trademark of Gnosis S.p.A. Produced under US patent 7,947,662.

Aminogen® is a Registered Trademark of Triarco Industries. Aminogen® is protected by U.S. patent No. 5,387,422. Preventium® is a registered trademark of Applied Food Sciences, LLC. (US patents 4,845,123, 5,364,644, 5,561,160).

ColonX features magnesium citrate for its promotion of muscle relaxation and effective elimination of feces through the bowel. Magnesium citrate is also highly bioavailable.<sup>[16]</sup> Cape aloe is added to support normal GI transit time and stool bulk.<sup>[17]</sup> Triphala, a balanced blend of astringent fruits used extensively in Ayurveda, is present to support all phases of digestion, assimilation, and elimination.\*<sup>[18]</sup>

**Drainage** combines homeopathic "drainers" with homeopathic remedies that support excretory function and address symptoms of toxicity. Cleansing itself of by-products and waste that accumulate is an essential function of the body. Homeopathic drainage, specifically, is a process of detoxifying the body that involves opening the emunctories and elimination channels and discharging toxic accumulation. Emunctories are organs of elimination: liver, kidneys, lungs, stomach, intestines, pancreas, skin, nose, genitals. Toxic accumulation can occur from external sources, such as pesticides, insecticides, and herbicides, and from internal sources, such as stress and inadequate nutrition, which lead to undesirable changes in metabolic function.\*

**ProbioMax Daily DF** is a vegetarian, dairy- and gluten-free, four-strain probiotic formula totaling 30 billion CFU (colony forming units) per capsule. Supplementation with probiotics assists with many mechanisms of action that benefit health, including (1) supporting metabolic activity, such as the production of short-chain fatty acids and vitamins, nutrient absorption, and the digestion of lactose; (2) adhering to intestinal epithelial cells to help maintain a healthy balance of organisms in the intestinal tract; (3) helping to establish populations of good bacteria after disruption in balance; (4) supporting immune function; (5) promoting intestinal epithelial cell survival; (6) supporting healthy bowel function; and (7) degrading oxalates.<sup>[19-25]</sup> Additionally, the role of probiotics in direct detoxification and elimination of unwanted substances is scientifically supported, as discussed earlier.\*<sup>[1-8]</sup>

ProbioMax Daily DF provides four researched strains of beneficial bacteria: *Lactobacillus acidophilus* La-14, *Lactobacillus plantarum* Lp-115, *Bifidobacterium longum* Bl-05, and the extensively studied HN019 strain of *Bifidobacterium lactis*. These live microorganisms have proven health benefits and well-established safety, and have been tested for epithelial cell adhesion and/or resistance to low pH.\*

Each vegetarian capsule is sealed in nitrogen-purged aluminum blister packs that serve as protection from factors proven to compromise probiotic stability, such as heat, moisture, and oxygen. To further support resistance to low pH and assist the delivery of microorganisms to the small intestine, XYMOGEN employs DRcaps™ gastro-resistant capsules. These specially designed, innovative capsules help slow the exposure of actives to stomach acid and ensure more targeted release.\*

OptiCleanse GHI Vanilla Delight Typical Amino Acid Profile Per Serving:

Alanine	1,129 mg	Methionine	279 mg
Arginine	2,260 mg	Phenylalanine	1,432 mg
Aspartic Acid	3,049 mg	Proline	1,141 mg
Cysteine	248 mg	Serine	1,404 mg
Glutamic Acid	4,450 mg	Taurine	981 mg
Glycine	1,578 mg	Threonine	500 mg
Histidine	652 mg	Tryptophan	258 mg
Isoleucine	1,214 mg	Tyrosine	1,005 mg
Leucine	2,208 mg	Valine	1,317 mg
Lysine	1,910 mg		

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All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.

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## ColonX™ Supplement Facts

Serving Size: 2 Capsules

	Amount Per Serving	%Daily Value
Magnesium (as magnesium citrate)	200 mg	50%
Cape Aloe ( <i>Aloe ferox</i> ) (leaf)	300 mg	**
Triphala Extract ( <i>Embilica officinalis</i> ) (fruit), ( <i>Terminalia bellerica</i> ) (fruit), ( <i>Terminalia chebula</i> ) (fruit) (45% tannins)	75 mg	**

\*\* Daily Value not established.

**Other Ingredients:** HPMC (capsule), stearic acid, magnesium stearate, silica, and medium-chain triglycerides.

**DIRECTIONS:** Take one to two capsules at bedtime with 8 oz of water, or as directed by your healthcare practitioner. Do not use if tamper seal is damaged.

**DOES NOT CONTAIN:** Wheat, gluten, corn protein, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, artificial colors, artificial sweeteners, or preservatives.

**CAUTIONS:** Consult your healthcare practitioner before use. **DO NOT USE IF YOU ARE PREGNANT OR NURSING.** Discontinue use if diarrhea or abdominal pain develops. Intended for occasional support of bowel movements.

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



## ProbioMax Daily DF™ Supplement Facts

Serving Size: 1 Capsule

	Amount Per Serving	%Daily Value
Proprietary Blend <i>Lactobacillus acidophilus</i> La-14 <i>Bifidobacterium longum</i> BI-05 <i>Lactobacillus plantarum</i> Lp-115	174 mg (15 Billion CFU <sup>1</sup> )	**
HOWARU® Bifido ( <i>Bifidobacterium lactis</i> HN019)	50 mg (15 Billion CFU <sup>1</sup> )	**

\*\* Daily Value not established.

**Other Ingredients:** Microcrystalline cellulose, HPMC (acid-resistant capsule), stearic acid, magnesium stearate, and silica.

<sup>1</sup> Colony-Forming Unit

**DIRECTIONS:** Take one capsule with water daily, or as directed by your healthcare practitioner.

Children and pregnant or lactating women should consult their healthcare practitioner prior to use.

**DOES NOT CONTAIN:** Wheat, gluten, corn, yeast, 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. Keep closed in a cool, dry place out of reach of children.

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## Drainage

**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.

**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.

## References

- Oishi K, Sato T, Yokoi W, et al. Effect of probiotics, *Bifidobacterium breve* and *Lactobacillus casei*, on bisphenol A exposure in rats. *Biosci Biotechnol Biochem*. 2008 Jun;72(6):1409-15. [PMID: 18540113]
- Islam SM, Math RK, Cho KM, et al. Organophosphorus hydrolase (OpdB) of *Lactobacillus brevis* WCP902 from kimchi is able to degrade organophosphorus pesticides. *J Agric Food Chem*. 2010 May 12;58(9):5380-86. [PMID: 20405842]
- Cho KM, Math RK, Islam SM, et al. Biodegradation of chlorpyrifos by lactic acid bacteria during kimchi fermentation. *J Agric Food Chem*. 2009 Mar 11;57(5):1882-89. [PMID: 19199784]
- Nowak A, Kuberski S, Libudzisz Z. Probiotic lactic acid bacteria detoxify N-nitrosodimethylamine. *Food Addit Contam Part A Chem Anal Control Expo Risk Assess*. 2014;31(10):1678-87. [PMID: 25010287]
- Sobko T, Reinders CI, Jansson E, et al. Gastrointestinal bacteria generate nitric oxide from nitrate and nitrite. *Nitric Oxide*. 2005 Dec;13(4):272-78. [PMID: 16183308]
- Robinson JB, Tuovinen OH. Mechanisms of microbial resistance and detoxification of mercury and organomercury compounds: physiological, biochemical, and genetic analyses. *Microbiol Rev*. 1984 Jun;48(2):95-124. [PMID: 6377034]
- Halttunen T, Salminen S, Tahvonen R. Rapid removal of lead and cadmium from water by specific lactic acid bacteria. *Int J Food Microbiol*. 2007 Feb 28;114(1):30-35. [PMID: 17184867]
- Monachese M, Burton JP, Reid G. Bioremediation and tolerance of humans to heavy metals through microbial processes: a potential role for probiotics? *Appl Environ Microbiol*. 2012 Sep;78(18):6397-404. [PMID: 22798364]
- Smith RJ, Wilmore DW. Glutamine nutrition and requirements. *JPN J Parenter Enteral Nutr*. 1990 Jul-Aug;14(4 Suppl):94S-99S. Review. [PMID: 2119461]
- 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):123-28. [PMID: 16709450]
- Adolphe JL, Whiting SJ, Juurlink BH, et al. Health effects with consumption of the flax lignan secoisolariciresinol diglucoside. *Br J Nutr*. 2010 Apr;103(7):929-38. Review. [PMID: 20003621]
- Hofmann T, Kuhnert A, Schubert A, et al. Modulation of detoxification enzymes by watercress: in vitro and in vivo investigations in human peripheral blood cells. *Eur J Nutr*. 2009 Dec;48(8):483-91. [PMID: 19636603]
- Barch DH, Rundhaugen LM, Stoner GD, et al. Structure-function relationships of the dietary anticarcinogen ellagic acid. *Carcinogenesis*. 1996 Feb;17(2):265-69. [PMID: 8625448]
- Akhlaghi M, Bandy B. Dietary green tea extract increases phase 2 enzyme activities in protecting against myocardial ischemia-reperfusion. *Nutr Res*. 2010 Jan;30(1):32-39. [PMID: 20116658]
- Amália PM, Possa MN, Augusto MC, et al. Quercetin prevents oxidative stress in cirrhotic rats. *Dig Dis Sci*. 2007 Oct;52(10):2616-21. [PMID: 17431769]
- Walker AF, Marakis G, Christie S, et al. Mg citrate found more bioavailable than other Mg preparations in a randomised, double-blind study. *Magnes Res*. 2003 Sep;16(3):183-91. [PMID: 14596323]
- Wintola OA, Sunmonu TO, Afolayan AJ. The effect of *Aloe ferox* Mill. in the treatment of loperamide-induced constipation in Wistar rats. *BMC Gastroenterol*. 2010 Aug 19;10:95. [PMID: 20723249]
- Mukherjee PK, Rai S, Bhattacharyya S, et al. Clinical study of "triphala" – a well-known phytomedicine from India. *Iranian J Pharmacol Ther*. 2006 Jan;5(1):51-54. <http://www.bioline.org.br/request?pt06008>. Accessed June 18, 2012.
- Vanderpool C, Yan F, Polk DB. Mechanisms of probiotic action: Implications for therapeutic applications in inflammatory bowel diseases. *Inflamm Bowel Dis*. 2008 Nov;14(11):1585-96. [PMID: 18623173]
- Abratt VR, Reid SJ. Oxalate-degrading bacteria of the human gut as probiotics in the management of kidney stone disease. *Adv Appl Microbiol*. 2010;72:63-87. [PMID: 20602988]
- Masood MI, Qadir MI, Shirazi JH, et al. Beneficial effects of lactic acid bacteria on human beings. *Crit Rev Microbiol*. 2011 Feb;37(1):91-98. [PMID: 21162695]
- Turroni S, Vitali B, Bendazzoli C, et al. Oxalate consumption by lactobacilli: evaluation of oxalyl-CoA decarboxylase and formyl-CoA transferase activity in *Lactobacillus acidophilus*. *J Appl Microbiol*. 2007 Nov;103(5):1600-09. [PMID: 17953571]
- Shu Q, Lin H, Rutherford KJ, et al. Dietary *Bifidobacterium lactis* (HN019) enhances resistance to oral *Salmonella typhimurium* infection in mice. *Microbiol Immunol*. 2000;44(4):213-22. [PMID: 10832963]
- Gopal P, Prasad J, Gill H. Effects of the consumption of *Bifidobacterium lactis* HN019 (DR10TM) and galacto-oligosaccharides on the microflora of the gastrointestinal tract in human subjects. *Nutr Res*. 2003;23(10):1313-28. [http://www.nrjournal.com/article/S0271-5317\(03\)00134-9/abstract](http://www.nrjournal.com/article/S0271-5317(03)00134-9/abstract). Accessed December 22, 2014.
- Waller PA, Gopal PK, Leyer GJ, et al. Dose-response effect of *Bifidobacterium lactis* HN019 on whole gut transit time and functional gastrointestinal symptoms in adults. *Scand J Gastroenterol*. 2011 Sep;46(9):1057-64. [PMID: 21663486]

Additional references available upon request

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