# OptiCleanse<sup>®</sup> GHI Sugar- & Stevia-Free<sup>‡</sup>

## Support for Gastrointestinal System, Hepatic Function, and Cytokine $\mbox{Balance}^*$



Available in Vanilla Delight and Creamy Chocolate ‡This formula is not a low-calorie dietary supplement. Please see the Supplement Facts panel for more details.

### Discussion

**OptiCleanse® GHI Sugar- & Stevia-Free**<sup>‡</sup> is now sweetened with a natural, highpotency sweetener extracted from monk fruit. This generally recognized as safe (GRAS) monk-fruit extract offers a high-quality sweetness and flavor without the bitter aftertaste associated with some natural sweeteners.

Like XYMOGEN's other OptiCleanse GHI formulas, OptiCleanse<sup>™</sup> GHI Sugar- & Stevia-Free<sup>‡</sup> contains macro- and micronutrients, as well as a host of ingredients (some patented or proprietary) that support fatty acid metabolism, gastrointestinal health, and healthy eicosanoid and cytokine metabolism. Activated cofactors support mitochondrial energy production needed for biotransformation and detoxification. This formula's ingredients help moderate phase I detoxification, upregulate and support phase II pathways, and provide antioxidant support as well.\*

### Protein Metabolism

**VegaPro** is XYMOGEN's proprietary blend of pea protein isolate and rice protein concentrate, L-glutamine, glycine, and taurine. Generation of glutathione and sulfation cofactors—vital for phase II conjugation—requires an array of amino acids. The combination of pea protein and rice protein, containing a complement of amino acids, achieves an amino acid score of 100%. Glutamine, a conditionally essential and versatile amino acid with two nitrogen moieties, is crucial to nitrogen metabolism and helps maintain healthy liver tissue and function.<sup>[1,2]</sup> The amino acid glycine is needed for bile synthesis, phase II detoxification, and glutathione production. Taurine, a derivative of the sulfur-containing amino acid cysteine, is also important for synthesis of bile salts and helps stabilize cell membranes.\*

### Gastrointestinal Support

Ginger root, included to support healthy digestion such as the release of bile from the gallbladder, acts at several sites to moderate PGE(2) production and support the normal response to inflammation.<sup>[3]</sup> Fiber (from inulin and flaxseeds) supports production of short-chain fatty acids as well as a healthy intestinal flora. MeadowPure<sup>™</sup>, an organic flaxseed complex, possesses excellent oxidative stability, supports antioxidant activity, and provides lignins, soluble fiber, and omega-3 and omega-6 essential fatty acids.<sup>[4]</sup> The flaxseed is extensively milled, which provides a smoother mouthfeel and less grit than earlier versions of OptiCleanse formulas. **Glutamine** plays a key role in healthy intestinal cell proliferation and gut barrier integrity, immune function, and normal tissue healing.<sup>\*[1,2]</sup>

# **Clinical Applications**

- » Supports Natural Detoxification Mechanisms\*
- » Supports Gastrointestinal Health\*
- Supports a Balanced Cytokine Profile\*
- » Lactose-Free Vegan Protein Source\*

**OptiCleanse® GHI Sugar- & Stevia-Free**<sup>‡</sup> is a comprehensive, monkfruit-extract-sweetened, low-allergy–potential dietary supplement designed to support gastrointestinal (GI) function and balanced detoxification. It features VegaPro<sup>™</sup>, XYMOGEN's proprietary amino acid and pea/rice protein blend; Aminogen®, to facilitate protein absorption; phytonutrients; mineral amino acid chelates; and activated B vitamins, including Quatrefolic® and methylcobalamin. In conjunction with a modified elimination diet, OptiCleanse GHI Sugar- and Stevia-Free<sup>‡</sup> addresses GI and hepatic function as well as eicosanoid balance and cytokine metabolism. This formula is suitable for vegans.\*

### Detoxification Support

**Green tea catechins** not only support antioxidant activity but also appear to act as modulators of phase I and phase II detoxification.<sup>[5]</sup> **Choline** is present to support lipid metabolism in the liver and can be converted to betaine, a methyl donor.\*<sup>[6]</sup>

The active, bioavailable form of **B vitamins** (pyridoxal-5'-phosphate (B6), 5-methyltetrahydrofolate (folate), methylcobalamin (B12)) and glycine all support amino acid conjugation and are vital for the detoxification of xenobiotics and xenoestrogens. 5-methyltetrahydrofolate (5-MTHF), methylcobalamin, betaine, and **methylsulfonylmethane** (MSM) are present to support methylation and detoxification. 5-MTHF supports healthy folate nutrition, especially in individuals with variations in folate metabolism. In OptiCleanse GHI, 5-MTHF is provided as Quatrefolic<sup>®</sup> for enhanced stability, solubility, and bioavailability.<sup>\*[7]</sup>

**Preventium®**, a patented form of potassium hydrogen d-glucarate, supports glucuronidation. Sulfation is supported by **MSM** and **sodium sulfate**. Acetylation is supported by **d-calcium pantothenate**, pyridoxal-5'-phosphate, and magnesium. Several minerals in OptiCleanse GHI are provided as Albion® mineral chelates and TRAACS® mineral amino acid chelates for enhanced gastrointestinal absorption and bioavailability.\*<sup>[5]</sup>

### Antioxidant Support and Cytokine Balance

**Bioflavonoids, quercetin, rutin,** and **curcumin** support antioxidant activity, counter free radicals, and support healthy eicosanoid and cytokine metabolism.<sup>[9,10]</sup> Curcumin has a long history of use for its support of a normal, healthy response to inflammation.<sup>[11]</sup> **N-acetyl-cysteine (NAC)** stimulates glutathione synthesis, enhances glutathione-S-transferase activity, and promotes detoxification.<sup>[12]</sup> **Selenium glycinate** provides support for glutathione metabolism and antioxidant protection.\*

### **OptiCleanse® GHI Sugar- & Stevia-Free Vanilla Delight Supplement Facts**

Serving Size: 1 Packet (about 53 g)

	Amount Per Serving	%DV
Calories	210	
Total Fat	8 g	10%†
Saturated Fat	2 g	10%†
Total Carbohydrate	10 g	4%†
Dietary Fiber	4 g	14%
Protein (from Pea Protein Isolate and Rice Protein Concentrate)	26 g	
Vitamin A (as natural beta-carotene)	750 mcg	83%
Vitamin C (as sodium ascorbate)	250 mg	278%
Thiamin (as thiamine HCI)	15 mg	1250%
Riboflavin (as riboflavin 5'-phosphate sodium)	5 mg	385%
Niacin (as niacinamide and niacin)	40 mg	250%
Vitamin B6 (as pyridoxal 5'-phosphate)	5 mg	294%
Folate (as [6S]-5-methyltetrahydrofolic acid, glucosamine salt) <sup>s1</sup>	340 mcg DFE	85%
Vitamin B12 (as methylcobalamin)	50 mcg	2083%
Biotin	150 mcg	500%
Pantothenic Acid (as d-calcium pantothenate)	35 mg	700%
Choline (as choline bitartrate)	100 mg	18%
Calcium (as dicalcium malate <sup>s2</sup> and ingredients with naturally occurring calcium)	225 mg	17%
Iron (naturally occurring)	5 mg	28%
lodine (as potassium iodide)	60 mcg	40%
Magnesium (as di-magnesium malate) <sup>s2</sup>	140 mg	33%
Zinc (as zinc bisglycinate chelate) <sup>s2</sup>	10 mg	91%
Selenium (as selenium glycinate complex) <sup>s2</sup>	100 mcg	182%
Manganese (as manganese bisglycinate chelate) <sup>s2</sup>	2 mg	87%
Chromium (as chromium nicotinate glycinate chelate) <sup>s2</sup>	60 mcg	171%
Molybdenum (as molybdenum glycinate chelate) <sup>s2</sup>	35 mcg	78%
Sodium (from ingredients with naturally occurring sodium, sodium ulfate anhydrous, and sodium ascorbate)	560 mg	24%
Potassium (from tripotassium citrate and ingredients with naturally occurring potassium)	455 mg	10%
Stabilized Flaxseed Typical Alpha-Linolenic Acid Typical Linoleic Acid	5.6 g 1.28 g 392 mg	**
Pomegranate Extract ( <i>Punica granatum</i> )(whole fruit)	400 mg	**
(30% punicalagins A+B and punicalins A+B)	400 mg	
Betaine Anhydrous (trimethylglycine)	250 mg	**
Lemon Bioflavonoid Complex ( <i>Citrus × limon</i> )(fruit peel)(25% bioflavonoids)	250 mg	**
Quercetin (as quercetin dihydrate from <i>Dimorphandra mollis</i> )(pod)	250 mg	**
Potassium d-glucarates3	250 mg	**
Rutin (from Sophora japonica)(bud)	200 mg	**
Turmeric Extract ( <i>Curcuma longa</i> )(rhizome)(95% total curcuminoids complex, including curcumin, curcuminoids, and volatile oils)(86% curcuminoids)(65% curcumin) <sup>54</sup>	200 mg	**
N-AcetyI-L-Cysteine	150 mg	**
Ginger ( <i>Zingiber officinale</i> )(rhizome)	150 mg	**
Methylsulfonylmethane (MSM)	120 mg	**
Sodium Sulfate Anhydrous	100 mg	**
Green Tea Aqueous Extract ( <i>Camellia sinensis</i> )(leaf)(80% polyphenols, 60% catechins, 30% EGCG, 6% caffeine)	82 mg	**
<sup>†</sup> Percent Daily Values are based on a 2,000 calorie diet. ** Daily Value (DV) not established.		

Other Ingredients: Sunflower oil, natural flavors (no MSG), medium-chain triglyceride oil, taurine, glycine, cellulose gum, xanthan gum, fungal proteases<sup>55</sup>, L-glutamine, monk fruit extract, guar gum, and silica.

**DIRECTIONS:** Blend, shake, or briskly stir the contents of one packet (53 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 professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

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

**FORMULATED TO EXCLUDE:** Wheat, gluten, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

\*This formula is not a low-calorie dietary supplement. Please see the Supplement Facts panel for more details.

#### Also available in Creamy Chocolate Sugar- & Stevia-Free.



Quotrefolic• S1. Quatrefolic® is a registered trademark of Gnosis S.p.A. Produced under US Patent 7,947,662.

S2. Albion®, DimaCal®, TRAACS®, and the Albion Gold Medallion® are registered trademarks of Albion Laboratories, Inc. Malates covered by US patent 6,706,904.



References

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Additional references available upon request

Typical Amino Acid P	rofile Per Servin	g:
Alanine	1,280 n	١g
Arginine	2,580 n	١g
Aspartic Acid	3,400 n	۱g
Cysteine	300 n	۱g
Glutamic Acid	4,990 n	۱g
Glycine	1,720 n	۱g
Histidine	740 n	۱g
Isoleucine	1,330 n	۱g
Leucine	2,490 n	۱g
Lysine	2,120 n	۱g
Methionine	330 n	۱g
Phenylalanine	1,630 n	۱g
Proline	1,340 n	۱g
Serine	1,570 n	۱g
Taurine	1,160 n	۱g
Threonine	500 n	۱g
Tryptophan	300 n	۱g
Tyrosine	1,130 n	١g
Valine	1,490 n	١g

S3. Preventium  $^{\otimes}$  is a registered trademark of Applied Food Sciences, LLC. (US patents 4,845,123, 5,364,644, 5,561,160).

S4. BCM-95 $^{\odot}$  is an exclusivity licensed registered trademark to Arjuna Natural Pvt Ltd. Protected under US patents 7,883,728; 7,736,679; and 7,879,373.

S5. AMINOGEN<sup>®</sup> is a registered trademark of Innophos Nutrition, Inc. AMINOGEN<sup>®</sup> is protected under U.S. patent 5,387,422.



All XYMOGEN<sup>®</sup> Formulas Meet or Exceed cGMP Quality Standards. <sup>\*</sup>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.

Detoxification Cytokine Balance Support

Liver Support