# **PureGI**<sup>™</sup>

# GI Health Brochure<sup>‡</sup>



Featuring Exclusive Protocols by Dr. Dan Kalish, D.C.<sup>+</sup>





# **Functional GI Factors & Gut Health**

Complaints related to gastrointestinal (GI) health are highly prevalent in both US and global populations—with one academic survey reporting 61% of Americans experienced at least one GI symptom in the past week.<sup>1</sup>

GI complaints are not only common but often present in patients with structurally healthy GI tracts. In these cases, patient complaints are typically attributed to functional GI factors, such as alterations in the gut microbiota, immune function and central nervous system processing.<sup>2</sup>

Due to the high rate of prevalence and discomfort associated with GI complaints (e.g., gas, bloating, abdominal pain, etc.), there is a great need for practitioners to understand and support functional GI factors—and in turn patient health and comfort.

This exclusive PureGI™ brochure will introduce you to GI thought leader, Dr. Daniel Kalish, and his methodology for understanding and managing functional GI factors. Included in this brochure are the following:

- An introduction to Dr. Kalish's Three Stages of GI Function
- Assessment recommendations to help you identify the stage of the patient
- Lifestyle recommendations for optimizing gut health
- Four supplement protocols designed to support various aspects of gut health



# PureGI<sup>™</sup>Exclusive Developed with expert

# Dan Kalish, D.C.<sup>+</sup>

Daniel Kalish is the founder of the Kalish Institute, an online training program established in 2006, dedicated to building Functional Medicine practices. The core of his practice model is correcting the microbiome using diet, lifestyle and supplement programs. Drawing on his training with traditional naturopaths, Dr. Kalish has developed GI programs for over 10,000 patients. In 2016, Dr. Kalish published a research study with Mayo Clinic researchers on the GI interventions taught in his training programs. Dr. Kalish has authored three books and is a notable speaker at integrative medicine conferences across the United States.



"In natural medicine the
GI tract is considered the
'mother' of the body—
meaning, it feeds and heals
the rest of the organ
systems. A complete workup for any chief complaint
must include a thorough
GI assessment."

- DR. DAN KALISH



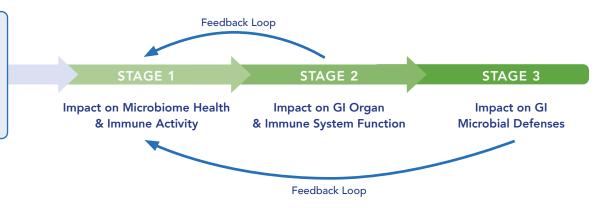
- $1.\ Almario\ CV,\ Ballal\ ML,\ Chey\ WD,\ et\ al.\ Am\ J\ Gastroenterol.\ 2018;113(11):1701-1710.$
- 2. Sperber AD, Bangdiwala SI, Drossman DA, et al. Gastroenterology. 2021 Jan;160(1):99-114.e3.



# The Three Stages of GI Function

**Dr. Kalish:** Patient-reported GI complaints don't manifest overnight (with some obvious exceptions like food poisoning). Instead, they develop over months or even years and progress through a predictable series of stages. This clinical observation, along with input from my mentors, and a detailed understanding of the latest research, has led me to my current model for understanding functional GI factors—The Three Stages of GI Function.

Diet
Food Sensitivities
Stress
Sleep
Relationship
Detox
Exercise



# **Progression through the Three Stages**

Lifestyle factors such as diet, food sensitivities, stress, social isolation, lack of sleep, inactivity and many others can lead to immune activation and changes in the gut microbiome. This is the first stage in the Three Stages of GI Function, when complaints are typically mild but, if not addressed, may advance.

Over time, this prolonged, activation of the immune system and shift in the gut microbiome (stage 1) can lead to changes in GI organ and immune system function (stage 2). In this stage, basic digestive functions can be affected, such as stomach acidity, pancreatic enzyme and bile production, gut barrier integrity and others. Immune balance can also be altered through changes in T-helper cell polarization patterns. Patient complaints may become more diverse.

Changes in the functionality of GI organs and immune function (stage 2) often influences GI microbial defenses (stage 3). Stomach acid, pancreatic enzymes and bile not only help us digest food but protect us from foreign microbes that we ingest, and a balanced immune system helps the body manage microbes already residing in our GI tract. In stage 3, patients may

It is important to note that Three Stages of GI Function is a self-perpetuating process. While lifestyle factors often initiate it, stages 2 and 3 loop back into stage 1, further affecting microbiome health and immune activity.

complain of worsening symptoms.

For a more in-depth explanation of the Three Stages of GI Function, refer to Dr. Kalish's webinar at: blog.PureEncapsulationsPro.com



# Lab Assessments

I recommend that all my patients conduct a stool test, even those without Gl complaints. My teacher, Dr. Bill Timmins, wouldn't even meet with a new patient until they'd completed one!

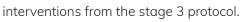
There is a lot of information that can be gleaned from a stool test. One of the major benefits is that it can help practitioners identify which stage the patient is in. Look for the markers (listed below) in the results of the stool test to help you with this process. If the marker is out of range, it's an indication that the patient is in (our beyond) that stage.

Thankfully, these days, lab reports often include reference ranges and graphical representations to help practitioners interpret the results—so, don't be afraid to dive in and start ordering stool tests! Of course, additional laboratory testing may also be warranted.

Finally, if the patient is unable to afford or perform a stool test, the supplement protocols intended for stages 1 and 2 can be used without one—along with,

of course, diet and lifestyle changes. However, if results are not seen within 3-4 months, I recommend revisiting the need for a GI test.

I always recommend performing a lab test before applying





- Commensal Microbial Status
- Short-Chain Fatty Acid Levels

#### **STAGE 2: LAB TEST MARKER**

- Elastase
- Fat Stain
- Lactoferrin
- Calprotectin
- Lysozyme
- Secretary IgA

#### STAGE 3: LAB TEST MARKER

Non-commensal microbes

# **Supporting GI Health**

# The Importance of Lifestyle

Over the course of my career, I've seen patients achieve profound results with changes to diet and lifestyle alone. In fact, I estimate that 80% of any patients' success comes from healthy diet and lifestyle habits—and these factors are especially important when GI health is a concern.

Making diet and lifestyle changes is easier said than done, but with personalized guidance and ongoing support, practitioners can help patients make necessary changes in key areas, such as diet, sleep, stress, exercise, relationships and detoxification.

Examples of common changes include identifying and removing food sensitivities, journaling and meditating to help manage stress, and finding ways to exercise more consistently. Like any intervention, diet and lifestyle changes can be even more successful when they are prioritized and personalized to meet the needs of the patient.

That said, in addition to the factors listed above, there are three simple habits that I recommend to all of my patients with GI complaints:

### The "Cereal Bowl Diet" (no cereal needed)

I recommend that my patients consume a cereal bowl-sized serving of vegetables with lunch and dinner, and ideally eat that portion of their meal first. With lunch, I often recommend a raw vegetable bowl (e.g., a salad) and at dinner cooked vegetables. With breakfast, patients can consume a smaller portion of vegetables or fruit. I've found this recommendation to be far more impactful than the generic advice, "consume x number of servings per day," since patients don't have to estimate or track serving sizes.

#### **Deep Breathing:**

One practice that I've found particularly important is deep breathing. Controlled deep breaths promote mindfulness, relaxation and—in this parasympathetic state—allow the digestive system to function optimally. I recommend patients inhale and hold their breath for a count of four and then exhale and hold their breath out for a count of four. This is repeated for 30 to 60 seconds or four to eight cycles. In many patients, this simple exercise has profound and immediate effects.

#### **Hydration:**

Dehydration is shockingly common. When patients don't consume enough water, they can't produce healthy amounts of stomach acid. For this reason, the third lifestyle change I teach is drinking 8 to 12 cups of water daily. Water should be consumed away from meals, so that it does not dilute stomach acid, enzymes or other digestive components.

"Controlled deep breaths promote mindfulness, relaxation and—in this parasympathetic state—allow the digestive system to function optimally."

- DR. DAN KALISH

# Four Protocols for GI Health

Developing healthy habits and dietary changes often take time—both to implement the change and to see results. For this reason, I encourage practitioners to utilize supplements in the beginning of the patient's care plan, as this allows practitioners to provide patients with targeted support, helps them develop trust with the practitioner and motivates them to continue working on lifestyle changes.

I developed the following four protocols to help address each of the Three Stages of GI Function. I encourage you to consider one or more of them. They do not have to be used in sequence—practitioners can select any protocol or even just a single formula that they feel is most appropriate.

Since the Three Stages of GI Function is a cyclical process, the Stage 1 Microbiome Optimization Protocol could be supportive of patients in any of the three stages. In addition to lab test results, the patient's timeline, priorities and symptoms can help you decide which protocol to apply.

Lastly, the goal is not to take these supplements indefinitely, but to discontinue them as lifestyle changes are incorporated and the patient's complaints resolve

### Microbiome Optimization Protocol<sup>‡</sup>

PRODUCT RECOMMENDATION	PRODUCT FEATURES	DOSING*
Poly-Prebiotic powder Order Code: PPRP1 or	Poly-Prebiotic powder: a unique, powdered blend of researched prebiotic fibers and polyphenols to support microbiome diversity along with gastrointestinal and immune health. <sup>‡</sup>	1 serving, 1-2 times daily, mixed with a beverage or into food
PureLean® Fiber Order Code: PLFX3	PureLean® Fiber: a blend of insoluble and soluble fibers to support digestive health, regularity and microflora balance.†	1 serving, 1-3 times daily, mixed with a beverage. Adequate water intake is recommended.
PureGG 25B Order Code: PGG6 or	PureGG 25B: contains highly researched Lactobacillus rhamnosus GG to support immune and G.I. health	Pure GG 25B: 1 capsule daily, with or between meals
Probiotic 50B Order Code: PR56	Probiotic 50B: features acid-resistant capsules with pH targeted release. Supports healthy intestinal microflora.	Probiotic 50B: 1 capsule daily, with or between meals
SunButyrate™-TG liquid Order Code: BTGL	Unique, butyrate-rich triglyceride oil that promotes intestinal health, gut barrier integrity, cytokine balance in the G.I. tract, bowel motility, and abdominal comfort	1 teaspoon, 1-3 times daily, with meals

#### STAGE 2

### Upper GI Support Protocol<sup>‡</sup>

PRODUCT RECOMMENDATION	OBJECTIVE	DOSING*
<b>Betaine HCl Pepsin</b> Order Code: BP2	A combination of betaine HCl and lactose-free pepsin designed to promote healthy gastric function	1 capsule, 3 times daily, with each meal
<b>Digestive Enzymes Ultra</b> Order Code: DEU1/DEU9 or	Digestive Enzymes Ultra: a comprehensive blend of vegetarian digestive enzymes to support protein, carbohydrate, fat, fiber, and dairy digestion <sup>†</sup>	Digestive Enzymes Ultra: 2 capsules with each meal
<b>Digestion GB</b> Order Code: DGB1/DGB9	Digestion GB: includes digestive enzymes, as well as bile salts, taurine and plant extracts to promote healthy gallbladder function and lipid utilization	Digestion GB: 2 capsules, with each meal
Peptic-Care ZC <sup>‡</sup> Order Code: PCZ6	Provides 75 mg of zinc-l-carnosine to support gastric health and comfort. Strengthens the stomach's mucosal defense and buffers gastric acid <sup>†</sup>	1 capsule, 1-2 times daily, with meals
<b>DGL Plus®</b> Order Code: DG1/DG6	A combination of plant extracts including deglycyrrhizinated licorice, aloe vera, slippery elm and marshmallow root to support a healthy stomach lining <sup>†</sup>	1 capsule daily, before a meal

#### STAGE 2

# Lower GI Support Protocol<sup>‡</sup>

PRODUCT RECOMMENDATION	OBJECTIVE	DOSING*
<b>Epi-Integrity Powder</b> Order Code: EIP1	A combination of I-glutamine and plant extracts to support a healthy immune response and GI integrity <sup>†</sup>	1 scoop, 1-2 times daily
GlutenAssure Multivitamin Order Code: GAM9	A unique multivitamin/mineral complex specially formulated with higher levels of certain nutrients for patients consuming a gluten-free diet, plus Tolerase® G to support the breakdown of inadvertent gluten ingestion <sup>1</sup>	3 capsules per day, 1 with each meal
Saccharomyces Boulardii Order Code: SB6	A probiotic yeast designed to support a healthy intestinal microflora and G.I. function <sup>†</sup>	2 capsules, 1-2 times daily, between meals

#### STAGE 3

### GI Microbial Defense Protocol<sup>‡</sup>

PRODUCT RECOMMENDATION	OBJECTIVE	DOSING*
MicroDefense w/Oregano Order Code: MI31/MI39	A combination of plant extracts, including oregano, designed to support healthy gastrointestinal tract function and microbial balance <sup>†</sup>	1 capsule, 1-3 times daily, just before a meal, with 6-8 oz water
<b>A.C. Formula II</b> Order Code: AC21	Formulated with herbal extracts, like grapefruit seed extract, to support intestinal microbial balance <sup>†</sup>	2 capsules, 1-3 times daily, just before meals, with 6-8 oz water

‡These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

<sup>^</sup>This product is not intended to replace a gluten-free diet or to treat or prevent celiac disease \*Dosages should be personalized to the patient at the discretion of the healthcare provider.



# Summary

GI complaints are highly prevalent and a major concern for many patients. Dr. Kalish's methodology for understanding functional GI complaints—Three Stages of GI Function illustrates how patients tend to progress through a series of predictable stages and how to interrupt this process to support gut health. At your disposal are four of Dr. Kalish's gut health protocols, along with his preferred lifestyle recommendations and laboratory markers to help inform your plan of care.<sup>‡</sup>

### More Educational Resources at Your Fingertips

For more PureGI exclusive resources visit: PureEncapsulationsPro.com/PureGI

#### Connect with Dr. Kalish

Dr. Dan Kalish, founder of The Kalish Institute for Functional Medicine, has trained over 5,000 practitioners on building successful Telemedicine and Functional Medicine practices. Founded in 2006, The Kalish Institute teaches clinical application and patient communication techniques through a hands-on, case-based approach.

Learn more at KalishInstitute.com Join Dr. Kalish on Facebook @kalishinstitute

# **Pure Encapsulations®: Nutritional Supplements** You Can Trust

At Pure Encapsulations, we've spent the last 30 years researching, innovating, and developing our comprehensive line of premium supplements to bring you uniquely formulated products made with high-quality and pure ingredients, backed by verifiable science. And what we leave out of our products is just as important as what we put in. That's why Pure Encapsulations offers a comprehensive line of supplements **FREE FROM** unnecessary additives and many common allergens, providing your patients with everything they need, and nothing they don't—that's goodness encapsulated.

# **PureGI™ Products**

### A.C. Formula II

PureGI™ product line

SUPPORTS INTESTINAL MICROBIAL BALANCE

This combination of herbal extracts, caprylic acid and calcium undecylenate promotes a healthy environment for microflora in the colon and intestinal tract. Undecylenic acid and caprylic acid are fatty acids that promote a favorable environment for beneficial microflora. Calcium and magnesium act as buffers and may also help slow the dispersion and release of undecylenic acid and caprylic acid to support activity throughout the gastrointestinal tract. Grapefruit seed extract and berberine sulfate support microbial balance. Research suggests that they promote a healthy G.I. environment when exposed to a wide range of bacterial biotypes.\*

#### 2 capsules, 1-3 times daily, just before meals, with 6-8 oz water. Two (size 00) vegetarian capsules contain:

Calcium (as calcium undecylenate and calcium caprylate)	44 mg
Magnesium (as magnesium caprylate)	17 mg
Caprylic acid (as calcium and magnesium caprylate)	400 mg
Bromelain (from pineapple stem) (2400 GDU/g)	250 mg
Undecylenic acid	125 mg
Grapefruit (Citrus x paradisi) extract (seed and fruit)	100 mg
Berberine sulfate	50 mg
Other ingredients: vegetarian capsule (cellulose, water), hypoallerg	

plant fiber (cellulose)

# Our supplements are FREE FROM:







& Peanuts



Flavors &







#### Not to be taken by pregnant or lactating women.



A.C. Formula II







Quantity

120 AC21

# **Betaine HCl Pepsin**

**PureGI**<sup>™</sup> product line

#### PROMOTES HEALTHY DIGESTIVE FUNCTION<sup>‡</sup>

Betaine HCl and pepsin are gastric-juice components essential to the digestion of food and absorption of most nutrients. In particular, betaine HCl is necessary for adequate absorption of protein, calcium, vitamin  $B_{12}$  and iron. The low pH of the stomach's hydrochloric acid destroys ingested bacteria and microorganisms. This formula can be beneficial for anyone seeking enhanced digestive function.

#### 1 capsule, 3 times daily, with each meal.

plant fiber (cellulose), ascorbyl palmitate

#### Each (size 00) vegetarian capsule contains:

` , , , .	
Betaine HCI	520 mg
Pepsin (1:10,000 USP units) (vegan)	21 mg
Other ingredients: vegetarian capsule (cellulose, water)	hypoallergenic,

Discontinue immediately if a burning sensation occurs. Not recommended for people with ulcers or a history of ulcers.







Betaine HCI Pepsin Quantity

<sup>\*</sup>Except where labeled.
†Visit PureEncapsulations.com for more information about our GMO policy

#### DGL Plus®

#### OFFERS NUTRITIONAL SUPPORT FOR HEALTHY STOMACH LINING<sup>‡</sup>

This combination of deglycyrrhizinated licorice (DGL) and herbal extracts provides nutritional support to the gastrointestinal tract. DGL Plus® supports the body's natural defense mechanisms by stimulating the mass, quality, and production of mucous, a major component of the stomach's protective lining. DGL is free of side effects typically associated with licorice.

#### 1 capsule daily, before a meal, or as directed by a health professional. Each (size 00) vegetarian capsule contains

Deglycyrrhizinated licorice (Glycyrrhiza glabra) extract (root)	300 mg
Aloe vera (Aloe barbadensis) extract (inner fillet)	50 mg
(standardized to contain 10% polysaccharides)	
Slippery elm (Ulmus fulva) powder (bark)	100 mg
Marshmallow (Althaea officinalis) extract (root)	200 mg
Other ingredients: vegetarian cansule (cellulose water) ascorby	d nalmitate

#### Not to be taken by pregnant or lactating women.







DGL Plus®	Quantity	Order Code
	180	DG1
	60	DC6



# **Digestion GB**

PureGI™ product line

A UNIQUE MIX OF ENZYMES, BILE SALTS, TAURINE AND HERBALS TO PROMOTE HEALTHY GALLBLADDER FUNCTION AND LIPID UTILIZATION IN ADDITION TO GENERAL DIGESTIVE FUNCTION<sup>‡</sup>

Digestion GB contains gallbladder digestive enzymes, bile salts, taurine and herbal extracts to promote healthy gall bladder function and fat utilization. The metabolism of fats involves emulsification and digestion in a complex process that requires healthy liver, gallbladder and pancreas function. Milk thistle, curcumin and taurine promote liver and gallbladder health and stimulate production and secretion of bile acids. Bile acids, also provided in the form of ox bile salts, support the emulsification of fats necessary for digestion. The digestive enzymes included in this formula are active in a broad pH range to support fat, carbohydrate and protein digestion to complement pancreatic enzyme activity. This formula has enhanced lipase for extra fat digestion support.<sup>‡</sup>

#### 2 capsules, with each meal, or as directed by a health professional. Two (size 0) vegetarian capsules contain:

Proprietary enzyme blend	160 mg	
Providing:		
Protease	16,000 HUT	
Lipase	6,000 FIP	
Amylase	600 DU	
Ox bile powder (bovine)	225 mg	
Taurine (free-form)	250 mg	
Milk thistle (Silybum marianum) extract (seed)	150 mg	
(standardized to contain 80% silymarin)		
Turmeric (Curcuma longa) extract (root)	100 mg	
(standardized to contain 95% curcuminoids)		
Other ingredients: vegetarian capsule (cellulose, water), hypoallergenic		

Gastrointestinal

plant fiber (cellulose), ascorbyl palmitate



gestion GB	Quantity	Ordei Code
	180	DGB1
	90	DGBG

# Digestive Enzymes Ultra

PureGI™ product line

COMPREHENSIVE BLEND OF VEGETARIAN DIGESTIVE ENZYMES; SUPPORT FOR PROTEIN, CARBOHYDRATE, FAT, FIBER AND DAIRY DIGESTION<sup>‡</sup>

Digestive Enzymes Ultra contains an extensive profile of vegetarian digestive enzymes. Proteases included in this formula provide optimal activity across a wide pH range. They facilitate the normal breakdown of proteins and di- and tri-peptides. Lipase promotes lipid breakdown, while amylase and glucoamylase are included to stimulate polysaccharide breakdown of starch and glycogen. Invertase and lactase support digestion of carbohydrate disaccharides, including the dairy sugar lactose. This formula also offers numerous enzymes to support fiber breakdown, including cellulase, hemicellulase, betaglucanase and phytase. These enzymes act to break down cell wall components and phytic acid, promoting nutrient bioavailability of fiber-containing foods. Additionally, alpha-galactosidase promotes the breakdown of certain complex carbohydrates, such as raffinose and stachyose, found in some vegetables, grains and legumes—helping to relieve occasional bloating or gas.\*

### 2 capsules with each meal, or as directed by a health professional.

Two (size 3) vegetarian capsules contain:

Proprietary enzyme blend	391 mg
Providing:	
Amylase	24,000 DU
Protease	60,000 HUT
Protease 6.0	20,000 HUT
Glucoamylase	30 AGU
Lactase	1,600 ALU
Lipase	3,000 FIP
Beta-glucanase	20 BGU
Invertase	900 SU
Cellulase	800 CU
Alpha-galactosidase	120 GalU
Protease 3.0	20 SAPU
Phytase	10 FTU
Hemicellulase	200 HCU

Other ingredients: vegetarian capsule (cellulose, water), ascorbyl palmitate, hypoallergenic plant fiber (cellulose)







Digestive Enzymes Ultra	Quantity	Code
	180	DEU1
	90	DEU9

# Epilntegrity powder Shelf-Stable

**PureResponse**<sup>™</sup> product line

Formulated with Samuel F. Yanuck, D.C., FACFN, FIAMA+

PROMOTES HEALTHY MODULATION OF MUCOSAL IMMUNE RESPONSES TO SUPPORT GI INTEGRITY IN A GREAT-TASTING POWDER<sup>‡</sup>

Epilntegrity powder combines glutamine, prebiotic fiber and herbal extracts to promote healthy modulation of mucosal immune response to support gastrointestinal (G.I.) integrity and function. Th2 modulation may be indicated when addressing immune balance in the G.I. tract. L-glutamine is an essential fuel for enterocytes (the cells that line the small intestine and colon), supporting cellular renewal, glutathione production and healthy, everyday tissue repair, while promoting healthy villous function. Arabinogalactan is a prebiotic fiber found in high concentrations in North American larch trees. It has been shown to increase the concentration of beneficial bacteria. such as Bacteroidetes and Faecalibacterium prausnitzii. Beneficial microflora are crucial for proper gut associated lymphoid tissue (GALT) function and development. Research suggests higher levels of F. prausnitzii are associated with healthy cytokine balance and G.I. function. In clinical trials, arabinogalactan has been shown to promote immune cell function. In a randomized three-week trial involving healthy adults, arabinogalactan potentiated the innate immune system, supporting key first-line defenses. Perilla supports cytokine homeostasis of the G.I. mucosal tissue. In a randomized, controlled trial involving 50 individuals, 150 mg of Benegut® Perilla frutescens extract twice daily offered statistically significant support for G.I.

comfort. Research suggests that perilla also helps maintain cytokine balance and stabilize mast cells. Astragalus promotes cytokine balance and supports macrophage, natural killer (NK) cell and T-cell activity. Adaptogens like astragalus support physiological and cellular homeostasis and have positive effects on immune function and antioxidant defenses. Deglycyrrhizinated licorice (DGL) maintains intestinal comfort by supporting the protective mucosal lining.<sup>‡</sup>

#### 1 scoop, 1-2 times daily. Add 1 serving to 8 oz of water or juice. Shake or stir until dissolved.

Serving size: 1 scoop (approximately 5.7 g) Servings per container: approximately 30

#### One scoop (approximately 5.7 g) contains:

Calories	15
Total Carbohydrate	2.5 g
Sodium (naturally occurring)	25 mg
Arabinogalactan	2.4 g
I-Glutamine (free form)	2.4 g
Benegut® Perilla (Perilla frutescens) extract (leaf)	150 mg
Astragalus (Astragalus membranaceus) extract (root)	200 mg
Deglycyrrhizinated licorice (Glycyrrhiza glabra) extract (root)	50 mg
Other ingredients: citric acid, natural strawberry and lemonade flavors,	
malic acid, purified stevia leaf extract	

Benegut® is a trademark of Vital Solutions GmbH, Germany



Epilntegrity powder









EIP1 6 oz (171 g)

### GlutenAssure Multivitamin

With Metafolin® L-5-MTHF

MULTIVITAMIN/MINERAL COMPLEX DESIGNED TO SUPPORT NUTRITIONAL NEEDS OF THOSE AVOIDING GLUTEN

#### Indications:

• Men and women ages 18 and up

#### Vitamin Distinctions:

- Provides enhanced levels of fat-soluble vitamins to meet increased needs
- Provides activated B vitamins, including pyridoxal-5-phosphate, riboflavin-5-phosphate, and Metafolin® L-5-methyltetrahydrofolate (L-5-MTHF), the naturally occurring, universally metabolized form
- Offers activated vitamin B<sub>12</sub> in a blend of adenosylcobalamin and methylcobalamin
- Includes vitamin  $K_1$  and  $K_2$  (menaguinone-7) to support healthy calcium metabolism<sup>‡</sup>

#### **Special Features:**

- Contains unique, clinically researched Tolerase® G prolylendopeptidase enzyme at the level designed to target the breakdown of 500 mg gluten over 3 capsules<sup>1</sup>
- Convenient 3-capsule dosing designed to be taken at each meal to target inadvertent dietary gluten
- Offers calcium, magnesium, folate, and vitamins B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub> and D, nutrients that can be low in individuals following a gluten-free diet\*
- Provides lutein to support macular health
- Contains the concentrated 5-LOXIN® boswellia extract to promote healthy immune activity in the epithelial lining of the digestive tract and cytokine balance<sup>†</sup>

Nutrition surveys indicate that gluten-free diets are often low in fiber and micronutrients, particularly B vitamins and certain minerals. GlutenAssure Multivitamin is specially formulated with higher levels of key B vitamins, as well as magnesium, calcium, zinc and selenium. Enhanced levels of fat-soluble vitamins A, D, E,  $K_1$  and  $K_2$  help support optimal serum levels of these nutrients, which can be difficult to absorb. 5-LOXIN® boswellia extract is concentrated to provide 10 times as much AKBA as typical boswellia extracts. Research suggests that AKBA promotes cytokine balance to support joint and gastrointestinal health, in part by maintaining healthy immune activity in the epithelial lining of the digestive tract. This multivitamin also includes the scientifically researched prolyl-endopeptidase enzyme targeting gluten breakdown. Research suggests that individuals following a gluten-free diet are exposed to an average of 150 to 400 mg of gluten daily. This unique formulation is designed to be taken with meals and target this inadvertent gluten exposure. In a randomized, double-blind, placebo-controlled trial, individuals consuming prolylendopeptidase enzyme and gluten showed lower  $\alpha$ -gliadin (a main component of gluten) concentration in the stomach and duodenum. The enzyme specifically degrades the immunogenic parts of the gluten protein. Research reveals that gluten-sensitive T-cells no longer react after gluten has been degraded with the enzyme.

#### 1 capsule with each meal.

#### Each (size 00) vegetarian capsule contains:

Vitamin A (as vitamin A acetate and as 20% beta carotene)	500 mcg
Vitamin C (as ascorbic acid)	33 mg
Vitamin D (as cholecalciferol) (D₃) 8.3 mc	cg (333 IU)
Vitamin E (as d-alpha tocopherol succinate)	6.6 mg
Vitamin K (as vitamin K <sub>1</sub> )	30 mcg
Thiamin (as thiamin HCI) (B <sub>1</sub> )	3.3 mg
Riboflavin (as riboflavin and 50% riboflavin-5-phosphate (activated B <sub>2</sub> ))	1.3 mg
Niacin (as niacin and 75% niacinamide)	6.6 mg
Vitamin B <sub>6</sub> (as pyridoxine HCl and 50% pyridoxal-5-phosphat (activated B <sub>6</sub> ))	e 8.3 mg
Folate (as Metafolin®, L-5-MTHF) 333 mcg DFE (200 mcg L	5-MTHF)
Vitamin B <sub>12</sub> (as methylcobalamin and 50% adenosylcobalamir	 า)333 mcg
Biotin	33 mcg
Pantothenic acid (as calcium pantothenate) (B₅)	2 mg
Choline (as choline bitartrate)	10 mg
Calcium (as di-calcium malate) (DimaCal®)	50 mg
lodine (as potassium iodide)	50 mcg
Magnesium (as di-magnesium malate) (Albion®)	50 mg
Zinc (as zinc picolinate)	5 mg
Selenium (as selenomethionine)	23 mcg
Copper (as copper bis-glycinate)	0.3 mg
Manganese (as manganese citrate)	0.8 mg
Chromium (as chromium picolinate)	33 mcg
Vitamin K <sub>2</sub> (menaquinone-7)	10 mcg
Inositol	10 mg
FloraGLO® lutein	666 mcg
5-LOXIN® Boswellia serrata extract Indian frankincense	33 mg
(Boswellia serrata) extract (gum resin)(standardized to cont 3-acetyl-11-keto-beta-boswellic acid (AKBA))	ain 30%
Tolerase® G Prolyl endopeptidase	29,000 PPI
Other ingredients: vegetarian capsule (cellulose, water), hypoc	ıllergenic

(Bostveilla serrata) extract (garri resiri) (staria	araizea to contain 5070
3-acetyl-11-keto-beta-boswellic acid (AKBA	))
Tolerase® G Prolyl endopeptidase	29,000 PPI
Other ingredients: vegetarian capsule (cellulose	, water), hypoallergenic
plant fiber (cellulose)	

Metafolin® is a registered trademark of Merck KGaA, Darmstadt, Germany.

Albion® and DimaCal® are registered trademarks of Albion Laboratories, Inc. U.S. Patent 6,706,904.

®FloraGLO is a registered trademark of Kemin Industries, Inc.

5-LOXIN® is a registered trademark of PL Thomas – Laila Nutra, LLC and is used under license. International Patents Pending.

Tolerase® G is a trademark of DSM.

Multivitamins, Vitamins & Minerals



GlutenAssure Multivitamin	Quantity	Order Code
	90	GAMA

# MicroDefense w/Oregano

PureGI™ product line

COMBINATION OF PLANT EXTRACTS DESIGNED TO SUPPORT HEALTHY GASTROINTESTINAL TRACT FUNCTION AND MICROBIAL BALANCE<sup>‡</sup>

Artemisia, which contains artemisinin, has been used traditionally for thousands of years to promote healthy microbial balance within the body. Oregano oil powder offers antioxidant and microbial-balancing properties. In vitro and animal research suggests that oregano oil and clove can diffuse through microbial cell membranes, promoting membrane permeability. Berberine sulfate is a highly concentrated microbial-balancing compound. Olive leaf extract contains the active constituent oleuropein, a phenolic glucoside that helps maintain healthy G.I. microorganism balance and may help support immune function.<sup>‡</sup>

#### 1 capsule, 1-3 times daily, just before a meal, with 6-8 oz water, for 2-3 months, or as directed by a health professional.

#### Each (size 00) vegetarian capsule contains:

_as: (si_s ss) regetarian sapsars seritames	
Berberine sulfate	100 mg
Olive (Olea europaea) extract (leaf)	100 mg
(standardized to contain 15% oleuropein)	
Sweet wormwood (Artemisia annua) extract (aerial parts)	150 mg
Clove (Syzygium aromaticum) powder (bud)	50 mg
Oregano (Origanum vulgare) oil extract (leaf and flower)	100 mg
Other ingredients: vegetarian capsule (cellulose, water)	

#### Not to be taken by pregnant or lactating women.







licroDefense w/ Oregano	Quantity	Order Code
	180	MI31



### Peptic-Care<sup>†</sup> (Zinc-L-Carnosine)

**PureGI**<sup>™</sup> product line

PROVIDES PATENTED SUPPORT FOR GASTRIC HEALTH AND COMFORT FOR STRENGTHENING THE STOMACH'S MUCOSAL DEFENSES, BUFFERING GASTRIC ACID. MAINTAINING GASTRIC INTEGRITY AND PROVIDING ANTIOXIDANT SUPPORT FOR OVERALL GASTRIC HEALTH AND COMFORT<sup>‡</sup>

This patented, 1:1 chelate of zinc and I-carnosine provides a unique configuration that is important to this compound's activity. Zinccarnosine has a slow disassociation rate and adheres to the stomach lining, allowing for prolonged protection. Once dissociated, zinc and carnosine provide synergistic antioxidant protection, support the stomach's mucosal defenses, buffer gastric acid and maintain healthy cytokine release. Studies have suggested that this combination has greater effects on the integrity of the gastric lining than either ingredient alone. One Japanese multi-center, double-blind study involving 299 subjects described a positive effect of zinc-carnosine on objective and subjective parameters of normal gastric health and repair functions, especially after 8 weeks. Seven additional clinical evaluations with more than 550 volunteers indicate similar results. In recent in vitro and in vivo studies, zinc-carnosine stimulated healthy gut repair by supporting healthy colon cell reproduction and maintaining healthy villous function. In a double-blind, randomized, crossover trial, zinc-carnosine maintained healthy gut permeability. Extensively studied and utilized in Japan, this zinc-carnosine combination has an excellent safety profile.

#### 1 capsule, 1-2 times daily, with meals.

#### Each (size 3) vegetarian capsule contains:

Zinc (from 75 mg zinc-l-carnosine complex)	16 mg
Carnosine (from 75 mg zinc-l-carnosine complex)	58 mg

Other ingredients: hypoallergenic plant fiber (cellulose), vegetarian capsule (cellulose, water), ascorbyl palmitate



(Zinc-L-Carnosine)

Peptic-Care<sup>‡</sup>







PCZ6 60

Order

This product is not intended to replace a aluten-free diet or to treat or prevent celiac disease

### Poly-Prebiotic powder

PureGI™ product line

A UNIQUE POWDERED BLEND OF RESEARCHED PREBIOTIC FIBERS AND POLYPHENOLS TO SUPPORT GASTROINTESTINAL, CELLULAR, AND IMMUNE FUNCTION BY BOOSTING BIFIDOBACTERIA AND MICROBIOME DIVERSITY<sup>‡</sup>

Prebiotics are nondigestible components of food that act to modulate and support the gut microbiota. Emerging evidence suggests that they may play an even more significant role than probiotics, performing beneficial metabolic, trophic, and protective functions within the gut, leading to overall cellular, immune and metabolic support. High-microbiome diversity has been linked to optimal health and resilience. PreticX<sup>™</sup> XOS (xylooligosaccharide) and BioEcolians<sup>®</sup> a-GOS (alpha-glucooligosaccharide) both promote short-chain fatty acid (SCFA) production in the colon and Bifidobacteria in the G.I. tract. In one study, 1.4 grams or 2.8 grams of  $\mathsf{PreticX}^{\mathsf{T}} \mathsf{XOS}$ increased Bifidobacterium count 21% and 17% at four and eight weeks, respectively. In an in vitro study using clinical isolates from hospital patients, XOS was found to stimulate growth in all 35 Bifidobacterium strains tested. In another study, supplementation with 2 grams of a-GOS supported abdominal comfort by Day 7 and offered increased support throughout the 28-day period, including bowel motility and stool consistency. A significant increase in B. longum, B. animalis and lactobacilli was also reported. In addition, BioEcolians® supplementation increased secretion in the mucosa of the antimicrobial peptides  $\beta$ -defensins. These molecules moderate the adhesion of bacteria to the intestinal wall and support healthy cytokine balance in the intestine. The health benefits of polyphenols may be due to their effects on the microflora. These compounds are generally not absorbed, but pass through the G.I. tract, where they are biotransformed to enhance bioavailability and support healthy gut microbial composition. In an animal study involving mice, supplementation with cranberry polyphenols promoted healthy fat metabolism in the liver, insulin sensitivity, and cytokine balance. It was also shown to markedly increase Akkermansia muciniphila.

Animal models indicate a role for Akkermansia on gut barrier function, including increased mucus layer thickness and production of occludin, an essential component of tight junctions. Polyphenols from blueberry and pomegranate support the growth of lactobacilli and bifidobacterium in the colon, as well as cytokine balance in the G.I. tract. In contrast to many common prebiotics, XOS,  $\alpha$ -GOS and polyphenols report very low incidence of gas, bloating or other intestinal side effects.<sup>‡</sup>

#### 1 serving, 1-2 times daily, mixed with a beverage or into food.

Serving size: 1 scoop (approximately 4.6 g) Servings per container: Approximately 30

#### One scoop contains:

Calories	10
Total carbohydrate	3 g
Total sugars	2 g
PreticX <sup>™</sup> xylooligosaccharide (XOS)	1.4 g
BioEcolians® a-glucooligosaccharide (a-GOS)	1 g
Cranberry (Vaccinium macrocarpon) extract (fruit)	1.2 g
(standardized to contain 12 mg proanthocyanidins [PACs])	
Blueberry (Vaccinium angustifolium) extract (fruit)	100 mg
(standardized to contain 4% polyphenols)	
Pomegranate (Punica granatum) juice powder (fruit)	500 mg
Other ingredients: citric acid, malic acid, stevia leaf extract	

Xylooligosaccharide. PreticX<sup>™</sup> is covered by registered and pending patents. PreticX<sup>™</sup> is a trademark of AIDP, Inc. PreticX<sup>™</sup> is distributed exclusively by AIDP, Inc.

BioEcolians® is a registered trademark of Solabia.



Please visit PureEncapsulationsPro.com to access the most up-to-date product information and availability.







Poly-Prebiotic powder	Quantity	Order Code
	4.9 oz (138 g)	PPRP1



Improved Formula Allergen-Free

#### ACID-RESISTANT CAPSULES WITH PH TARGETED RELEASE; HIGH-POTENCY PROBIOTIC SUPPORT FOR HEALTHY INTESTINAL MICROFLORA‡

Probiotic 50B offers seven researched probiotic strains that promote healthy intestinal ecology to support gastrointestinal and immune health. Clinical studies indicate that Lactobacilli and Bifidobacteria supplementation supports intestinal epithelial integrity and a healthy immune response. Lactobacillus rhamnosus GG is one of the most characterized and utilized probiotic strains, having been studied in numerous clinical trials on immune, GI, and overall health across

#### 1 capsule daily, with or between meals.

#### Each (size 00) vegetarian capsule contains:

Probiotic blend

50 billion CFU

Providing:

Lactobacillus plantarum (Lp-115)

Lactobacillus acidophilus (La-14)

Lactobacillus rhamnosus GG

Lactobacillus gasseri (Lg-36)

Bifidobacterium lactis (BI-04)

Bifidobacterium longum (BI-05)

Bifidobacterium bifidum (Bb-06)

Other ingredients: hypoallergenic plant fiber (cellulose), vegetarian capsule (cellulose, gellan gum, water)

This formula requires refrigeration to maintain culture viability.

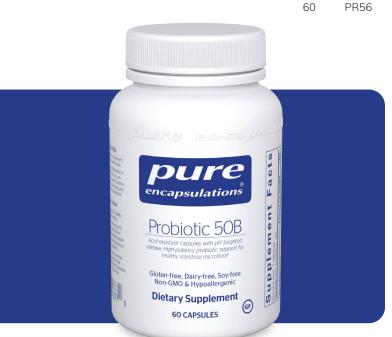
#### **Probiotics & Prebiotics**











### PureGG 25B

Shelf-Stable; Allergen-Free

#### HIGHLY RESEARCHED LACTOBACILLUS RHAMNOSUS GG TO SUPPORT IMMUNE, G.I., AND OVERALL HEALTH ACROSS ALL AGES‡

Lactobacillus rhamnosus GG is one of the most characterized and utilized probiotic strains, with numerous clinical trials across all ages. It is a human origin strain, identified for its resistance to gastric acidity, adhesion properties, and ability to support healthy gut microflora. Studies involving infants and children suggest that supplementation with L. rhamnosus GG supports healthy G.I. colonization, G.I. function, and immune function, particularly related to skin and respiratory health. In a study involving children ages 1-7 attending day care, L. rhamnosus GG offered statistically significant support for respiratory and immune health. Studies involving pregnant women suggest supplementation supports healthy gut microflora in the infant, and nutrient metabolism during pregnancy. In one study, infants whose mothers had received L. rhamnosus GG during pregnancy showed increased bifidobacterial diversity at Day 5 after birth. L. rhamnosus GG is well known for its effects on bowel function, particularly abdominal comfort, bowel motility and occasional diarrhea. It also promotes cytokine balance in the G.I. tract at the level of gene expression, and overall immunomodulatory support. In a double-blind, crossover study, L. rhamnosus GG supplementation moderated the neutrophil and monocyte immune response in dairy-challenged, milk-sensitive subjects, while promoting immune function in non-sensitive subjects. In another study, L. rhamnosus GG promoted healthy gene expression to support white blood cell (WBC) function. Elderly subjects supplemented for 28 days showed 95 differentially expressed genes related to cellular movement, cell-tocell signaling, and cytokine response.<sup>‡</sup>

## 1 capsule daily, with or between meals.

#### Each (size 00) vegetarian capsule contains:

Lactobacillus rhamnosus GG 25 billion CFU Other ingredients: vegetarian capsule (cellulose, water)

**Probiotics & Prebiotics** 

PureGG 25B









Quantity Code

PGG6



### PureLean® Fiber

#### PureLean® product line

POWDERED BLEND OF FIBER AND PREBIOTICS TO PROMOTE WEIGHT MANAGEMENT BY SUPPORTING HEALTHY MICROFLORA BALANCE, GLYCEMIC RESPONSE, SATIETY AND REGULARITY<sup>‡</sup>

The gut microflora is now recognized as an important factor in overall health, with potential roles ranging from cellular and immune health to metabolic function and weight management. Studies indicate that obese individuals possess lower levels of Bacteroidetes microorganisms and higher levels of Firmicutes bacteria in the GI tract compared to lean individuals. In one study, germ-free mice inoculated with bacteria from obese mice showed increased Firmicutes bacteria and an increase in body fat over two weeks despite no change in dietary intake, compared to mice inoculated with bacteria from lean mice. In a double-blind, randomized, placebo-controlled study, 32 healthy adult subjects were given 1.4 grams or 2.8 grams of PreticX™ XOS for eight weeks. The Bifidobacterium count increased 21% from the baseline at four weeks and 17% from the baseline at eight weeks in the highest dose group. B. fragilis levels (a Bacteroidetes organism) were also found to increase. Similar results were found in another study involving healthy young women, which also showed PreticX™ supplementation resulted in an increase in fecal triglyceride and cholesterol concentrations. In contrast to many common prebiotics, these studies reported no gas, bloating or other intestinal side effects. Each serving of PureLean® Fiber provides 0.7 grams PreticX™ XOS and a minimum of 6 grams fiber, typically providing 3.5 grams soluble fiber from glucomannan, guar gum, apple pectin and prune fiber, and 3 grams insoluble fiber from flax seed and cellulose. Soluble fiber helps slow the rate of digestion, promoting satiety, digestive health, nutrient absorption and healthy glycemic control.

encapsulations Saccharomyces boulardii Gluten-free, Non-GMO Dietary Supplement 60 CAPSULES

It enhances satiety by absorbing water and adding bulk in the digestive tract. Research has revealed that the high molecular weight and viscosity of glucomannan is particularly supportive. Each serving of PureLean® Fiber contains 1 gram of glucomannan. Several randomized controlled trials indicate that glucomannan supports healthy weight management<sup>†</sup> and lipid metabolism, and supports healthy glycemic control.<sup>‡</sup>

#### 1 serving, 1-3 times daily, mixed with a beverage. Adequate water intake is recommended.

Serving size: 2 scoops (approximately 14.4 g) Servings per container: approximately 24

Two scoops (approximately 14.4 g) contain:

Calories	40
Total carbohydrate	8 g
Dietary fiber	6 g
Sugar alcohols	2 g
Protein	1 g
Magnesium (as magnesium citrate)	100 mg
Sodium (naturally occurring)	30 mg
PreticX <sup>™</sup> xylooligosaacharides	700 mg
Proprietary fiber blend	10 g
Providing:	

CreaFibe cellulose, Sunfiber® partially hydrolyzed guar gum, flax seed fiber, 1,000 mg glucomannan, prune fruit powder, apple pectin

Other ingredients: xylitol, luo han guo (Momordica grosvenori)

Sunfiber® is a registered trademark of Taiyo International, Inc. PreticX<sup>™</sup> is a trademark of AIDP, Inc. PreticX<sup>™</sup> is a patent protected Xylooligosaccharide exclusively distributed by AIDP, Inc.

Cardiometabolic Health & Metabolism







PureLean® Fiber	Quantity	Order Code
	12207	PLEX3

12.2 oz (345.6 a)

# Saccharomyces boulardii (active probiotic culture) Allergen-Free

PROBIOTIC SUPPORT FOR HEALTHY INTESTINAL MICROFLORA AND G.I. FUNCTION<sup>‡</sup>

Saccharomyces boulardii is a probiotic yeast which nutritionally supports the health of the gastrointestinal tract. This yeast supports a balance of healthy gut flora.<sup>‡</sup>

2 capsules, 1-2 times daily, between meals.

Two (size 00) vegetarian capsules contain:

Saccharomyces boulardii 10 billion CFU Other ingredients: hypoallergenic plant fiber (cellulose), vegetarian

This formula requires refrigeration to maintain culture viability.

**Probiotics & Prebiotics** 

capsule (cellulose, water)









SunButyrate<sup>™</sup>-TG liquid

PureGI™ product line

UNIQUE, BUTYRATE-RICH TRIGLYCERIDE OIL THAT PROMOTES INTESTINAL HEALTH, GUT BARRIER INTEGRITY, CYTOKINE BALANCE IN THE G.I. TRACT. BOWEL MOTILITY, AND ABDOMINAL COMFORT<sup>‡</sup>

Butyrate is one of the three most abundant short-chain fatty acids (SCFAs) produced by anaerobic bacterial fermentation of polysaccharides/fiber in the colon, where it serves as an energy source for epithelial cells. Butyrate plays a major role in intestinal physiology, supporting both physical and biochemical protective barrier function, bowel motility, nutrient absorption, and immune activity of intestinal cells. It also promotes the proliferation, differentiation and renewal process of the colonocytes.

Research suggests that SCFAs produced by intestinal bacteria activate key players in the regulation of energy metabolism in the gut as well as regulate healthy gene expression for mucin production, supporting tight-junction assembly, healthy mucous production, and a healthy intestinal barrier. In a four-week study comparing a standard low-fiber Western diet to a high-fiber diet with high levels of resistant starch from potato and wheat bran concentrated in the hemicellulose fiber arabinoxylan, levels of butyrate, acetate and other SCFAs significantly increased, as did epithelial mucin 2 (MUC2) and the tight junction protein occludin. SCFAs also help protect epithelial cells by modulating oxidative stress and immune mediators, including prostaglandins; cytokines such as TNF-a, IL-6, IL-10; and the transcription factor NF-kB. Clinical trials indicate that butyrate supplementation supports intestinal function and promotes healthy cytokine balance in the G.I. tract. In a 30-day trial involving 50 subjects, 1 g butyrate promoted healthy G.I. motility and abdominal comfort, and reduced bloating in 68% of subjects.

Preliminary research suggests SCFAs could also offer support for blood vessel and blood-brain barrier integrity, as well as relaxation and satiety. Animal studies suggest that SCFA supplementation may moderate corticosterone response and promote the secretion of peptide YY, to inhibit gastric emptying and intestinal transit time. As butyrate is typically produced in the colon, oral butyrate salts have poor palatability and are easily degraded by stomach acid, preventing delivery to the colon.

Novel triglyceride-form SunButyrate<sup>™</sup> offers a light and pleasanttasting, unique triglyceride-form sunflower-based oil designed to protect butyrate from degradation in the stomach and upper G.I. tract. G.I. models and in vitro tests reveal 6-8% breakdown in the stomach compared to 70% breakdown in other forms, while maintaining >90% breakdown in the intestine.\*

1 teaspoon, 1-3 times daily, with meals.

Serving size: 1 teaspoon (5ml / 0.17 fl oz) Servings per container: 56

Each teaspoon contains:

Calories	40
Total Fat	5 g
Saturated Fat	1 g
SunButyrate <sup>™</sup> butyrate-triglyceride	4.5 g
Providing 875 mg butyric acid	

Other ingredients: natural blueberry and vanilla flavors, mixed tocopherols, rosemary leaf extract

SunButvrate<sup>™</sup> is a trademark used under license.



SunButyrate<sup>™</sup>-TG liquid





Order Quantity Code

280 ml BTGL (9.5 fl oz)

# Discover all of the Pure Exclusives

Pure Exclusives are unique to Pure Encapsulations and created in collaboration with a medical expert to address key needs for practitioners in specific areas. Each Pure Exclusive, like PureLean™, includes specially formulated products that focus on specific health needs, along with recommendations from highly experienced medical experts to help guide your plan of care. Discover all of the Pure Exclusives:

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- PureSYNAPSE™
- PureLean<sup>™</sup>
- PureWoman<sup>™</sup>
- PureResponse<sup>™</sup>

# PureGI<sup>™</sup>

Go With Your Gut



Access hundreds of research-based **FREE-FROM** products—from the #1 most recommended brand by healthcare professionals.<sup>1</sup>

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'Among professional supplement brands surveyed, Nutrition Business Journal" 2016, 2020

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