



DIGESTIVE RESTORATION PROGRAM

The Six Principles For Restoring
Gastrointestinal Health

Six Principles For Restoring Gastrointestinal Health

Gastrointestinal health is at the core of health of the whole person. Without healthy GI function, other systems—the immune system, the skin, the musculoskeletal system, the cardiovascular system—cannot function optimally. Clinical interventions that effectively support gastrointestinal function have been shown to help maintain and restore wellness and support health. Integrative Therapeutics™ Six Principles For Restoring Gastrointestinal Health are important in promoting healthy function of the gastrointestinal tract and re-establishing balance for patients with a broad range of health concerns.

Principle 1: Optimize Digestion

Principle 2: Provide Soothing Gastric Support

Principle 3: Restore Healthy Intestinal Mucosa and Colon Comfort

Principle 4: Support Intestinal Defense

Principle 5: Promote Detoxification and Elimination

Principle 6: Re-establish Healthy Microflora



Digestive Wellness

An optimally functioning digestive system is the cornerstone of good health. In addition to supporting the digestion and absorption of nutrients from the diet, the gastrointestinal tract protects the body by supporting detoxification and immunological processes. Eating a healthful diet is not necessarily enough. In order to assure digestive wellness, the gastrointestinal tract must function properly in these essential areas:

- Gastrointestinal secretions must be produced at adequate levels (e.g., hydrochloric acid, pepsin, pancreatic bicarbonate, amylase, lipase, protease, intestinal lactase, sucrase, maltase)
- · The gastric mucosa must be protected by appropriate mucin production and microbial defenses
- Support of the intestinal mucosa is important for proper absorption of nutrients as well as to support a semipermeable barrier that permits passage of needed nutrients while barring absorption of undesirable substances from the gut
- Supporting intestinal comfort and normal stool frequency and composition may be influenced by the balance and activity of cell mediators present in the colonic mucosa
- Intestinal defenses must be able to support an appropriate balance of microorganisms
- · Gastrointestinal motility must assure proper elimination of waste and toxins
- Hepatic function must be sufficient to assure proper assimilation of dietary lipids and detoxification of endogenous toxins and xenobiotics
- Healthy intestinal microflora must be present in appropriate numbers to assure healthy intestinal pH, immune response, and microbial defenses

Age-Related Digestive Challenges

In healthy individuals the aging process can contribute to a decrease in basal metabolic rate (BMR) and altered gastrointestinal function. The following digestive changes have been associated with aging:

- Reduced salivary production and decreased salivary amylase
- Decreased gastric acid secretion potentially impacting nutrient absorption
- · Compromised capacity of the gastric mucosa to rebound from environmental, dietary, and oxidative stresses
- · Reduction in absorptive surface area of the intestinal mucosa leading to decreased nutrient absorption
- Alteration of bacterial microflora balance in the small and large intestines
- · Slowed digestion and many secondary effects that can result from these changes



This Digestive Restoration Program explores Six Principles of nutritional support that can help restore the healthy function of the gastrointestinal tract and re-establish balance and well-being.

To learn more about the Digestive Restoration Program, visit integrative pro.com/digestion.

Principle 1: Optimize Digestion

In 2004 alone, patients made more than 100 million visits to healthcare professionals seeking support for healthy digestive comfort and function.

For reliable results, supplementation with Pure Plant Enzymes[™] can provide effective basic support for digestive function. Improved digestion can help to relieve gas, bloating, and occasional indigestion.*

Pure Plant Enzymes are vegetarian enzymes naturally derived from microbial and plant sources. They digest virtually all types of dietary macronutrients throughout a broad pH range. Because they are acid-stable, these enzymes are not destroyed by gastric acidity and do not require enteric coatings. They possess aggregate activity under both acid and alkaline conditions so they are effective beginning in the stomach and continuing in the intestines. The following table provides a summary of the main types of these enzymes including foods digested, activity units, and assay methods measured according to standards of the United States Pharmacopeia (USP) and Food Chemicals Codex (FCC).

Enzymes	Sources	Activity Units and Assay Method	Food Types Digested
Protease	Aspergillus oryzae, A. melleus, A. niger	USP (pH 7.5) PC; FCC (pH 7.0) HUT; FCC (pH 4.7)	Proteins and polypeptides from animals and plants (meat, fish, eggs, dairy, wheat, legumes, vegetables, etc.), proline dipeptides from gluten, casein
Amylase	A. oryzae	USP (pH 6.8) DU; FCC (pH 4.8)	Starches, complex carbohydrates, polysaccharides
Lipase	Rhizopus oryzae, A. niger	FIP (pH 7.0) LU; FCC (pH 6.5)	Fats, oils, triglycerides from animals and plants
Cellulase	A. niger	CU; FCC (pH 4.5)	Dietary fiber, cellulose, hemicellulose
Lactase	A. oryzae	ALU; FCC (pH 4.5)	Lactose
Sucrase	Saccharomyces sp.	INVU; FCC (pH 4.6)	Sucrose
Maltase	Malt barley (Hordeum vulgare)	DP°; FCC (pH 4.6)	Maltose, starch, polysaccharides
Phytase	A. niger	PU; FCC (pH 6.0)	Dietary phytate, phytic acid, pectin, cellulose
Alpha-Galactosidase	A. niger	GalU; FCC (pH 5.5)	Indigestible oligosaccharides and sugars, in beans, legumes, vegetables, grains, e.g. stachyose, raffinose

Other nutritional supplements can also be used to support digestion depending on individual needs:

- Betaine Hydrochloride (HCI) supports healthy stomach acidity, gastric function, and protein digestion.*
- Pepsin supports protein digestion under acidic conditions in the stomach.*
- Pancreatin supplies pancreatic amylase, lipase, and protease for digestion of carbohydrates, fat, and protein under alkaline conditions in the upper small intestine.* Trypsin and chymotrypsin form the main constituents of pancreatic protease.
- Ox Bile Extract supplies bile salts to aid in the emulsification and assimilation of dietary fats.*

Principle 2: Provide Soothing Gastric Support

The stomach maintains an acidic pH that helps to initiate digestion and promote microbial defense, yet its epithelial tissues must simultaneously be shielded against harsh acidic conditions. The stomach's protective mucin barrier must be intact in order to protect stomach health and comfort, while the lower esophageal sphincter must remain tightly closed during digestion.

Patients who experience an occasional discomfort after consuming coffee, spicy or fried foods, and experience relief after eating food or drinking milk, may benefit from natural agents that provide soothing gastric support such as those listed below:

- Deglycyrrhizinated Licorice (DGL) has been shown to support a healthy gastric mucosal lining and to stimulate increased mucin production.* Removal of the glycyrrhizin component preserves mucosal benefits while avoiding potential concerns with maintaining normal blood pressure.
- **Gamma-Oryzanol**, derived from rice bran oil, has been shown to produce soothing effects on stomach tissues in the presence of stress.*
- Marshmallow Root has a long history of traditional use as a demulcent herb. Its mucilagenous properties form a soothing coat over mucous membranes such as the gastric mucosa.*
- Slippery Elm is a botanical demulcent with a long history of traditional use in soothing mucous membranes.*
- Zinc-Carnosine, a unique ingredient that combines L-carnosine, a naturally occurring dipeptide, with elemental zinc, has been clinically shown to support mucosal integrity and gastrointestinal immune defenses.* It also helps relieve occasional indigestion.*



Principle 3: Restore Healthy Intestinal Mucosa and Colon Comfort

The human gut contains endotoxin and bacteria. Under healthy conditions, the epithelial lining of the gastrointestinal tract forms a selectively-permeable membrane that permits the absorption of nutrients from the diet while presenting a barrier against potentially harmful agents. Maintaining optimal structure and function of the intestinal mucosa plays an essential role in supporting overall health and wellness.

Intestinal permeability can be assessed by laboratory tests (such as the mannitol-lactulose test) or by clinical observation. Identifying and temporarily eliminating foods to which the body is sensitive supports healthy intestinal permeability. Research indicates that nutritional factors may help to support mucosal health and promote normal intestinal permeability, including certain antioxidants and mucosal nutrients.

Intestinal comfort and normal stool frequency and composition may be associated with healthy cell mediator balance in the colonic mucosa. Laboratory assays of cell mediators as well as clinical assessment can help to evaluate and monitor colon health and normal function.

Nutrients for Intestinal Barrier Function

- L-Glutamine is a conditionally essential amino acid used as fuel by enterocytes.* Many well-designed clinical studies have shown that L-glutamine restores healthy gut barrier function and permeability.*
- N-Acetyl D-Glucosamine (NAG) is a naturally occurring precursor for production of intestinal mucin, the protective glycoconjugate secreted by goblet cells that makes up the intestinal glycocalyx.* NAG has been shown to be absorbed from the gut lumen and directly incorporated into glycosaminoglycans and glycoproteins of the intestinal mucosa.*
- Gamma-Linolenic Acid (GLA) is an omega-6 fatty acid that has been shown to support healthy gut barrier function due to its incorporation into cell wall membranes.*
- Gamma-Oryzanol has been shown to support gastrointestinal health and the lining of the stomach.*
- Phosphatidylcholine is a major component of cell membranes and a key constituent of the hydrophobic mucus gel that protects the gastrointestinal mucosa.* It has also been shown to help protect human epithelial cells from endotoxins.*

Antioxidant Support for the Intestinal Mucosa

- Quercetin has been shown to support healthy regulation of histamine release from human intestinal mast cells and to enhance intestinal barrier function in human intestinal cells.*
- **Ginkgo biloba** is an antioxidant and free radical scavenger with cytoprotective effects on cells of the gastrointestinal mucosa.* Ginkgo has also been shown to support healthy intestinal permeability and mucosal oxygen supply.*
- N-Acetyl L-Cysteine (NAC) is an antioxidant and precursor to glutathione.* Pre-treatment with NAC has been shown to support healthy intestinal permeability.*
- Vitamins C and E help protect intestinal mucosa cells from oxidative and free radical stressors.*
- Zinc plays a critical role in the maintenance of healthy intestinal permeability.* Zinc has cytoprotective activity in the gastrointestinal tract and helps to stabilize intestinal mast cells.*

Support for Colon Comfort and Cell Mediator Balance

• Turmeric Extract, Green Tea Extract, and Selenomethionine, in combination, support intestinal comfort and a healthy cell mediator response.* One *in vitro* study suggested that curcumin, green tea extract, and selenomethionine, in combination, appear to work synergistically.*

Principle 4: Support Intestinal Defense

A healthy intestinal defense system depends on a balance of intestinal microflora. An individual's intestinal flora can be influenced by many factors such as travel, diet, or other stressors. Certain botanical agents and nutritional factors have been shown to help provide support for intestinal microbial defense, which may help restore optimal gastrointestinal health and comfort.*

Broad Microbial Defense

- Berberine Sulfate is a natural plant alkaloid found in goldenseal, barberry, and Oregon grape. Research indicates berberine sulfate can enhance intestinal health by promoting the balance of a broad spectrum of bacterial and fungal organisms.*
- Goldenseal Extracts have been shown to support the balance of a broad range of intestinal organisms.*
- Garlic and its key compound, allicin, have been shown to support bacterial, fungal, and yeast balance.*
- Black Walnut Extract is a source of juglone, an important compound shown to balance a wide variety of bacterial and yeast organisms.*
- Grapefruit Extract promotes a healthy balance of bacteria, yeast, and fungi.*
- Sweet Wormwood is a source of artemisinin, a compound that has been shown to support healthy intestinal defense and improve microbial balance.*

Healthy Yeast Balance

- Oregano Oil and its constituents have been shown to promote healthy yeast balance.*
- · Thyme contains a key constituent, thymol, which has been shown to be active in controlling yeast growth.*
- Pau D'Arco Bark promotes a healthy balance of yeast and fungi.*
- Caprylic Acid is a medium-chain fatty acid that has been shown to support healthy intestinal function.*
- Undecylenic Acid flora is a monounsaturated fatty acid that has been shown to help maintain a healthy balance of intestinal flora.*





Principle 5: Promote Detoxification and Elimination

Exposure to foreign chemicals, or xenobiotics, in the environment is virtually universal. The body even produces its own toxins as a normal part of its everyday metabolism and others are produced as waste products by the bacteria that inhabit the GI tract. In a healthy gut, these waste products are detoxified by the liver and eliminated via the bowel, supporting the health of tissues and organs throughout the body. A healthy intestinal mucosa also supports detoxification by screening what substances pass into the bloodstream and thus limiting the liver's total xenobiotic processing. Lifestyle and environmental factors can play a significant role in reducing exposure to xenobiotics. Toxic chemicals, including volatile organic compounds, such as solvents and formaldehyde, are found in a wide range of products from automotive fuels to household cleaners and building materials. Food represents the most common source of exposure to xenobiotics. Numerous studies have found pesticide residues in a significant percentage of food samples. Thousands of chemicals are used in food processing and packaging materials. Use of organic and minimally processed foods can help to reduce exposure to toxins from the diet.

Nutritional factors can also play an essential role in supporting healthy detoxification and elimination. Phase I and Phase II detoxification pathways in the liver require many cofactors and conjugating agents supplied by the diet. Other nutrients such as lipotropic factors are able to mobilize fat from the liver, facilitating the hepatic metabolism of hormones and other compounds.

Agents to Support Liver Detoxification Pathways

- Calcium-D-Glucarate supports Phase II conjugation reactions by forming D-glucaro-1,4-lactone in the body, a powerful inhibitor of beta-glucuronidase, an enzyme expressed by some gut bacteria that deconjugates products of Phase II liver metabolism.*
- Glycine, Glutamine, and Taurine are amino acids that act as conjugating agents to support Phase II detoxication.*
- N-Acetyl L-Cysteine (NAC) supports Phase II sulfation and promotes glutathione synthesis, thus supporting cellular health and aiding the excretion of toxins.*
- Reduced Glutathione is a powerful antioxidant and conjugating agent that plays a crucial role in the detoxication of xenobiotics.* It is vital in the regeneration of other antioxidants, such as vitamins C and E.*
- Vitamin E supports Phase I detoxification and protects cell membranes from damage by quenching free radicals.*
- · Choline, Methionine, and Inositol act as lipotropic agents to help support the mobilization of fat from the liver.*
- Dandelion, Fringe Tree, Greater Celandine, Beet Root, and Black Radish Root are botanical cholagogues that help support healthy bile flow, a marker of healthy liver and gallbladder function.*
- Milk Thistle Extract is rich in the bioflavonoid silymarin, a powerful antioxidant with hepatoprotective properties.*

Agents to Support Elimination

- Flax Seed, a rich source of omega-3 fatty acids and lignans, enhances intestinal peristalsis and adsorbs toxins thereby increasing elimination.*
- Psyllium Husk provides soluble dietary fiber and supports healthy intestinal lubrication, for ease in elimination and bowel regularity.*
- Rice Bran is a rich source of insoluble dietary fiber and contains gamma-oryzanol, which has been shown to help support gastrointestinal function.*
- Dried Plum is well known for supporting healthy elimination.*
- Fenugreek, Slippery Elm, and Marshmallow Root are botanical demulcents that soothe the intestinal lining.*
- **Triphala** is an ancient Ayurvedic herbal blend comprised of amla, belleric myrobalan, and chebulic myrobalan fruits. This combination helps promote healthy digestion, aid in detoxification, and support the immune response.*

Principle 6: Re-establish Healthy Microflora

Normal bowel microflora, such as *Lactobacilli* and *Bifidobacteria* species, support healthy gastrointestinal function through numerous mechanisms.* These probiotic bacteria contribute to a healthy intestinal environment by helping maintain an optimal pH and producing important nutrients and enzymes.* Bacteria that dwell in the large intestine help digest dietary fiber to produce short-chain fatty acids, the fuel for enterocytes that make up the intestinal lining.* *Lactobacilli* and *Bifidobacteria* also help to support healthy digestion, support immune system homeostasis, promote healthy bacterial and yeast balance, support skin health, and promote normal intestinal permeability.*

Everyday factors such as poor diet, stress, and travel can disrupt healthy intestinal microflora, contributing to digestive upset and irregularity.

Research indicates that supplementation with probiotic bacteria and microflora growth-promoters, or pre-biotics such as fructooligosaccharides (FOS), can help to re-establish the natural balance of healthy bowel flora and support gastrointestinal function and comfort.*

- Lactobacillus species are the primary probiotics inhabiting the small intestines.
- Bifidobacteria species are the primary probiotics inhabiting the large intestine.
- Fructooligosaccharides are prebiotics, growth factors that have been shown to promote the growth of beneficial microflora in the large intestine.*

Promoting Wellness by Restoring Digestive Health

Digestive health forms the foundation of wellness. Through the Six Principles For Restoring Gastrointestinal Health, healthcare professionals can help improve overall patient well-being and help then respond more effectively to other measures to improve specific health concerns. For certain patients with digestive health concerns, it may be necessary to address all Six Principles of digestive health. Others may only require support in a few areas. Most patients are likely to benefit from improved digestion and re-establishing a healthy balance of intestinal microflora.

A seasonal program to promote detoxification and healthy elimination is another method that has been used to promote health and wellness.







Principle 1: Optimize Digestion

Similase® diaestive enzymes

Similase digestive enzymes provide superior support of carbohydrate, protein, fat, and fiber digestion*

A physician formulated, proprietary blend of Pure Plant $Enzymes^{TM}$ that are active across a broad pH range in the digestive tract, Similase provides a higher potency and broader range of digestive enzymes than other products.*

Two capsules contain: PURE PLANT ENZYMES 613 mg: Amylase-USP (pH 6.8) 32,000 USP, FCC (pH 4.8) 23,800 DU; Protease I, II, III, IV-USP (pH 7.5) 30,000 USP, FCC (pH 7.0) 48,750 PC, FCC (pH 4.7) 82,000 HUT; Lipase I,II-FIP (pH 7.0) 2,100 FIP, FCC III (pH 6.5) 970 LU; Lactase I,II-FCC III (pH 4.5) I,600 ALU; Phytase-Phytic Acid (pH 6.0) 1.7 PU; Cellulase 1,II-FCC (pH 4.5) 350 CU; Sucrase (Invertase)-FCC (pH 4.6) 300 INVU; Maltase (Malt Diastase)-FCC (pH 4.6) 32 100 DP 9

Other Ingredients: Vegetable capsule (modified cellulose) and cellulose.

Contains no: Sugar, salt, yeast, wheat, corn, soy, dairy products, artificial coloring, artificial flavoring, preservatives or ingredients of animal origin.

Recommendations: Take 1 or 2 capsules at the beginning of each meal, or as recommended by your healthcare professional.

Warning/caution: Not recommended for use if peptic ulcer, gastritis or heartburn is present. If pregnant, nursing or taking prescription drugs, consult your healthcare professional prior to use.

Form: 90 Vegetarian Capsules Item #: 74239 Item #: 74230 Form: 180 Vegetarian Capsules

Alternate Options:

Similase BV

Item #: 106001 Form: 90 Capsules Item #: 106002

Form: 180 Vegetarian Capsules

Similase GFCF

Form: 120 Vegetarian Capsules Item #: 73952

Similase Jr. Item #: 106009

Form: 90 Vegetarian Capsules

Similase Lipo

Item #: 74403 Form: 30 Capsules

Similase Sensitive Stomach

Form: 90 Capsules Item #: 136007 Form: 180 Capsules Panplex 2-Phase

pancreatic enzyme and digestion formula

Panplex 2-Phase is designed to provide hydrochloric acid and pepsin for release in the stomach (phase I) and pancreatin and bile salts for the intestinal phase (phase II). The formula features a unique, chemical-free delayedrelease matrix to protect against deactivation of enzymes by stomach acids.*

Two tablets contain: Calcium 140 mg; PHASE I: Betaine HCl 320 mg; Pepsin (1:3000 Concentrate) 220 mg; L-Glutamic Acid HCl 200 mg; PHASE II: Pancreatin USP (6X Concentrate) 168 mg; Amylase (25,200 USP units), Protease (25,200 USP units), Lipase (2,016 USP units); Ox Bile Extract 130 mg.

Other Ingredients: dicalcium phosphate, modified cellulose, stearic acid, calcium carbonate, cellulose, cottonseed oil, magnesium stearate, and silicon dioxide.

Contains no: Sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial coloring, artificial flavoring, or preservatives.

Recommendations: Take 1 or 2 tablets three times daily with meals, or as recommended by your healthcare professional. Do not chew. Not recommended for use if peptic ulcer, gastritis, or heartburn is present.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 126006 Form: 60 Vegetarian Capsules Item #: 126007 Form: 180 Vegetarian Capsules Betaine HCL

With pepsin combination

Supports healthy stomach acidity, gastric function, and protein digestion*

Betaine HCl mirrors the action of healthy stomach acid levels, supporting comfortable digestion.* The addition of pepsin ensures additional support for protein digestion.*

Two capsules contain: Betaine HCl 1.3 g; Pepsin (acidstable protease) 260 mg.

Other Ingredients: Vegetable capsule (modified cellulose), cellulose, calcium laurate, and silicon

Contains no: Artificial coloring, artificial flavoring, corn, dairy products, gluten, preservatives, salt, soy, sugar, wheat, yeast.

Recommendations: Take 1 or 2 capsules at the beginning of each meal or as recommended by your healthcare professional. Do not chew. Not recommended for use if peptic ulcer, gastritis or heartburn is present.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 126002 Form: 250 Capsules



Principle 2: Provide Soothing Gastric Support

Similase® Sensitive Stomach soothing digestive support

Herbs combined with Pure Plant Enzymes, licorice root, and gamma-oryzanol provide support for the gastric mucosa and ease digestion in the intestinal tract.*

Two vegetarian capsules contain: Slippery Elm (Ulmus rubra) Bark 240 mg; Pure Plant Enzymes™ 220 mg; Amylase-UP (pH 6.8) 21,170 USP, FCC (pH 4.8) 15,750 DU; Cellulase-FCC (pH 4.5) 38 CU; Lipase-FCC III (pH 6.5) 54 LU; Deglycyrrhizinated Licorice (DGL) (Glycyrrhiza glabra) Root Extract 3:1 200 mg; Gamma-Oryzanol (from rice bran) 170 mg; Marshmallow (Althaea officinalis) Root Extract 4.0:1 80 mg.

Other Ingredients: Vegetable capsule (modified cellulose), cellulose, and ascorbyl palmitate.

Contains no: Artificial coloring, artificial flavoring, corn, dairy products, gluten, ingredients of animal origin, preservatives, salt, soy, sugar, wheat, yeast.

Recommendations: Take 1 or 2 capsules three times daily at the beginning of meals or as recommended by your healthcare professional.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 136007 Form: 180 Vegetarian Capsules

Rhizinate® 3X

great-tasting, extra-strength deglycyrrhizinated licorice

Deglycyrrhizinated licorice stimulates and accelerates the natural protective factors in the digestive tract which help relieve occasional stomach discomfort immediately.* The potent extract makes this product ultra-concentrated, which means it provides immediate benefits and maximum absorption.*

One chewable tablet contains: Deglycyrrhizinated Licorice (DGL) (Glycyrrhiza glabra) Root Extract 400 mg; Glycine 50 mg.

Other Ingredients: fructose, organic agave syrup, natural flavors (coconut and milk), cocoa bean powder, rice starch, silicon dioxide, and organic gum acacia.

Contains no: Salt, yeast, wheat, gluten, corn, soy, artificial coloring, artificial flavoring or preservatives.

Recommendations: Chew 1 extra-strength tablet twenty minutes before a meal, or as recommended by your healthcare professional. May take up to 3 extra-strength tablets per day.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 79101 Form: 90 Chewable Tablets

Alternate Options: Rhizinate Original

Item #: 79001 Form: 100 Chewable Tablets

Rhizinate^{*} Original Fructose Free

Item #: 79021 Form: 100 Chewable Tablets

Zinc-Carnosine PepZinGl® brand

Clinically validated Zinc-Carnosine protects and stabilizes the gastric and intestinal mucosal lining, supports a healthy gastric microbial balance, support healthy intestinal permeability, and helps relieve mild gastric discomforts, such as occasional heartburn and upset stomach.* Its gastro-supportive benefits have been demonstrated in over 20 published studies.*

One veg capsule contains: Zinc 16 mg, Zinc-Carnosine (PepZin GI® brand) 75 mg.

Other Ingredients: vegetable capsule (modified cellulose),cellulose, ascorbyl palmitate, and silicon dioxide.

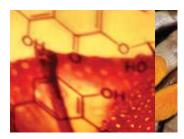
Contains no: sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial coloring, artificial flavoring, preservatives, or ingredients of animal origin.

Recommendation: Take 1 capsule twice daily, or as recommended by your healthcare professional.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

PepZin $\mathrm{GI}^{\$}$ is a registered trademark of Hamari Chemicals, LTD

Item #: 10033 Form: 60 Veg Capsules



Principle 3: Restore Healthy Intestinal Mucosa and Colon Comfort

Permeability Factors™ intestinal permeability complex

Targeted nutritional support for gastrointestinal integrity*

The one-of-a-kind, synergistic combination of key nutrients, amino acids, phospholipids, and essential fatty acids in Permeability Factors supports proper gastrointestinal health and normal intestinal permeability, two key components in overall health.*

Two softgels contain: Vitamin E (as d-alpha tocopheryl acetate) 11 IU; L-Glutamine 500 mg; NAG (N-Acetyl D-Glucosamine) (crab and shrimp shells) 250 mg; Sunflower Lecithin Proprietary Blend including Phosphatidylcholine 170 mg; Gamma-Linolenic Acid (as borage seed oil) 133 mg; Gamma Oryzanol (from rice bran oil) 66 mg.

Other Ingredients: Gelatin, safflower oil, glycerin, beeswax, titanium dioxide color, caramel color, and soybean oil.

Contains no: Salt, yeast, wheat, gluten, corn, dairy products, artificial flavoring, or preservatives.

Recommendations: Take 1 or 2 softgels three times daily, or as recommended by your healthcare professional.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 136013 Form: 90 Softgels

Glutamine Forté®

L-Glutamine with Theracurmin®

A convenient, hypoallergenic drink mix to support healthy intestinal permeability and immune function*

Glutamine Forté delivers a therapeutic level of L-glutamine in combination with Theracurmin, a novel water-dispersible form of turmeric with dramatically enhanced curcumin bioavailability. L-glutamine has been extensively studied and shown to restore healthy gut barrier function and permeability.* It also enhances immune system function and tissue repair.*

1 level scoop (7.7 g) contains: L-Glutamine 5 g Theracurmin (water-dispersible turmeric (Curcuma longa) rhizome) 100 mg

Other Ingredients: Natural flavors, xylitol, citric acid, silicon dioxide, luo han guo, dextrin, maltose, and gum ghatti.

Contains no: Sugar, salt, yeast, wheat, gluten, soy, dairy products, artificial coloring, artificial flavoring, preservatives, or ingredients of animal origin.

Recommendations: Take one level scoop mixed in 8 oz. water or juice, 1-3 times daily, or as recommended by your healthcare professional.

Warning/caution: If pregnant, nursing, taking prescription drugs, or if you have active liver disease, consult with your healthcare professional prior to use. Glutamine is not recommended for individuals with Crohn's disease.

Theracurmin® is a trademark of Theravalues.

Item #: 70676 Form: Powdered drink mix

Oxyperm™

intestinal antioxidant protection

Oxyperm is a high-potency natural antioxidant formula supplying essential nutrients for nutritional support of the intestinal mucosa.* Ideal for use in conjunction with Permeability Factors.

Two capsules contain: Vitamin A (as natural beta carotene with mixed carotenoids) 20,000 IU; Vitamin C (from Poly-Ascorbates") (magnesium, calcium, zinc, potassium ascorbates, and ascorbic acid, 667 mg; Vitamin E (as d-alpha tocopheryl succinate) 133 IU; Calcium (as calcium ascorbate) 28 mg; Magnesium (as magnesium ascorbate) 28 mg; Zinc (as zinc picolinate, ascorbate) 30 mg; Selenium (as selenium aspartate complex) 133 mcg; Copper (as copper aspartate) 500 mcg; Potassium (as potassium ascorbate) 5 mg; Quercetin 267 mg; NAC (N-acetyl L-cysteine) 100 mg; Ginkgo (Ginkgo biloba) Leaf Extract (24% ginkgo flavonglycosides) 28 mg.

Other Ingredients: Gelatin, silicon dioxide, ascorbyl palmitate, and cellulose.

Contains no: Sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial coloring, artificial flavoring, or preservatives.

Recommendations: Take 1 or 2 capsules three times daily with meals or as recommended by your healthcare professional.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 236008 Form: 90 Capsules



Principle 3: Cont.

Coltect™ colon support

Coltect is a unique, enteric-coated formula that combines standardized extracts of turmeric (*Curcuma longa*) and green tea (*Camellia sinensis*) with selenomethionine and Theracurmin®, a novel, water-dispersible form of curcumin. The formula is designed to support colon comfort and promote a healthy cell mediator response.*

Two tablets contain: Proprietary Blend: Turmeric (Curcuma longa) Extract standardized to contain 95% curcuminoids and Theracurmin® (water-dispersible turmeric (Curcuma longa) rhizome) 1,030 mg; Green Tea (Camellia sinensis) Leaf Extract standardized to contain 60% polyphenols and 45% epigallocatechin-3-0-gallate (EGCG) 500 mg; Selenium (as L-selenomethionine) 200 mcg.

Other Ingredients: Cellulose, stearic acid, modified cellulose gum, silicon dioxide, modified cellulose, dextrin, sodium alginate, maltose, gum ghatti, fractionated coconut oil, and citric acid.

Contains no: Sugar, salt, yeast, wheat, gluten, soy, dairy products, artificial coloring, artificial flavoring, preservatives, or ingredients of animal origin.

Recommendations: Take 2 enteric-coated tablets twice daily or as recommended by your healthcare professional. May be reduced to 1-2 tablets daily for maintenance.

Warning/caution: If pregnant, nursing or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 10343 Form: 30 Enteric-Coated Tablets

Principle 4: Support Intestinal Defense

Para-Gard®

intestinal defense botanicals

Utilized for intestinal defense to maintain healthy microflora*

Para-Gard contains botanical concentrates and standardized extracts shown to exhibit activity against a variety of intestinal organisms in in-vitro and in-vivo studies, thereby providing effective intestinal support.* Great for travel.

Three capsules contain: Berberine Sulfate 300 mg; Grapefruit (Citrus paradisi) Seed extract 300 mg; Gentian (Gentiana lutea) Root Extract 4:1 225 mg; Black Walnut (Juglans nigra) Green Outer Hull Extract 4:1 150 mg; Garlic (Allium sativum) Bulb Extract standardized to contain 1% allicin (odor-reduced) 150 mg; Goldenseal (Hydrastis canadensis) Root Extract standardized to contain 5% total alkaloids including berberine, hydrastine, and canadine 150 mg; Jamaica Quassia (Picrasma excels) Bark Extract 4:1 150 mg; Sweet Wormwood (Artemisia annua) Aerial Part 150 mg

Other Ingredients: Vegetable capsule (modified cellulose), cellulose, calcium laurate, and silicon dioxide.

Contains no: Sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial coloring, artificial flavoring, preservatives, or ingredients of animal origin.

Recommendations: Take 1 to 3 capsules three times daily between meals, or as recommended by your healthcare professional.

Warning/caution: Do not use if pregnant or nursing. If taking prescription drugs, consult your healthcare professional prior to use.

Item #: 136008Form: 60 Vegetarian CapsulesItem #: 136009Form: 120 Vegetarian Capsules

Alternate Option: Berberine Complex, a combination of extracts of

barberry, Oregon grape, and goldenseal

Item #: 78169 Form: 90 Vegetarian Capsules

Phytostan

intestinal and yeast balance formula

Phytostan combines caprylic acid, undecylenic acid, and grapefruit extract with Pau D'Arco and other key botanical extracts to support healthy intestinal function and healthy yeast balance.*

One tablet contains: Vitamin A (as natural beta-carotene with mixed carotenoids) 500 IU; Calcium (as calcium carbonate, undecylanate, and caprylate complex) 100 mg; Zinc (as zinc caprylate complex) 0.3 mg; Pau D'Arco (Tabebuia impetiginosa) Bark 100 mg; Undecylenic Acid (as calcium undecylenate) 100 mg; Caprylic Acid (as calcium, magnesium, and zinc caprylate complex) 75 mg; L-Glutamic Acid HCl 50 mg; Grapefruit (Citrus paradisi) Seed Extract 12:1 25 mg; Rosemary (Rosmarinus officinalis) Aerial Parts Oil Extract 4:1 1.5 mg; Thyme (Thymus vulgaris) Aerial Parts Oil Extract 4:1 1.5 mg;

Other Ingredients: Cellulose, magnesium stearate, modified cellulose gum, silica, stearic acid, and food

Contains no: Artificial coloring, artificial flavoring, corn, dairy products, gluten, preservatives, salt, soy, sugar, wheat, yeast.

Recommendations: Take 1 tablet three times daily between meals, or as recommended by your healthcare professional. If you experience nausea when using this product, take with a small amount of food.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 146009 Form: 90 Tablets

Alternate Option:

Yeast Formula™ herbal blend of oregano, thyme, peppermint, and goldenseal

Item #: 78289 Form: 90 Enteric-Coated Softgels



Principle 5: Promote Detoxification and Elimination

Blue Heron[™] detoxifying fiber complex

The balanced blend of dietary fiber, herbs, triphala, and probiotics in Blue Heron is synergistically formulated for convenient, effective, and gentle intestinal support and to help absorb toxins and improve colon function.* Formulated with True Dispersion™ Technology to ensure complete release and dispersal of fiber for enhanced benefits.*

Six capsules contain: Flax (Linum usitatissimum) Seed 1.2 g; Psyllium (Plantago ovate) Seed Husk 1.2 g; Rice (Oryza sativa) Bran 1.2 g; Dried Plum (Prunus domestica) fruit 180 mg; Fenugreek (Trigonella foenum-graecum) Seed 150 mg; Slippery Elm (Ulmus rubra) Bark 150 mg; Triphala (a blend of amla fruit) (Phyllanthus emblica), belleric myrobalan fruit (Terminalia bellerica), and chebulic myrobalan fruit (Terminalia chebula) 150 mg; Spectra Probiotic Proprietary Blend of Lactobacillus acidophilus, Bifidobacterium bifidum, Bifidobacterium infantis, Bifidobacterium longum, Lactobacillus helveticus, Lactobacillus casei, Lactobacillus salivarius, and Streptococcus thermophiles 60 mg; Marshmallow (Althaea officinalis) Root Extract 3.5:1 48 mg; Papain (Papaya enzyme equivalent to 30,000 USP units/mg) 3.7 ma

Other Ingredients: Vegetable capsule (modified cellulose), rice flour, vegetable glycerin, and non-fat milk (from probiotic blend).

Contains no: Sugar, salt, yeast, wheat, gluten, corn, soy, artificial coloring, artificial flavoring, or preservatives.

Recommendations: Take 3 to 6 capsules twice daily with 8 oz of water or as recommended by your healthcare professional.

Warning/caution: Do not use if you have an intestinal obstruction. If you are using other medication, take at least 1 hour prior to consumption of this product. If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 146001 **Form:** 120 Capsules

Detoxication Factors™ phase I and phase II support

Comprehensive nutritional support for Phase I and Phase II detoxification pathways*

Hepatic detoxification pathways transform foreign chemicals (xenobiotics) and endotoxins from poorly eliminated fat-soluble molecules into less toxic, water soluble compounds that can be readily eliminated. In order to function properly, these pathways require nutritional conjugating agents, antioxidants, and cofactors.

Two capsules contain: Vitamin A (75% as natural beta carotene with mixed carotenoids and as retinyl palmitate) 6,668 IU; Vitamin C (as magnesium ascorbate) 167 mg; Vitamin E (as d-alpha tocopheryl succinate) 83 IU; Thiamin (as thiamin HCl, thiamin pyrophosphate) 8.7 mg; Riboflavin (as riboflavin-5'-phosphate) 8.3 mg 488%; Niacin 10 mg; Vitamin B6 (as pyridoxal-5'-phosphate) 10 mg; Folic Acid 200 mcg; Vitamin B12 (as methylcobalamin) 42 mcg; Biotin 66 mcg; Pantothenic Acid (as calcium pantothenate) 33 mg; Magnesium (as magnesium citrate, malate, ascorbate) 78 mg; Zinc (as zinc picolinate) 10 mg; Selenium (as L-selenomethionine) 66 mcg; Copper (as copper sebicate) 334 mcg; Manganese (as manganese glycinate) 2 mg; Molybdenum (as molybdenum citrate) 50 mcg; Calcium D-Glucarate 66 mg; Choline (as choline bitartrate) 66 mg; Glycine 66 mg; L-Glutamic Acid HCl 66 mg; L-Glutamine 66 mg; L-Methionine 66 mg; L-Taurine 66 mg; NAC (as N-acetyl L-cysteine) 66 mg: Quercetin (dihydrate) 66 mg: Broccoli (Brassica oleracea italica) Sprout Powder (standardized to contain 0.4% sulforaphane) 33 mg; Inositol 33 mg; L-Ornithine L-Aspartate 33 mg; L-Carnitine (as L-carnitine tartrate) 16 mg; L-Glutathione, reduced 16 mg; L-Histidine 16 mg; L-Serine 16 mg; Milk Thistle (Silybum marianum) Seed Extract 16 mg; Turmeric (Curcuma longa) Extract (standardized to contain 95% curcuminoids) 16 mg; Natural Coenzyme Q10 (trans-CoQ10) (ubiquinone 10) (derived from yeast fermentation) 8.4 mg: Green Tea (Camellia sinensis) Extract (standardized to contain 80% catechin and 98% polyphenols 8.3 mg; Grape (Vitis vinifera) Seed Extract (90% polyphenols including procyanidolic oligomers) 3.4 mg; Catalase 16 mcg.

Other Ingredients: Gelatin, cellulose, and silicon dioxide.

Contains no: Sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial coloring, artificial flavoring, or preservatives.

Recommendations: Take 1 or 2 capsules three times daily between meals, or as recommended by your healthcare professional.

Warning/caution: If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 146003 Form: 60 Capsules Item #: 146004 Form: 120 Capsules

Lipotropic Complex[™] comprehensive liver support

Provides transmethylation support for the liver*

Combines phytonutrients and bile salts with essential vitamins and minerals to provide comprehensive nutritional support for the liver.*

Two capsules contain: Vitamin B6 (as pyridoxine HCl) 25 mg, Folic Acid 100 mcg; Vitamin B12 (as cyanocobalamin) 25 mcg; Magnesium (as magnesium oxide, aspartate) 34 mg; L-Methionine 333 mg; Choline (as choline bitartrate) 192 mg; Black Radish (Raphanus sativus niger) Root Extract 4:1 133 mg; Inositol 125 mg; Milk Thistle (Silybum marianum) Seed Extract standardized to contain 40% silymarin 112 mg; Dandelion (Taraxacum officinale) Root Extract 4:1 100 mg; Fringe Tree (Chionanthus virginicus) Bark Extract 4:1 100 mg; Celandine (Chelidonium majus) Aerial Parts Extract 37 mg; Beet (Beta vulgaris) Root Extract 32 mg; Ox Bile Extract 25 mg.

Other Ingredients: Gelatin and ascorbyl palmitate.

Contains no: Sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial coloring, artificial flavoring, or preservatives.

Recommendation: Take 1 or 2 capsules three times daily with meals, or as recommended by your healthcare professional.

Warning/caution: Not recommended for use if pregnant or nursing. If taking prescription drugs, consult your healthcare professional prior to use.

Item #: 146002 **Form:** 90 Capsules

Alternate Option:

SLF Forte comparable formula with no ox bile

Item #: 146008 Form: 120 Vegetarian Capsules



Principle 6: Re-establish Healthy Microflora

Probiotic Pearls™

active cultures

Protected probiotics to support healthy intestinal flora balance*

Contains a blend of Lactobacillus acidophilus and Bifidobacterium longum to support healthy gastrointestinal and immune function.* Features True Delivery™ Technology which guarantees the active cultures survive stomach acids, arrive in the intestines, and remain alive for exceptional support.*

One capsule contains: Proprietary Probiotic Blend providing 1 billion CFU: Lactobacillus acidophilus and Bifidobacterium longum.

Other Ingredients: Vegetable oil (palm and coconut), fish gelatin (Tilapia), vegetable glycerin, soy lecithin, and pectin.

Contains no: Sugar, salt, yeast, wheat, gluten, corn, artificial coloring, artificial flavoring or preservatives.

Recommendations: Take 1 capsule daily, with water or your favorite beverage, or as recommended by your healthcare professional. May be taken with or without food. Do not chew or crush.

Waning/caution: Store in a cool, dry location. May refrigerate if desired. If taking prescription drugs, consult your healthcare professional prior to use. Probiotic Pearls do not interfere with the efficacy or activity of commonly-prescribed medications.

 Item #: 136001
 Form: 30 Capsules

 Item #: 136002
 Form: 90 Capsules

Alternate Options:

Probiotic Pearls™ ADVANTAGE (5 billion CFU)
Item #: 70652 Form: 60 Capsules

Pro-Flora™ Concentrate

Item #: 74363 Form: 30 Capsules
Item #: 74369 Form: 90 Capsules

Pro-Flora™ Immune

Item #: 74403 **Form:** 30 Capsules

Enterogenic™ Intensive 100 high-potency probiotics

100 billion CFU to replenish and re-balance intestinal microflora*

Designed to replenish and re-balance intestinal microflora during and after periods of digestive challenge or distress, Enterogenic Intensive 100 contains ten hardy probiotic strains for broad spectrum upper and lower GI support and utilizes a unique enteric coating to ensure probiotics survive stomach acid and are released directly into the intestine.*

One capsule contains: Vitamin C (ascorbic acid) 2 mg; Proprietary Probiotic Blend providing 100 billion CFU: Lactobacilli (L. casei HA-108; L. paracasei HA-196; L. acidophilus HA-122; L. rhamnosus HA-111; L. rhamnosus HA-144; L. salivarius HA-118); Bifidobacteria (B. breve HA-129; B. bifidum HA-132; B. longum HA-135; B. infantis HA-116) 479 mg; Short-chain fructooligosaccharides (scFOS) 20 mg.

Other Ingredients: Aqueous coating (modified cellulose, sodium alginate, stearic acid, fractionated [non-hydrogenated] coconut oil, oleic acid), plant-derived capsule (modified cellulose), magnesium stearate, and silicon dioxide.

Contains no: Sugar, wheat, gluten, corn, artificial coloring, or preservatives. May contain a minimal residual amount of milk and soy protein.

Recommendation: Take 1 capsule daily. May be taken at any time, with or without food, or as recommended by your healthcare professional. Keep refrigerated to maintain maximum potency. 100 billion CFU potency per capsule is guaranteed until expiration date when bottle is kept tightly closed and refrigerated.

Warning/caution: May contain a minimal residual amount of milk and soy protein. If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Item #: 70667 Form: 30 Enteric-Coated Capsules

FOR OVER 35 YEARS, OUR
DEDICATION TO SERVING
THE NEEDS OF HEALTHCARE
PROFESSIONALS AND THEIR
PATIENTS HAS HELPED
US BECOME A LEADING
MANUFACTURER OF
NUTRITIONAL SUPPLEMENTS.

At Integrative Therapeutics™, we strive to provide you with the research and resources you need to make informed decisions about your patients and your practice.

PROFESSIONAL RESOURCES

Patient-Centered Therapeutic Programs Educational Downloads

Seminars

Product Literature

Drug-Nutrient Interactions Checker

