

TECHNICAL DATA SHEET

Digestive Formula



A complete and unique digestive formula that contains high potency, bio-available plant enzymes, betaine HCl and pepsin that allows for a more complete digestion. Probiotics and DDS-1 acidophilus (1.3 billion organisms per capsule) provide a vital first line of defense against illness and disease by promoting a healthier and better balanced bacteria flora. Marshmallow root and slippery elm bark two powerful demulcents that are added to protect, repair and heal the gut mucosal linings.

INGREDIENTS

Pancreatic Enzymes (Plant Derived)

All of our pancreatic enzymes are derived from plants rather than from an animal source. Plant enzymes are much more stable and more active in a broader range pH than animal derived enzymes. This creates better absorption and greater utilization from the nutrients eaten in food and from supplementation.

Protease supports the digestion of proteins such as meat, fish, dairy, eggs, and gluten from grains. The importance of protein digestion is vital for the utilization of the essential amino acids. Protein digestion begins in the stomach when splitting occurs at the nitrogen bonds to form proteoses, peptones, and polypeptides. In the duodenum digestion continues with the aid of protease and the epithelial cells that line the cell wall.

Amylase aids in the digestion of carbohydrates such as sugars and starches by catalyzing the hydrolysis of the polysaccharide amylose and similar starch based polysaccharides into smaller more readily absorbed disaccharides and trisaccharides.

Lipase assists in the digestion of fats by catalyzing the hydrolysis of ester linkages between fatty acids and glycerol as they occur in triglycerides and phospholipids.

Cellulase supports the digestion of fiber found in whole grains, fruits, and vegetables by catalyzing the hydrolysis of cellulose, a ubiquitous hexose which forms the skeleton of most plants and plant cells.

Sucrase helps breakdown simple (cane) sugar by splitting the disaccharide sucrose into a mixture of the dextrorotary hexoses, glucose, and fructose.

Lactase aids in the digestion of dairy/milk products by splitting disaccharides into glucose and galactose monosaccharides. In lactose intolerant individuals the normally present lactase found in the microvilli of the brush border of epithelial cells is not functioning normally.

Phytase catalyzes the breakdown of phytic acid found in grains, seeds, tubers, rhizomes and other plant food sources. Phytic acid binds important dietary minerals that prevent their absorption. Phytic acid is known to inactivate many digestive enzymes.

Maltase supports the breakdown of large starch-derived sugars commonly found in the diet by converting the twelve carbon maltose into dextrose. Maltase will also cleave other glucosides.

PROBIOTICS

The word probiotic means "for life". **A probiotic is an organism that contributes to the health and balance of the intestinal tract.** A probiotic is often referred to as "friendly" "beneficial" or "good" bacteria because when ingested it creates and helps maintain a healthier intestinal tract. A healthy intestinal tract should contain at least 85% friendly bacteria to prevent the over colonization of disease causing micro-organisms like E-coli and salmonella. Unfortunately the majority of people have the reverse ratio of 85% "unfriendly" or "bad" bacteria and 15% "friendly" or "healthy" bacteria.

Probiotics enhance the immune system by favorably altering the gut micro-ecology and preventing unfriendly organisms from gaining a greater foothold. They prevent the overgrowth of yeast and fungus and produce substances that lower cholesterol when present in a more ideal ratio.

Two of the most damaging substances to the delicate intestinal flora balance are chlorine and sodium fluoride, present in most treated city water. **Antibiotics, alcohol consumption, birth control pills, and many pharmaceutical drugs** also cause damage to the intestinal flora and to the tissue in the intestinal wall. Poor eating habits, chlorinated drinking water, stress and disease and the use of antibiotics in food production as well as in medical treatments can wreak havoc in the gastrointestinal tract by destroying good bacteria and allowing undesirable bacteria to multiply. When the ratio of good bacteria to bad is lowered, problems such as gas, bloating, constipation, intestinal toxicity and poor digestion and absorption of nutrients begin.

Digestive Formula adds 1.3 billion organisms of 12 distinct strains of probiotics (including DDS-1 Acidophilus) per capsule. These probiotics increase and replenish levels of beneficial bacteria, help improve digestion of food and absorption of vitamins, stimulate the immune system, and help inhibit the growth of more harmful microbes. The probiotics we use are viable in pH levels as low as 2.5 and will not be destroyed by low stomach pH. It is recommended **digestive formula** be taken during or right after the meal to assure maximum absorption of all the probiotics.

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Betaine Hydrochloride

Betaine hydrochloride is a source of hydrochloric acid (1). Vitamin B-12 and other nutrients require hydrochloric acid for absorption since pancreatic enzymes can not break down these nutrients. After the age of 25, our ability to produce hydrochloric acid decreases 2% every year resulting in achlorhydria in more people as they age.

Marshmallow Root

The applicable parts of marshmallow are the leaves and the root. Marshmallow root and leaf (a well-established and recognized demulcent) contain mucilage polysaccharides that soothe and protect mucous membranes from local irritation by forming a protect layer (2). Marshmallow's mucilage is antimicrobial, anti-inflammatory, and assists wound healing in the repair and function of irritated mucosal tissues.

Slippery Elm Bark

The applicable part of slippery elm is the inner bark rind. Slippery Elm, a powerful demulcent and emollient, contains mucilages as the principal constituents. Used internally, slippery elm preparations cause reflex stimulation of nerve endings in the GI tract leading to mucous secretion that protects the delicate mucosal lining of the GI tract (3).

This formula is designed to be safely used with Ultra High Formula.

Digestive Formula

Quantity: 90 capsules

Serving size: 1 capsule

Directions: 1 capsule during or after each significant meal or as directed by your healthcare professional.

Each 1 capsule contain:

Protease	22,000 HUT
Amylase	10,000 DU
Lipase	2,870 LU
Cellulase	200 CU
Sucrase	600 IAU
Lactase	400 LacU
Phytase	30 PU
Maltase	250 DP
MPN Bacteria Blend (11strains)	1.26 Billion
Bifidobacterium bifidum	Organisms
Bifidobacterium infantis	
Bifidobacterium longum	
Enterococcus faecium	
Lactobacillus acidophilus	
Lactobacillus bulgaricus	
Lactobacillus plantanum	
Lactobacillus rhamnosus	
Lactobacillus salvarious	
Pediococcus acidilactili	
Streptococcus thermopilus	
DDS-1 Acidophilus	115 Million
	Organisms
Betaine HCl	185 mg
Marshmallow Root	25 mg
Slippery Elm Bark	25 mg

Other ingredients: Vegetarian capsules

Contains No: wheat, dairy, soy, corn or preservatives. No fillers, binders, or flowing agents.

Patients: Consult with your healthcare professional for the proper dosage and use of this formula.

For more information about this and other Condition Specific Formulas®, please visit our website at:

www.mpn8.com



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REFERENCES:

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2. Monographs on the Medicinal uses of plant drugs. Exeter,UK: EuropeanScientific Co-op Phytother,1997
3. The Review of Natural Products by Facts and Comparisons. St. Louis, MO: Wolters Kluwer Co: 1999