



Acid Reflux™

Acid reflux, medically termed gastroesophageal reflux disease (GERD), is one of the most rapidly growing diseases in the U.S. The American Gastroenterological Association (AGA) sets the numbers at around 60 million adults who experience GERD symptoms at least once a month, and 25 million that have pain daily due to the illness. It is also reported that 50 million Americans experience some sort of nighttime symptoms that would make it roughly 25 percent of the total population. GERD symptoms are characterized by tissue damage as a result of repeated and prolonged exposure of the lining of the esophagus to acidic contents from the stomach. This occurs when the lower esophageal sphincter (LES) does not seal off the lower esophagus from the stomach. One of the most frequently reported symptoms of GERD is heartburn, which can be described as a burning discomfort that begins behind the breastbone and radiates to the neck and throat. The second most frequent symptom presented is acid regurgitation, which is characterized as a bitter, sour tasting fluid. **Acid Reflux™** was formulated with the generous input of knowledge and clinical experience of Dr. Steven Sandberg-Lewis, gastroenterology professor at the National College of Natural Medicine (NCCM) in Portland, Oregon. We combined specific raw ingredients that have been clinically shown to be highly effective in addressing the causative issues of GERD.

INGREDIENTS:

L-Glutamine

Glutamine is the most abundant free amino acid in the body (1). It is produced primarily in skeletal muscle and then released into circulation. Gastrointestinal tissue requires glutamine to help fuel the epithelial cells of the small intestine (2). The gastrointestinal tract is one of the largest utilizers of glutamine in the body (3). Glutamine acts as an intra-organ nitrogen and carbon transporter (4). Depletion of glutamine can result in atrophy, ulceration and necrosis of intestinal epithelium. Inflammation in the intestinal wall appears to disrupt normal glutamine metabolism in people with Crohn's disease and ulcerative colitis (5). A preliminary study found that glutamine supplementation prevented esophagitis during chemotherapy (6). Glutamine is a precursor to glutathione, a powerful antioxidant.

N-Acetyl Glucosamine (NAG)

N-acetyl glucosamine is the acetylated derivative of the amino sugar glucosamine, which is a constituent of cartilage proteoglycans. NAG is incorporated into glycoproteins, glucolipids, and glycosaminoglycans, the substrates for tissue repair. It is involved in the protection and repair of mucous membranes throughout the body, including the large and small intestines, stomach and esophagus. With inflammatory bowel disease (IBS), N-acetylation of glucosamine is relatively deficient, possibly reducing the synthesis of the gastric and intestinal mucosa's protective glycoprotein cover (7).

Supplement Facts

Serving size: 1 capsule
Servings per container: 90

Amount per serving	%DV
Zinc (as Methionate)	5 mg 33%
L-Glutamine (98.5%)	150 mg *
Gamma Oryzanol (87.5%)	100 mg *
Aloe vera extract (Aloe barbadensis) (200:1) (leaf)	100 mg *
Licorice DGL extract (Glycyrrhiza uralensis) (4:1) (root)	100 mg *
N-Acetyl-D-Glucosamine (98%)	75 mg *
Glycine (98.5%)	75 mg *
Marshmallow extract (Althaea officinalis) (4:1) (root)	75 mg *
Slippery Elm bark extract (Ulmus spp) (4:1)	75 mg *
Curcumin (Curcuma longa) (95% curcuminoids)	50 mg *
L-Carnosine	5 mg *

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

* Daily Value not established.

Other ingredients: vegetarian capsules (cellulose and water)
N-Acetyl-D-Glucosamine contains trace amounts of shellfish.

Glycine

Glycine is an amino acid. It is not considered an essential amino acid because the body makes glycine from serine. The body requires glycine for the formation of DNA, collagen, phospholipids and for the release of energy. Glycine is an essential intermediate in the metabolism of protein, peptides and bile salts. Glycine promotes repair of damaged and stressed tissue and neutralizes acid, soothing the gastric mucosa.

Gamma Oryzanol

Gamma oryzanol is a naturally occurring mixture of plant chemicals called sterols and ferulic acid esters. It is extracted from rice bran oil and has a wide variety of biological activities that include antioxidant activity. Gastrointestinal benefits from gamma oryzanol have been clinically shown in a study which indicated that after taking 300 mg daily for two weeks more than 62% of those with superficial gastritis, more than 87% of those with atrophic gastritis, and all people with erosive gastritis, had experienced improvement. Gamma oryzanol provides beneficial support for gastric health and comfort.

Aloe Vera

Aloe vera is the clear, jelly like substance obtained from the thin walled mucilaginous cells in the center of the leaf. This succulent plant has traditionally been used as a remedy for burns and skin wounds (8). Historically, Aloe vera has been used to treat gastritis, peptic ulcers, reflux esophagitis, and inflammatory bowel disease because of its soothing, healing and demulcent qualities. Aloe vera has been shown to have anti-inflammatory and antioxidant actions in colon epithelial cell cultures from people with inflammatory bowel disease (9). In a clinical trial of people with ulcerative colitis the study revealed significant improvement of those people taking the Aloe vera (10).

Licorice Root DGL

Licorice has antispasmodic, anti-inflammatory, laxative and soothing properties. DGL (deglycyrrhized licorice) seems to be similar to carbenoxolene for ulcer reduction without the fluid retention or electrolyte imbalance of carbenoxolene. Carbenoxolene is a semisynthetic derivative of glycyrrhetic acid that is used outside the US for treating gastric and duodenal ulcer disease (11).

Marshmallow Root and Slippery Elm Bark

These mucilaginous and demulcent herbs aid in the repair and strengthening of the inflamed, ulcerated and porous gut mucosa.

Curcumin (Turmeric)

Turmeric's major active constituents are curcuminoids including curcumin (diferuloylmethane), a yellow pigment. Its anti-inflammatory activity appears to inhibit cyclooxygenase-2 (COX-2), prostaglandins and leukotrienes (12). In a clinical trial that analyzed the effects of curcumin on patients with dyspepsia, irritable bowel syndrome and other stomach conditions, it was found that patients taking curcumin twice daily for 6 months recovered faster from indigestion (13).

Zinc and Carnosine

The combination of zinc and carnosine creates a natural complex that serves to safely and effectively relieve chronic gastric distress and help restore stomach health and comfort. Zinc and carnosine have been shown to enhance healing of the stomach epithelial lining by inhibiting production of pro-inflammatory interleukin-8, and by preventing inflammatory white blood cells from adhering to epithelial cells (14).

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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