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GI Care

INTRODUCTION

GI Care Powder is a comprehensive blend of herbs and zinc L-carnosine that help reduce gastrointestinal discomfort associated with gastrointestinal inflammation, as well as mild digestive upset. This combination of well-researched botanicals and zinc carnosine supports the integrity of gastrointestinal tissue and promotes healing.[1] GI Care Powder contains deglycyrrhizinated licorice root (DGL) (*Glycyrrhiza glabra*), chamomile flower (*Matricaria chamomilla*), marshmallow root (*Althaea officinalis*), zinc L-carnosine, and the inner gel of aloe leaf (*Aloe vera*). It is sweetened with natural-source *Stevia rebaudiana* extract and mixes easily with liquid. Studies show that these botanicals, their phytochemicals, and zinc carnosine stimulate gastrointestinal repair, protect against injury and damage, and restore healthy intestinal barrier function.

WHAT IS GI CARE?

GI Care Powder is made up of 1200 mg of DGL from *Glycyrrhiza glabra*, 400 mg of chamomile flower (*Matricaria chamomilla*), 600 mg of marshmallow root (*Althaea officinalis*), 150 mg of zinc L-carnosine, and 600 mg of *Aloe vera* leaf gel. DGL licorice has had glycyrrhizin removed, reducing the potential for drug interactions (particularly with blood pressure and anticoagulant medications) as well as the potential for adverse effects in individuals with high blood pressure. In addition, *Aloe vera* gel does not contain latex.

MECHANISM OF ACTION

Licorice contains more than 300 flavonoids that contribute to its antioxidant support. It is also known for its anti-inflammatory and antimicrobial effects.[2] DGL protects the gastric mucosa by upregulating endogenous antioxidant enzymes, downregulating inflammatory cytokines, and inhibiting the growth of *H. pylori*.[3,4]

Both chamomile and marshmallow contain multiple phytochemicals that lend healing support, including antioxidant flavonoids.[5,6] Chamomile's therapeutic properties include antioxidant, anti-inflammatory, antimicrobial, analgesic, and others.[6] Chamomile protects the gastric mucosa, while marshmallow contains mucilaginous polysaccharides that adhere to irritated tissue, such as mucous membranes; both promote endothelial regeneration.[7,8]

Experimental studies have shown that *Aloe vera* gel upregulates tight junction complexes, reducing intestinal permeability and supporting wound healing.[9] It also supports healthy intestinal barrier function, demulcent mucus production, and healing of intestinal injury.[10,11] Clinical trials have shown both histological and symptomatic improvement.[12,13]

Zinc carnosine supports intestinal tract healing and integrity by decreasing inflammation and intestinal permeability.[14] Clinical trials have shown that zinc carnosine helps prevent gastrointestinal tissue damage and resulting hyperpermeability from anti-inflammatory medications.[15,16] In animal models, zinc carnosine has been shown to improve nerve growth factor (NGF) in gastric mucosa.[1] NGF deficiency in gastric endothelial cells is a key mechanism underlying impaired delayed ulcer healing in aging gastric mucosa.[17]

ASSESSMENT

Licorice contains glycyrrhizic acid, which has been shown to interact with anticoagulants in animals. Glycyrrhizic acid may also cause hypertension and hypokalemia. While these are unlikely to occur with DGL as the glycyrrhizic acid has been removed, use in patients with blood pressure and coagulant conditions should be closely monitored.[18] German chamomile may have additive effects with sedative medications.[19] Theoretically, marshmallow has diuretic effects, which may increase the levels and reduce the excretion of lithium.[20] Zinc may decrease levels of quinolone and tetracycline antibiotics, as well as cephalexin.[21] Although latex from aloe may increase the adverse effects of cardiac glycosides, the aloe in GI Care Powder is from the latex-free gel.[22]

Possible adverse effects of licorice may include nausea, vomiting, or headache.[18] German chamomile may cause an allergic reaction in individuals with allergies to the daisy (*Asteraceae*) family.[19] No adverse effects have been reported for marshmallow; however, more studies are needed.[20] Zinc may cause gastrointestinal effects, but this is uncommon in levels lower than the upper intake level of 40 mg per day.[21] The only adverse effects associated with the oral intake of aloe are gastrointestinal effects associated with aloe latex, which this product does not contain.[22]

A standard history and physical exam should always be performed. If symptoms are persistent or unrelieved, testing such as endoscopy or colonoscopy may be warranted to rule out other potential diagnoses, depending on the patient's presentation. Consult a health care practitioner if symptoms persist or worsen. Consult a health care practitioner prior to use in cases of diabetes. Avoid use in pregnancy or lactation. Discontinue use if allergic or hypersensitivity reaction occurs. Keep out of reach of children. Avoid use if you are allergic to aloe or members of the daisy (*Asteraceae*) family.

GENERAL RECOMMENDATIONS AND DOSING

Take 1 serving once daily or as directed by a health care practitioner. Mix with liquid before use.

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SUMMARY

GI Care Powder contains natural-source botanicals with zinc to provide targeted support for symptoms of gastrointestinal inflammation and mild digestive upset. DGL is free of glycyrrhizic acid, and *Aloe vera* gel does not contain latex. DGL offers antioxidant, anti-inflammatory, and antimicrobial support. Chamomile protects the gastrointestinal mucosa while aloe adheres to irritated tissue, facilitating healing. *Aloe vera* upregulates tight junctions and, along with zinc, decreases gastrointestinal permeability. Clinical trials have shown histological and symptomatic improvement with aloe and tissue protection from anti-inflammatory medications with zinc.

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