DGL
DEGLYCYRRHIZINATED LICORICE ROOT
400 mg

NPN 80015442

RESEARCH INFORMATION

Feature summary

Natural Factors DGL Deglycyrrhizinated Licorice Root is used to soothe irritated stomachs, helping to relieve abdominal pain and burning sensations during digestion. DGL protects the stomach lining by stimulating the natural production of mucin, the slippery protective coating of the stomach and intestines, and helps relieve inflammatory conditions in the gastrointestinal tract.

Licorice root (*Glycyrrhiza glabra*) has been used for centuries in traditional medicine to aid digestion and stomach complaints. However, licorice in its natural form contains a compound called glycyrrhizin that can raise blood pressure and cause other potentially severe side effects in some people.

DGL stands for "deglycyrrhizinated licorice," meaning that this licorice root extract contains no glycyrrhizin and is suitable for people with high blood pressure. The 10:1 extract provides the equivalent of 4000 mg of the raw herb in each tablet, a concentration that scientific research has confirmed to be effective.

Studies show that DGL is an effective herbal remedy for stomach complaints. This DGL formula is delivered in convenient chewable tablets because chewing helps mix DGL with saliva, allowing it to become active in the digestive tract. For the greatest effectiveness, chew one DGL tablet 20 minutes before each meal.

How it works

Deglycyrrhizinated licorice root extract (DGL) works with the body's natural defence mechanisms to protect the mucous membranes of the digestive tract from damage (Wahab et al., 2021; Hasan et al., 2021). Licorice flavonoids stimulate mucus secretion from cells within the stomach lining, helping form a protective barrier on its surface that counteracts cell damage and extends the lifespan of stomach cells (Hasan et al., 2021). Licorice also enhances the concentration of hormone-like compounds called prostaglandins within the stomach mucosa and gastric juices. Prostaglandins inhibit stomach acid and further stimulate mucus production, providing antiulcerogenic activities (Hasan et al., 2021).

Licorice flavonoids help reduce gastrointestinal inflammation by inhibiting the production of certain substances known to promote inflammation in the body, such as nitric oxide and some proteins and lipids involved in immune system activity (Hasan et al., 2021). Licorice's anti-adhesive qualities may protect the gastrointestinal tract against colonization by the bacteria *Helicobacter pylori* involved in inflammatory conditions, including sores in the gastrointestinal lining (Hajiaghamohammadi et al., 2016).

DGL is a licorice preparation with the compound glycyrrhizin removed. In large doses, glycyrrhizin stimulates sodium retention and potassium secretion in the kidneys. Imbalanced sodium and potassium levels (hypokalemia) result in increased fluid retention in the body and can lead to hypertension (high blood pressure). Removing glycyrrhizin from licorice prevents its adverse effects on blood pressure (Wahab et al., 2021).

Research

Licorice root has been used medicinally for centuries and was the most prescribed herb in many ancient civilizations throughout Asia and Europe (Wahab et al., 2021). Although long recognized as beneficial for stomach ailments, long-term use of the raw forms of licorice, which contain glycyrrhizin, is associated with adverse side effects (Wahab et al., 2021). DGL has shown exceptional benefits and contains no glycyrrhizin, making it suitable even for people with high blood pressure.

The regular use of alcohol, caffeine, and certain medications can damage the lining of the gastrointestinal tract. When the integrity of the mucosal barrier is compromised, the gastric lining becomes more vulnerable to digestive fluids and prone to lesions. DGL is strongly indicated for patients requiring long-term treatment with medications that irritate the gastric lining (Murray, 2020).

Studies show that supplementation with DGL multiple times per day protects the gastric mucosa against damage caused by medications and, in some cases, has helped reduce bleeding from gastric lesions (Murray, 2020; Rees et al., 1979).

In a controlled study, patients with gastric lesions were supplemented with either a combination of DGL plus antacid and bismuth subcitrate or a standard therapy. Endoscopic examination revealed that gastric tissues had healed in 63% of the patients taking the combined DGL preparation after six weeks and in 91% of patients after 12 weeks. After healing, the dose of combined DGL preparation was reduced, and a year later, only 14% of patients were found to experience a recurrence in lesions (Morgan et al., 1982). In ongoing follow-up studies, researchers found that when patients terminated supplementation completely, they experienced a rapid recurrence of symptoms (Morgan et al., 1985).

Often, inflammation in the gastrointestinal tract is associated with *H. pylori* infection. When left unaddressed, infection can lead to more serious and uncomfortable digestive ailments, such as gastric lesions and chronic inflammation in the stomach lining (Hajiaghamohammadi et al., 2016; Yoon et al., 2019).

Studies show that licorice extract can help relieve pain and burning sensations in the gastrointestinal tract (Hajiaghamohammadi et al., 2016; Murray, 2020). In a randomized, controlled clinical trial, patients experiencing symptoms of dyspepsia (with or without peptic ulcers) were supplemented for two weeks with 380 mg of licorice extract twice per day, in addition to standard therapy for eradicating *H. pylori* infection. Assessments conducted six weeks post-supplementation revealed that the patients with peptic ulcers who received licorice had a 20.8% higher response rate to treatment than patients who took only the standard therapy (Hajiaghamohammadi et al., 2016).

In a multicentre, placebo-controlled clinical trial, patients with chronic gut inflammation associated with *H. pylori* infection were supplemented with fermented milk containing 100 mg of DGL and probiotics daily for eight weeks. After eight weeks, the degree of gastrointestinal inflammation was found to improve significantly in the treatment group compared to the placebo group. Gastrointestinal symptoms, such as indigestion, diarrhea, constipation, abdominal pain, and reflux, improved by 26.9%, measured using the Gastrointestinal Symptom Rating Scale (GSRS). Indications of *H. pylori* infection were also found to decline from 20.8% to 16.9% (Yoon et al., 2019).

Ingredients

Each tablet contains:

Deglycyrrhizinated licorice extract 10:1
(*Glycyrrhiza glabra*) (root).....400 mg
Providing 4,000 mg crude herb licorice

Dosage

Recommended adult dose: Chew 1 tablet 20 minutes before a meal or as directed by a health care practitioner.

Cautions

Consult a health care practitioner if symptoms persist or worsen.
Keep out of the reach of children.

References

Hajiaghamohammadi, A.A., Zargar, A., Oveisi, S., et al. (2016). To evaluate the effect of adding licorice to the standard treatment regimen of *Helicobacter pylori. Braz J Infect Dis, 20*(6), 534-8.

Hasan, M.K., Ara, I., Mondal, M.S.A., et al. (2021). Phytochemistry, pharmacological activity, and potential health benefits of *Glycyrrhiza glabra*. *Heliyon, 7*(6), e07240.

Morgan, A.G., McAdam, W.A., Pacsoo, C., et al. (1982). Comparison between cimetidine and Caved-S in the treatment of gastric ulceration, and subsequent maintenance therapy. *Gut, 23*(6), 545-51.

Morgan, A.G., Pacsoo, C., & McAdam, W.A. (1985). Maintenance therapy: A two year comparison between Caved-S and cimetidine treatment in the prevention of symptomatic gastric ulcer recurrence. *Gut, 26*(6), 599-602.

Murray, M.T. (2020). *Glycyrrhiza glabra* (Licorice). In J. Pizzorno & M. Murray, *Textbook of Natural Medicine* (pp.641-7) Amtersdam: Elsevier.

Rees, W., Rhodes, J., Wright, J., et al. (1979). Effect of deglycyrrhizinated liquorice on gastric mucosal damage by aspirin. *Scand J Gastroenterol, 14*(5), 605-7.

Wahab, S., Annadurai, S., Abullais, S.S., et al. (2021). *Glycyrrhiza glabra* (Licorice): A comprehensive review on its phytochemistry, biological activities, clinical evidence and toxicology. *Plants* (Basel, Switzerland), *10*(12), 2751.

Yoon, J.Y., Cha, J.M., Hong, S.S., et al. (2019). Fermented milk containing *Lactobacillus paracasei* and *Glycyrrhiza glabra* has a beneficial effect in patients with *Helicobacter pylori* infection: A randomized, double-blind, placebo-controlled study. *Medicine, 98*(35), e16601.