

# DGL

## Deglycyrrhizinated Licorice Root Extract

### Relieves Stomach and Digestive Tract Irritation

### Protects Stomach Lining

#### Product Summary

Deglycyrrhizinated licorice, or DGL, has been used clinically for decades, primarily for the treatment of peptic ulcers.<sup>1</sup> Licorice has been shown to inhibit several inflammatory enzymes, including both cyclooxygenase-2 (COX-2) and 5-lipoxygenase (5-LOX), decreasing the production of several potent inflammatory compounds, including prostaglandin E2, thromboxane B2, and leukotriene B4. Importantly, this inhibition is not due to glycyrrhizic acid, the component of licorice which has been removed in DGL, and which is associated with mineralocorticoid excess and hypertension.<sup>2</sup> Another component of licorice, glabridin, has been shown to prevent lipopolysaccharide (LPS) induced production of inflammatory compounds, including nitric oxide and interleukin-1 beta, whereas glycyrrhizic acid has no effect.

Clinically, DGL has been shown to have comparable efficacy to cimetidine for both the healing and prevention of ulcer recurrences.<sup>3</sup> Additionally, extracts of licorice have been shown to inhibit the adhesion of *H. pylori* to gastric mucosa, as well as the growth of antibiotic resistant strains, suggesting multiple mechanisms of action for its anti-ulcer benefit.<sup>4,5</sup> The use of chewable tablets appears necessary for DGL's efficacy, as it allows for distribution and absorption by the gastric mucosa.<sup>3</sup>

#### Unique Features

- DGL chewable tablets is the form associated with the greatest clinical efficacy, as it allows for licorice to be released in the stomach and dispersed/absorbed by the gastric mucosa
- Provides 400 mg DGL per tablet, the clinically effective dosage
- Deglycyrrhization prevents adverse effects associated with licorice consumption
- Pleasant tasting tablets for better compliance

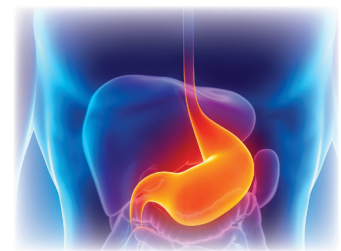
#### DGL

Deglycyrrhizinated Licorice Root Extract

180 Chewable Tablets

Code: 9227

NPN: 80037407



**Actual size:** 15.96 mm diameter  
**Feature:** Protects stomach lining

## Supplement Facts

Serving Size: 1 Tablet  
Servings per Container: 180

### Each Tablet Contains:

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

**Non-medicinal Ingredients:** Xylitol, microcrystalline cellulose, aniseed, stearic acid, vegetable grade magnesium stearate (lubricant), silica, *Stevia rebaudiana* leaf.

**Contains no artificial colours, preservatives, or sweeteners; no dairy, starch, sugar, wheat, gluten, yeast, soy, corn, egg, fish, shellfish, animal products, salt, tree nuts, or GMOs.** Suitable for vegetarians/vegans. Sealed for your protection. Do not use if seal is broken. For freshness, store in a cool, dry place.

**Recommended Adult Dose:** Chew 1 tablet per day 20 minutes prior to each meal, or as directed by a health care practitioner. Consult a health care practitioner for use beyond 16 weeks.

**Recommended Use:** Deglycyrrhizinated Licorice (DGL) protects stomach lining by stimulating mucous formation and secretion. Helps relieve inflammatory conditions of the gastrointestinal tract (demulcent). Helps relieve abdominal pain and burning sensation in the stomach (demulcent).

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

**Drug Interactions:** No known drug interactions. Licorice influences the activity of several cytochrome enzymes, and reduces warfarin activity in animal models, likely due to glycyrrhizic acid activity. Thus DGL use should be carefully monitored in these patients.

### References:

1. Turpie AG, et al. Clinical trial of deglycyrrhizinated licorice in gastric ulcer. *Gut*. 1969 Apr;10(4):299-302.
2. Chandrasekaran CV, et al. Dual inhibitory effect of *Glycyrrhiza glabra* (GutGard™) on COX and LOX products. *Phytomedicine*. 2011 Feb 15;18(4):278-84.
3. Morgan AG, et al. Comparison between cimetidine and Caved-S in the treatment of gastric ulceration, and subsequent maintenance therapy. *Gut*. 1982 Jun;23(6):545-51.
4. Wittschier N, et al. Aqueous extracts and polysaccharides from licorice roots (*Glycyrrhiza glabra* L.) inhibit adhesion of *Helicobacter pylori* to human gastric mucosa. *J Ethnopharmacol*. 2009 Sep 7;125(2):218-23.
5. Fukai T, et al. Anti-*Helicobacter pylori* flavonoids from licorice extract. *Life Sci*. 2002 71:1449-63.



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