



BETAINE HYDROCHLORIDE with Fenugreek

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RESEARCH INFORMATION

Feature summary

Betaine hydrochloride increases the level of hydrochloric acid (HCl) in the stomach, which is necessary for proper digestion and assimilation of nutrients from food. Stomach acid assists in complete digestion of protein, encourages the flow of bile and pancreatic enzymes, renders the stomach sterile against orally ingested pathogens, prevents bacterial or fungal overgrowth of the small intestine, and facilitates the absorption of many vitamins, minerals, and amino acids.

Poor digestion can arise in the absence of adequate HCl, leading to a range of digestive symptoms, such as bloating, belching, indigestion, diarrhea, or constipation. Betaine hydrochloride helps restore the proper acid levels in the stomach and maintain healthy gastrointestinal function. Taking betaine hydrochloride prior to or during meals can help kick-start the digestive process and help the body digest and break down foods.

Fenugreek seeds help soothe the gastrointestinal tract by providing mucilage to calm inflammation by coating the lining of the stomach and intestines. Natural Factors Betaine Hydrochloride with Fenugreek supports normal digestion and helps gently increase stomach acidity.

How it works

Betaine hydrochloride helps temporarily lower gastric pH to aid in digestion. Digestive discomfort related to low levels of HCl can range from gas and bloating to constipation and diarrhea (Champagne, 1989). HCl works by converting pepsinogen to its active form pepsin, helps denature proteins so they are more susceptible to pepsin's effects, and helps protect from pathogenic organisms that may be ingested with food. HCl may also support the function of digestive enzymes from the pancreas and small intestine (Patricia & Dhamoon, 2021).

Fenugreek has long been used in Ayurvedic medicine for digestive support as well as in traditional Chinese medicine (Venkata et al., 2017). Fenugreek seeds contain 30% soluble fibre and 20% insoluble fibre for a total of 50% fibre, which helps with digestion and regularity (Basch et al., 2003). Fenugreek also contains mucilage to protect digestive tissue and calm inflammation by coating the stomach and intestinal lining. In addition, fenugreek may help support healthy carbohydrate digestion (Basch et al., 2003).

Research

Levels of stomach acid decrease with age, and it is estimated that 30% of the population have low stomach acid, or hypochlorhydria (Champagne, 1989). HCl, secreted by parietal cells in the stomach, plays an important role in healthy digestion and normal digestive function. As healthy levels of stomach acid protect against infection caused by micro-organisms that may be unintentionally ingested with food, low stomach acid may also increase the risk of gastrointestinal infection (Hsu et al., 2021). Additionally, low stomach acid may decrease the absorption of micronutrient vitamins and minerals such as vitamin B12, vitamin D, iron, and calcium (Fatima & Aziz, 2021).

Betaine hydrochloride can help support healthy gastric reacidification in people with low stomach acid. In a pilot study with six healthy volunteers, the participants underwent experimentally induced hypochlorhydria. After their stomach acid was confirmed to be greater than pH 4, they were given 1500 mg of betaine hydrochloride with 90 mL of water. The betaine hydrochloride significantly lowered the pH within 30 minutes, normalizing the acidity (Yago et al., 2013). In a follow-up study, participants were given an experimental substance before and after experimentally induced hypochlorhydria, then once again after the stomach pH was normalized by betaine hydrochloride. Researchers concluded that betaine hydrochloride normalized the stomach pH, which in turn normalized absorption (Yago et al., 2014).

Fenugreek has been used in Ayurveda and traditional Chinese medicine for centuries. In animal studies, fenugreek has been shown to help stimulate the release of pancreatic and intestinal digestive enzymes (Aher et al., 2016; Platel & Srinivasan, 1996). The seeds are high in fibre, an important component of healthy digestion, and contain mucilage that may help protect the tissue of the digestive tract and soothe digestive inflammation (Aher et al., 2016). The mucilage of fenugreek seed may also help support bowel regularity (Johanson, 2007).

Fenugreek also contains vitamins such as A, B1 (thiamine), B2 (riboflavin), B6 (pyridoxine), and C, as well as minerals such as calcium and iron (Jhahria & Kumar, 2016). In randomized, double-blind, placebo-controlled studies with fenugreek for various purposes, no side effects or adverse effects were reported (Khanna et al., 2021).

Ingredients

Each vegetarian capsule contains:

Betaine hydrochloride 500 mg
Fenugreek (*Trigonella foenum-graecum*) (seed)..... 100 mg

Dosage

Recommended adult dose: 3 capsules daily with food or as directed by a health care practitioner.

Cautions

Consult a health care practitioner prior to use if you are pregnant or breastfeeding, have a peptic ulcer, excess stomach acid, high cholesterol, or diabetes. Keep out of the reach of children.

References

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