

Peptic Ulcer

The term “peptic” ulcer distinguishes this condition from ulcerations that affect other parts of the body. Peptic ulcers are erosions in the stomach or duodenum (the first part of the small intestine). These ulcers often bleed and may cause sharp burning pain in the area of the stomach or just below it. Peptic ulcer should never be treated without proper diagnosis.

Peptic ulcer is often caused by infection from *Helicobacter pylori*. People with peptic ulcer due to infection should discuss conventional treatment directed toward eradicating the infection—a combination of antibiotics and bismuth—with a medical doctor. Ulcers can also be caused or exacerbated by stress, alcohol, smoking, and dietary factors.

Dietary changes that may be helpful: People with ulcers have been reported to eat more sugar than people without ulcers,¹ though this link may only occur in those with a genetic susceptibility toward ulcer formation.² Sugar has also been reported to increase stomach acidity,³ which could exacerbate ulcer symptoms. Salt is a stomach and intestinal irritant. Higher intakes of salt have been linked to higher risk of stomach (though not duodenal) ulcer.⁴ As a result of these reports, some nutritionally oriented doctors suggest that people with ulcers should restrict the use of both sugar and salt. However, the amount of benefit

obtained by making such dietary changes remains unknown.

Many years ago, researchers reported that cabbage juice accelerated healing of peptic ulcers.^{5 6 7 8} Drinking a quart of cabbage juice per day was necessary for symptom relief in some reports. Although only preliminary modern research supports this approach,⁹ many nutritionally oriented doctors claim considerable success using one quart per day for ten to fourteen days, with ulcer symptoms frequently decreasing in only a few days. Carrot juice may be added to improve the flavor.

Fiber slows the movement of food and acidic fluid from the stomach to the intestines, which should help those with duodenal though not stomach ulcers.¹⁰ When people with recently healed duodenal ulcers were put on a long-term (six months) high-fiber diet, the rate of ulcer recurrence was dramatically reduced in one controlled study,¹¹ though short term (four weeks) use of fiber in people with active duodenal ulcers led to only negligible improvement.¹²

Ayurvedic doctors in India have traditionally used dried banana powder to treat ulcers. In animal studies, banana powder protects the lining of the stomach from acid.¹³ A human trial has also found dried banana helpful in those with peptic ulcer. In that report, two capsules of dried raw banana powder taken four times per day for eight weeks led to significant improvement.¹⁴ Bananas and unsweetened banana chips may be good substitutes, although ideal intake remains unknown.

Years ago, food allergies were linked to peptic ulcer.¹⁵ Exposing the lining of the stomach to foods a person was known to be allergic to has caused bleeding in the stomach.¹⁶ If not triggered by *Helicobacter* infection nor helped by other natural approaches, peptic ulcer may respond to avoidance of allergens. Consultation with a nutritionally oriented doctor is needed to discover which foods a person is sensitive to.

Lifestyle changes that may be helpful: Aspirin and related drugs,¹⁷ alcohol,¹⁸ coffee¹⁹ (including decaf),²⁰ and tea²¹ are known to increase stomach acidity, which can interfere with the healing of an ulcer. Smoking is known to slow ulcer healing.²² Whether or not an ulcer is caused by infection, people with peptic ulcer should avoid use of these substances.

Nutritional supplements that may be helpful: Vitamin A is needed in the healing of mucosal tissue, including linings of the stomach and intestines. In one controlled trial, vitamin A facilitated healing in a small group of people with stomach ulcer.²³ The amount used in that report—50,000 IU taken three times per day—is highly toxic, can cause birth defects, and should never be taken by a woman who is or could become pregnant, nor by anyone else without careful supervision from a nutritionally oriented doctor. Objective evidence of healing from taking vitamin A has been reported by the same research group.²⁴ The effect of lower amounts of vitamin A has not been studied in people with peptic ulcer.

Zinc is also needed in the repair of damaged tissue and has protected rats from stomach ulceration.²⁵ In Europe, zinc combined with acexamic acid, an anti-inflammatory substance, is used as a drug in the treatment of peptic ulcers.²⁶ In an isolated controlled trial that used 88 mg of zinc taken three times per day, the speed of healing tripled compared with placebo.²⁷ Some nutritionally oriented doctors suspect that such an exceptionally high intake of zinc may be unnecessary, suggesting instead that people with ulcers wishing to take zinc supplements have only 25–50 mg of zinc per day. Even at these lower levels, 1–3 mg of copper per day must be taken to avoid copper deficiency that would otherwise be induced by the zinc supplementation.

Glutamine, an amino acid, is the principal source of energy for cells that line the small intestine and stomach. Years ago, glutamine was reported to help people with peptic ulcer in a preliminary trial.²⁸ Glutamine has also prevented stress ulcers triggered by severe burns in another preliminary report.²⁹ Despite the limited amount of published research, some nutritionally oriented doctors suggest 500–1000 mg of glutamine taken two to three times per day to help people overcome peptic ulcers.

Research has shown that bioflavonoids—such as quercetin, catechin, and apigenin, which is found in chamomile—inhibit the growth of *Helicobacter pylori*, the microorganism that frequently causes peptic ulcer.³⁰ Bioflavonoids have also been used for ulcers because of

their anti-inflammatory activity,³¹ though most published research has studied leg ulcers—not peptic ulcer. Some nutritionally oriented doctors recommend 500 mg of quercetin taken two to three times per day, though optimal intake remains unknown.

A study from Malaysia reports that oral dimethyl sulfoxide (DMSO) reduced relapse rates for peptic ulcer significantly better than placebo or the ulcer drug cimetidine.³² Previous research showed that DMSO in combination with cimetidine was more effective than cimetidine alone.³³ These trials used 500 mg of DMSO taken four times per day. The authors of these trials believe the antioxidant activity of DMSO may have a protective effect.

Are there any side effects or interactions? Refer to the individual supplement for information about any side effects or interactions.

Herbs that may be helpful: Licorice root has a long history of use for soothing inflamed and injured mucous membranes in the digestive tract. Licorice may protect the stomach and duodenum by increasing production of mucin, a substance that protects the lining of these organs against stomach acid and other harmful substances.³⁴ Bioflavonoids in licorice also appear to inhibit *Helicobacter pylori*, according to laboratory research.³⁵

For people with peptic ulcer, many doctors who use herbal medicine use the deglycyrrhized form of licorice (DGL). In making DGL, the portion of licorice root that

can increase blood pressure and cause water retention is removed, while the mucous membrane-healing part of the root is retained. In some reports, DGL has compared favorably to the popular drug cimetidine (Tagamet®) for treatment of peptic ulcer,³⁶ while in other trials cimetidine has appeared to be initially more effective.³⁷ However, after DGL and cimetidine were discontinued, one study reported fewer recurrences in the former DGL group compared with the former cimetidine group.³⁸ Though not every trial has reported efficacy,³⁹ most studies find DGL to facilitate healing of peptic ulcer. A review of the DGL research shows that the studies not reporting efficacy used capsules, and the trials finding DGL to be helpful used chewable tablets.⁴⁰ Doctors typically suggest taking one to two chewable tablets of DGL (250–500 mg) fifteen minutes before meals and one to two hours before bedtime.

The gummy extract of *Pistachia lentiscus*, also known as mastic, has been shown in two double blind studies to heal peptic ulcers.^{41 42} This may be related to its ability to kill *Helicobacter pylori* in test tubes.⁴³ This herbal preparation is not yet available in the US.

Chamomile has a soothing effect on inflamed and irritated mucous membranes. It is also high in the bioflavonoid apigenin. Many doctors of natural medicine recommend drinking two to three cups of strong chamomile tea each day. The tea can be made by combining 3–5 ml of chamomile tincture with hot water or by steeping 2–3 teaspoons of chamomile flowers in the water, covered, for ten to fifteen minutes. Chamomile is also available in

capsules; two can be taken three times per day. Calendula is another plant with anti-inflammatory and healing activity used as part of the approach to people with peptic ulcers in traditional medicine. The same amount as chamomile can be used.

Marshmallow is high in mucilage. High-mucilage-containing herbs have a long history of use for irritated or inflamed mucous membranes in the digestive system, though no clinical research has yet investigated effects in people with peptic ulcer.

Garlic,⁴⁴ thyme tea, and cinnamon tincture have all been reported to have anti-*Helicobacter* activity in test tube studies.⁴⁵ Whether garlic, thyme or cinnamon would be effective in humans with peptic ulcers caused by this bacterium has yet to be explored in clinical research.

Comfrey has a long, traditional history of use as a topical agent for improving healing of wounds and skin ulcers.^{46 47} It was also used for people with gastrointestinal problems, including stomach ulcers, though these traditional uses have yet to be tested in scientific studies.

Are there any side effects or interactions? Refer to the individual herb for information about any side effects or interactions.

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