

Helicobacter pylori (*H. Pylori*) is a common human pathogen affecting approximately 50% of the population worldwide. *H. pylori* may cause several gastrointestinal issues. Supporting the reduction of *H. pylori* levels may improve associated digestive discomfort, bloating/abdominal distention, frequent burping, and occasional nausea and/or vomiting.

Clinical Applications

PyloGuard™ was specifically developed to help:

- Address *H. pylori*-associated occasional gastrointestinal (GI) distress and upper GI discomfort
- Promote healthy gastric mucosal inflammatory responses and alleviate abdominal distension
- Lessen GI issues related to elevated levels of *H. pylori*
- Support reducing *H. pylori* load in both symptomatic and asymptomatic individuals
- Reduce and/or alleviate adverse reactions and undesirable effects of antibiotics, particularly occasional diarrhea and associated abdominal pain
- Decrease digestive discomfort severity when combined with triple therapy
- Support optimal gut microbial diversity and microbiome balance
- Promote gut and overall health in individuals presumed to have *H. pylori* in their GI tracts



Mechanism of Action

The unique characteristics of PyloGuard™'s *L. reuteri* DSM 17648 include:

High Affinity

In in vitro experiments, coaggregation of *L. reuteri* DSM 17648 and *H. pylori* bacteria may occur within a few seconds. One *L. reuteri* DSM 17648 cell can bind two to three *H. pylori* cells.

High Specificity

L. reuteri DSM 17648 exhibits specific binding to various strains of *H. pylori* and other *Helicobacter* spp. It does NOT bind to other gastrointestinal commensal or undesirable bacteria in the oral cavity or gut environment. This selectivity ensures that the natural microbial balance in the gastrointestinal tract remains undisturbed.

Function in Gastric Environment

L. reuteri DSM 17648 effectively coaggregates with *H. pylori* in artificial stomach juice (at 37°C), covering the fasting to postprandial pH range. This is critical, as *H. pylori*'s presence can alter stomach pH. *L. reuteri* DSM 17648's activity is not disturbed by a variety of common dietary sugar molecules. Coaggregation activity requires Pepsin to activate fully.

Efficacy as Both Probiotic and Postbiotic

A postbiotic is a preparation of inanimate microorganisms and/or their components that promote health benefits for the host. *L. reuteri* DSM 17648 to *H. pylori* binding mechanism of action does not depend solely on the strain's activity, as coaggregation also occurs when the strain is an inactivated postbiotic. This feature reduces transportation and storage challenges and signifies that *L. reuteri* DSM 17648 does not lose its *H. pylori*-binding ability in the presence of antibiotics.





Ingredients

200 mg Pylopass™ (*Limosilactobacillus reuteri* DSM 17648)

The *Limosilactobacillus reuteri* DSM 17648 strain has a highly specific adhesion and strong coaggregation activity to *H. pylori*. In a proof-of-concept, single-blinded, randomized, placebo-controlled pilot study, *L. reuteri* DSM 17648 significantly supported a reduced load of *H. pylori* in symptomatic and asymptomatic adults. Pylopass™ is safe and effective, **backed by 10+ human clinical trials**.

*Formerly known as *Lactobacillus reuteri*



SUPPLEMENT FACTS

Serving Size 1 Capsule
Servings Per Container 30

Amount Per Serving

| | |
|------------------------------------|------------------|
| <i>Limosilactobacillus reuteri</i> | 200 mg |
| DSM 17648 (Pylopass™) | 20 Billion Cells |

† Daily values not established.

Other Ingredients: Cellulose, vegetable capsule (cellulose, water), silicon dioxide, magnesium stearate.

Suggested Use: One capsule per day. Or as directed by a healthcare professional.

13

(And Counting)
Clinical Trials

20%

Higher Reduction Rate
Compared to Standard
Therapy Group

DOI: 10.9734/JPRI/2021/v33i52B33611

65.22%

Reduction with
Postbiotic + PPI

DOI: 10.15406/ghoa.2020.11.00407

Science You Can Trust from Microbiome Labs

In a groundbreaking 2014 study, *Limosilactobacillus reuteri* DSM 17648 exhibited a unique coaggregation capability with *H. pylori*. Out of 700 screened *Lactobacilli* strains, *L. reuteri* DSM 17648 displayed the highest binding affinity to *H. pylori*, forming coaggregates in artificial stomach juice. The researchers hypothesized that the distinctive molecular structure on the surface of *L. reuteri* DSM 17648, potentially including specific proteins, lipoteichoic acid, and carbohydrate molecules, strongly coincides with the molecular structure on the *H. pylori* bacteria's surface. This alignment facilitates their mutual attraction, leading to the formation of coaggregates.

Through a natural coaggregation process, *L. reuteri* DSM 17648 can impede *H. pylori* motility and its adhesion to the gastric mucosa. *L. reuteri* DSM 17648 and *H. pylori*

coaggregates are expelled from the stomach via peristaltic movements, resulting in a decreased *H. pylori* load in the stomach.

Backed by the findings of more than 13 clinical trials where Pylopass™ was administered independently or in conjunction with conventional treatments, it has demonstrated safety and efficacy. These trials, encompassing over 700 subjects, have shown support from Pylopass™ to successfully reduce *H. pylori* levels, enhance reduction rates, and relieve associated gastrointestinal issues.

As Your Practice Partner, Microbiome Labs is committed to producing and developing the scientific research, data, and raw materials necessary to elevate human health and the standing of Natural Medicine. We're pioneering health to ensure the microbiome takes center stage in tomorrow's integrated healthcare.

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Want to learn more? Contact us

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Food supplements
should not be used as
a substitute for a healthy
diet and lifestyle.