

Pylopass™ – A New Approach to Prevent Gastritis and Gastric Ulcers

Pylopass-一种预防胃炎和胃溃疡的新方法

What is Pylopass™?

- Pylopass™ is obtained through fermentation of a probiotic strain, *Lactobacillus reuteri*. Pylopass 是通过益生菌罗伊氏乳杆菌发酵得来的。
- Thanks to a unique mode of action Pylopass™ can reduce the *Helicobacter pylori* colonization of the stomach thus reducing the risk of developing gastritis and gastric ulcers. 由于一种独特的作用机理，Pylopass可以降低胃里幽门螺杆菌的繁殖，因此可以降低患胃炎和胃溃疡的风险。
- Pylopass™ is stable at room temperature and can be used in a wide range of products. 在室温下，Pylopass是很稳定的，可以应用于不同的产品中。

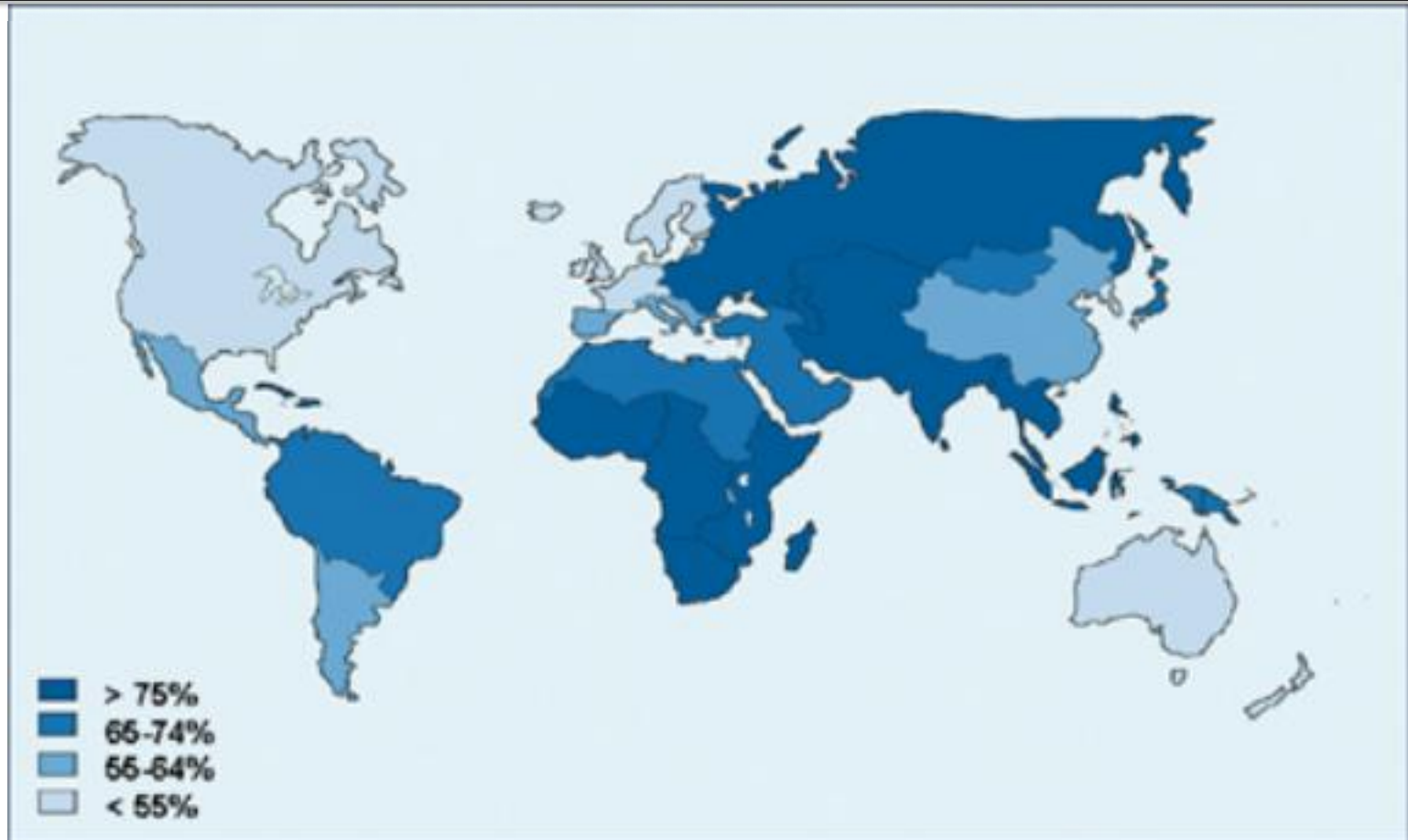
Helicobacter pylori – A Recent Discovery

- Two Australian scientists, Dr Barry Marshall and Dr Robin Warren, discovered that *Helicobacter pylori* is the main cause of gastritis and gastric ulcers.两个澳大利亚科学家，发现了幽门螺杆菌是引起胃炎和胃溃疡的“元凶”。
- This groundbreaking discovery was awarded with the **Nobel Prize for Medicine and Physiology in 2005**.这个开创性的发现让这两个科学家获得了**2005年**的诺贝尔医学奖。
- Up to then it was thought that no bacteria can survive in the acidic conditions of the stomach and that ulcers are caused by **lifestyle**.知道那以前，人们一直认为没有细菌可以在胃里的酸性环境中生存，胃溃疡是由于生活方式不当造成的。

***Helicobacter pylori* – Infection and Prevalence**

- *Helicobacter pylori* infection is acquired by oral ingestion of this bacterium. 幽门螺杆菌是通过口腔感染的。
- Prevalence among middle-aged adults is over 80% in many emerging countries and 20 - 50% in industrialized countries. 在发展中国家，超过80%的中年人感染了幽门螺杆菌，而在发达国家，患病率是20-50%。
- Over 80% of individuals infected with the bacterium are asymptomatic. 超过80%的感染者是无症状的。
- If left untreated *Helicobacter pylori* infection can cause gastritis, duodenal, and gastric ulcers. 如果不进行治疗，可能会引起胃炎，十二指肠炎和胃溃疡。

Helicobacter pylori – Global Prevalence



Helicobacter pylori – Conventional Treatment

Conventional Treatment

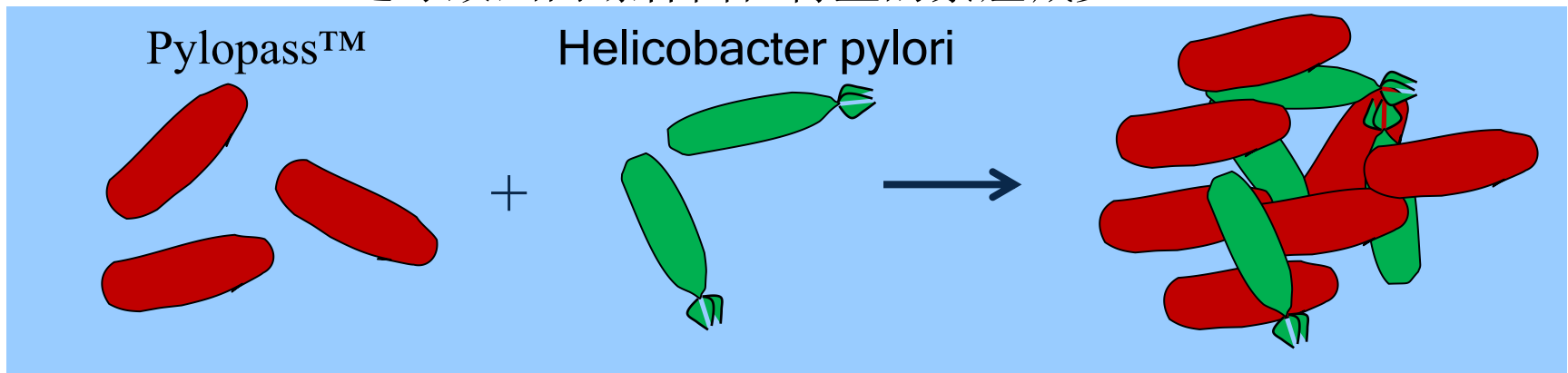
- eradication with 2-3 antibiotics and a proton pump inhibitor 目前的治疗方法是2-3种抗生素和一个质子泵制剂

Disadvantages

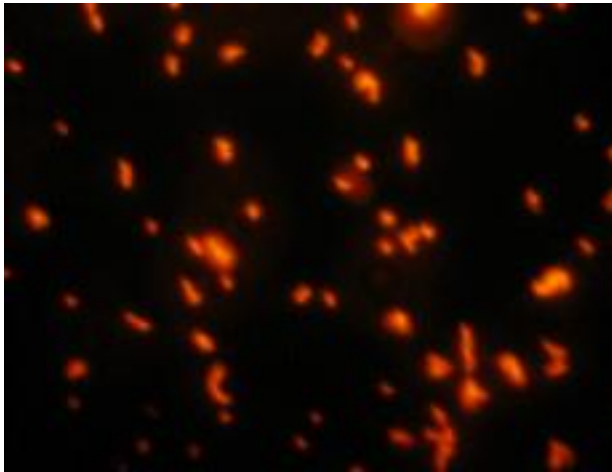
- increased resistance against antibiotics leads to the decrease of success rate from 90 to 75% to date 持续使用抗生素会导致成功率从90%降至75%
- severe side-effects such as nausea, vomiting, digestive disorders and headache are observed 会导致严重的副作用产生，如恶心，呕吐，肠胃紊乱，头痛等症状
- high risk of re-infection 再次感染的风险很高

Pylopass™ – Unique Mode of Action

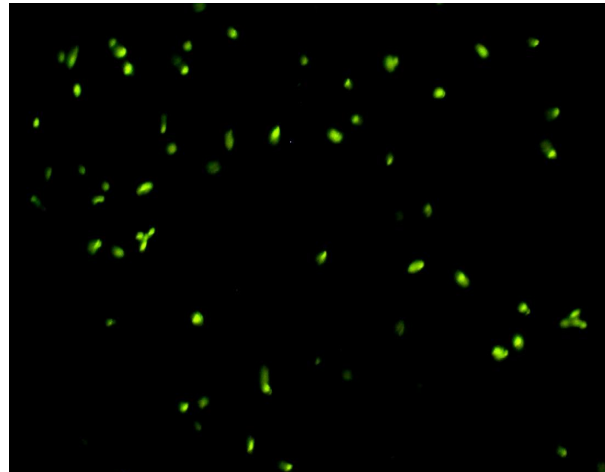
- Pylopass™ is able to recognize the surface of *Helicobacter pylori* and to co-aggregate. Pylopass™ 可以识别幽门螺旋杆菌，附着在其表面，形成共聚合细菌体
- Co-aggregates are eliminated from the organism. 共聚合细菌体最后被排泄掉
- This leads to a reduction of *Helicobacter pylori* colonization in the stomach. 这导致幽门螺旋杆菌在胃里的繁殖减少。



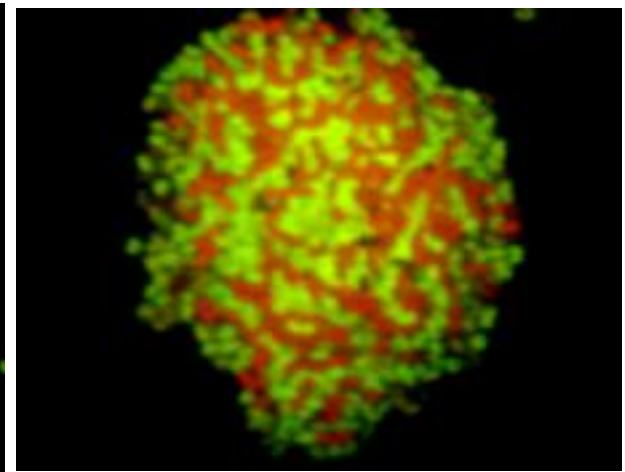
Pylopass™ in vitro co-aggregation with *Helicobacter pylori*



Pylopass™



Helicobacter pylori

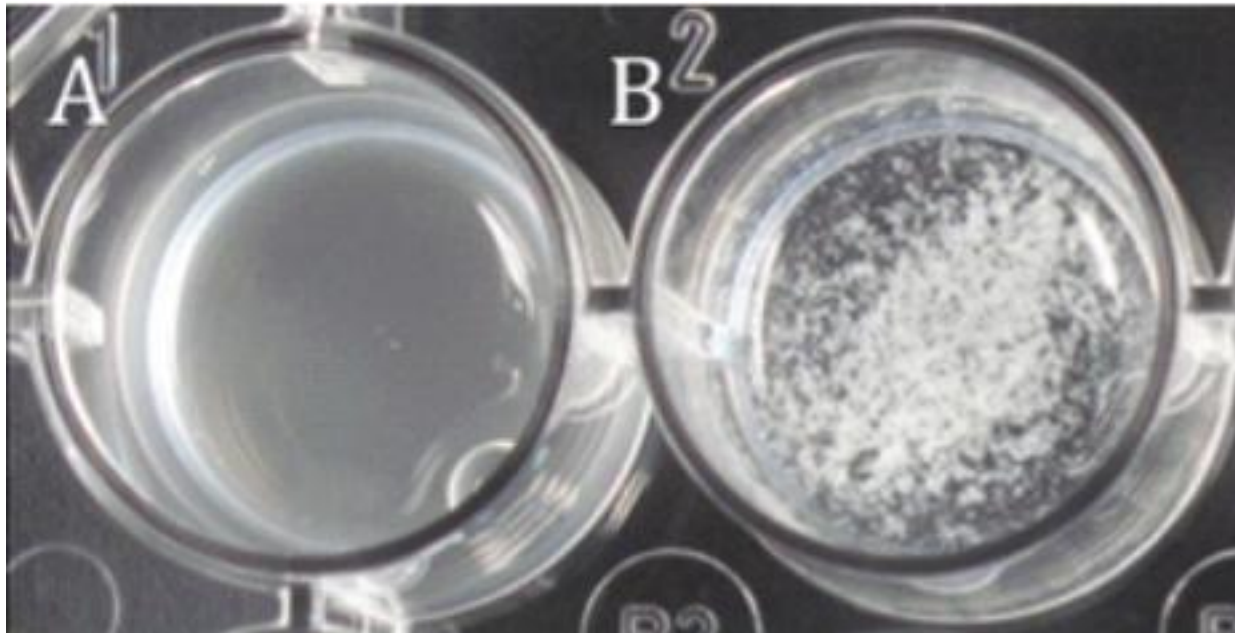


Co-aggregation of *H.pylori* and Pylopass™

Pylopass™ specifically aggregates *Helicobacter pylori*.

Pylopass只特定地聚合幽门螺杆菌

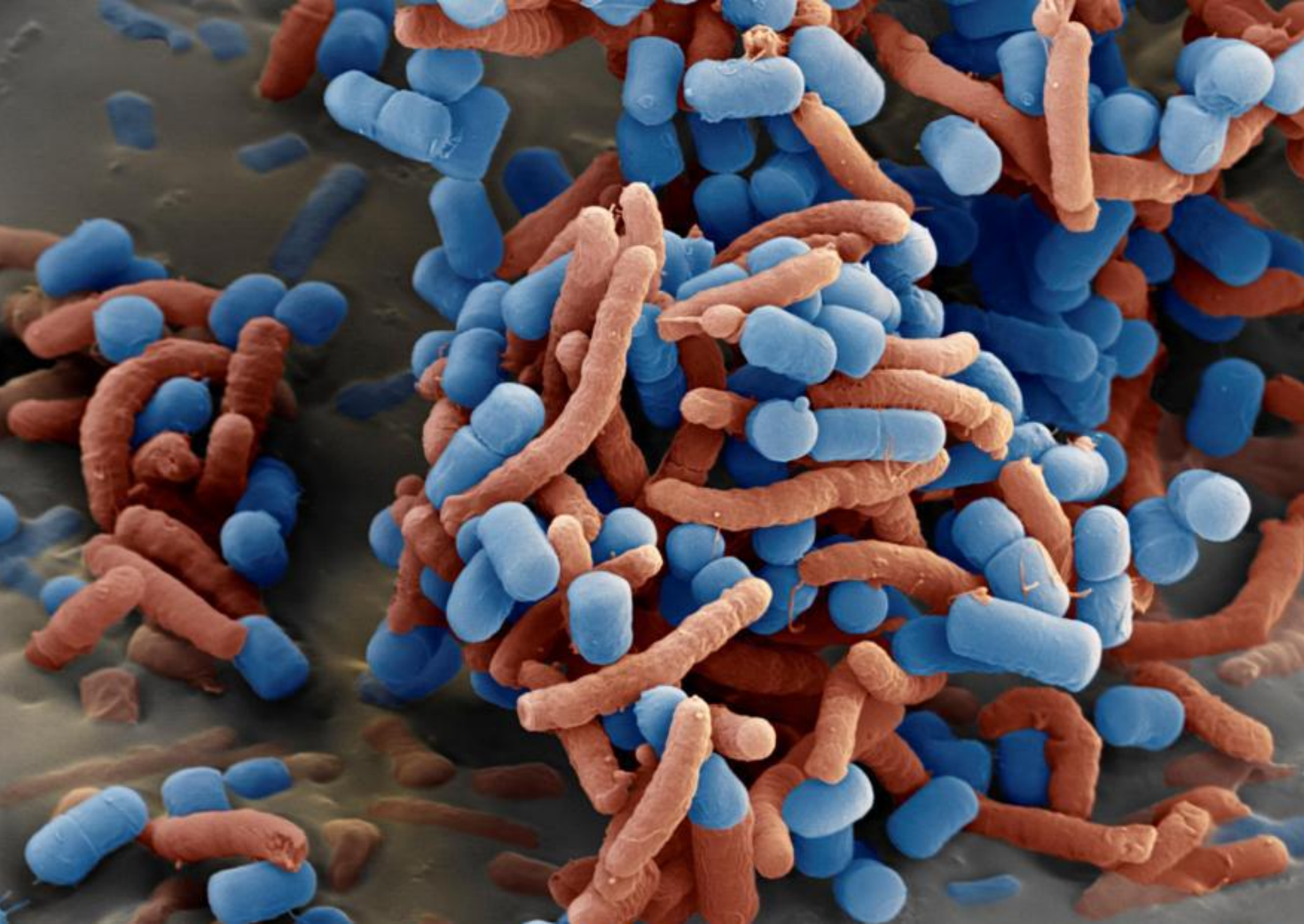
Pylopass™ in-vitro coaggregation with *H. pylori*



H. pylori + other lactobacillus
= no coaggregation

H. pylori + Pylopass™ =
coaggregation

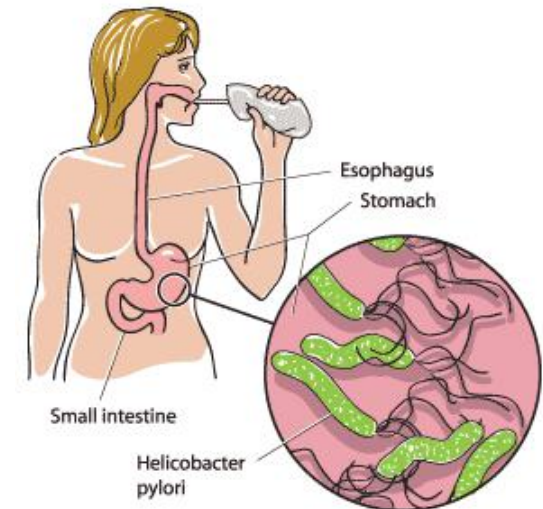
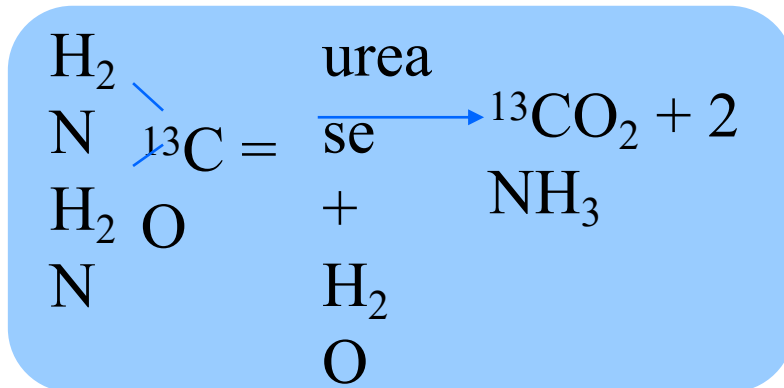
Pylopass™ specifically aggregates *Helicobacter pylori*



Urea Breath Test

Principle

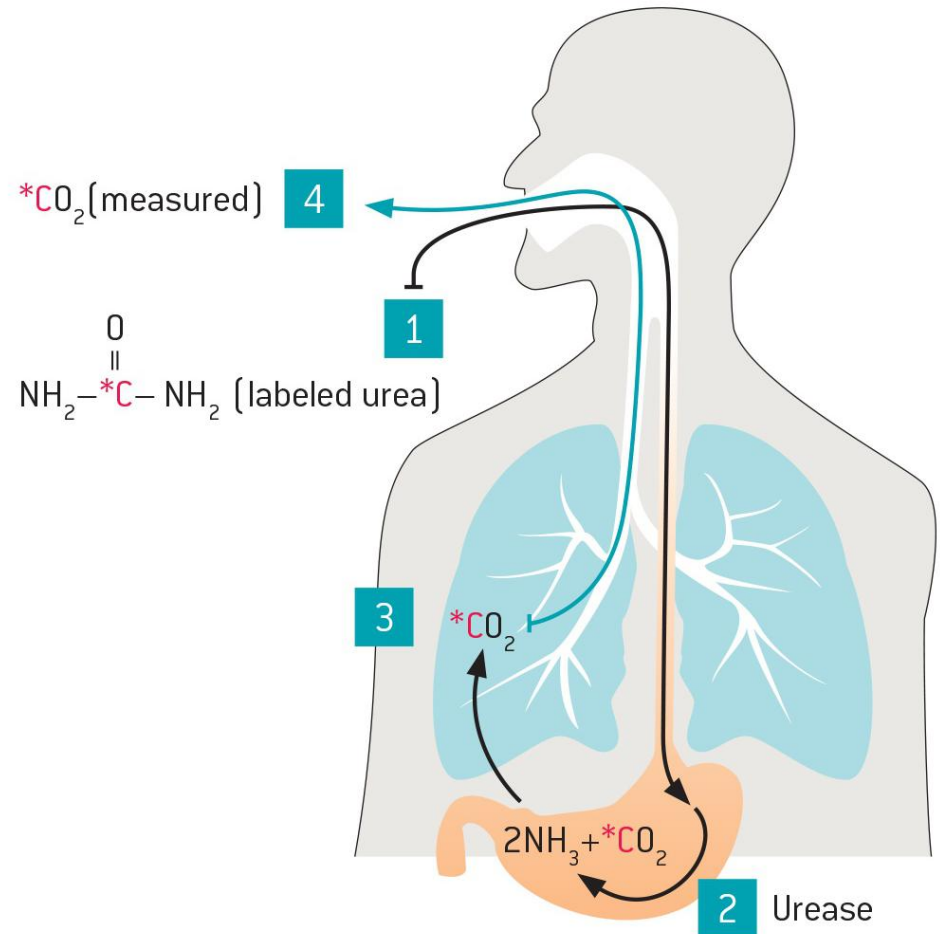
- Urea normally is not metabolized in the body
- *Helicobacter pylori* produces urease, the enzyme used to hydrolyse urea
- In the presence of *Helicobacter pylori*, urea is hydrolysed to ammonia and CO₂



- In the Urea breath test, ¹³C-labelled urea is provided to the test person and the concentration of ¹³CO₂ is measured in the exhalation air

Urea Breath Test

1. Ingest known amount of labeled urea
2. Due to the enzyme urease produced by *H. pylori*, the urea is converted to ammonia and carbon dioxide in the stomach
3. The labeled carbon dioxide is absorbed into the blood stream and travels to the lungs
4. A breath sample is taken and the amount of carbon dioxide is measured



Pylopass™ technical information

- Free flowing powder containing 10×10^{11} *Lactobacillus reuteri* cells per gram stabilized in a special matrix 每克含1000亿菌
- Co-aggregation activity tested in every batch
- Daily dosage: 200 mg which can be split in several servings 每天 200mg
- Regulatory: Qualified presumption of safety (QPS) status in the EU
- Stability: at least one year at room temperature
- Packaging: 10 kg bag in box

Pylopass™ at a Glance

- Unique and specific mode of action to prevent gastritis and gastric ulcer
- Obtained through fermentation of a probiotic strain *Lactobacillus reuteri*
- Versatile use thanks to its stability

Stada (Russia) Helinorm

Pylopass™ content

- 200mg per hard capsule

Other active ingredients

- none

Position claim

- Promoted through medical channel



Santiveri (Spain) beneflor™ Antacid

- Pylopass™ content
200 mg in one sachet
- Other ingredients
aloe vera
ginger
calcium, magnesium
and zinc
- Claims
Gastric well-being
Aloe vera and ginger
contribute to a normal gastro-intestinal function
- Field of Application
Dietary supplement



The image shows the packaging for beneflor Antacid. The background is a close-up of a person's stomach with a red circular glow. The product name "beneflor™ Antacid" is prominently displayed in blue and black text. Below it, there are two sections of text in Spanish and Italian describing the benefits of the ingredients. The Santiveri logo is in a green leaf shape, and the Pylopass logo is in a dark red oval. A circular logo on the right says "BENESSERE INTESTINALE". At the bottom left, it says "30 Sobres Bustine". At the bottom right, it says "Pylopass™ is a trademark of ORGANO BALANCE GmbH Germany www.pylopass.com".

**beneflor™
Antacid**

Bienestar gástrico
Con aloe vera y jengibre, que contribuyen a una normal función gastro-intestinal

Benesere gastrico
Con aloe vera e zenzero, che contribuiscono a una normale funzione gastro-intestinale

30 Sobres Bustine

Santiveri

Pylopass™

Pylopass™ is a trademark of
ORGANO BALANCE GmbH
Germany
www.pylopass.com

Unifarco (Italy) Gastri Bioma

- Pylopass™ content
200mg in two hard
capsules
- Other ingredient
licorice extract
- No claim
- Field of Application
Dietary supplement



Pharmatheka (Croatia) HELPyred

- Pylopass™ content
200mg in two soft gels
- Other ingredients
Sunflower oil, calcium,
zinc and tocopherol

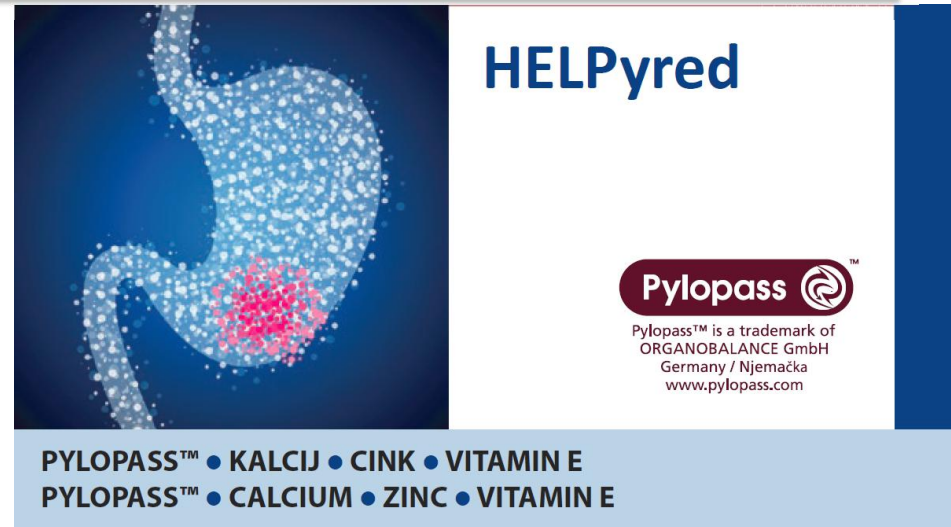
- Claims

Calcium contributes to the normal function of digestive enzymes.

Zinc contributes to normal acid-base metabolism.

Vitamin E contributes to the protection of cells from oxidative stress.

- Field of Application
Dietary supplement



Synomed (Germany) Enterobact pylori

- Pylopass™ content
200mg in one tablet
- Other ingredients
biotin
- Claim
Biotin contributes to the
maintenance of normal
mucous membranes
(EFSA claim)
- Field of Application
Dietary supplement



60 **Zutaten:**
Füllstoff Mikrokristalline Cellulose, Lactobacillus reuteri DSMZ 17648 (Pylopass™), modifizierte Stärke, Trennmittel Magnesiumsalze der Speisefettsäuren (pflanzlich), Füllstoff Siliciumdioxid, D-Biotin.

Tagesverzehrsmenge (1 Tablette) enthält:
Lactobacillus reuteri 200 mg(†)
Biotin 100 µg (200%*)

* Referenzmenge nach LMIV (NRV)
** 4 x 10⁹ Bakterien pro 1 Tablette

Pylopass 

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ORGANO BALANCE GmbH
Germany
www.pylopass.com

Synomed GmbH, Flamweg 134, D-25335 Elmshorn

SYNOMED
**Enterobact[®]
pylori
Tabletten**

Nahrungsergänzungsmittel
mit dem Vitamin Biotin
und dem Milchsäure-
bakterium Lactobacillus
reuteri. Biotin trägt bei
zur Erhaltung normaler
Schleimhäute.

Laboratorios Lebudit (ES) Gastro H

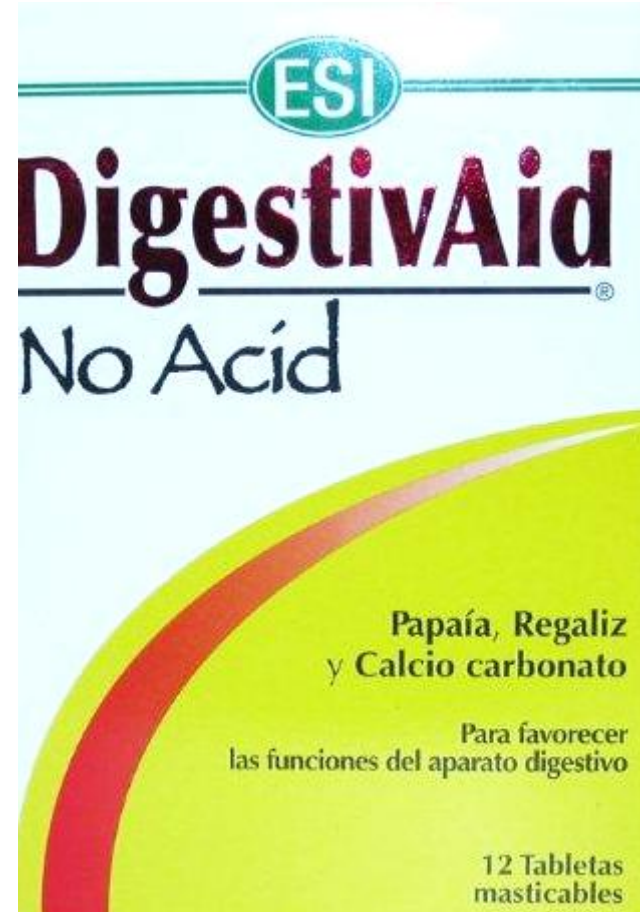
- Pylopass™ content
200 mg in one hard capsule
- Other active ingredients
none
- Position claim
helps to recover gastric health
- Field of Application
dietary supplement
promoted through medical visits



ESI (Italy and Spain) DigestivAid

Active ingredients

- Pylopass™, Calcium carbonate, coral, papaya



Mundonatural (France) Pylostop

Pylopass™ content

- 200mg in two hard capsules

Other active ingredients

- 500mg calcium carbonate and 200mg magnesium carbonate



Laboratoarele Remedia (Romania)

GastroRem

Pylopass™ content

- 75 mg/tablet, 3 tablets/day

Other active ingredients

- Calcium carbonate, magnesium, licorice extract



The image shows the packaging for GastroRem. At the top left is the Pylopass logo with a circular icon and the text 'Pylopass™ is a trademark of Lonza Ltd, Switzerland www.pylopass.com'. To the right is the 'Laboratoarele Remedia' logo in a script font with a leaf icon and the tagline 'natura ca medicament'. The main product name 'GastroRem' is prominently displayed in large orange and dark blue letters. Below it, a dark blue banner contains the text 'neutralizează aciditatea gastrică' in white. To the right of this banner, the word 'pylopass' is written in white on an orange background. Below that, 'SUPPLEMENT ALIMENTAR' is written in orange. At the bottom, the ingredients 'carbonat de calciu și magneziu din sursă naturală' are listed in dark blue, followed by '24 comprimate masticabile' in orange. A partial image of a person's hands clutching their stomach is visible on the left side of the packaging.

Laborest (Italy)

Grisù BST

Pylopass™ content

- 200mg in two sachets

Other active ingredients

- Potassium citrate, magnesium hydroxide, calcium alginate, cactus extracts



SPM (Vietnam)

Pylodi

Pylopass™ content

- 200mg per tablet

Other active ingredients

- Magnesium and calcium carbonates



Biogena (Austria) Helicobacter Control

Pylopass™ content

- 200mg per capsule

Other active ingredients

- none

Position claim

- Reduces the H. pylori load of people suffering from gastritis



Helicobacter
Control

Bei Helicobacter pylori-Infektionen



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of Lonza Ltd, Switzerland
www.pylopass.com

