

Detecting Helicobacter Pylori by  
Urea Breath Test System

# HeliGuide



Ease in Detecting the Disease

# HeliGuide

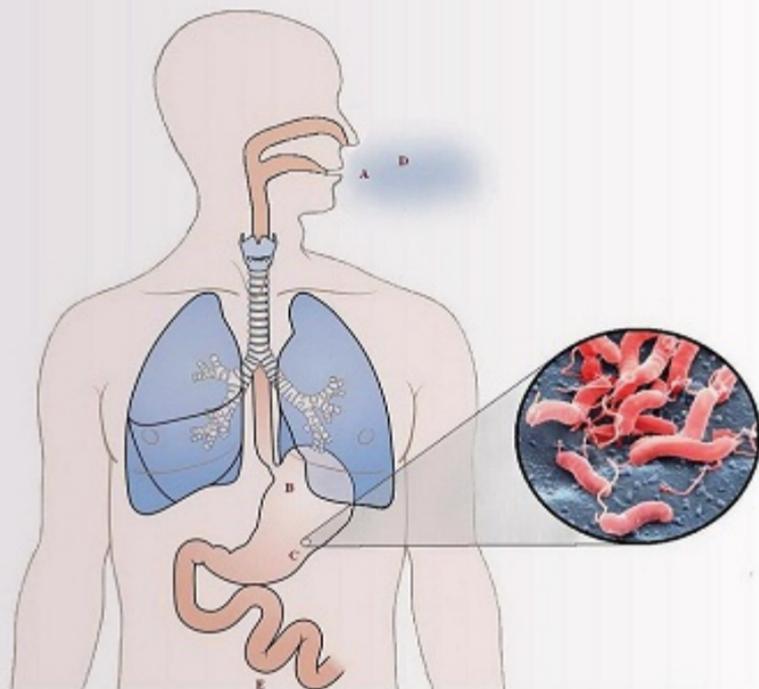
## Urea Breath Test System



*Helicobacter pylori* is extremely common in humans, infecting around 50% of the world's population. It is recognized as the main etiological factor for chronic gastritis, peptic ulcer coma and also gastric cancer. Much suffering and even ulcer related deaths can be easily prevented through accurate diagnosis and appropriate treatment with antibiotics.

HeliGuide is a  $^{14}\text{C}$ -Urea Breath Test System perfectly suited for primary diagnosis and for post treatment follow-up of *Helicobacter pylori* infection.

It is a reliable, safe, and cost-effective near-patient testing system consisting of three components: Capsule, BreathCard and HeliGuide Analyzer.



**A.** On an empty stomach the patient swallows the capsule with a glass of water.

**B.** The capsule containing  $^{14}\text{C}$ -labeled urea, disintegrates rapidly in the stomach and the  $^{14}\text{C}$ -urea is dissolved.

**C.** In the presence of *Helicobacter pylori*, the  $^{14}\text{C}$ -urea is metabolized to carbon dioxide and ammonia by the enzyme urease, produced by *Helicobacter pylori*.

**D.** The available  $^{14}\text{C}$  isotopes, now in the form of  $^{14}\text{CO}_2$ , diffuse into the blood to be transported to the lungs, where it is exhaled in the breath to be captured during sampling. A positive answer offers conclusive evidence that the patient is infected with *Helicobacter pylori*.

**E.** In the absence of *Helicobacter pylori*, the administered urea is absorbed in the gastrointestinal tract and subsequently voided.

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### Advantages of HeliGuide system

- Convenience – Easy to use, near patient testing  
no need to send sample for analysis
- Comfort – Painless, non-invasive gastroscopic  
tubing
- Speed – Samples are ready for analysis in only  
10 minutes with test result available in 5 minutes





1. Swallow the capsule



2. After a 10-minute wait,  
breathe into Breathcard



3. Insert Breathcard into  
HeliGuide analyzer



4. Result is available in  
a few minutes



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## Urea Breath Test System



### Specifications:

Bright LCD display

User-friendly console

Firm and portable console with comfortable handle design

Heavy duty packaging

Weight: 4Kg

Console dimension: 15×15.5×21 cm<sup>3</sup>

All of our products are designed and manufactured based on national and international safety and quality rules.

Having such certificates guarantees the safety and quality of HeliGuide.

ISO 9001:2008 specifies requirements for quality management system.

ISO 13485:2003 specifies requirements for a quality management system where an organization needs to demonstrate its ability to provide medical devices and related services that consistently meet customer requirements and regulatory requirements applicable to medical devices and related services.



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