

Diagnosis of Infections and Metabolic Diseases  
Now Even Simpler and Faster



# Heli FAN<sup>plus</sup>



Clinically tested

## A device indispensable to gastroenterology and in the best interest of your patients

Helicobacter pylori infection is one of the most abundant bacterial infections all over the world.

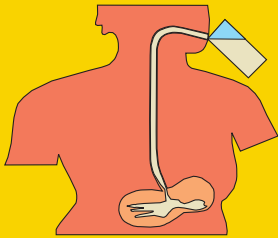
Only total eradication of the pathogen effectively protects from gastritis as well as from gastric and duodenal ulcers.

If an infection is suspected a <sup>13</sup>C-breath test with its high sensitivity and specificity nowadays is the golden standard for detecting this insidious germ. Additionally, it is the most pleasant method because not the individual person but only his/her breath is investigated. The troublesome swallowing of a tube can be reduced to a minimum.

### Attractive for Medical Practices and Laboratories As Well As for Small Hospitals

- World wide
  - unrivalled price-performance ratio
  - smallest, compact device
  - minimum weight
- Fast measurement using the fourfold sampler with status display
- Easy connection to a PC or notebook
- Simple operation with user-friendly Windows™ software and integrated patients database

## Operational Sequence of $^{13}\text{C}$ -Breath Test:

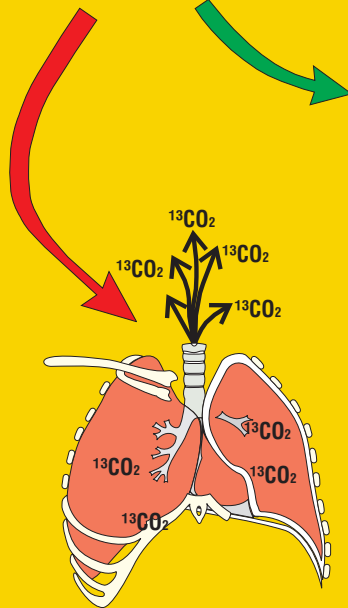


Intake of  $^{13}\text{C}$ -labelled urea together with a test meal

30 minutes later:

**Hp negative !!**

No enzymatic reaction, little  $^{13}\text{CO}_2$  in breath



**Hp positive !!**

Hp cleaved urea to form  $^{13}\text{CO}_2$  which reaches breath via blood circulation

1. Blow up the first breath bag
2. Drink  $^{13}\text{C}$ -labelled test liquid and wait for 30 minutes
3. Blow up the second breath bag
4. Measurement

The  $^{13}\text{C}$ -urea breath test surpasses all other tests when it comes to diagnosing *Helicobacter pylori* infections both in sensitivity (96-99 %) and specificity (96-98 %) and thanks to its non-invasive mode of operation does not strain the patient at all.

Other non-invasive tests ( $^{14}\text{C}$ -urea breath test, serology) as well as invasive ones (culture, histology, rapid urease test, 24 h urease test) are clearly inferior to the  $^{13}\text{C}$ -urea breath test with respect to diagnostic reliability.

$^{14}\text{C}$ -urea breath test which was frequently applied in the past, involves a certain radiation exposure and is therefore not allowed to be applied to children and pregnant women and its use for other patients is questionable.

### A Whole Variety of Applications

The compact device **HeliFANplus** can, of course, also be applied to the more than 20 other  $^{13}\text{C}$ -breath tests for diagnosing infections and metabolic diseases using substrates other than urea. The software suggests the proper test procedure to the user, queries all necessary parameters and supports diagnosis on the basis of up-to-date scientific results.

### Simple PC-Connection:

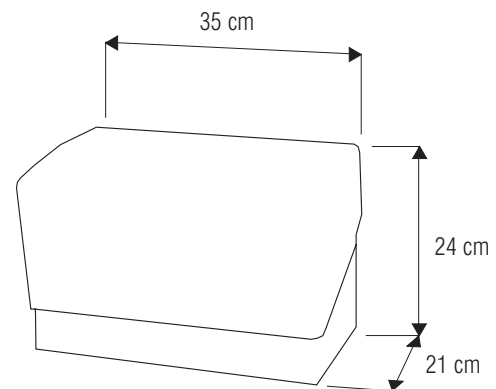
**HeliFANplus** can be connected to all PCs and notebooks with Windows 98™ or higher. All current interfaces are supported:

- USB Interface
- Serial Interface
- Printer Interface
- CAN BUS

### Fully Developed Operation Mode:

- Non-dispersive Infrared Spectroscopy
- No additional carrier or calibration gases necessary

### Small and Lightweight:



Weight: 9 kg

Presented by: