

A simple test for

Lactose Intolerance

H₂ Check



Other Applications include:

Lactose mal-absorption

Carbohydrate mal-absorption

Carbohydrate breakdown deficiencies

Bacterial overgrowth

Intestinal transit time

Sucrose mal-absorption

Fructose mal-absorption

Lactulose bacterial overgrowth

Sorbitol mal-absorption

sales@mdd.org.uk

www.mdd.org.uk

Lactose is a sugar found in milk. Unless it gets changed into glucose it cannot be absorbed into the body. This change happens when the Lactose passes through the stomach into the small intestine and comes into contact with something called Lactase. If there is not enough Lactase present the Lactose cannot be broken down, this in turn leads to Lactose Intolerance. As a result, the hydrogen that is produced by bacteria is absorbed through the wall of the small or large intestine. The hydrogen then travels to the lungs where it is released and exhaled in the breath where it can be measured by the H2 Check.

The H2 Check is capable of diagnosing a range of gastroenterology disorders and food intolerances based on collecting Hydrogen breath results.

Building on experience gained over many years, the H2 Check is an easy to use hand held device for the simple detection of Hydrogen on the breath. A simple breath test will display H2 results in PPM.

The H2 Check can be used on all age groups and types of patients. A face mask can be used on patients that are not able to comply with tidal breathing through a standard cardboard mouthpiece test.



A simple breath test using the H2 Check



Simplicity is the key

- Single switch operation
- Fast results time
- Rapid response time
- Unique re-breathing system

Specifications:

| | |
|------------------------------------|------------------------------------|
| Gas Detected | Hydrogen |
| Concentration Range | 6 - 500 PPM |
| Maximum Overload | 2000 PPM |
| Detection Sensor Used | Electrochemical fuel cell |
| Sensitivity | 1 PPM |
| Accuracy (repeatability) | ±5% or ±5 ppm whichever is greater |
| Operating Temperature | 5-30° Celsius |
| Ideal Operating Temperature | 20° Celsius |
| Operating Pressure | Atmospheric 10% |
| Operating Humidity | 30% to 90% RH |
| Operating Altitude | Sea level to 6000 ft |
| Storage Temperature | -20 to + 70° Celsius |
| Storage Humidity | 15% to 90% RH |
| Sensor Life | 2 years, 6 month warranty |
| Sensor Drift | <2% per month |
| Display | 128 X 64 pixels Graphic LCD |
| Power Supply | Single Lithium 9V PP3 battery |
| Weight (approximate) | 180g including battery |
| Dimensions | 135mm x 65mm x 30mm |

The H2 Check is part of an extensive range of breath analysis devices and is available from MD Diagnostics as Catalogue No BH02

Distributed By:

Bibliography

Gastroenterology. 1984 Dec 87 (6) 1358-63. Fasting breath hydrogen concentration: normal values and clinical application. Perman JA, Modler S, Barr RG, Rosenthal P.

Can J Physiol Pharmacol. 1991 Jan 69 (1) 111-5. Clinical application of breath hydrogen measurements. Perman JA. Department of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD 21205.

Gut. 2006 Mar 55 (3) 297-303. Use and abuse of hydrogen breath tests. Simrén M, Stotzer. Gastroenterology and Hepatology, Department of Internal Medicine, Sahlgrenska University Hospital, S-41345 Göteborg, Sweden.

Aliment Pharmacol Ther. 2005 Jun 1 21 (11) 1391-5. Abnormal breath tests to lactose, fructose and sorbitol in irritable bowel syndrome may be explained by small intestinal bacterial overgrowth. Nucera G, Gabrielli M, Lupascu A, Lauritano EC, Santoliquido A, Cremonini F, Cammarota G, Tondi P, Pola P, Gasbarrini G, Gasbarrini A. Gemelli Hospital, Catholic University of Sacred Heart, Rome, Italy.



MD Diagnostics Ltd.

15 Hollingworth Court, Turkey Mill, Ashford Road, Maidstone, Kent ME14 5PP

Tel: + 44 (0) 1622 682686 Fax: + 44 (0) 1622 681693

Email: sales@mdd.org.uk www.mdd.org.uk