

H₂/METHANE BREATH TEST — RINGWOOD

Provided to: Dr Peter Holsman
Wellbeing Institute of Australia – PO Box 205 Ashburton 3147
Phone: 9885 7766

Provider No: 36390MA
Fax: 9886 9384



ABN: 29 102 270 468
Stream Diagnostics Pty Ltd
Head Office: Level 1, 91 Maroondah Hwy,
Ringwood VIC 3134
Phone: 1300 837 863 Fax: 1800 852 896
e: headoffice@streamdiagnostics.com.au
www.breathtest.com.au



Accredited for compliance with NPAAC
Standards and ISO 15189

Date: 22.05.2019

For Patient: KIRKHAM, Lisa D.O.B: 11/09/69 Sex: F
Address: 46 Hermitage Place Rowville 3178 Phone: 0466 548 215

Clinical Question: ? Fructose Malabsorption; SIBO

Time (min)

Lactulose 15.05.19	0	20	40	60	80	100	120	140	160	180	Symptoms
Hydrogen (ppm)	3	22	20	35	27	27	15				None Reported
Methane (ppm)	0	7	8	11	8	9	6				

Time (min)

Fructose 17.05.19	0	20	40	60	80	100	120	140	160	180	Symptoms
Hydrogen (ppm)	4	19	18	31	34	26	35				None Reported
Methane (ppm)	7	14	18	20	19	18	20				

Time (min)

Glucose 22.05.19	0	15	30	45	60	75	90	105	120	Symptoms
Hydrogen (ppm)	4	28	30	19	24	26	28	18	9	None reported
Methane (ppm)	6	17	19	14	16	19	18	14	9	

Comment: This study supports evidence of Fructose malabsorption and proximal bowel bacterial overgrowth.

BreathTracker Specifications:
Resolution: 1ppm H₂ and CH₄
Accuracy: ± 2-3 ppm or 5% of full range for H₂ and CH₄
Linear Range: 2-150ppm H₂; 2-75ppm CH₄

Yours sincerely,

Helen Dong - Senior Medical Scientist

PLEASE NOTE: These breath tests provide you with a diagnosis regarding sugar malabsorption/intolerance. As symptoms you may be experiencing can be the result of other illnesses, we recommend a consultation with your doctor, who can advise you about these issues. **How these tests work:** Sugars are fermented by bacteria to produce hydrogen which, in most people, will be found in the expired air. If hydrogen is produced following the ingestion of a sugar, then there is either malabsorption/intolerance of that sugar, or bacteria present in an abnormal place (ie: small bowel bacterial overgrowth). **Notes on the interpretation of breath hydrogen and methane tests:** Hydrogen is the preferred indicator gas and is produced in 95% of people. For this reason, a Lactulose only test will assess a Hydrogen rise only. Methane interpretation will be at the discretion of the Practitioner. For Malabsorption and Intolerance tests - A rise >20ppm above baseline breath hydrogen for 2 consecutive readings is considered an unequivocal rise in breath hydrogen and a positive response. If there is <5ppm hydrogen response for any sugar, then breath methane results are used. A breath methane rise >12ppm (as compared with 20ppm for hydrogen) for 2 consecutive readings above the basal value, is considered evidence for malabsorption. A combined hydrogen + methane rise >15ppm is also considered evidence of malabsorption. A hydrogen rise of 10-19 ppm above the baseline is considered an equivocal positive response. For SIBO test - A rise >12ppm of either hydrogen or methane for 2 consecutive readings above the baseline breath sample indicates a positive response. When the baseline breath hydrogen (ie before the ingestion of the test sugar) is >10ppm, interpretation of the results is more difficult. In contrast to breath hydrogen, there is often a high baseline breath methane, which does not impact on interpretation.

A very small percentage of the population does not produce hydrogen or methane. Breath testing does not provide useful information for these people. The numbers produced during each test do not indicate severity of the malabsorption/intolerance. Patient symptoms are only true indicator of 'severity'.

Sugar Doses – 12 years and older:
Lactulose: total volume 100ml - Pure Lactulose 10g
Fructose: total volume 200ml - Pure Fructose 25g
Lactose: total volume 200ml - Pure Lactose 25g
Sorbitol: total volume 100ml - Pure Sorbitol 10g
Glucose: total volume 200ml - Pure Glucose 75g
Sucrose: total volume 200ml - Pure Sucrose 35g
Mannitol: total volume 100ml - Pure Mannitol 10g
(Patients 6-11 years – sugar amount and total volume is 1g per kg up to the maximum dose as listed above)