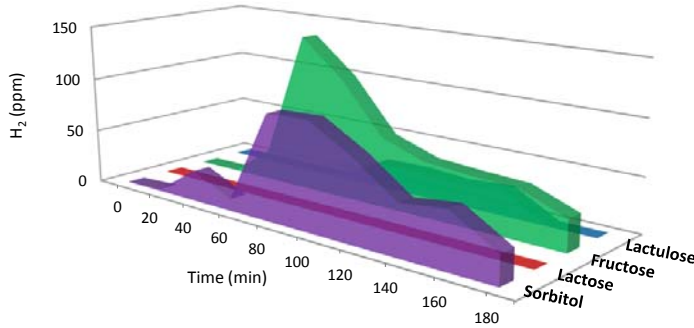


# BREATH HYDROGEN TEST

Provided to:  
Cc: to patient  
For Patient:                      D.O.B:                      Sex: M  
Address:                              Phone:  
Clinical Question: Fructose/Lactose/Sorbitol Malabsorption?

Eastern Health Clinical School  
GI Physiology Laboratory  
Level 1, 5 Arnold Street, Box Hill VIC 3128  
Phone: (03) 9091 8827 Fax: (03) 9899 9137  
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Date:



**\*\*Please note all results and comments in this report are for breath hydrogen. When available, this has been shown to be a more accurate predictor of food sugar malabsorption. Our machines also analyse and record breath methane response. Please let us know if you would also like to be sent those results for this patient.**

Time (min)	0	20	40	60	80	100	120	140	160	180
Sorbitol	0	2	28	11	96	100	75	46	51	26
Lactose	0	0	0	0	0	0	0	0	0	0
Fructose	0	0	28	144	111	64	50	47	45	29
Lactulose	0	0	0	0	22	23	20	23	0	0

Symptoms
0
0
0
diarrhoea, cramps

N.B Readings corrected for baseline breath hydrogen

SEMI-QUANTITATIVE ANALYSIS	Fructose	Lactose	Sorbitol
Grams ingested sugar	35	50	10
Proportion of sugar malabsorbed	100%	0%	100%

*Proportion of sugar malabsorbed is calculated relative to lactulose response. This is a semi-quantitative estimate of malabsorption.*

**Comments:**  
There is convincing evidence for fructose malabsorption based on semi-quantitative breath hydrogen analysis  
There is no evidence for lactose malabsorption based on semi-quantitative breath hydrogen analysis  
There is convincing evidence for sorbitol malabsorption based on semi-quantitative breath hydrogen analysis

Kind Regards,

**Dr Mayur Garg**  
MBBS FRACP PhD, Consultant Gastroenterologist  
Provider Number 25252BW

**Notes on the interpretation of breath hydrogen tests:**  
The 'control' sugar, lactulose, is completely malabsorbed by all. For this reason it is used to (i) determine the type of gas produced after ingestion of a malabsorbed sugar, i.e. confirmation of hydrogen production, (ii) compare response to tested sugars (fructose, lactose and/or sorbitol) to provide semi-quantitative assessment of the degree of malabsorption, and (iii) assess transit time and evidence of small intestinal bacterial overgrowth (SIBO) if requested.  
Semi-quantitative analysis is undertaken to provide more specific information on the degree of malabsorption. We can therefore conclude responses as no evidence (<10%), small degree of evidence or convincing evidence for malabsorption of the tested sugars. This then assists the dietitian in determining the degree to which dietary restriction needs to be followed.  
A major purpose of breath testing is to assist a dietitian in individualising the low FODMAP diet (diet low in fermentable carbohydrates: fructose, lactose, fructans, GOS, sorbitol, mannitol) for functional gut symptoms. For example, no evidence for lactose, fructose or sorbitol malabsorption = no need to restrict lactose, fructose or sorbitol, but other FODMAP carbohydrates need consideration.  
No matter what the results of the breath tests, dietary advice is worth considering.