

HYDROGEN & METHANE BREATH TEST RESULTS

Date: 20 November 2023

Practitioner: Mr Luke Clarke

Patient Details: Danny Peraic

Patient DOB: 02/11/72

TEST	DATE	TIME 0min	30min	60min	90min	120min	150min	180min	SYMPTOMS *
Lactulose									
H ₂ (ppm)	7/11/23	9	5	7	6	8	5	7	
CH ₄ (ppm)		12	9	10	10	11	9	8	

CONCLUSIONS:

No evidence of small intestinal bacterial overgrowth after Lactulose challenge. Lactulose is superior to glucose in detecting distal small intestinal bacterial overgrowth.

* **SYMPTOMS:** 1. Abdominal bloating 2. Abdominal pain 3. Flatulence 4. Diarrhoea

Symptoms experienced post-test are not recorded. **Note:** intolerance is malabsorption *with symptoms*.

SMALL INTESTINAL BACTERIAL OVERGROWTH (SIBO) RESULT INTERPRETATION:

Lactulose: ≥10ppm above baseline in the first 60mins suggests evidence of small intestinal bacterial overgrowth.

Oro-caecal transit time is indicated by ≥10ppm rise after lactulose challenge. Normal oro-caecal transit time in healthy adults is 90-120min.

Glucose: ≥12ppm above baseline suggests small intestinal bacterial overgrowth.

SUGAR MALABSORPTION RESULT INTERPRETATION:

Methane (CH₄) gas: unequivocally positive: 12ppm above baseline.

Hydrogen (H₂) gas only: unequivocally positive: 20ppm above baseline.

As a guide only, an increase of 20-40ppm above baseline indicates mild malabsorption, 40-80ppm moderate malabsorption, and >80ppm severe malabsorption.

Hydrogen (H₂) and Methane (CH₄) gases are measured on all breath samples, guided by Carbon Dioxide (CO₂) concentration for quality assurance. The type of gas produced simply reflects the patient's gut microbiota. False negatives may occur if there is recent history of antibiotics or colonoscopy.

Baseline: H₂ and CH₄: 0min or 30min value (whichever is lowest). **High baselines** >30ppm may suggest incorrect test preparation or SIBO.

N/A = invalid or missing sample.

Results reviewed by supervising pathologist before report issued – VIC • NSW • ACT • QLD • SA • WA

Results are to be interpreted along with patient clinical details. Specialist dietary advice may assist management.

cc: Self Referred,