

Breath Methane to be reported with Breath Hydrogen

Effective Date: December 7, 2021

As recommended in recent gastroenterology guidelines, Beaumont Laboratory Special Chemistry in Royal Oak will now report methane in addition to hydrogen in breath samples from fasting patients challenged with lactose, glucose, sucrose, or fructose. The test name for Epic LAB5865 will be updated to **Hydrogen and Methane, Breath**.

Methane can be produced with a carbohydrate challenge in individuals with disaccharidase deficiencies or microbial overgrowth in the small intestine. Measuring both hydrogen and methane has become the new standard approach to evaluate intolerances and is supported by consensus gastroenterology guidelines.

Breath samples will be collected only at Royal Oak Medical Office Building PSC or Dearborn Medical Park PSC by appointment only. Patient preparation remains unchanged: Patients should avoid antibiotics and medications that affect gut motility, eat the recommended diet the evening before, and must arrive fasting. Detailed instructions for patients are provided by the physician and the Beaumont Appointment Center.

Breath samples from Dearborn must be transported in validated breath transport bags to Royal Oak by the next day.

Both hydrogen and methane concentrations are reported in parts per million. Interpretation of hydrogen and methane breath results is provided in the report by Beaumont Clinical Pathology.

References:

- 1) Rezaie, et al. Amer J Gastroenterology; May 2017
- 2) Hammer, et al. United European Gastroenterol J; Jun 2021.

Date submitted: December 3, 2021

Submitted by: Steven M. Truscott, PhD, DABCC, Technical Director, Special Chemistry
Caitlin Schein, MD, Medical Director, Special Chemistry