

March 2012

Fecal Immunochemical Test (FIT): Update and Introduction of Free Retests for Borderline Results

Screening for colorectal cancer is recommended every 1-2 years for individuals 50-75 years old with no known risk factors. LifeLabs offers the FIT screen, requiring only a single patient sample. Supported by extensive research findings, this screen method was approved by Health Canada and the US FDA to provide conclusive evidence for the presence or absence of blood in the stool. FIT offered by **other laboratories** may use different methodologies, requiring **two samples collected on two different days** to observe the approval conditions of regulating authorities.

Given its high sensitivity (100%) and specificity (99%) in detecting small amounts of human hemoglobin from adenomas and colorectal cancer lesions, LifeLabs' single sample FIT assay is considered equivalent to the two sample assay offered elsewhere.

FIT results are reported as positive (>115 ng/mL), negative (<85 ng/mL) or borderline. As of May 1, 2012, LifeLabs will be offering a Free Retest kit to patients with borderline results upon physician approval. This offer will be valid for 3 months after the initial test with borderline result was ordered. To order a free retest kit, please write "Repeat FIT due to previous borderline result" on a lab requisition form in the Additional Tests / Instructions section.



March is National Colorectal Cancer Awareness Month

Dr. Cheryl Tomalty, Clinical Biochemist

Breath Hydrogen Test for Lactose Intolerance

Introduction

The breath hydrogen test (BHT) is a non-invasive procedure for the detection of carbohydrate malabsorbtion, and can be used as an adjunct to clinical history in the diagnosis of lactose intolerance. The BHT relies on the metabolism of undigested carbohydrate by intestinal bacteria. In lactose intolerant patients, intestinal bacteria convert undigested lactose into hydrogen gas, which is absorbed and subsequently appears in expired air.

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Procedure

The fasting patient is asked to collect a baseline sample by breathing into a breath collection bag. The patient then drinks a solution containing 50 grams of lactose. Two more breath samples are collected at 60-minute intervals over two hours. No blood tests are required.

Interpretation of Results

The baseline breath hydrogen level is subtracted from the breath hydrogen levels of the 60 min. and 120 min. post-lactose samples. If the difference between the levels of the 60 min. **or** 120 min. sample and the baseline sample is greater than 20 parts per million (ppm), lactose intolerance is likely. Baseline levels above 20 ppm may be a sign of intestinal bacterial overgrowth, and BHT results cannot be interpreted. In addition to measuring the breath hydrogen levels, carbon dioxide levels are also determined to correct for contamination by small amounts of room air; however, if there is too much room air present, the BHT results may become unusable.

Warning: The BHT is not recommended for patients with insulin dependent diabetes mellitus (IDDM), as they are at risk of becoming either hyperglycemic or hypoglycemic depending on whether the lactose load is absorbed or not. Breath hydrogen testing on patients with IDDM requires prior consultation with a LifeLabs Biochemist.





Testing Logistics

Testing is available at select LifeLabs patient service centers (PSCs) in BC. An appointment should be scheduled for this test through one of the contacts indicated below. Patients should plan on being at the PSC for about 3 hours. Test results will be available within 7-10 days from the time of collection. Since breath hydrogen testing is not an MSP insured service, patients will be charged a fee of \$40.

Lower Mainland	Vancouver Island	Kamloops	
604-412-4495	250-881-3113	250-374-1644	

Dr. Kent Dooley, Clinical Biochemist

