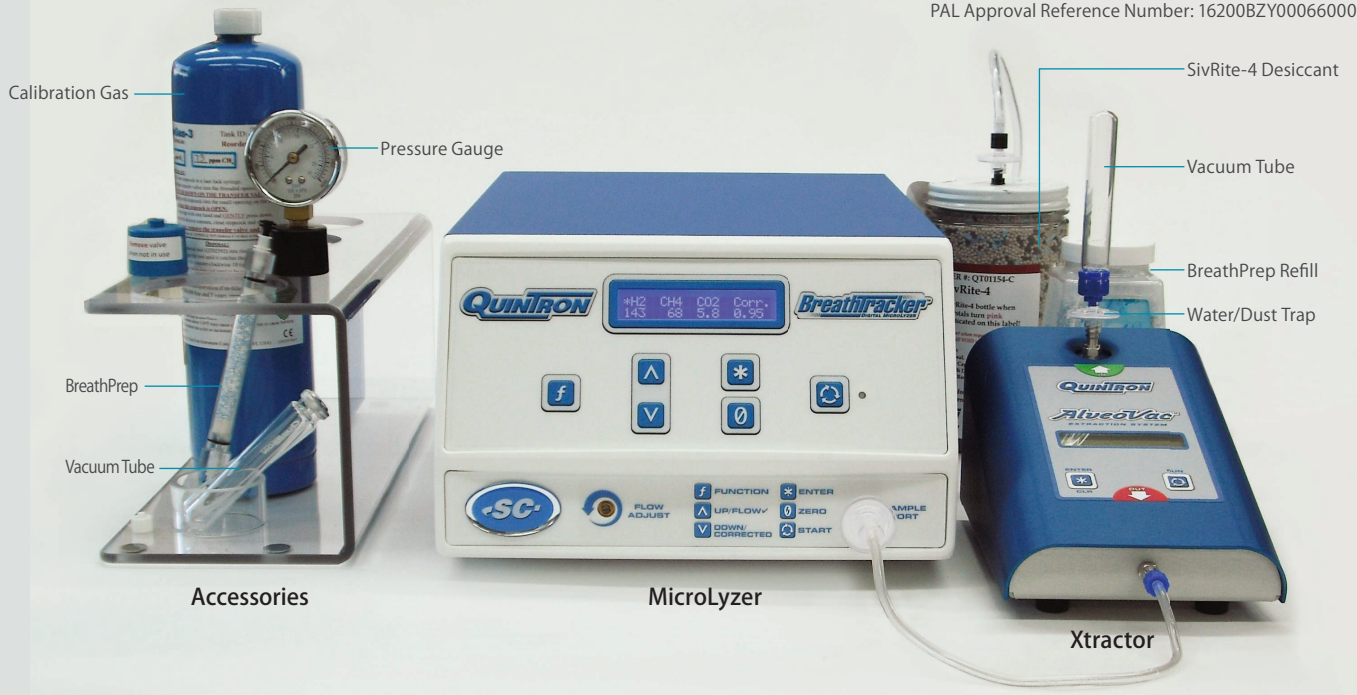


MicroLyzer

For your most careful, accurate breath testing ever.

Throughout the entire procedure, from collecting sample gas to injecting it into the instrument, the MicroLyzer system is designed to effectively minimize contamination with room air and reduces any substance or humidity which may affect the accuracy of your breath testing.

PAL Approval Reference Number: 16200BZY00066000



Mainly for assessments of :

- ◎ Small Intestinal Bacterial Overgrowth (SIBO); with glucose (dextrose) or lactulose
--- Intestinal bacteria causes malabsorption of vitamins and/or nutrients. Hydrogen breath test.
- ◎ Lactose Malabsorption; with lactose --- Lactose intolerance; major symptoms: osmotic diarrhea, abdominal pain, diarrhea, flatulence
Sucrose Malabsorption; with sucrose --- Sucrose intolerance; major symptoms: osmotic diarrhea, abdominal pain, diarrhea, flatulence
- ◎ Intestinal Transport Dysfunction; with fructose --- From mouth to cecum; normally 40-110 min

TARGETS :

Bacterial Overgrowth (BOG)

Normally, BOG can be diagnosed with an assessment using lactulose, which reaches the small intestine without being degraded. This diagnosis of BOG plays a vital role in the clinical management of BOG and thus leads the way to effective treatment.

[Symptoms]

Chronic Diarrhea, Carbohydrate Malabsorption, Trophopathy

Lactose Intolerance

Undissolved lactose in the intestines often causes osmotic diarrhea, whereas lactase, which is a digestive enzyme, gradually becomes less active after the period of weaning. When adult type lactase deficiency is developed, it may be a major cause of chronic diarrhea and this deficiency can be identified by utilizing the lactose intolerance screening test.

[Symptoms]

Osmotic diarrhea, abdominal pain and/or diarrhea caused by bacteria, flatulence.

Irritable Bowel Syndrome

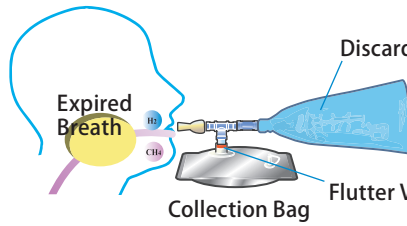
IBS is a syndrome which cannot be identified as an organic disorder and thought to be some abnormal state of the correspondence between the brain and intestines. As the IBS involves symptoms such as abdominal pain or anomalies in defecation, it affects the QOL of the patients even when it is benign. The management of this disorder has therefore been an issue of great importance, and breath testing is known to be a useful method to diagnose and distinguish this IBS. The measurement of breath-methane plays a key role in the management of IBS patients with constipation.

[Symptoms]

Chronic stomachache, diarrhea, constipation, vomiting, defecation dysfunction, etc.

Collection Steps

Collection of breath samples



Discard Bag --- The sample collection system is designed to collect the last portion of expired breath by letting the "dead-space" air exhaled from the oral cavity or trachea flow into the discard bag and thus captures the alveolar air only.

Flutter Valve --- Minimizes the contamination of sample with room air.

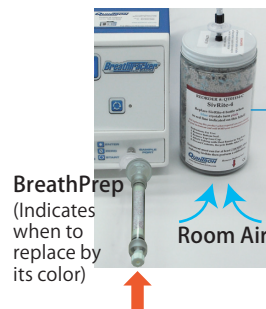
Transfer to syringe



The collected sample air is then transferred to the syringe in order to inject it into the analyzer.

The syringe and two-way stopcock used in this transfer are both designed specifically for this purpose, and their quality to prevent measurement errors is validated.

Injection into the analyzer

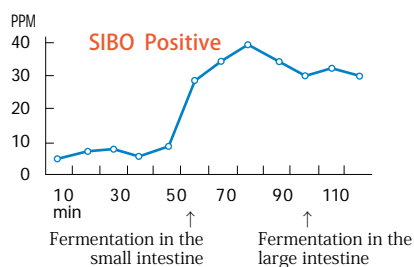
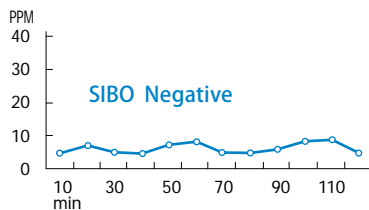


SivRite-4 (Desiccant) --- Maintains the dried environment within the measurement tube.

CO₂ correction ----- Automatically corrects the value, using the proportion of CO₂ contained in the sample.

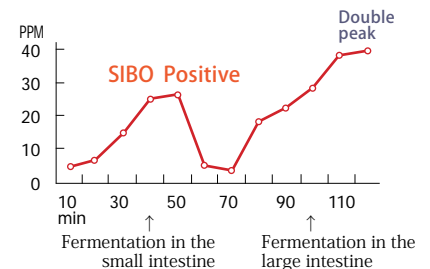
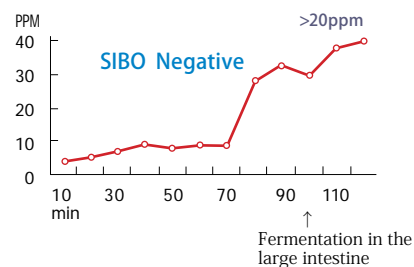
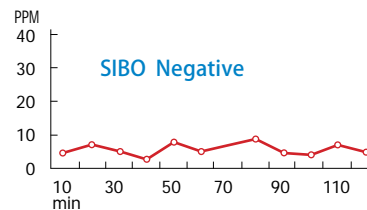
H₂ breath-testing using glucose

Fasted over the night before
Glucose administered



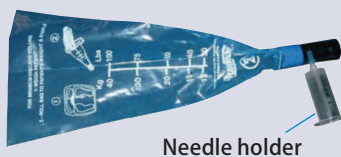
H₂ breath-testing using lactulose

Fasted over the night before
Lactulose administered



EasySampler Kit 4205

EasySampler with a needle holder



Needle holder



Label



Lactulose



Vacuum-sealed collection tube
This tube collects and stores the sample.

Variation of EasySampler Kit required for one breath-testing

4204	4 vacuum tubes	1 EasySampler	25 gm Fructose
4206	4 tubes	1 EasySampler	25 gm Lactose
4203	10 tubes	1 EasySampler	25 gm D-xylose
4205	10 tubes	1 EasySampler	10 gm Lactulose
4210	10 tubes	1 EasySampler	100 gm Glucose