Hydrogen Breath Test for Small Intestinal Bacterial Overgrowth (SIBO)

This test is used to determine if bacteria have invaded the small intestine either from the stomach, where they are usually killed by stomach acid, or from the large intestine, where they are normally found and are necessary for normal intestinal function.

Bacteria in the colon (large intestine) break down complex sugars and release hydrogen, methane and carbon dioxide. Some of the gases are reabsorbed into the blood stream and are brought to the lungs, where they are exhaled with your breath. The time at which these trace gases are detected in the lung air after the ingestion of a dose of a special sugar, called lactulose, can be used to estimate where the bacteria are located in the intestinal tract. Lactulose is a “special” sugar because it cannot be absorbed by humans, but is digested only by bacteria. If trace gases appear early on, it means that the bacteria must exist toward the stomach. If trace gases appear only later in the test, the bacteria must reside in the colon only.

If you have received antibiotics within two (2) weeks before the test or if you have had severe diarrhea recently, please inform your doctor before coming to the test.

7 days before the test:
- Do not use a bowel prep, laxatives or enemas

24 hours before the test:
- Stop all fiber supplements and lactose enzyme supplements.
- Avoid all raw fruits and vegetables. V-8 juice and prune juice should not be used.
- Canned or cooked fruits and vegetables without skins and seeds may be eaten.
- Avoid foods high in fiber such as whole grain or bran cereals and breads.
- Avoid foods containing nuts, seeds, or dried fruit.
- Avoid all dairy products, including yogurt, cheese and ice cream.
- Avoid fried and highly seasoned foods.
- Avoid alcoholic beverages.

The evening before the test
- Eat a light meal which may include beef, fish, skinless poultry, tofu or rice.

12 Hours before the test:
- Do not eat or drink anything except water for 12 hours prior to the test.

1 Hour before the test:
- Do not sleep, exercise or use any tobacco products

15 minutes before the test:
- Please report to St. Francis Hospital Outpatient Services to register.

What to expect during the test:
- A baseline breath sample is collected.
- You will be asked to drink 8 ounces of water mixed with lactulose.
- Repeat breath samples are collected every 15 minutes for up to 1 hour and then again after 90 minutes. Depending on the results, additional samples may be needed at 2 and 3 hours after drinking the solution.
- You may only have small amounts of water to drink during the test.
- You may want to bring needlework or something to read.