

Bacterial Overgrowth Testing

The bacterial overgrowth breath 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. The following explanation will help you understand the importance of following the instructions closely.

Bacteria in the colon (large intestine) break down complex sugars and release hydrogen (H₂), methane (CH₄), and carbon dioxide (CO₂). 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, 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.

1. The patient **SHOULD NOT** eat high-fiber or slowly digesting foods the day before the test because they may still be present in the colon the next day. Such foods include bran, coarse breads, nuts, beans and similar vegetables. Avoidance of such foods will reduce the chance of hydrogen and methane production from something other than lactulose during the period of the test.
2. The patient **SHOULD** fast overnight (at least 12 hours) before the test, consuming no food and having only water to drink. This will further eliminate the chance of other foods interfering with the test.
3. The patient **SHOULD NOT** sleep or exercise vigorously for at least one hour before, or any time during the test.
4. The patient **SHOULD NOT** smoke for at least ½-hour before collecting any air-sample used for the test.
5. The patient **SHOULD** notify (or remind) the doctor if you are taking antibiotics for a chronic condition. Otherwise, you will need to be off antibiotics for at least 2 weeks prior to testing.

Your appointment is on _____ at _____.

This test is performed at our office.