



Hydrogen Breath Test – FAQs for the Patient

What is the Purpose of this test? The purpose of the Hydrogen Breath Test (HBT) is to investigate unexplained gastrointestinal complaints that you have been experiencing, such as bloating, gas, diarrhea, IBS, abdominal distention and pain, malnutrition, etc.

How does it work? Using just your breath, this non-invasive test can help to investigate if you have intolerance to specific foods, as well as a condition known as bacterial overgrowth (explained further along in this document)

How can you tell if I have a problem just from testing my breath? It's very simple. When you have a problem digesting certain foods (or you have bacterial overgrowth), specific bacteria in your gut get exposed to the undigested food and create the gases, hydrogen and/or methane. These gases get absorbed into your blood, which then gets dumped into your lungs, and you breathe it out.

How accurate is this test? Breath testing, and specifically the hydrogen breath test, has been around for over 40 years and the medical literature is very favorable regarding the accuracy of this test.

What is the advantage of the test? This test is similar to other diagnostic tests that your doctor may order, but with the added advantage that it is non-surgical – you can be back at work the same day. As with any other test, a hydrogen breath test offers your doctor one view into the overall picture of your gastrointestinal health.

What do I have to do for this test? There are a few simple steps involved, but it's important to understand why you are being asked to follow these steps. You'll receive a set of instructions to help you prepare for the test which will remind you of things like do not to smoke and you may brush your teeth on the morning of the test. It's important that you follow the recommendations precisely to ensure that you get the best results and haven't wasted your time on this test. Below are the two most important instructions:

- 1. Pre-test Recommended Diet:** Remember, that the purpose of this test is to investigate the theory that you are having trouble digesting certain foods (carbohydrates) properly. In order to investigate that effectively, your doctor needs to ensure that you are not digesting problematic foods from meals that you consumed 1 to 3 days earlier. The recommended diet that you will be asked to follow prior to the test will ensure that there is no interference from undigested food on the morning of the test.
- 2. 12 hour Fast Before the Test:** The goal of the Hydrogen breath test is to test the response you have to a specific food (carbohydrates), which will be administered during the test. To do this, your doctor needs you to have an empty stomach, which requires that you fast for a minimum of 12 hours. For example, if your test is at 7:30 am Monday, you should not eat or drink anything After 7:30 pm on that Sunday evening. Anything you eat the day before the test should be according to the recommended diet plan.

What happens if I fail to fast properly? At the start of the test, you will be asked to provide a baseline breath sample to determine if you fasted properly. If you do not follow the 12 hour fast and the recommended diet, you will not pass the baseline readings. We usually have the patient drink some water and repeat the baseline testing. If the baseline reading doesn't pass again, we contact the ordering physicians to receive instruction of how to continue (either stop test or continue)

How long will this test Take? The test can last anywhere from 1 to 3 hours. (1 hour if test does not pass baseline and 3 hours for completed test). The goal is to measure gas production throughout the digestion process. The test is a very simple procedure of blowing into a balloon when instructed, and then a technician will use a syringe to pull a sample of that air and run in the breathraker analyzer. Due to the length of this test we recommend that you bring a book, Ipad, or anything that will help you pass the time.

What is bacterial overgrowth also know as Small Intestine Bacterial Overgrowth (SIBO)? Although there are normally lots of bacteria in the large intestine, the small intestine normally contains far less bacteria because stomach acid prevents bacteria from growing and because food is rapidly moved through it. However, certain conditions can allow bacteria to grow in the small intestine, such as low stomach acid, a parasite infection, intestinal scar tissue, diabetes, Crohn's disease, and slow transit of food through the intestine. Bacteria in the small intestine can cause bloating/gas and possible diarrhea within one hour of eating. Unexplained weight loss and Vitamin B12 deficiency are other clues to bacterial overgrowth.

What type of solution due I drink for testing? The majority of our breath tests are testing for SIBO. After a baseline breath test has been performed, the patient must drink an 8 ounce glass of lactulose solution. Don't worry; it doesn't have much of a flavor to it. Most patients describe it as mildly sweet. That is it and only one glass is needed for test.

Prior to the Hydrogen Test being performed there are some important factors to follow:

Two weeks prior to the test

- **No recent antibiotic therapy**
- **No Colonoscopy**
- **No Fluoroscopy**

One Week Prior to Test

- **No Laxatives or stool softeners**
- **No fiber supplements, Imodium/Loperamide, or Pepto Bismol**
- **Avoid prebiotics and probiotics**
- **Avoid PPI's(Proton Pump Inhibitors) and H2 blockers (Xantac) can be taken at physician's discretion. Will be stated on the order**

Remember patient should consult with their physicians for use with all other medications for conflicts