



Glucose Hydrogen (Bacterial Overgrowth) Breath Test

Please follow the below instruction for the best possible results from this test.

If you have any questions about preparing or collecting the test, there is a comprehensive video on our website at: <https://www.mngi.com/resources>

It can be found under the "Videos" section, titled, "Your Lactose, Fructose, or Glucose Breath Test Experience".

If you need further assistance after watching the video, please call 612-871-1145. If you have diabetes, ask your regular doctor for diet and medication instructions.

PREPARATION

2 weeks prior to the test:

- Antibiotics must be completed 2 weeks prior to this test.
- No colonoscopies or barium studies 2 weeks prior to the test.

1 day before the test:

- Avoid slowly digesting foods and high fiber foods (examples: beans, vegetables, bran, coarse breads).
- *Please see the "Breath Test Diet" recommendations on the following pages for additional suggestions of foods to eat and foods to avoid.*

12 hours before the test

- Do not have anything to eat 12 hours before you exam. You may only have water before the test.

Day of the test

- DO NOT smoke for at least one (1) hour prior to the test or any time during the test and avoid exposure to second hand smoke.
- DO NOT sleep, or exercise vigorously for at least one (1) hour before or any time during the test.
- Be sure the medical staff is aware of any recent antibiotic therapy or runny diarrhea since it can affect the test.
- Follow the enclosed instructions from Quintron for preparing your solution.
 - If you weigh 165 lbs (75 kgs) or more, mix the entire sugar packet in water.
 - If you weigh less than 165 lbs (75 kgs) you will use the following formulas to determine how many tablespoons of sugar to mix in 8 ounces of water.
 - Formula for weight in pounds: $(\text{Patient weight}/23)= \text{Tablespoons}$
 - Formula for weight in kgs: $(\text{Patient weight}/10.5) = \text{Tablespoons}$
 - Example for patient weighing 145 lbs: $145/23=6.3$ tablespoons. Rounded to the nearest tablespoon is 6 tablespoons.

Failure to accurately and completely prepare for your exam may result in the need for an additional procedure and both procedures will be billed to your insurance.



PROCEDURE DESCRIPTION

What is a glucose hydrogen breath test?

The glucose hydrogen breath test is used to identify abnormal growth of bacteria in the intestine. You will be asked to breathe into a breath collection device and your breath will be collected and analyzed for the presence of hydrogen.

Normally, small amounts of bacteria are found in the intestine. If there is a significant increase in the amount of bacteria, food and nutrients are not absorbed properly. Bacterial overgrowth can result from a slow transit of food through the bowels or from certain medications. Symptoms may include abdominal pain, bloating, gas, and diarrhea.

What are the possible complications with this test?

Complications of a glucose hydrogen breath test are rare.

What should I expect during the test?

First, you will collect a baseline breath sample by breathing into the collection device. Then you will drink a solution of glucose. Then, every 20 minutes for a 3 hour period, you will breathe into the device. You will collect a total of 10 breath samples.

What should I expect after the test?

Breath test samples must be returned/mailed within 3 days of collection. You will be able to resume your normal activities and diet. Your doctor will send you the results by mail in 9-12 days after your test is received. If the test indicates that you do have small bowel bacterial overgrowth, it may be treated with antibiotics.



Enc. # _____

Glucose (Bacterial Overgrowth) Test --- Patient Diary

Tube #1 Time : _____ (Baseline Sample)

Time Solution Consumed: _____

Tube #2 Time: _____ (20 minutes after solution)

Tube #3 Time: _____ (40 minutes after solution)

Tube #4 Time: _____ (60 minutes after solution)

Tube #5 Time: _____ (80 minutes after solution)

Tube #6 Time: _____ (100 minutes after solution)

Tube #7 Time: _____ (120 minutes after solution)

Tube #8 Time: _____ (140 minutes after solution)

Tube #9 Time: _____ (160 minutes after solution)

Tube #10 Time: _____ (180 minutes after solution)

Lab Use Only	
1	____-____-____.____-____.____
2	____-____-____.____-____.____
3	____-____-____.____-____.____
4	____-____-____.____-____.____
5	____-____-____.____-____.____
6	____-____-____.____-____.____
7	____-____-____.____-____.____
8	____-____-____.____-____.____
9	____-____-____.____-____.____
10	____-____-____.____-____.____

****Please return this diary with your breath test kit****

Affix patient sticker below and on breath test kit

**If NO patient label available, please fill out:*

Patient Name: _____
DOB: _____
Location: _____
Ordering Provider: _____

Diet for Breath Tests

Foods Recommended:	Foods to Avoid:
Breads, Cereal, Rice and Pasta: <ul style="list-style-type: none"> - White bread, rolls, biscuits, and croissant, melba toast - Waffles, French toast, and pancakes - White rice, Plain crackers, Saltines - Cooked cereals: Farina, Cream of Rice - Cold cereals: Puffed Rice, Rice Krispies, Corn Flakes, and Special K 	Breads, Cereal, Rice and Pasta <ul style="list-style-type: none"> - Breads or rolls with nuts, seeds or fruit - Whole wheat, pumpernickel, rye breads and cornbread - Potatoes, brown or wild rice, and kasha (buckwheat)
Vegetables: <ul style="list-style-type: none"> - None 	Vegetables: <ul style="list-style-type: none"> - Vegetable juices - Alfalfa sprouts, Beets, Green/yellow beans - Carrots, Celery, Cucumber - Eggplant, Lettuce, Mushrooms - Green/red peppers - Squash, Zucchini - Broccoli, Cauliflower, Brussels sprouts, Cabbage, Kale, Swiss chard, Beans, Lentils, Corn
Fruits: <ul style="list-style-type: none"> - None 	Fruits: <ul style="list-style-type: none"> - Any raw or dried fruit - All berries, figs, dates, raisins and prunes - Fruit juices and prune juice - Apple sauce, Apples, pears, oranges - Apricots, Bananas, Cantaloupe, honeydew Watermelon - Canned fruits, Grapes, Peaches
Milk/Dairy: <ul style="list-style-type: none"> - None 	Milk/Dairy: <ul style="list-style-type: none"> - Milk, - Cheese, Butter - Ice cream, Yogurt
Meat and other proteins: <ul style="list-style-type: none"> - Baked or broiled chicken, turkey or fish - Eggs - Peanut butter without nuts 	Meat and other proteins: <ul style="list-style-type: none"> - Tough, fibrous meats with gristle - Beans, peas and lentils - Peanut butter with nuts - Tofu
Fats, Snack, Sweets, Condiments, and Beverages: <ul style="list-style-type: none"> - Sugar, - Chicken or beef broth, - Coffee, tea, - Plain cakes and cookies - Gelatin - Salt, pepper - Pretzels 	Fats, Snack, Sweets, Condiments and Beverages: <ul style="list-style-type: none"> - Nuts, seeds, and coconut - Jam, marmalade, and preserves - Pickles, olives, relish, and horseradish - All desserts containing nuts, seeds, dried fruit, coconut, or made from whole grains or bran - Candy made with nuts or seeds - Popcorn - Crackers and snack chips made with whole grains or bran - Margarine, butter, oils, mayonnaise, sour cream, and salad dressing - Plain gravies - Clear jelly, honey, and syrup - Carbonated drinks - Puddings, custard, sherbet, - Ketchup, mustard, ground spices - High fructose corn syrup or other products that contain corn

Suggestions for last meal prior to 12 hour fast -- Baked or broiled chicken or turkey (salt and pepper only), baked or broiled fish (salt and pepper only), plain steamed white rice, eggs, clear chicken or beef broth.



FREQUENTLY ASKED QUESTIONS

- Are there any possible complications?
 - These tests are very safe. You may feel minor discomfort from gas and you may experience diarrhea, cramping, or bloating.
- When can I expect results?
 - Your provider will send you results 9-10 days after the test has been received.
- What can I eat the day before the test?
 - The MNGI Digestive Health prep instructions include a list from the manufacturer of recommended foods to eat and foods to avoid.
- I want to eat something, but it is not on the list of recommended foods or the list for foods to avoid.
 - It is impossible to list all foods. If something is not on either list it would be best to avoid it. The recommendations are in place to ensure the most accurate results.
- Can I take oral medication during the test?
 - No. Please wait until after the test is complete.
- Can I chew gum or eat a hard candy during the test?
 - No. Please refrain from taking anything by mouth for 12 hours prior to and during the test, except for small sips of water.
- Can I brush my teeth during the test?
 - No. Please wait until the test is complete.
- If I drink the solution before I collect my baseline sample can I continue with the test?
 - No. All other samples are based off your baseline sample. The baseline must be collected first.
- If I do not feel I collected a good sample can I try again with the same tube?
 - No. Once the tube has been punctured it cannot be used again.

If you have any other concerns that cannot be answered by watching the video, please contact us during regular business hours at 612-871-1145.