

Patient information Brochure

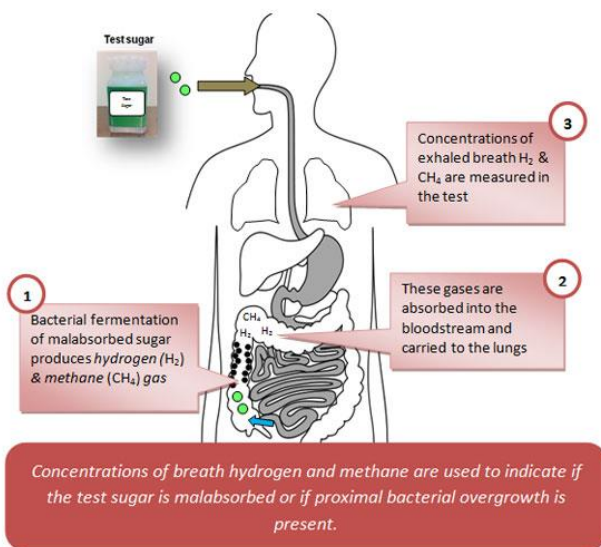
What is a IBS breath test?

The test is based on breath Hydrogen analysis and provides information about the digestion of certain sugars or carbohydrates, e.g. milk sugar (lactose) or fruit sugar (fructose). The pattern and quantity of hydrogen produced in your exhaled breath at intervals during the test will help determine if you are intolerant to, or have difficulty in processing or absorbing certain sugars.

How does it work?

Hydrogen gas in the body is produced from intestinal bacteria. Bacteria, normally in the large intestine, produce hydrogen through fermentation of carbohydrates – such as lactose, fructose and other sugars. Some of the hydrogen produced by bacteria is absorbed by intestinal mucosa into the bloodstream and is transported to the lungs, where it can be detected in the breath.

Normally, such sugars are broken down and absorbed in the small intestine and very little reaches the large intestine to be fermented by bacteria. However, a number of people develop a reduced ability to process and absorb certain sugars in the small intestine. They are therefore carried forward to the colon where they are metabolised by colonic bacteria producing a large amount of hydrogen that is measured in the breath as below.



IBS Testing Procedure

In order to achieve the most accurate test result, you need to have very low bacterial activity in your digestive tract. This can only be done by strictly following our pre-test diet (as below) for two full days prior to each test.

You will be asked to breathe in and blow out a single breath sample into a collection bag (0) to establish your baseline breath level. Following, you will be given a single-dose sugar solution to drink. Breath samples will then be collected at 30, 60, 90, 120, 150 and 180 minutes.

You may experience certain gut symptoms during and immediately after your test such as bloating and flatulence. Side effects are not expected. When the test has been completed you can resume your normal diet, medications and activities.

Common FODMAP Foods and IBS Tests:

FODMAP subtype	Major Food Sources
Lactose	Milk, ice cream, yoghurt, custard, ricotta/cream/cottage cheese
Fructose	Apple, pear, watermelon, mango, cherry, asparagus, artichoke, honey; foods with high-fructose corn syrup (e.g. soft drinks, pastries, commercial cereals)
Polyols (Sorbitol & Mannitol)	Peach, plum, prune, apricot, dried fruit, avocado, apple, pear, mushroom, cauliflower, snow pea; sugar-free mints/gum
Sucrose	Mango, peach, date, sugar beet, sweet pea, most dried fruit; confectionery, soft drinks, biscuits/cookies, commercial cereals, ice cream/sorbets, desserts
Fructan	For suspected fructan malabsorption. Foods that are high in fructans may include wheat products (such as bread, pasta), onions, shallots, garlic, barley, cabbage, broccoli, pistachio, artichoke, chicory root, and asparagus.
Glucose	Recommended for investigation of proximal and distal small intestinal bacterial overgrowth (SIBO)

The efficacy of a low-FODMAP diet for IBS symptom management is well known. However, simply eliminating suspected FODMAPs from your diet without objective proof is inadvisable as FODMAPs are natural prebiotics that help maintain good intestinal microbiota and general gut health. Likewise, it is inadvisable to eliminate food groups such as milk/dairy (containing lactose) or fruits and vegetables (containing fructose) without clinical justification because of their nutritional importance.

IBS test results will assist in providing a more complete clinical picture leading to more effective health outcomes. Professional dietetic advice can also help to maximise food options whilst minimising symptoms. Seek answers, reduce anxiety, and get solutions to your IBS problems today.

What is Small Intestinal Bacterial Overgrowth (SIBO)?

In health, there are relatively few bacteria living in the stomach and small intestine due to several natural defence mechanisms preventing bacterial overgrowth. Some of these are: gastric acid secretion, peristalsis (muscle contractions that move food through the digestive tract), intact ileo-caecal valve (that separates the small intestine and the large intestine), and various intestinal secretions containing antibacterial/bacteriostatic properties.

The cause of SIBO is complex however it is associated with disorders of these defence mechanisms. For example, overgrowth of bacteria may occur in achlorhydria (an absence or deficiency of stomach acid) arising from hypothyroidism, medications (overuse of antacids and proton pump inhibitors), surgery (e.g. for weight loss), *Helicobacter pylori* infection, or certain autoimmune disorders.

It has recently been demonstrated that IBS symptoms are due partly to SIBO because IBS patients have altered gut microbiota. There is evidence supporting treating a subset of IBS patients (diarrhoea-predominant-IBS) with antibiotics to treat the underlying SIBO. There is also evidence of a role of SIBO in rosacea, with eradication of SIBO resulting in complete resolution.



Pre-Test Meal plan for IBS Tests

Breakfast

- Cornflakes or rice bubbles with lactose free milk, rice milk or soy milk
- White/Gluten-free bread with margarine/vegemite/peanut butter
- Eggs and bacon on toast (White/Gluten-free bread)
- Piece of fruit – banana, kiwifruit, cantaloupe, berries
- Water; Tea or coffee with lactose free milk, rice milk or soy milk with or without sugar

Lunch

- White/Gluten-free bread sandwich with margarine/mustard, ham/chicken/tuna/salmon and lettuce/tomato/cucumber/avocado
- Rice crackers/crispbreads with tomato and cucumber
- Salad of cooked potato, capsicum, tomato, cucumber, pine nuts, tuna with olive oil and balsamic vinegar
- Sushi/sashimi/rice paper rolls
- Piece of fruit – banana, kiwifruit, cantaloupe, berries
- Water; Tea or coffee with lactose free milk†, rice milk or soy milk with or without sugar

Dinner

- Steak/Chicken/Fish grilled with either one or more of the following: salad (lettuce, tomato, cucumber); mashed potato; vegetables (broccoli, carrot, bok choy, eggplant, zucchini, capsicum, pumpkin)
- Stir fry vegetables cooked with oil, soy sauce, oyster sauce, served with rice or rice noodles
- Water; Tea or coffee with lactose free milk, rice milk or soy milk with or without sugar

Snacks

- Rice crackers/crispbreads
- Small serving of nuts
- Fruit – banana, cantaloupe, kiwifruit, berries
- Water; Tea or coffee with lactose free milk, rice milk or soy milk with or without sugar

Diet Tips:

A/ 3 Hour Gaps Between Meals

Allow a minimum of 3 hours without eating between each meal. This prevents FODMAP levels from accumulating.

B/ Preparing your meals

Each meal can include multiple food groups. You must not exceed the serving sizes indicated within each category when making your meal.

C/ Restricted Food

Any food or beverage that is not found on the following pages can not be consumed while you are on this diet.

D/ Unlimited Food:

If you are feeling hungry between meals, you can eat from the list of unlimited foods below at any time. These foods have no FODMAPs.

1. Plain meats (excluding processed meats)
 - Red/white meat, poultry, seafood, crustaceans
 - canned plain Tuna & Salmon in olive oil /springwater only
 - Deli meats - Bacon and Ham off the bone only
 - Quorn mince
2. Salt and Pepper
3. Olive oil
4. Eggs
5. Water

Please don't hesitate to contact us on 1300 45 45 60 if any concern