

## Patienteninformation: H<sub>2</sub>-Breathing test for small intestinal bacterial colonization

Dear patient,  
dear patient,

You should have an H<sub>2</sub>-Breathing test to be carried out. With the following information we would like to explain to you the purpose of this investigation and the necessary behavioral measures. From the result of H<sub>2</sub>-Breathing tests may depend on the correct diagnosis or the decision to undertake further examinations and treatment. This test procedure is very meaningful and helpful for assessing various diseases and complaints of the digestive tract. Good preparation is therefore very important in your interest and avoids unnecessary and time-consuming repeat examinations.

**Please note:** The test is not meaningful if you are taking antibiotics. If you are currently taking antibiotics, please make an appointment 14 days after stopping antibiotic therapy.

**Principle:** The H<sub>2</sub>-Breathing test is based on the formation of hydrogen through the bacterial breakdown of an ingested sugar in the gastrointestinal tract. If sugar is not digested properly or if there are excessive bacteria in the small intestine, hydrogen is formed, which enters the air we breathe through the blood and the pulmonary circulation. The hydrogen concentration (H<sub>2</sub>) can be measured in breathing air using a small electrochemical measuring device.

**Test procedure:** At H<sub>2</sub>- Breath test, the exhaled air is measured in an empty state and after ingesting a test substance. The testing process can take up to 3 hours. Bring patience and something to pass the time in the waiting room (newspaper, book, etc.).

**Preparation:** **the day before the examination:**

- Breakfast can be eaten until 10 a.m. Please avoid high-fat sausage/cheese and very sweet spreads (e.g. Nutella, honey).
- Until 5 p.m., rice, potatoes (salt allowed), lean meat without sauce, steamed vegetables (not gassy), e.g. carrots, may be eaten
- The following drinks are permitted until 11 p.m.: still water, black coffee or tea (unsweetened)

**on the day of the examination:**

- stay sober
- don't drink anything
- do not take any tablets
- do not smoke
- don't chew gum
- don't brush your teeth
- Do not use adhesive for dentures
- do not use mouthwash solution