

H₂-Breath Gas Test

biovis'
DIAGNOSTIK MVZ

Determination of Sorbitol Intolerance

Test Procedure H₂ – Breath Gas Test Determination of Sorbitol Intolerance



In case of sorbitol intolerance the intestinal sorbitol consumption capacity is reduced. Sorbitol is a sugar alcohol, which is used as artificial “sweetener” by the food industry. Sorbitol intolerances are rather common. The symptoms are flatulence, bloating and possibly also diarrhoea. Intolerance of sugar-free chewing gums or sweets is a first sign of sorbitol intolerance.

What is required?

The H₂-breath gas test for the determination of sorbitol intolerance requires the following pre-conditions:

- Please avoid bloating foods (beans, lentils, peas, cabbage etc.).
- The test has to be taken on an empty stomach. 12 hours before the test and during the test period the patient is not allowed to eat. Sugar-containing drinks (including “light” drinks) are not allowed. After starting the test moderate amounts of mineral water or unsweetened tea are allowed.
- The breath gas test should preferably be carried in the morning 1-2 hours after getting up.
- Smoking should already be stopped 6 hours before starting the test. During testing you are also not allowed to smoke (not even passively).

It is recommendable to carry out tests within three months after receipt of the sampling material. The filled sample containers should be sent to the laboratory immediately. If the period of 3 months is exceeded, the vacuum in the test tubes may have decreased and lead to false-negative results.

Testablauf

I. Test Procedure:

a) Please check if the sampling materials are complete. The following should be contained:

1 x mouthpiece with bag and sampling device attached at the side

5 x sample tubes, with label numbered consecutively.

Attention: Test tubes are in vacuo; for this reason they should not be opened, as otherwise they become useless

1x 10 g sorbitol

1x test protocol

b) Take the numbered sample tubes out of the white outer tubes in the shipping box.

c) Label the tubes with your name and the date of test and put them in the correct numerical sequence (no. 1-5).

d) There are 10g of sorbitol (test substance) in the shipping box. Dissolve the complete content in 200 ml warm water.

II. Test Completion/ Taking Breath Gas Samples

Phase 1:

Taking the Reference Sample (before drinking the test liquid)

1. Take the mouthpiece with the breathing bag in one hand while holding the labelled sample tube No. 1 in the other hand.
2. Breathe in normally (do not breathe deeply), then blow the breath through the mouthpiece in the bag, so this fills slowly (Picture 1).
3. While breathing out - the bag still being filled with your breath - put the test tubes (the side of the rubber stopper) with slight pressure on the sampling device at the side of the mouth piece. A needle will penetrate the rubber stopper of the test tube and your breath flows into the vacuum tube (Picture 2). After completely breathing out you pull the test tube out of the sampling device and lay it out ready for shipment.

Phase 2:

Drinking the Test Liquid

4. After taking the reference sample (test tube no.1), please drink the test liquid.
5. Please note the time your drink the liquid on the test protocol (this corresponds with Test Time 0).

Phase 3:

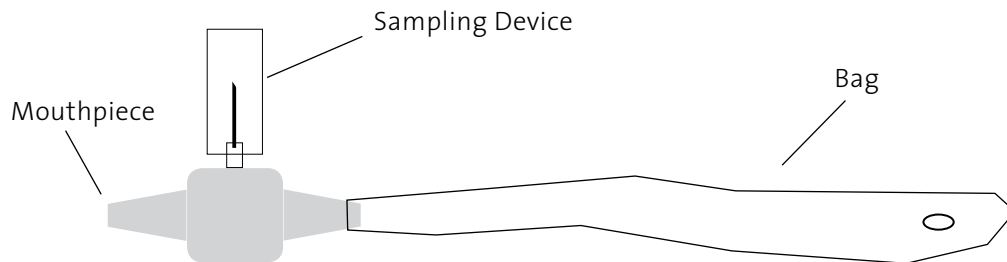
Taking Breath Gas Samples No. 2 – 5

6. After 30, 60, 120 and 180 min you take the further breath gas samples like described under Point 1 to 3 (see above). Always write the time you take the respective breath gas sample on the test protocol.
7. Put the filled breath gas tubes back into the shipping box.

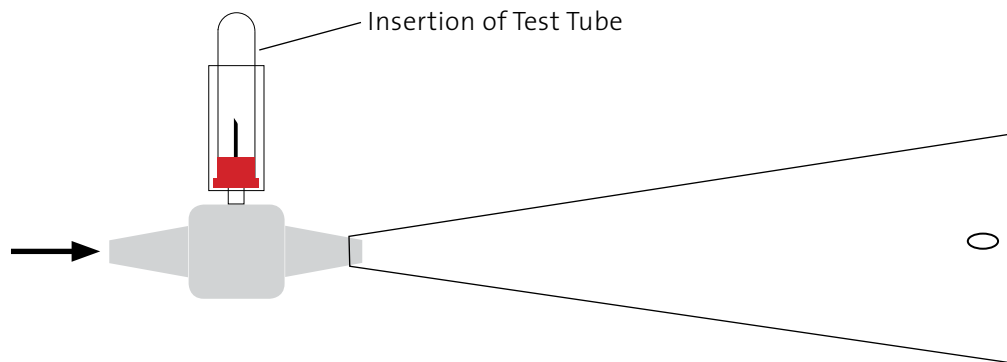
8. Add the completed test protocol and the request form. Ship or send the box immediately. (The complete sampling utensils should also be returned, so we can dispose of them properly.)

Sampling Device:

Picture I:



Picture II:



Take sample when breathing out. During sampling the bag has to be filled with breath gas. The contact of mouth and mouthpiece is not to be interrupted.

Please be careful when handling the sampling devices: Do not touch inside the sampling device because there is a pointed needle. You may injure yourself!