

Test kit: Lactose intolerance

ORY ANALYSIS – RESPIRATORY TEST



When dairy becomes a problem

About 15-20% of the German population suffer from lactose intolerance. Dairy products cannot be digested properly - often due to a lack of the lactose-splitting enzyme (lactase). Many people avoid milk and milk products as a precaution if they suspect lactose intolerance. However, since these are particularly rich in nutrients, the risk of a deficit in important vitamins and minerals also increases.

How can lactose malabsorption occur?

Primary lactase deficiency is genetic and the most common cause of lactose intolerance.

In the case of secondary (acquired) lactase deficiency, the production of the enzyme lactase in the mucous membrane of the small intestine is disrupted. Possible causes are diseases of the small intestine (e.g. celiac disease or Crohn's disease), bacterial or fungal infections, gastrointestinal surgery or medication (e.g. antibiotics). If the mucosal damage can be reversed, the small intestinal mucosa can also produce lactase again. A successful therapy of the underlying disease therefore usually also normalizes the lactase activity.

TEST INSTRUCTION:



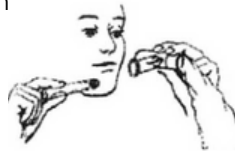
CHECK

- Request form + instructions for implementation
- Mouthpiece incl. disposable bag and removal device with needle (*Caution! Do not put your finger inside the removal device as there is a sharp needle there*)
- 5 glass tubes consecutively numbered + bag with test substance + clear plastic bag with quick-release fastener
- mailing bag



REQUIREMENTS

- **On the day before** the test is carried out, high-fiber foods (whole grain products, nuts, fruit, beans, lentils and peas) must be avoided. Only light meals may be eaten, e.g. fish, turkey, rice dishes.
- You must be sober at the start of the test. **12 hours before** the start of the test and during the test period you are not allowed to eat. Sugary drinks should not be consumed. After the start of the test, moderate fluid intake of still mineral water or unsweetened tea is possible.
- The breath test should be carried out in the morning, if possible, **1-2 hours after** getting up.
- Smoking should be stopped **6 hours** before the start of the test.
- The last intake of antibiotics or laxatives should be at least 1 week ago. The patient should not suffer from diarrhea.
- You should not sleep directly before the test or during the test.



TEST INSTRUCTION

- Remove the sequentially numbered sample tubes from the shipping tubes in the shipping carton. You no longer have to label the tubes because they are barcoded. Prepare the tubes in order (#1-#5).
- Hold the mouthpiece with the breathing bag in one hand while holding the #1 labeled sample tube in the other hand.
- Breathe in normally (do not take a deep breath) and then blow the breath out through the mouthpiece into the bag so that it slowly fills and flows out through the hole at the end of the bag.
- While you are still exhaling, i.e. the bag is still filled with your breathing air, push the sample tube (with the rubber stopper side) onto the removal device on the side of the mouthpiece, applying slight pressure. A needle penetrates the rubber stopper of the sample tube. The air you breathe now flows into the vacuum tube. Pull the sample tube out of the collection device and have it ready for shipment.
- After taking the reference sample (#1), drink the test solution. Note the time on the test log (this corresponds to test time 0).
- After 30, 60, 120 and 180 minutes, take the other breath samples as described in points 1 to 3. Also note the times of the respective breath sampling on the test protocol.



PACKING AND SHIPPING

Please place the sample tubes in the blister foil and together with the completed request form in the shipping envelope and take it to the mailbox or post office. Shipping envelope does not need to be stamped.



Done! You will receive an e-mail when your results are available.