Patient information – H2 breath test

The H2 breath test is an examination to clarify intestinal problems.

With this test intolerances (e.g. fructose, lactose) can be determined.

**Organizational process in Steyr**

At Steyr Hospital, can be tested the tolerability of:

 Lactose  Sorbitol

 Fructose Glucose

Appointment:

We would like to ask you, after clarification and referral by your family doctor, to arrange a telephonic appointment.

Call time: 8:00 a.m. to 12:00 p.m

Contact number: 050554 66 25301 (laboratory)

**Appointment: …………................... AT 7:30/10:00 AM IN THE CENTRAL LAB.**

If two types of sugar are to be tested on you, two separate appointments are necessary.

Shortly before the appointment on the day of the examination:

Please report with your **referral slip/doctor's letter/your internal referral**

at the control center of the central laboratory in building 3, on the 1st floor. Please take the **ID** and **e-card** with you. If you fail to keep the appointment, please inform the central laboratory as soon as possible.

Preparing for the test is very important.

In order to obtain a meaningful result, we would like to ask you, before the examination,

to comply with the recommended measures.

The results are discussed with a doctor on site in order to determine possible follow-up measures. An appointment with a dietician can be arranged.

Since there are waiting times between the 15-minute analyses, we recommend to take with you some books or similar for reading.

**Test principle and measures to be followed**

Test principle:

The test is based on measuring the concentration of hydrogen (H2) in the breathing air before and during exposure to the substance to be tested (fructose, lactose,...).

Carbohydrates (e.g.: lactose or fructose) are normally broken down in the small intestine

and absorbed into the blood. If this does not happen, they reach undigested in the large intestine and so it produces hydrogen (H2) as a result of bacterial degradation.

A part of this hydrogen travels through the blood to the lungs and it is exhaled. The H2 concentration can be measured in the breathing air.

Measures to be observed:

**4 weeks before the examination**

 not taking any antibiotics

 do not perform a colonoscopy or colonic irrigation

 do not administer oral contrast agent

**2 weeks before the examination**

 no gastroscopy

**1 week before the examination**

 No food supplements (vitamins, probiotics, intestinal bacteria, .)

**The day before the examination**

 No high-fiber flatulent foods (whole grain products, fruit, salad, vegetables)

 Eat less low-carbohydrate meals (noodles, grains, potato dishes)

 **14 hours** before the appointment (from 6 p.m. - for appointments at 8 a.m.) **eat and drink no more**

 Only drink tap water or still mineral water

 Stop smoking

 no chewing gum or sweets

**On the day of the examination**

 no breakfast, possibly a glass (1/4l) of warm tap water

 It is recommended to brush your teeth without toothpaste, and no mouthwash too use

 do not use lipstick

 Prosthesis wearers must not use any adhesive on the day of the examination

 Medicines can be taken with pure water.

 do not smoke

**Test execution**

 After a fasting measurement, the appropriate test solution is administered,

which quickly must be drinked within a maximum of 5 minutes.

 The examination lasts at least 2 hours.

 During this time, the exhaled air is measured at regular intervals

 Remaining sober and not smoking until the end of the test is required

**Diet on the day before the examination**

Easily digestible food (basic light whole food)

- **permitted foods:**

o Meat/fish naturally prepared

o ham

o White bread (without milk, preferably from the day before)

o white pasta, rice (no whole grain products or high-fiber alternatives),

potatoes naturally prepared

o easily digestible vegetables (e.g. carrots, zucchini, pumpkin, celery,

parsnips; preferably in steamed form)

o scrambled eggs

o Use fats and oils sparingly when preparing meals

o pure water (non-carbonated or additives)

o black tea

**-prohibited foods:**

o high-fiber foods (wholemeal bread, wholemeal side dishes, muesli, etc.)

o fresh bread and pastries

o fruit and fruit products (e.g. jam, compote, fruit juices), honey

o flatulent vegetables (e.g. cabbage, savoy cabbage, raw onion/garlic), leeks,

leguminous plants

o lettuce

o conventional milk or milk products

o fizzy drinks

o pastries or sweets

o finished products (contain additives)

**Daily example:**

 breakfast: bread rolls/house bread from the day before, ham

 lunch: clear soup with an ingredient (e.g. noodles), meat/fish in olive oil

fried with rice, noodles or potatoes (without added fat), steamed vegetable side dish

(e.g. carrots)

 dinner: clear soup with an ingredient (e.g. noodles), bread roll/house bread from the day before, rusk,

ham, scrambled eggs, egg

 drinks: black tea, still mineral water, tap water

The day before, an early evening meal is recommended, which should not be too lavish.

If the test result from the H2 breath test is positive, targeted nutritional advice is recommended to help you to educate about foods that you should better avoid. The aim is to minimize the discomfort and thus achieve a positive effect on your qua