

LACTIC ACID - AMMONIUM – ACID-BASE EQUILIBRIUM (ABE)

A reliable result can be obtained only handing the blood sample in as soon as possible.

Therefore please observe these following instructions:

- Carry out the administrative acceptance at the designated help desk taking the ticket dedicated to **PRIORITIES**.
- Go to the medical area with your procedure, you will receive the test tubes and the blood sample will be carried out, (keep your priority ticket). The blood specimen will be delivered to a professional who will store it in melted ice and they will hand the specimen in to the laboratory as soon as possible.

To do so, it is necessary that you respect the following schedule:

- **from Monday to Friday: 7:45 a.m. or 9:45am.**
- **Saturday: 8:45 a.m.**

Other exams with priority delivering are **amino acids** for which your personal doctor has to fill out a specific document (amino acids exams will not be carried out on Saturday).

ALDOSTERONE AND RENIN

The concentration of hormones can change considerably during the day; therefore it is necessary that the first blood sample is done before 8 a.m.

Within 5 days before the sampling the patient can take a low sodium diet.

Two weeks prior to giving the specimen, **upon agreement with your personal treating doctor**, it is necessary to avoid taking medication such as:

- ACE-INHIBITORS
- NON STEROIDAL ANTI-INFLAMMATORIES

- BETA-BLOCKERS
- CALCIUM ANTAGONISTS

The first **orthostatic** blood specimen is carried out: the patient must have been standing for two hours.

Later the second **supine** blood specimens carried out after having lain the patient down for two hours in a complete resting state.

INSTRUCTIONS FOR THE GLUCOSE TOLERANCE TEST IN ADULT SUBJECTS FOLLOWED BY DOSAGES OF GLYCAEMIA AND INSULIN

The analysis is arranged via booking or by phone. The analysis follow the PRIORITY procedure.

COMPLETE LOAD OF 75g.

- For this exam it is imperative not to eat (no less than 8 hours and no more than 14 hours without eating).
- A blood sample is carried out to dose the basic level of basic glycaemia which indicates if the test can be carried out.
- A syrup composed by an aromatized solution of 75g of glucose is given and it should be swallowed within 3 minutes.
- The only problem is that this solution can induce nausea and, if asked, you can drink a glass of water. If you vomit, the exam must be stopped and repeated.
- After taking the solution of glucose you must rest as long as the test takes to end in the waiting room of the "Servizio Prelievi Esterni". You must neither smoke nor eat, but you can drink a little water.
- At the end, they carry out the blood specimen 30, 60, 90, 120 minutes after the ingestion of the glucose solution.

TOTAL DURATION OF THE STAY: 2 hours and 30 minutes.

If 6 tests of the baseline glucose are requested, after 150 minutes another blood sample is taken and the patient will stay 30 minutes more.

HOW TO COLLECT 24 HOUR URINE TESTS

In a graded container you have to collect all the day and night urine following these steps:

- Discard the first urines in the morning and mark the hour (for example, 7 a.m.) and as the day goes on you have to add the urine you expelled during the day, including the urine you expelled during the night.
- The next morning you have to end the collection of urine at the same time you started the day before (for example, 7 a.m.).
- At the end of the collection, measure the amount of urine and mark it, then extract a part of them and deliver this part in a container to the “Servizio Prelievi Esterni”.

HOW TO COLLECT 24 HOURS URINE ACIDIFIED

To determine:

- ✓ **CATECHOLAMINE** (dopamine, adrenaline, noradrenaline)
- ✓ **METANEPHRINE**

24 hours urinetests must be collected following these strict rules:

- Pour on the ground of a container fitted for the collection of urine, which has the capacity of 3-4 liters, 4 spoons of muriatic acid without detergent, normally on the market.

Be very careful as the acid is highly corrosive and irritating (do not use sodium hypochlorite).

- Discard the first urine in the morning and mark the hour (for example, 7 a.m.) and as the day goes on you have to add the urine you expelled during the day, including the urine you expelled during the night.

- Mix thoroughly after each addition. The next morning you have to end the collection of urines at the same time you started the day before (for example, 7 a.m.).

- At the end of the collection, measure the amount of urines and register it, then extract a part of them and deliver them in a container to the “Servizio Prelievi Esterni”.

The specialists of the laboratory of expertise, upon agreement with your personal doctor, suggest dietetic indication: from 48 hours before the beginning, and for all the duration of the 24 hours collection of urine, it is necessary to observe a diet without chili peppers or derivatives of capsaicin. This derivative can be found also in drinks and dietary supplements. It can also be found in some medicines so it is appropriate to consult your own treating doctor.

HOW TO COLLECT 24 HOURS URINES ACIDIFIED

To determine:

- ✓ **CALCIUM**
- ✓ **PHOSPHOROUS**
- ✓ **MAGNESIUM**

24 hours urine tests must be collected following these strict rules:

- Pour on the ground of a container fitted for the collection of urines, which has the capacity of 3-4 liters, 7 spoons of non scented muriatic acid, normally on the market. Be very careful as the acid is highly corrosive and irritating (do not use sodium hypochlorite)
- Discard the first urines in the morning and mark the hour (for example, 7 a.m.) and as the day goes on you have to add the urines you expelled during the day, including the urines you expelled during the night.
- Mix thoroughly after each addition. The next morning you have to end the collection of urines at the same time you started the day before (for example, 7 a.m.)
- At the end of the collection mix thoroughly, measure the amount of urines and register it, then extract a part of them and deliver this part in a container to the “Servizio Prelievi Esterni”.

HOW TO COLLECT 24 HOURS URINES ALKALINE

To determine:

✓ **URIC ACID**

24 hour URINE tests must be collected following these strict rules:

- Pour on the ground of a container fitted for the collection of urine, which has a capacity of 3-4 liters, 4 spoons of sodium bicarbonate.
- Discard the first urine in the morning and mark the hour (for example, 7 a.m.) and as the day goes on you have to add the urine you expelled during the day, including the urine you expelled during the night. Mix thoroughly after each addition. The next morning you have to end the collection of urines at the same time you started the day before (for example, 7 a.m.).
- At the end of the collection mix thoroughly, measure the amount of urine and register it, then extract a part of them and deliver this part in a container to the “Servizio Prelievi Esterni”.

HOW TO COLLECT URINES OF 24 HOURS

To determine:

✓ URINARY BICARBONATES

24 hour urine tests must be collected following these strict rules:

- Pour on the ground of a container fitted for the collection of urine, which has the capacity of 3-4 liters, a thin layer of liquid vaseline or toluene bought in the pharmacy.
- Discard the first urine in the morning and mark the hour (for example, 7 a.m.) and as the day goes on you have to add the urine you expelled during the day, including the urine you expelled during the night.
- The next morning you have to end the collection of urine at the same time you started the day before (for example, 7 a.m.); mix, measure and register the whole amount of urines.
- Pour some of the urine in an urine-culture sterile container and fill it up to 2/3
- Cover the surface with a thin layer of toluene or vaseline and deliver the urine in a container to the "Servizio Prelievi Esterni".

Note: The specimen can be stored in the fridge for few hours and it cannot be used for other exams.

HOW TO COLLECT 24 HOURS URINE TESTS

To determine:

✓ **GLYCOSURIA**

Following these strict rules:

- Use a specific container for the collection of urine with the capacity of 4-5liters.
- Discard the first urines in the morning and mark the hour (for example, 7 a.m.).

As the day goes on you have to add the urines you expelled during the day, including the urines you expelled during the night. The next morning you have to end the collection of urines at the same time you started the day before (for example, 7 a.m.).

- At the end of the collection mix thoroughly, measure and register the whole amount of urine expelled, then extract a part of them and deliver this part in a container to the “Servizio Prelievi Esterni”.

Note: during the duration of the whole collection the urine must be stored in the fridge.

URINE CULTURE

- It is better to collect the specimen before starting with the antibiotal therapy.
- It is necessary to provide for an accurate cleaning of the external genitals with soap and water at your own home. Remember that the lack of cleaning of the external genitals may create an unfitted false positive specimen.
- The collection must be made under sterile conditions, you must not collect the first part of the urine but the second. It is recommended not to contaminate the container being careful not to touch the edge and the inside of it while collecting.
- Once you closed the container, transfer the urine in the test tube: lift the sticky protection on the cover and insert the test tube into the opening and push it to the bottom.
- Wait until the test tube is full then remove it. Close up the opening with the sticky protection.
- If the collection is made at home bring the specimens using ice.

SEMEN CULTURE TEST

The exams take place from Monday to Friday. Book by calling 0303995654(from Monday to Friday, from 9 a.m.to 12 p.m. and from 2p.m. to 3.30p.m.).

Follow these strict rules:

- The user must not have sexual relations during the 24 hours before the test.
- The collection must be preceded by an accurate cleaning of the external genitals and the hands.
- The whole ejaculation must be collected in a sterile container.
- If the urine culture is requested it is necessary to collect the urine first.
- It is suggested to collect the specimen before starting the antibiomatic therapy, in case of therapy declare which therapy you are following or the most recent one.

The specimens must be delivered to the second floor of the Blood Specimens building, Stauffer Area, to the Ambulatory number 208 where swabs are carried out.

STOOL TEST OF FAECES

TOOLS YOU NEED:

- Transparent tape
- Glass slides (you can find them in the “Servizio Prelievi Esterni” or in the Laboratory of Microbiology)
- Scissors

WHEN TO COLLECT THE SPECIMEN: in the morning before defecating and/or cleaning.

HOW TO RECOLLECT THE SPECIMEN:

- Cut with the scissors a piece of tape in the shape of the glass slide
- Press the sticky side onto the gut opening as well on a glass slide.
- Use a bandage or a cotton ball to press gently so as to make the tape on the glass slide fit together.
- Wash your hands in the proper way before and after this collection; it is suggested to use disposable gloves while collecting.

DELIVERING: the specimens prepared must be delivered to the Service of Microbiology within 72 hours from the collection.

Several specimens are needed (from 4 to 6 recollected in successive days) to confirm the negative result of the research.

RESEARCH OF PARASITES

HOW TO COLLECT AND STORE FAECES

- Faeces must be collected on a clean and dry surface (for example sheet of paper or plastic bag).
- Collect the faeces in the morning or during the night and store the specimen in the fridge.

In case the exam is requested on one sample:

- Transfer the faeces in the specific container; the amount of faeces transferred must exceed the half of the container.

In case the exam is requested on three samples:

- Transfer the faeces in the specific container with the preservative (freely available at the “Servizio Prelievi Esterni”).
- In this container the whole content (faeces + preservative) must reach the level line signed on the label of the same container. Less or more than what indicated on the label do not allow the scheduling of the parasite.
- After transferring the faeces in the container shake it gently to facilitate the proper conservation of the parasites, if present.
- The specimen with the fixative must be stored at room temperature and the specimens can be delivered together.

INSTRUCTIONS FOR COLLECTING OF SPECIMEN TO RESEARCH FAECAL OCCULT BLOOD

INSTRUCTIONS FOR THE USER:

- In the research on three specimens you must take a specimen in three different bowel motions, preferably in three consecutive days.
- Do not collect faecal material if there is trace of blood in faeces or urines (for example during menstruations, infections at the urinary tracts or during hemorrhoids).
- Avoid non steroidal anti-inflammatory medicines during the seven days before the starting of the collection of faecal material. Paracetamol can be taken if necessary.

INSTRUCTIONS FOR THE SAMPLING:

- Collect faeces on a clean surface.
- Extract the lid with the stick from the container.
- Brush the bar horizontally and vertically on the faeces collecting a minimum amount of specimen.
- Insert the bar in the tube, close the vial and shake.
- Store the vials in the fridge 7 days at best.



HOW TO COLLECT SEMINAL FLUID FOR THE SPERMIOGRAM

The exam should be booked from Monday to Friday calling 0303995374.

Follow these strict rules:

- The user must not have sexual affairs or leak seminal fluid a minimum of 2 days and maximum 7 days before the collection.
- It is better to carry out the collection at the External Samples Service Department (if carried out at home not before 7 a.m.).
- The collection must be carried out through masturbation in the proper sterile container, sign the hour of the collection.
- Store the specimen in a warm place.
- In case of problems cancel the appointment in advance.

INFORMATION ON THE DELIVERY OF THE SPECIMEN

After collecting the specimen at home or at the “Servizio Prelievi Esterni”, the user should go into SpedaliCivili di Brescia to hand in the specimen personally.

WARNING: The specimens must be delivered by 9 a.m. at the reception of the Laboratory of Analysis, Monoblocco D, ground floor, 14th stair.

CULTURE TEST OF THE SPUTUM

CONTAINER: large-neck sterile container with screw-top.

WHEN TO COLLECT THE SPECIMEN: in the morning before eating.

HOW: after proper cleaning of the oral cavity through gargles with water (do not use oral disinfectants) try to obtain a specimen from deep bronchial secretions while coughing.

DELIVERY: the specimen must be delivered as soon as possible to the Laboratory; if not possible, it must be stored in the fridge at +4-8°C for 24 hours.

It is suggested to collect the specimen before starting the antibiotic therapy, advise the Laboratory of the current therapy or the most recent one and the symptoms.

The specimens that during the first tests will result mostly sputum will be considered UNFIT and, as consequence, there will be no further analysis.



CREATININE CLEARANCE

How to collect the 24 hour urine

The patient must be hydrated (take 500 mL of water 15 minutes before the beginning of the urine collection) to guarantee a sufficient diuresis. Do not take coffee, tea or medication, if possible, during the day of the exam. An exact collection of urine is fundamental for the accuracy of the creatinine clearance of 24 hours, and it goes as follows:

- Discard the first urination in the morning and mark the hour (for example 7.am.).
- Add the urinations up as the day goes, including night urinations.
- Next morning, stop the collection of urine at the same time you started the day before (for example 7am).
- At the end of the collection mix thoroughly and measure the total amount of urine.
- Put a part of it in a test tube or in a container, correctly note the amount of diuresis and deliver it to the “Servizio Prelievi Esterni”.



STAMEY TEST

URINE CULTURE AFTER PROSTATE MASSAGE

(carried out in the urologic ambulatory)

The exam must be prescribed by the urologist after a specific visit.

It is planned and carried out in the specialist department.

Two specimens of urine of 10 ml before and after the prostate massage are collected in sterile containers. The user will bring the two specimens with the prescribed request by the urologist and he will carry out the reception's procedure as with any other exam.

HOW TO COLLECT URINE FOR URINARY CYTOLOGICAL TEST

The collection of samples should happen for three consecutive days, without the need of fasting.

Urine must not be the one of that night, but the second one in the morning (for example, in the morning you urinate normally, you drink 2 or 3 glasses of water and then you collect the successive urine).

1. Collect the urine in a clean container.
2. Open the **“SAMPLE 1”** and add to the fixative an amount of urine until the container is full (if there would be problems in urinating inferior amounts would be accepted).
3. Close carefully the container.
4. Apply on the container a label with your **biographical datas**.
5. Store the container in a cold place (fridge).
6. Repeat the procedure on the second and on the third day using the containers named **“SAMPLE 2”** and **“SAMPLE 2”**.
7. Put the three samples in the delivery box at the External Sample Blood Department, at the proper helping desk situated on the ground floor of the Area Stauffer Building in via Ducco n.89, Brescia.

PRECAUTIONS FOR USE

- The fluid present in the containers is inflamable. Do not drink it and keep the containers out of the reach and sight of children.
- Do not drink, nor drink, nor smoke during the using.
- Avoid the contact with the eyes.
- In case of contact wash abundantly with water.
- Store the containers well-closed in a cold place.

ACCESS WITH GP REFERRAL

To carry out “Urinary Cytological” Exam it is necessary to pick up the three containers at the helping desk of the External Blood Sample Service situated on the ground floor of the Area Stauffer Building in via Ducco n.89, Brescia, from Monday to Saturday, from 7.15 a.m. to 11.00 a.m., booking simultaneously, with the GP referral, day and time for the delivery of the sample.

Moreover it is possible to pick up the containers on the first floor of the External Blood Sample Department, Healthcare Sector, from 11.00 a.m. to 1.00 p.m., from Monday to Saturday.

For further healthcare information by phone it is possible to call the number 030/3996310 from Monday to Saturday, from 11:30 a.m. to 1.00 p.m.

The desk for picking up the reports is open from Monday to Friday, from 8.00 a.m. to 5.30 p.m. and on Saturday from 8.00 a.m. to 12.00 p.m. For information about reports it is possible to call the number 030/3995336 from Monday to Friday from 12.00 p.m. to 2.00 p.m.

COPRO-CULTURE TEST

- Carry out the collection of faeces, if it's possible during the morning in which the specimen would be delivered to the laboratory or, at maximum, during the afternoon before being careful of store the specimen in the fridge (no freeze).
- Expel the faeces on a dry and clean surface (collection container, basin, toilet paper ... not into the toilet)
- Collect with the shovel of the container an amount of faeces as big as a nut in case the faeces are solid or as big as one third of the volume of the container in case the faeces are liquid.