Dipartimento: Medicina di Laboratorio
Struttura Complessa: Patologia Clinica
Direttore: Prof. Alberto Dolci

For the collection and analysis of the following tests:

- **fecal occult blood (fecal hemoglobin),**
- **urine chemical-physical and morphological examination,**
- **Bence-Jones protein (detection and quantification),**
- **urinary albumin (microalbuminuria),**
- **total proteinuria (from a random sample or a 24-hour urine collection),**
- **plasma and urinary catecholamines,**
- **5-hydroxyindoleacetic acid (5-HIAA),**

please follow the instructions provided on the following pages.

Please note:

1. **Appropriate collection device are distributed at the ASST-FBF-Sacco "Specimen Collection Centers".**
2. **For 24-hour urine collection, you may purchase a graduated container at a pharmacy.**

INSTRUCTIONS FOR "FECAL OCCULT BLOOD" SAMPLE (F-HEMOGLOBIN)

Use exclusively the collection and transport device indicated below (see image), which is distributed at the **Specimen Collection Centers of the ASST FBF-SACCO**.

RECOMMENDATIONS:

- **Never remove the white cap** from the container (feces must only be inserted from the green side).
- **Do not use the container** if the white cap is open.
- **Do not collect the stool sample** in case of diarrhea, during menstruation, in case of rectal bleeding (e.g., hemorrhoids or other causes), or if the sample is contaminated by urine.
- **Storage and delivery:** The container with the stool sample must be stored at home in the refrigerator and in the dark. It must be returned to the collection center within a **maximum of 5 days** from collection. For a 3-sample profile request, the staff at the collection center will provide instructions regarding the single delivery of all materials.

SAMPLE COLLECTION PROCEDURE:

1. **Prepare a clean surface:** Collect the feces in a clean, dry container (e.g., a plastic container or by placing toilet paper inside the toilet bowl) to prevent the stool from falling into the water.
2. **Open the device:** Unscrew the **green cap** of the vial and extract the attached sampling stick.
3. **Collect the sample:** Insert the tip of the stick into 3 or 4 different points of the stool sample, rotating or scraping it gently. The grooved tip of the stick only needs to be evenly covered (avoid loading an excessive amount of material).
4. **Close the device:** Insert the stick back into the vial from the green side and screw the cap back on tightly.
5. **Label and store:** Apply the label with your name, surname, and collection date onto the vial. Store it in the refrigerator (in the dark, at 2–8°C) until delivery.

Sistema Socio Sanitario
Regione Lombardia
ASST Fatebenefratelli Sacco

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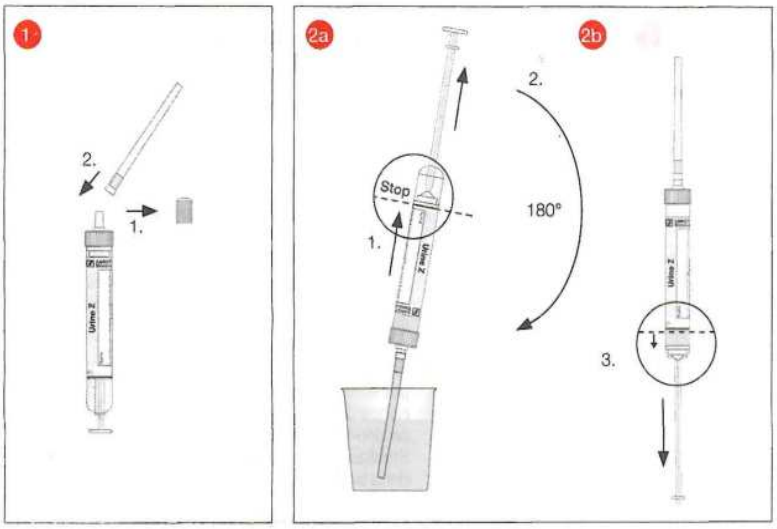
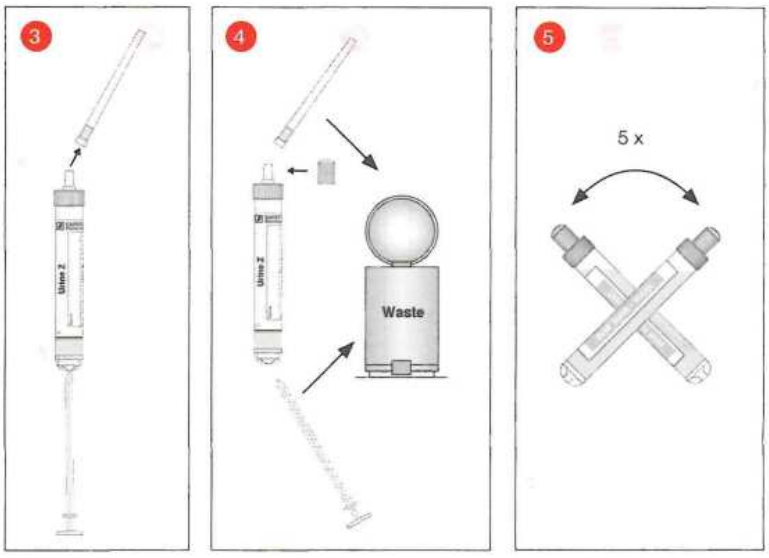
INSTRUCTIONS FOR "URINE CHEMICAL-PHYSICAL & MORPHOLOGICAL EXAMINATION"

Use exclusively the collection and transport device indicated below (see image), which is distributed at the **Specimen Collection Centers of the ASST FBF-SACCO:**

- **Sample of choice:** the clean-catch midstream urine (discard the first and last stream of urine stream), preferably from the first morning urination.
- **Hygiene:** Before collection, thoroughly wash your hands and external genitals with soap and water (do not use disinfectants), rinse completely, and dry very well.
- **Menstruation:** Do not collect the urine sample during menstruation.





SAMPLE COLLECTION PROCEDURE:

1. **Prepare the device:** Remove the small cap from the device and attach the suction nozzle.
2. **Draw the urine:**
a) By pulling the plunger, draw the urine—which was previously collected in a wide-mouthed container (e.g., a plastic cup) up to the **yellow line**.
b) Remove the device from the cup and pull the plunger all the way to the **end of its track** (bottom of the tube).
3. **Break the plunger:** Snap or cut the plastic plunger at the pre-scored break point (usually located at the base of the tube) so that it no longer protrudes from the container.
4. **Remove the nozzle:** Detach the suction nozzle used for drawing the urine.
5. **Seal the tube:** Firmly reinsert the original small cap onto the opening of the device to seal it hermetically.
6. **Label:** Write your identification data (name, surname, date, and time of

collection) on the tube and keep it upright until delivery.

INSTRUCTIONS FOR "BENCE-JONES PROTEINURIA"

- **Instructions for urine sample collection for Bence Jones Protein screening (Qualitative Bence Jones):**

  Use exclusively the sample collection and transport device (10 mL round-bottom tube with a white screw cap) distributed at the **Specimen Collection Centers of the ASST FBF-SACCO**. The sample of choice is a fresh urine sample from the second morning urination, collected in the appropriate 10 mL round-bottom tube with a white screw cap. The required volume for testing is at least 5 mL.

- **Instructions for urine sample collection for Bence Jones Protein quantification (Quantitative Bence Jones):**

  Urine must be collected in a suitable graduated 24-hour collection container, which can be purchased at a **pharmacy**. The sample of choice is a timed sample collected over 24 hours.

  Upon waking up, discard the urine from the first urination (it is not needed for the collection). From this moment onward, collect all urine voided over a 24-hour period (including the entire day and any night-time urination), as well as the first urine voided the following morning. During the collection period, the container must be kept closed and in a cool place (do not refrigerate).

  Essential Information**:** It is mandatory to report the total 24-hour urine volume during the request check-in/acceptance phase.

- **Instructions for urine sample storage:**
  Samples must be stored at room temperature and must not be frozen.

INSTRUCTIONS FOR "URINARY ALBUMIN" AND "TOTAL URINARY PROTEINS" ON SPOT SAMPLES AND 24-HOUR URINE COLLECTION

- **Patient Preparation**

  It is recommended to:
  - Avoid intense physical activity for 2-3 days prior to collection;
  - Do not perform the test during acute infections and/or inflammatory states.

- **Instructions for urine collection for analyte assay on a spot sample (U-Albumin or U-Total Proteins, first morning urine):**

  Use exclusively the sample collection and transport device (10 mL round-bottom tube with a white screw cap) distributed at **Specimen Collection Centers of the ASST FBF-SACCO**.

  The sample of choice is a fresh urine sample from the first morning urination, collected in the appropriate 10 mL round-bottom tube with a white screw cap. The required volume for testing is at least 5 mL.

  Note: Due to the physiological variability of urinary albumin within an individual, it is recommended to collect 2 (or preferably 3) spot urine samples at least one day apart from each other for repeat testing, in order to better estimate the true biological value of the analyte in the patient.

- **Instructions for urine collection for 24-hour assays:**

  Urine must be collected in a suitable graduated 24-hour collection container, which can be purchased at a **pharmacy**. The sample of choice is a timed sample collected over 24 hours.

  Upon waking up, discard the urine from the first urination (it is not needed for the collection). From this moment onward, collect all urine voided over a 24-hour period in the graduated container (including the entire day and any night-time urination), as well as the first urine voided the following morning. During the collection period, the container must be kept closed and in a cool place (do not refrigerate).

  Essential Information: It is mandatory to report the total 24-hour urine volume during the request check-in/acceptance phase.

- **Instructions for urine sample storage:**
  Samples must be stored at room temperature and must not be frozen.

INSTRUCTIONS FOR "PLASMA AND URINARY CATECHOLAMINES AND 5-HYDROXYINDOLEACETIC ACID" TESTS

- **Instructions for PLASMA CATECHOLAMINES:**

  It is critical that the blood draw is performed while fasting, and that no coffee, tea, or alcohol is consumed during the 12 hours prior to the draw. Furthermore, it is recommended to avoid taking the following medications, whenever possible, for 48 hours prior to the blood draw: reserpine, L-dopa, α-methyldopa, tetracyclines, and MAO inhibitors (always consult your doctor before discontinuing any medication).

- **Instructions for URINARY CATECHOLAMINES and 5-HYDROXYINDOLEACETIC ACID:**

  Urine must be collected in a suitable graduated 24-hour collection container, which can be purchased at a **pharmacy**. The sample of choice is a timed sample collected over 24 hours.

  Upon waking up, discard the urine from the first urination (it is not needed for the collection). From this moment onward, collect all urine voided over a 24-hour period in the graduated container (including the entire day and any night-time urination), as well as the first urine voided the following morning. During the collection period, the container must be kept closed and in a cool place (do not refrigerate).

  For the **Urinary Catecholamines**, it is recommended to avoid taking the following medications, whenever possible, for 48 hours prior to the urine collection: α-methyldopa and L-dopa.

  For the **5-Hydroxyindoleacetic Acid (5-HIAA)**, it is recommended to avoid consuming the following foods for 72 hours prior to the urine collection: tomatoes, bananas, kiwis, and walnuts. Furthermore, avoid taking the following medications, whenever possible: analgesics and antipyretics (e.g., paracetamol/acetaminophen, phenacetin, acetanilide), phenothiazines, and reserpine (always consult your doctor before discontinuing any medication).