

24-HOUR URINE, ACIDIFIED

DEAR PATIENT,

Your doctor has ordered a laboratory test that requires collecting urine over a 24-hour period.

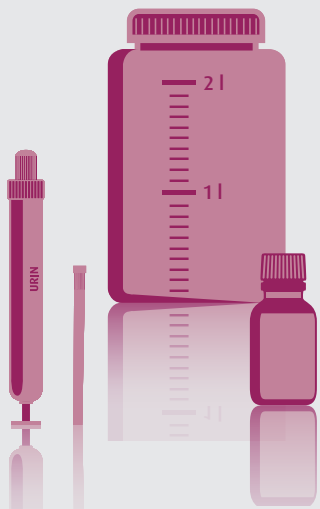
A sample of the collected urine will then be sent to the laboratory for testing.

It is important that all urine be collected completely throughout the full 24-hour period. It is also essential to accurately record the total 24-hour urine volume and the collection period. The accuracy of the laboratory test depends on this information!

This guide explains how to collect the urine, label the samples, and store them correctly.

From the laboratory you will need:

- 24-hour urine collection container
- Urine tube for sample collection
- Acidifying agent, e.g., a hydrochloric acid solution



HOW DO YOU COLLECT 24-HOUR URINE?

What should you pay attention to?

- During the urine collection period, you should drink approximately 1.5 to 2 liters of fluid throughout the day.
- Two days before urine collection and throughout the collection period, you should avoid the following foods: citrus fruits, eggplants, avocados, melons, mirabelle plums, nuts, damsons, and bananas. You should also avoid coffee, black tea, alcohol, and nicotine.
- Please discuss with your doctor which medications you may take before and during the collection period.

How to collect urine?

- Urine is collected over a 24-hour period, for example:
 - Day 1: start at 08:00
 - Day 2: end at 08:00
- Collect the urine in a clean container (a special container is recommended, protected from light and marked with volume graduations).
- The collection period begins in the morning after waking up. Empty your bladder completely into the toilet. This urine is not collected, but note the time (e.g., 08:00); this marks the start of the collection period.
- To acidify the urine, 6 mol/L hydrochloric acid (HCl) is used. Pour 10 mL of hydrochloric acid into the 24-hour urine collection container before starting urine collection. For every additional 1000 mL (1 L) of urine collected, add another 10 mL of hydrochloric acid (total: 20–30 mL).
- Collect all urine passed over the next 24 hours in the 24-hour urine collection container, including the first morning urine on the second day. This marks the end of the collection period. Please also record this time (e.g., 08:00).
- During the collection period, store the urine in a cool place or in a refrigerator (2–8°C).

Caution: The stabilizing solution (hydrochloric acid) is corrosive. Avoid contact with skin and mucous membranes. Keep out of reach of children.

WHAT HAPPENS AFTER THE COLLECTION?

1. Reading the urine volume

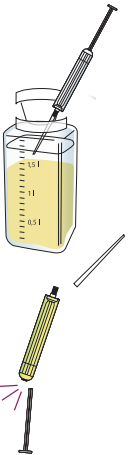
The urine collection container has graduated markings that allow you to read the urine volume. **Record the total 24-hour urine volume accurately!**

2. Mixing the collected urine

Gently swirl the urine collection container to ensure that the urine is well mixed. If you have filled more than one urine collection container, first pour the contents of all containers into a clean bucket.

3. Sample collection

Collect the urine sample using a special sampling tube (e.g., Urine Monovette, 10 mL). Remove the cap from the urine tube and attach the tip. Insert the tip into the urine collection container and fill the tube completely (10 mL). Break off the plunger, remove the tip, and close the cap tightly.



4. Labeling the sample

Label the tube with your first and last name, and store it in a cool place or refrigerator (2–8°C) until delivery to the laboratory.

How should you proceed?

- All urine must be collected without exception — even during bowel movements.
- Store the urine collection container in a cool place whenever possible.
- If any urine sample is missed during the collection period, the collection must be restarted on another day.