Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

24-Hour Urine Collection Instructions for Your Metanephrines and Catecholamines Test

This information explains how to collect and store your urine (pee) so it can be tested for metanephrines (meh-tuh-NEH-fruhnz) and catecholamines (ka-tuh-KOW-luh-meenz).

About your metanephrines and catecholamines test

Your adrenal glands make hormones, including catecholamines. When catecholamines break down, they make metanephrines. Your kidneys filter metanephrines and catecholamines from your blood. Your urine carries them out of your body.

Some tumors also make catecholamines. Examples of these tumors include paragangliomas (PAYR-uh-GANG-glee-OH-muhs) and pheochromocytomas (FEE-oh-KROH-moh-sy-TOH-muhs). Measuring the amount of catecholamines and metanephrines in your urine is a way to check for these tumors.



It's important to collect all your urine for the whole 24-hour collection period. We may not be able to complete this laboratory test if you do not collect all your urine.

Things to avoid before and during your 24-hour urine collection

Some things can make your test results less accurate. It's best to avoid these things starting 3 days before your urine collection. Keep avoiding them during your 24-hour urine collection.

Foods and drinks to avoid

- Alcohol.
- Food and drinks with caffeine, such as coffee, tea, energy drinks, and chocolate.
- Foods and drinks with vanilla, such as flavored coffee, protein shakes, and baked goods.
- Bananas.
- Citrus fruits, such as oranges and lemons.

Medicines to avoid

Make sure your healthcare provider knows all the prescription and over-the counter medicines you take.

If you take any of the medicines below, they may tell you to stop before and during your 24-hour urine collection. **Do not stop taking any medicines unless your healthcare provider tells you to.**

- Decongestants, such as pseudoephedrine (Sudafed®).

- Cough suppressants, such as guaifenesin (Mucinex®) and dextromethorphan (Delsym®, Robitussin®).
- Amphetamines, such as Adderall® and Ritalin®.
- Monoamine oxidase inhibitors (MAOIs).
- Tricyclic antidepressants.
- Buspirone.
- Prochlorperazine (Compro®).
- Levodopa (Inbrija®).

Other things to avoid

- Products with nicotine, such as:
  - Cigarettes and other tobacco products
  - Vapes and e-cigarettes
  - Nicotine patches
  - Nicotine pouches

Talk with your healthcare provider if you do not think you can stop using nicotine during your 24-hour urine collection.

Instructions for your urine collection

We will give you these supplies. We may give them to you during an appointment or mail them to you.

- A plastic container to collect your urine.
  - If you're male, we will give you a handheld urinal.
  - If you're female, we will give you a urine collection "hat."
  - If you're staying in the hospital, we may give you a bedpan.
- A plastic container to store your urine. Write your name on the label.

Starting your 24-hour urine collection period

You must start your urine collection period with an empty bladder. Urinate (pee) into the toilet and flush it right before you start the 24-hour collection period. Then, write down the time and date. This is the start time of your urine collection period. It will end 24 hours later.

Start date: _____ Start time: _____

During your 24-hour urine collection period

- **Collect all of your urine.** Only pee into the urinal, collection hat, or bedpan.
  - To use the urine collection hat, place it under the toilet seat and pee into it.
  - If you're staying in the hospital, ask for help if you need it.
- Do not put toilet paper in the urinal, collection hat, or bedpan. Put it in the toilet and flush it.
- Pour your urine from the urinal or collection hat into the labeled container each time you pee. If you're using a bedpan, ask your nurse or nursing assistant to do this for you.
- Plan ahead if you leave your home or hospital room during your 24-hour collection period. Take the urinal or collection hat and labeled container with you.
- Make sure to drink at least 8 (8-ounce) cups of liquids during your 24-hour collection period. You may also get fluids intravenously (through a vein) if you're staying in the hospital.

Store the labeled container in the refrigerator. The urine must be kept cool at all times. You can store it in a cooler on top of ice if you do not have space in the refrigerator. Add more ice as needed to keep the urine cold.

Ending your 24-hour urine collection period

Your last urine collection should be within 10 minutes before or after the time you started your urine collection period. This is the time you wrote in the "Starting your 24-hour urine collection period" section earlier.

For example, if you peed at 6 a.m. to start your urine collection period, try to collect your urine between 5:50 a.m. and 6:10 a.m. the next day. This will end your urine collection period.

After your 24-hour urine collection period

If you collected your urine while you were at home:

- You'll have an appointment within 24 hours after your urine collection period ends. Bring your labeled urine container to your appointment.
- Tell your nurse if you forgot to save any of your urine during the collection period.

If you collected your urine while you were in the hospital:

- A nurse or nursing assistant will collect your labeled urine container.
- Tell your nurse or nursing assistant if you forgot to save any of your urine during the collection period.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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