How to understand your 24-hour urine test results

1. Make sure the sample is complete

Urinary creatinine

To check if your urine collection is reliable, divide your urinary creatinine result by your body weight.
Example: Creatinine in urine: 10 mmol/day
Body weight in kg: 70kg (155 lbs). 1 lb = 0.4536 kg
→ 10/70=0.14 mmol/kg/day. This suggests the collection is complete for a woman but not for a man.

Ranges :
Women: 0,13 à 0,17 mmol/kg/day
Men: 0,17 à 0,21 mmol/kg/day

If the sample is incomplete or overestimated, the other test results may not be accurate. In somes cases, your doctor may ask you to repeat the test – especially if your weight is under 50 kg (110 lbs) or over 90 kg (200 lbs).

2. Check your urinary calcium level

Urinary calcium

High calcium in the urine can increase the risk of kidney stones or nephrocalcinosis. If you are taking calcium supplements or medication (like Alfacalcidol), your calcium level may be higher.
The reference ranges are indicative and may vary according to your body weight.

Divide your urinay calcium result by your weight.
Ex: urinary calcium: 10 mmol/day. Weight: 60 kg → 10/60 = 0.16 mmol/kg/day. That is above the recommended threshold of 0.1 – so a bit on the high side !
A raised calcium level can sometimes be acceptable if there are no kidney issues.

Ranges :
Women: < 6,25 mmol/d
Men: < 7,5 mmol/d
And also < 0,1 mmol/kg/day

3. Make sure your salt intake isn't too high

Urinary sodium

The more salt you eat, the more calcium your kidneys may lose.
You can estimate your daily salt intake by dividing your urinary sodium result by 17.
Example: urinary sodium = 170 mmol/day → 170/17 = 10g of salt per day. That is too much.

Recommended intake :
< 6-8 g/day

4. Make sure your protein intake isn't too high

Urinary urea

A high-protein diet (meat, fish, eggs…) can also raise calcium loss in the urine.
You can estimate your protein intake by multiplying your urinary urea by 0.21, then dividing by your weight.
Example: Urinary urea = 480 mmol/day. Weight = 85 kg. 480x0.21 = 101 g/day. 101/85 = 1.2 g/kg/day. That is a bit too much.

Ranges :
1 g/kg/day

Prepared by the CALiPSO Centre team – May 2025