

Preventing kidney stones: the 24-hour urine blueprint

A kidney stone forms from a specific chemistry, so prevention works best when stone analysis, blood tests, diet, medical history and a 24-hour urine collection are read together. The plan should name a urine-volume goal, the chemistry being targeted, the diet or medication used to change it and when it will be remeasured.



Figure 29.1. The 24-Hour Urine Blueprint. Prevention becomes more precise when stone analysis, blood testing, diet, medical history, and 24-hour urine chemistry are interpreted together.

Key points

- Keep the stone when you can; knowing what it is made of shapes prevention.
- A 24-hour urine collection is especially helpful for recurrent or high-risk stones, a single kidney or unusual stone types.
- The collection should reflect a typical day; a quiet day at home may not match the days that produced stones.
- A surprising result should prompt a look at the collection before a lifelong plan is built on it.
- Normal dietary calcium taken with food often helps; blanket calcium restriction can backfire.
- Prevention is a feedback loop: measure, intervene, remeasure and adjust.

Questions to ask your urologist

- What type of stone did I form, and was it analyzed?
- Would a 24-hour urine collection change my prevention plan?
- Which blood or urine abnormality is my plan targeting?
- What is my urine-volume goal, and how should my calcium and sodium intake change?
- If you recommend medication, what is it meant to correct, and how will it be monitored?
- When will we repeat the measurements to see whether the plan worked?

