

24-HOUR URINE COLLECTION PROTOCOL

Jug Type/Preservative:

All testing for 24hr urine samples requires that the specimen be initially collected in the appropriate container. Depending on the test to be performed, the collection jug should have either no additive, acid added or acid washed. Note: If two 24hr urine tests requiring differing additives are collected simultaneously, then a "split jug" kit must be used.

24hr urine tests collected in plain "**No Additive**" jugs are:

Creatinine Clearance (CREACL)	Sodium (NAU24)	Total Protein (TPU24)
Creatinine Excretion (CREXC)	Potassium (KU24)	Urea Clearance (UREA24)
Microalbumin (MALB24)	Protein Electrophoresis (PEU24)	Urea Nitrogen (UUN24)
Aldosterone (ALDO24)		

24hr urine tests collected with **6N HCl (Acid jug)** are:

17 Ketosteroids (17KSTO)	Citric Acid (MISC1)	Oxalate (OXAL24)
5 HIAA (5HIAAU)	Cyclic AMP (MISC1)	Phosphorus (PHOSUB)
Calcium (CAUR)	Magnesium (MISC1)	VMA (VMA)
Catecholamines (CATEFU)	Metanephrines (METAFU)	

24hr urine tests collected in a **Trace Element (Acid Washed jug)** are:

Antimony (ANTIM)	Copper (CU24)	Thallium (MISC1)
Bismuth (BISM)	Heavy Metals (HMPUR)	Zinc (MISC1)
Chromium (CR24)	Mercury (MISC1)	

Sample Collection:

1. To begin the collection, have the patient totally empty his bladder into the toilet. If there is a catheter collection bag, it should be changed and a fresh bag used. Note the start time on the requisition.
2. Hydrate the patient with at least 800 ml of water. Note that special orders may have been given by the attending physician of a patient with documented renal disease. These special orders may override recommendations made here with respect to water intake or withholding of medication. Withhold tea and coffee the day of the test. Some tests are susceptible to drug interference, thus depending on the test being collected, some medications should be halted prior to and during the 24hr collection. Please refer to each individual test page for specific drug interactions. Prescribed medications should not be halted without physician approval.
3. During the following 24 hours, every drop of urine must be placed (preferably directly) into the container as soon as possible.
4. Ending the collection – 5 minutes before the 24-hour collection period is complete, the bladder or catheter collection bag is emptied into the collection container.
5. **IMPORTANT!** If an error in timing occurs, or if some urine is lost, be sure to note that timing information accurately on the requisition. The physician and the clinical pathologist can then determine whether useful information can be obtained anyway (often it can).
6. Maintain the container in an ice slush bath with the ice level at least as high as the urine level at all times. Outpatients can maintain the container in the home refrigerator or portable cooler.
7. Deliver the specimen to the LMC Lab or affiliated location immediately after collection.