



## *Nutrient and Toxic Elements in Urine*

Urine element testing is primarily useful to monitor levels of toxic metals such as aluminum, arsenic, cadmium, lead, and mercury and for special mineral uptake testing. The 6-8 hour collection profiles are primarily for patients who are receiving oral or IV metal chelating agents to mobilize toxic elements from body pools. The 24 hour collection profiles may be used with or without administration of chelating agents to assess the rate of excretion of the elements reported. The total output of urine over 24 hours is collected and the daily output of nutrient and/or toxic elements is determined.

Metamatrix offers flexibility in urine element testing. Clinicians can select from challenged and unchallenged protocols. They can select both nutrient and toxic elements or toxic elements only. Although many clinicians do both pre- and post-challenge testing, some now elect to only test following the oral or IV administration of a chelating agent.

In order to allow comparison between different test protocols, Metamatrix results are reported using standardized units. 24 hour urine collections are reported as units per day. 6-8 hour collections are reported as units per mg creatinine to allow for variations in urine dilution.

### *Metamatrix urine element analysis features:*

- Testing with the latest advances in technology (ICP/MS), which can guide therapy by pinpointing imbalances of these important substances.
- Flexible test configurations to fit your protocols.
- A cost-effective approach for monitoring nutrient and toxic elements.
- Metamatrix quality and reliability backed by over 20 years of experience.



## Nutrient & Toxic Elements - Urine

Test #0052 - Nutrient & Toxic Elements  
6-8 Hr

Test #0055 - Nutrient & Toxic Elements  
6-8 Hr (NY)

Test #0152 - Toxic Elements 6-8 Hr

Test #0155 - Toxic Elements 6-8 Hr (NY)

Test #0058 - Nutrient & Toxic Elements  
24 Hr

Test #0059 - Nutrient & Toxic Elements  
24 Hr (NY)

Test #0158 - Toxic Elements 24 Hr

Test #0159 - Toxic Elements 24 Hr (NY)

### *Specimen Requirements*

6-8 Hr profiles - 6-8 Hr urine, 11 ml, refrigerated

24 Hr profiles - 24 Hr urine, 11 ml, refrigerated

**Method:** ICP/MS

**Turnaround Time:** 7-14 days, 11 days average

### *CPT Codes*

CPT #	Description
82108	Aluminum
82175	Arsenic
82300	Cadmium
82340	Calcium
82495	Chromium
82525	Copper
83540	Iron
83655	Lead*
83735	Magnesium
83785	Manganese
83825	Mercury
84255	Selenium
84630	Zinc
84311 x3	Spectrophotometry, NES: Boron Cobalt Vanadium

### *Analytes Reported*

#### **Nutrients & Toxics**

(#0052, #0055, #0058, #0059)

Aluminum  
Arsenic  
Boron  
Cadmium  
Calcium  
Chromium  
Cobalt  
Copper  
Iron  
Lead\*  
Magnesium  
Manganese  
Mercury  
Selenium  
Vanadium  
Zinc

#### **Toxics**

(#0152, #0155, #0158, #0159)

Aluminum  
Arsenic  
Boron  
Cadmium  
Lead\*  
Mercury

\* Lead is not included in New York profile.



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