



HAVEN

Health Assistance InterVention Education Network

Urine Samples for Toxicology Testing

Definitions:

Normal: Urine samples are called normal if there are no unexpected substances detected in the urine and the creatinine and specific gravity are within normal ranges.

Abnormal: Urine samples are called abnormal if the creatinine is less than 20mg/dl (a low creatinine) or there is an unexpected substance detected in the urine.

Dilute: Urine samples are called dilute if, in addition to the low creatinine, the specific gravity is < 1.003.

Both abnormal and dilute screens are of significance.

Samples can be both abnormal, dilute, or both abnormal and dilute.

Most people must consume significant amounts of water/water-based liquids (such as coffee, Crystal Light, etc) to produce a specimen with a creatinine lower than 20 mg/dl.

Urine creatinine levels that are low can be associated with:

- Excess water consumption
- Low muscle mass
- Low protein intake
- Kidney disease
- Liver disease

Urine dilution is of interest because consuming large amounts of liquid in order to dilute urine with hopes of having a normal urine result is a common method to try to avoid detection of inappropriate substance consumption.

To avoid dilute urines and low creatinine urine results, some practical suggestions are as follows:

- If not medically contraindicated, avoid all diuretics—including caffeine—the day of the selection until AFTER the collection is done.
- Go to the collection site after waking up while urine is still in your bladder to use this as the specimen.
- If this is NOT possible then you should empty your bladder approximately 2 hours prior to your planned arrival at the collection site and not consume large amounts of free water in the interim.
- During that 2 hour time period, you should NOT consume more than 24 oz of fluid and the fluid you do consume should be a substantial fluid—milk, smoothie, tomato juice—and/or eat a protein high meal or snack—egg, cheese, meat. Protein shakes – like Boost, Ensure, etc. - provide both hydration and protein.

By following these guidelines, you will help to avoid dilute and abnormal urines.