Laboratory Test Guide: Urine

Cotinine

Cotinine is the major metabolite of nicotine. This test, which can be performed on both urine and serum, distinguishes tobacco users from non-tobacco users.

Creatinine

Creatinine is a product released from muscle tissue and is excreted from the kidneys. Creatinine measurements also are used to screen for kidney disorders.

Glucose

Glucose is the main source of energy for living organisms. The most important cause of elevated glucose is diabetes mellitus, but many other impairments can also elevate glucose levels in the blood and urine.

Granular Casts

Granular Casts are protein masses that form in the kidney and are excreted through the urine. Granular casts are used in detecting inflammation or hemorrhaging.

Hyaline Casts

Hyaline Casts are another form of protein mass that are important in detecting kidney or heart disease.

Protein

Protein is a combination of complex amino acids that make up our body cells. Abnormal cell levels may indicate the presence of kidney disease.

Protein/Creatinine Ratio

Protein/Creatinine Ratio is more specific than an isolated protein measurement. This ratio can help determine whether the protein is elevated due to possible disease or urine concentration.

Red Blood Cells

Red Blood Cells are not typically carried in urine. A higher than average reading could indicate the presence of kidney diseases. The exception is menstruating females.

Specific Gravity

Specific Gravity is used to check renal or kidney functions. Presence of glucose or protein may cause higher than expected readings.

White Blood Cells

White Blood Cells are sometimes present in urine samples. The importance of detecting white blood cells is to check the presence of a urinary tract infection or inflammation of the urinary tract.