OCCULT BLOOD
Occult blood is blood that cannot be seen without a microscope. Normal urine does not contain any red blood cells, except females’ urine during menstruation.
Occult blood in someone’s urine can indicate kidney, bladder, prostate, or vaginal infections.

UROBILINOGEN
Urobilinogen is a breakdown product of the hemoglobin in red blood cells.
It is not found in normal urine!
Urobilinogen in a urine specimen may indicate the rapid destruction of red blood cells.

WBC-ESTERASE
The acronym means “White Blood Cell” because WBC-esterase is an enzyme contained in white blood cells that is not found in normal urine.
WBC-esterase in the urine suggests a bladder, prostate, vaginal, or kidney infection.

NITRITE
Nitrite is a by-product of bacterial growth.
Normal urine does not contain measurable levels of nitrite.
The presence of nitrite in a urine specimen indicates the presence of bacteria in the bladder and suggests an infection.
Laboratory values are evaluated as part of a person's complete health status. Many people normally have some values outside of the statistical range specified as “normal.” This does not necessarily indicate the presence of disease or other problem.

Age, gender, pregnancy, genetics, chronic medical conditions, prescription medications, over-the-counter medications, diet, or herbs may affect the normal range of any test. In some cases, disease or other problems may be present even when the tests are normal.

Discuss any unusual or abnormal findings with your personal physician.

**URINE SPECIMEN APPEARANCE**

Normal urine is clear. Cloudy urine indicates the presence of crystals, blood cells or bacteria.

Crystals in the urine might indicate a problem such as dehydration and increases the risk of kidney or bladder stones.

Red blood cells in urine may indicate a stone in the bladder or kidney, a cancer, or an infection. Red blood cells are normal in females' urine during menstruation.

White blood cells in urine are often associated with bladder, kidney, or vaginal infections.

Urine bacteria usually indicate a bladder, kidney, or vaginal infection.

**SPECIMEN COLOR**

Normal urine is a shade of YELLOW.

Milky urine may indicate the presence of white blood cells or crystals.

Red urine may indicate the presence of red blood cells or a diet high in red beets.

Orange urine may be the result of bile in the urine and usually suggests liver disease. It may also indicate dehydration, or excess beta carotene from some vitamin B combinations and/or carrot juice.

**SPECIFIC GRAVITY**

Specific gravity is a measure of the amount of material dissolved in the urine. Normal urine has a specific gravity between 1.010 and 1.020.

A low specific gravity usually indicates water overload or the inability of the kidney to concentrate urine.

A high specific gravity usually indicates dehydration, a high salt diet, or infection.

**URINE pH**

Urine pH is an acid-base measurement. Normal urine has a slightly acid pH (5.0 - 6.0).

A lower pH (more acidic) is usually the result of eating acidic foods.

Higher pH (more basic) urine may indicate the consumption of antacids or pH-basic foods. High pH urine indicates more susceptibility to infection.

**PROTEIN**

Normal urine does not contain any protein.

Trace amounts of protein can be normal in athletic individuals.

Protein is sometimes seen in male urine due to leakage from the prostate.

Protein in the urine can indicate a bladder or kidney infection or chronic kidney disease.

For diabetics with high blood pressure, urine protein can indicate serious kidney damage.

**URINE GLUCOSE (SUGAR)**

Normal urine does not contain any glucose. Glucose can occasionally be seen during pregnancy.

Glucose usually spills into the urine when the blood sugar level exceeds 200 mg./dl.

Glucose in the urine (in the absence of pregnancy) almost always indicates the presence of diabetes.

**KETONES**

Normal urine does not contain any ketones.

Ketones indicate that the body is destroying protein at an unusually rapid rate.

Ketones can be the result of excessive fasting, a high protein diet (such as the Adkins diet) or can suggest a serious complication of diabetes called “keto-acidosis”.

**BILIRUBIN**

Bilirubin is a normal body by-product (bile). Normal urine does not contain any bilirubin.

Bilirubin in the urine may indicate liver disease. It may also be seen in very dehydrated individuals.

Very high levels are found in infectious hepatitis and in end-stage cirrhosis (scarring of the liver.)