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**Urinalysis**

Urinalysis is the process of analyzing urine for target parameters of health and disease. Also known as routine and microscopy (R&M), this is an array of tests performed on urine, and one of the most common methods of medical diagnosis.

* The characteristics that can be detected in urine include cells, substances, and properties, such as specific gravity or pH.
* Urinalysis can be performed on test strips (routine) by light microscopy.
* The numbers and types of cells and/or material, such as urinary casts, can yield a great detail of information and may suggest a specific diagnosis.

The target parameters that are measured or quantified in urinalysis include many substances and cells, as well as other properties, such as specific gravity. A part of a urinalysis can be performed by using urine test strips, in which the test results can be read as the strip’s color changes. Another method is light microscopy of urine samples.

When doctors order a urinalysis, they will request either a routine urinalysis or a routine and microscopy (R&M) urinalysis; the difference being that a routine urinalysis does not include microscopy or culture. R&M is used specifically for culturing bacteria found in urine, which can make it an important tool for diagnosing specific urinary tract infections.

### Test Strip Urinalysis

Test strip urinalysis exposes urine to strips that react if the urine contains certain cells or molecules. Test strip urinalysis is the most common technique used in routine urinalysis. A urine test strip can identify:

* Leukocytes—their presence in urine is known as leukocyturia.
* Nitrites—their presence in urine is known as nitrituria.
* Proteins —their presence in urine is known as proteinuria, albuminuria, or microalbuminuria.
* Blood—its presence in urine is known as hematuria.
* pH—the acidity of urine is easily quantified by test strips, which can identify cases of metabolic acidosis or alkalosis.