



## Significance of Complete Blood Count and its Purposes

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### DESCRIPTION

A Complete Blood Count (CBC) is a blood test used to assess the general health and find a number of illnesses, such as leukemia, anemia, and infections. A complete blood count test evaluates several elements and characteristics of the blood, such as:

- White blood cells which fight infection
- Red blood cells, which deliver oxygen
- Hemoglobin, the protein in red blood cells that transports oxygen

A complete blood count that reveals abnormal increases or declines in cell counts may point to an underlying medical problem that necessitates additional testing. A frequent blood test that is performed for a number of reasons is a complete blood count.

To evaluate the general health. As part of a standard medical evaluation, the doctor may advise getting a complete blood count to check the general health and check for a number of illnesses, such as leukemia or anemia.

To find a medical condition's cause. If we are suffering from weakness, exhaustion, fever, inflammation, bruising, or bleeding, the doctor may advise a complete blood count. A complete blood count may be used to identify the underlying cause of various symptoms and indications. The test can also support a diagnosis of infection if the doctor has a suspicion of one. Complete blood counts may be used by the doctor to track the condition if we have been diagnosed with a blood ailment that affects blood cell counts.

To keep track of medical care. If we are taking medications that could impact blood cell counts, a complete blood count may be done to monitor the health. Usually, a full blood count is not a conclusive diagnostic procedure. Results beyond the normal

range may or may not call for further testing, depending on the rationale the doctor gave for recommending this test. The results of a CBC may need to be compared to those of other blood tests, or more tests may be required, according to the doctor.

For instance, if we are otherwise healthy and show no signs or symptoms of sickness, complete blood count readings that are just a little outside the normal range might not require further testing. A total blood count that falls outside of the normal range could mean we need to change the treatment plan if we're receiving cancer treatment.

Hematocrit, hemoglobin, and red blood cell count. Red blood cell count, hemoglobin, and hematocrit findings are connected because they each assess different facets of red blood cells. We have anemia if the measurements in these three categories are below average. Weakness and weariness are results of anemia. Numerous factors, such as low iron or specific vitamin levels, blood loss, or an underlying illness, can contribute to anemia. High levels of hemoglobin or hematocrit, or an abnormally high red blood cell count, may indicate an underlying medical issue like polycythemia Vera or heart disease.

The white blood cell count a medical illness like cancer, a bone marrow issue, or an autoimmune sickness that destroys white blood cells can all contribute to leukopenia, a low white blood cell count. Additionally, several drugs might lower white blood cell counts. A higher-than-average white blood cell count could indicate an infection or inflammation. Additionally, it can be a sign of a bone marrow condition or an immune system issue. A negative drug reaction can also result in an elevated white blood cell count.

A platelet count that is abnormally low (thrombocytopenia) or excessively high (thrombocytosis) is frequently a symptom of an underlying medical issue or a drug adverse effect. We'll probably need additional testing to determine the cause if the platelet count is above or below the usual range.

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