

Test	Nutrients Needed	Low	High
<b>WBC</b> White Blood Count 5.3-7.5 k/cumm	Vit A, Vit C, D, Folate, B12	Anemias Autoimmune Bone marrow deficiencies Liver problems Radiation therapy Spleen problems Viral and/or bacterial	Cigarette smoking Infections Inflammatory diseases Leukemia Physical/mental stress Tissue damage
<b>RBC</b> Red Blood Cell Count 4.2-4.9 m/cumm	B6, B12, Folate, Iron, Zinc	Anemias Bleeding Hemolysis Leukemia Malnutrition Multiple myeloma Over hydration Porphyria Thalassemia	Cigarette smoking Congenital heart disease Dehydration Plumonary fibrosis Polycythemia vera Renal cell carcinoma
<b>Hb or Hgb</b> Hemoglobin 14-15 g/dl (Male) 13.5-14.5 (Female)	Iron, Zinc, B6, Folate, B12, Copper	Anemia's Blood loss Bone marrow suppression Hodgkin's Lymphoma Lead poisoning Leukemia Nutritional Deficiencies	Cigarette smoking Dehydration Erythropoietin abuse Lung diseases Polycythemia vera Tumors
<b>Hct</b> Hematocrit Male: 40-48 % Female: 37-44%		Blood loss Bone Marrow Suppression Chemotherapy Hodgkin's Lymphoma Lead poisoning Leukemia Nutritoinal deficiencies Over dehydration	Cigarette smoking Dehydration Erythrocytosis Hypoxia Lung diseases polycythemia Tumors
<b>MCV</b> Mean Corpuscular Volume 85-92 fL	B12, Iron	Anemia of Chronic Disease Iron deficiency anemia Microcytic Sideroblastic Anemia Thalassemia	Aplastic Anemia Hemolytic Anemia Hypothyroidism Liver Disease/Alcoholism macrocytic anemia Myelodysplastic Syndrome Vit B12 or Folate Deficiency
<b>MCH</b> Mean Corpuscular Hemoglobin 27-31 pg	Vit C, B6, B12, Folate, Iron, Zinc	Anemia of Chronic Disease Hypochromic Iron deficiency anemia Microcytic Sideroblastic Anemia Thalassemia	Aplastic Anemia Hemolytic Anemia Hyperchromic Hypothyroidism Liver Disease/Alcoholism macrocytic anemia Myelodysplastic Syndrome Vit B12 or Folate Deficiency
<b>MCHC</b> Mean Corpuscular Hemoglobin Concentration 32-35g/dL	Vit C, B6, B12, Folate, Iron, Zinc	B6 & Iron Deficiencies Heavy Metal Toxic Burden Iron Deficiency Thalassemia Vitamin C Deficiency	Autoimmune Hemolytic Anemia Burn Patients Heredetary Spherocytosis Hypochlorhydria Vit B12 or Folate Deficiency

Test	Range	Low	High
<b>Neutrophils</b>	40-60%	Chronic disease, Nutrient deficiency, Poor production, Leukemia, Radiation, Crohns, RA, Lupus, Viral	Cigarette smoking, Infections, Inflammatory diseases, High Stress, Physical/mental stress Tissue damage
<b>Lymphocytes</b>	25-40%	Chemotherapy, Leukemias, Lupus Lymphomas, MS, RA, Unresolved infections	Autoimmunity, Cancer of Lymphatic system, Chronic Inflammation, Hepatitis, HIV, Leukemias, Viral infections
<b>Monocytes</b>	7 or less	Anemia, Acute Viral, B12 deficiency Leukemia, Lupus, RA, Stress	Cardiovascular disease, Chronic infections, IBD Inflammation, Injury, Obesity
<b>Eosinophils</b> (generally lower in the morning)	0-1%	Alcohol, Cushings disease, Adrenal stress	Allergic reactions, Asthma, Autoimmunity Histamine reaactions, Parasites
<b>Basophils</b>	0-1%		Lyme, Myeloproliferative disorders, Parasites, Tick-borne Illness