

## **Sugar (Blood Glucose)**

### **Youngsters (under 60 years):**

- **Fasting:** 70-99 mg/dL
- **After Meal (Postprandial):** 70-139 mg/dL

### **Elders (60 years and above):**

- **Fasting:** 80-130 mg/dL
- **After Meal (Postprandial):** 80-180 mg/dL

### **Impacts:**

- **Low (Hypoglycemia):** Shaking, sweating, confusion, dizziness, and in severe cases, loss of consciousness.
- **High (Hyperglycemia):** Increased thirst, frequent urination, fatigue, blurred vision, and risk of diabetes complications over time.

## **Platelets Count**

### **All Ages:**

- **150,000 - 450,000 cells/ $\mu$ L**

### **Impacts:**

- **Low (Thrombocytopenia):** Increased risk of bleeding and bruising.
- **High (Thrombocytosis):** Increased risk of blood clots, which can lead to stroke or heart attack.

## **Neutrophils**

### **Youngsters:**

- **40-70% of total white blood cells**

### **Elders:**

- **40-70% of total white blood cells**

### **Impacts:**

- **Low (Neutropenia):** Increased risk of infections.
- **High (Neutrophilia):** Possible indication of bacterial infection, inflammation, or other medical conditions.

## **Lymphocytes**

### **Youngsters:**

- **20-40% of total white blood cells**

### **Elders:**

- **20-40% of total white blood cells**

### **Impacts:**

- **Low (Lymphocytopenia):** Increased risk of infections.
- **High (Lymphocytosis):** Possible indication of viral infection or certain types of leukemia.

## **Eosinophils**

### **Youngsters:**

- **1-4% of total white blood cells**

### **Elders:**

- **1-4% of total white blood cells**

### **Impacts:**

- **Low:** Usually not significant.
- **High (Eosinophilia):** Possible indication of allergies, parasitic infections, or autoimmune diseases.

## **Monocytes**

### **Youngsters:**

- **2-8% of total white blood cells**

### **Elders:**

- **2-8% of total white blood cells**

### **Impacts:**

- **Low:** Usually not significant.

- **High (Monocytosis):** Possible indication of chronic infections, autoimmune disorders, or certain types of leukemia.

## **Basophils**

### **Youngsters:**

- **0.5-1% of total white blood cells**

### **Elders:**

- **0.5-1% of total white blood cells**

### **Impacts:**

- **Low:** Usually not significant.
- **High (Basophilia):** Possible indication of allergies, inflammation, or certain blood disorders.

## **ESR (Erythrocyte Sedimentation Rate)**

### **Youngsters:**

- **0-20 mm/hr**

### **Elders:**

- **0-30 mm/hr**

### **Impacts:**

- **Low:** Usually not significant.
- **High:** Possible indication of inflammation, infection, or autoimmune disorders.

## **Hemoglobin**

### **Youngsters:**

- **Male:** 13.8-17.2 g/dL
- **Female:** 12.1-15.1 g/dL

### **Elders:**

- **Male:** 12.5-17.0 g/dL
- **Female:** 11.5-16.0 g/dL

**Impacts:**

- **Low (Anemia):** Fatigue, weakness, shortness of breath.
- **High (Polycythemia):** Increased risk of blood clots, which can lead to stroke or heart attack.

**RBC Count (Red Blood Cell Count)****Youngsters:**

- **Male:** 4.7-6.1 million cells/ $\mu$ L
- **Female:** 4.2-5.4 million cells/ $\mu$ L

**Elders:**

- **Male:** 4.5-6.0 million cells/ $\mu$ L
- **Female:** 4.0-5.3 million cells/ $\mu$ L

**Impacts:**

- **Low (Anemia):** Fatigue, weakness, shortness of breath.
- **High (Polycythemia):** Increased risk of blood clots, which can lead to stroke or heart attack.

**Hematocrit****Youngsters:**

- **Male:** 40.7-50.3%
- **Female:** 36.1-44.3%

**Elders:**

- **Male:** 38.0-50.0%
- **Female:** 35.0-46.0%

**Impacts:**

- **Low (Anemia):** Fatigue, weakness, shortness of breath.
- **High (Polycythemia):** Increased risk of blood clots, which can lead to stroke or heart attack.

These ranges and impacts should be considered general guidelines. Always consult a healthcare provider for personal medical advice.