

# BLOOD



## Functions

- delivers O<sub>2</sub> throughout the body
- transports nutrients absorbed by the GI tract
- protects the body from infection
- maintains body temperature and chemical balance

Instagram @home\_of\_medico

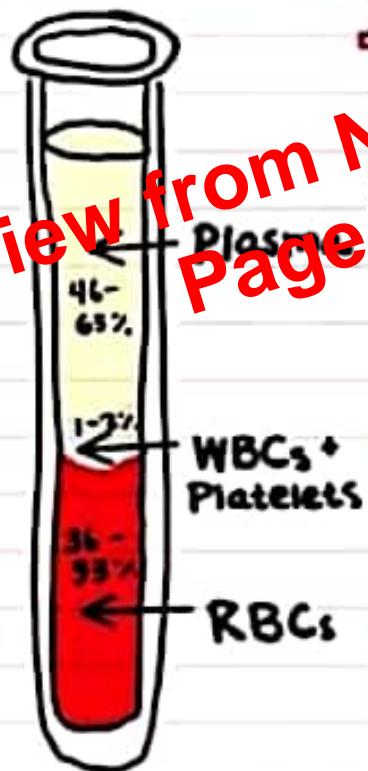
## Contents of Blood

PLASMA

- Water
- Albumin
- Globulins
- Fibrinogen
- Hormones
- Nutrients & wastes

FORMED ELEMENTS

- Erythrocytes (RBCs)
- Leukocytes (WBCs)
- Platelets



## Blood Clotting

### Extrinsic Pathway

↳ triggered by an outside trauma

### Intrinsic Pathway

↳ triggered by damage to the internal vessel wall

### Common Pathway

↳ both extrinsic/intrinsic lead to the common path.

**Albumin** - most abundant, transports acids + steroid hormones, affects BP + blood VOl.

**Globulins** - alpha, beta + gamma. transport iron, lipids + Vit. ADKE

**Fibrinogen** - produced by the liver, essential for blood clotting

**Leukocytes (WBCs)** - protect the body from external threats

**Erythrocytes (RBCs)** - transports O<sub>2</sub> and CO<sub>2</sub> between tissues & lungs. They live about 120 days

Hematocrit = % of Red Blood Cells

WBCs → 4.5 - 11 10<sup>9</sup>/L

Packed Cell Volume = volume of RBCs

RBCs → 3.5 - 5.5 10<sup>12</sup>/L

Platelets → 150 - 450 10<sup>9</sup>/L