

BLOOD



Functions

- delivers O_2 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

- Water
- Albumin
- Globulins
- Fibrinogen
- Hormones
- Nutrients + Wastes

- 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, transport fatty 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_2 and CO_2 between tissues & lungs. They live about 20 days

Hematocrit = % of Red Blood Cells

WBCs → $4.5 - 11 \times 10^9/L$

Packed Cell Volume = Volume of RBCs

RBCs → $3.5 - 5.5 \times 10^6/\mu L$

Platelets → $150 - 450 \times 10^3/\mu L$