

University of Mysore

Department of Studies in Genetics and Genomics



Manasagangothri, Mysuru, Karnataka

World Blood Donor Day, 14th June 2022

Blood is body circulatory fluid that helps in transportation of necessary substance such as nutrients, oxygen, hormones and metabolic waste products. Average human body contains 5 Litres of blood.





Blood consists of Plasma, red blood cells, white blood cells and platelets. Plasma cells secrete antibodies that fight infections, RBC helps in delivering of oxygen, WBC assists to fight invading bacteria and viruses and Platelets aid in formation of clots.

Haematopoiesis is the process of formation of blood cells and occurs in bone marrow. The average life span of RBC and WBC cells is 115 and 10 - 15 days respectively.



The first voluntary blood donation in India was initiated in 1942 in Kolkata during the world war II. Currently, India has 2760 blood banks out of which 211 is present in Karnataka.

Elucidation of Blood Donation

- Why should people donate blood?
 Blood Saves lives. Blood is needed by accident victims, anaemic and surgery patients, pregnant women and cancer patients.
- 2) How much Blood will be taken? Will I have enough? The volume of blood taken will be approx. 450 ml, which is less than 10% of the total blood. Blood will be restored after 36 hours.
- 3) Is donating blood safe?
 Yes. The needle and blood bag used for collection come in sterile packs so the process is safe.
- 4) Who can donate blood? Age group between 18 – 75 are eligible to donate blood, if don't suffer from infection that transmitted through blood.
- 5) How often can I donate blood? Healthy adults can donate blood at least twice a year.
- 6) Who should not donate blood? People who are unwell, anaemic, pregnant, breastfeeding, under any medications and have sexually transmitted disease should not donate blood. Also, if you recently had a tattoo, body piercing or injected any recreational drugs shouldn't donate blood.
- 7) What are the benefits of blood donation? Donating blood has benefits for your physical and emotional health. It can help to reduce stress, improve mental health and reduce the risk of cardio vascular diseases.
- How long will the process take?
 Blood donation usually takes 20 30mins.

References

