

Distinguish, differentiate, compare and explain what is the difference between Blood and Lymph. Comparison and Differences.

Blood is a special connective tissue consisting of a fluid matrix, plasma, and formed elements. As the blood passes through the capillaries in tissues, some water along with many small water soluble substances move out into the spaces between the cells of tissues leaving the larger proteins and most of the formed elements in the blood vessels. This fluid released out is called the interstitial fluid or tissue fluid. It has the same mineral distribution as that in plasma. Exchange of nutrients, gases, etc., between the blood and the cells always occur through this fluid. An elaborate network of vessels called the lymphatic system collects this fluid and drains it back to the major veins. The fluid present in the lymphatic system is called the lymph.

Lymph is a colorless fluid containing specialized lymphocytes which are responsible for the immune responses of the body. Lymph is also an important carrier for nutrients, hormones, etc. Fats are absorbed through lymph in the lacteals present in the intestinal villi.

Difference between Blood and Lymph

S.No.	Blood	Lymph
1	Blood consists of plasma, erythrocytes, leukocytes, and platelets.	Lymph consists of plasma and leukocytes (lymphocytes most abundant).
2	Red in color due to the presence of hemoglobin in erythrocytes.	Colorless as hemoglobin is absent.
3	Bloods plasma has more proteins, calcium and phosphorus.	Lymph plasma has fewer proteins and less calcium and phosphorus.
4	It carries materials towards and away from the tissue, therefore, it acts as a "vehicle".	It transfers materials from the blood to the body cells and vice-versa, therefore, it acts as a middle man.
5	Has bidirectional flow.	Has unidirectional flow.
6	Flow is rapid.	Flow is slow.
7	Platelets are present.	Platelets are absent.