Blood circulation

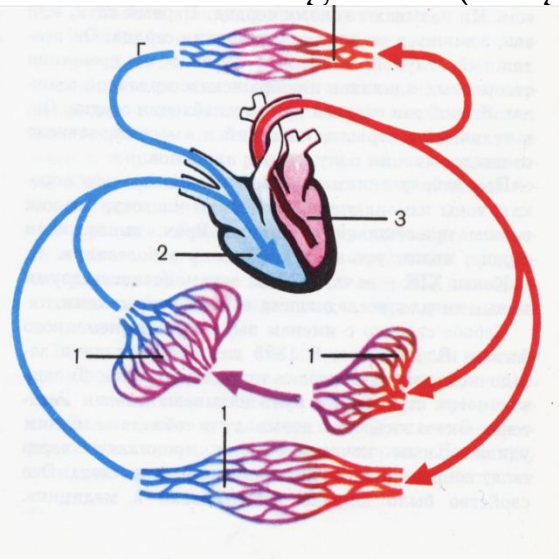
Done by: Askarbekov Maksat
Check by: Kaskenova B.R.
Group : 209 - ‘A’

Active words

Blood	Atrium
Circulation	Auricle
Cardiovascular	Ventricle
Heart	Valve
Artery	Aorta
Vein	Pump
Capillary	Nourish
Thorax	Vessel

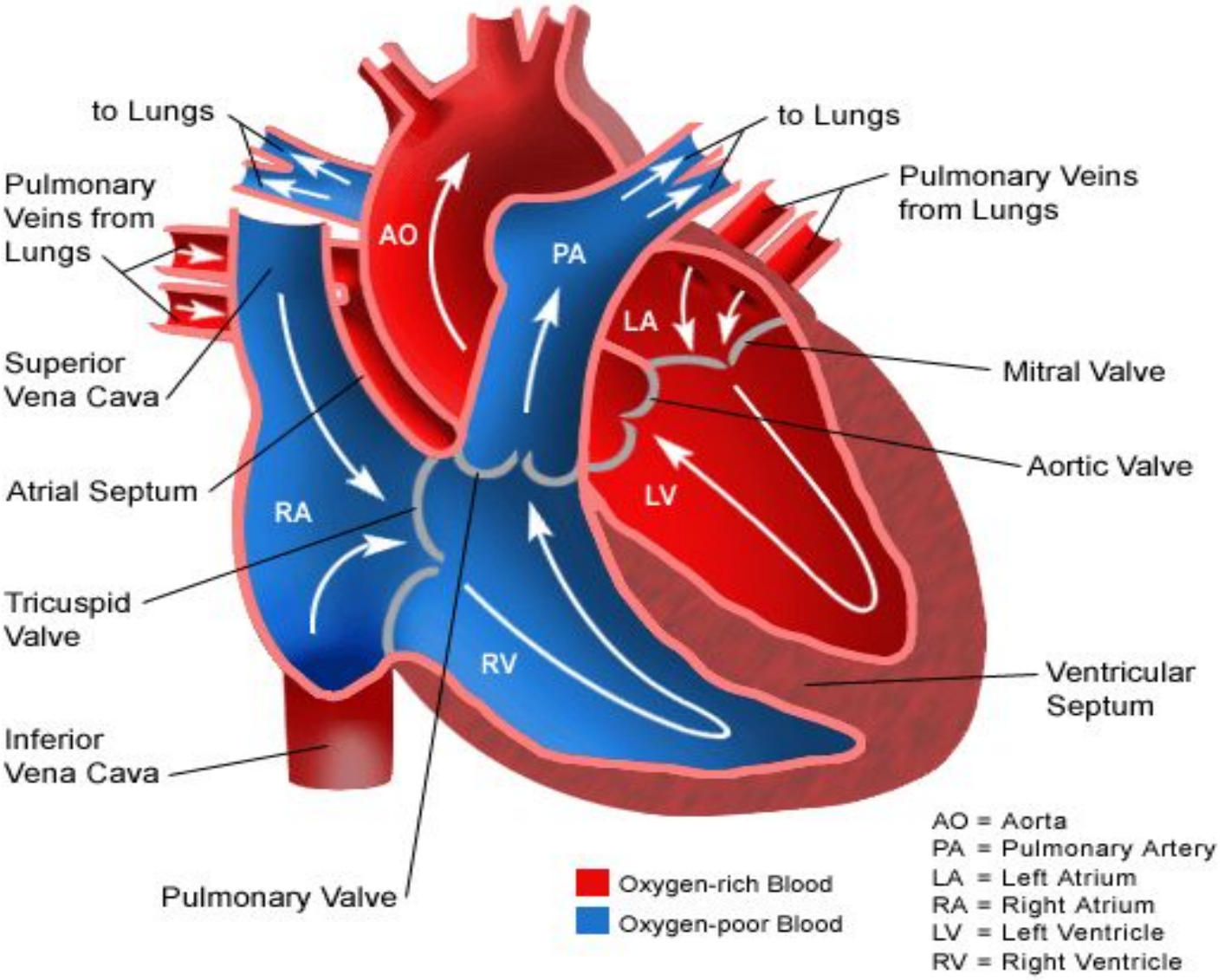
- **Blood circulation** is a movement of blood on the closed cardiovascular system, providing an exchange of gases in lungs and tissues of a body. The system of blood circulation consists of heart and the blood vessels.

- Besides providing fabrics and bodies oxygen and removals from them of carbonic acid, blood circulation delivers nutrients, water to cages, salts, vitamins, hormones and deletes the final products of a metabolism, and also maintains constancy of body temperature, provides humoral regulation and interrelation of bodies and systems of bodies in an organism.
- Blood circulation begins in fabrics where the metabolism through walls of capillaries is made. The blood which has given oxygen to bodies and fabrics, arrives in the right half of heart and the blood circulation circle where blood is sated with oxygen goes them in small (pulmonary), comes back to heart, arriving in its left half, and again is carried on all organism (a big circle of blood circulation).

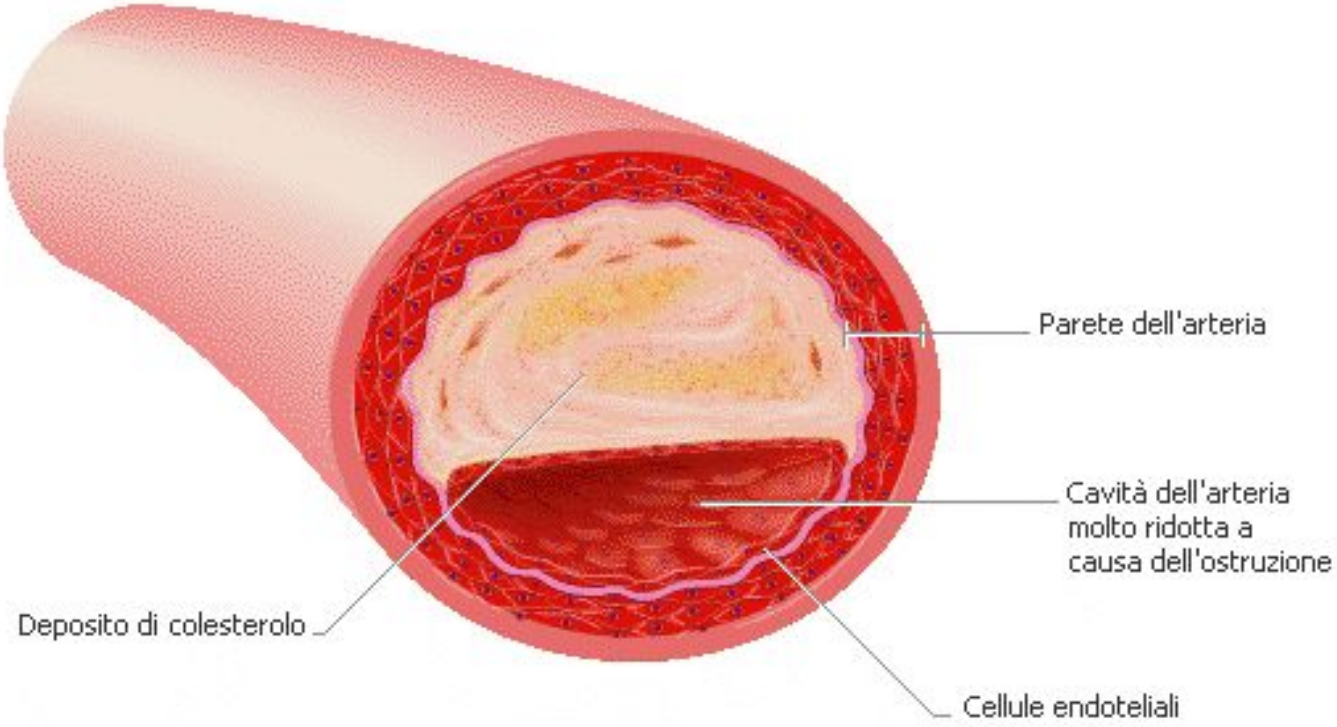


- **Heart** – is the centre of the circulatory system. The human heart is a cone-shaped organ, about 5 inches long and 3 ½ inches board. It weighs about 285 g in the adult male, 170 g in the female. The heart is a hollow muscle which has four chambers.
- The right heart consists of an upper chamber, the atrium or the auricle and a lower chamber, the ventricle. Between these two chambers is one-way valve, the tricuspid valve. The right heart receives blood from the veins and pumps it into the lungs by way of the lesser circulatory system.
- The left heart has two chambers, but the valve that separates its chambers we call the mitral valve. From the left heart the well-oxygenated blood moves into a large artery, the aorta.

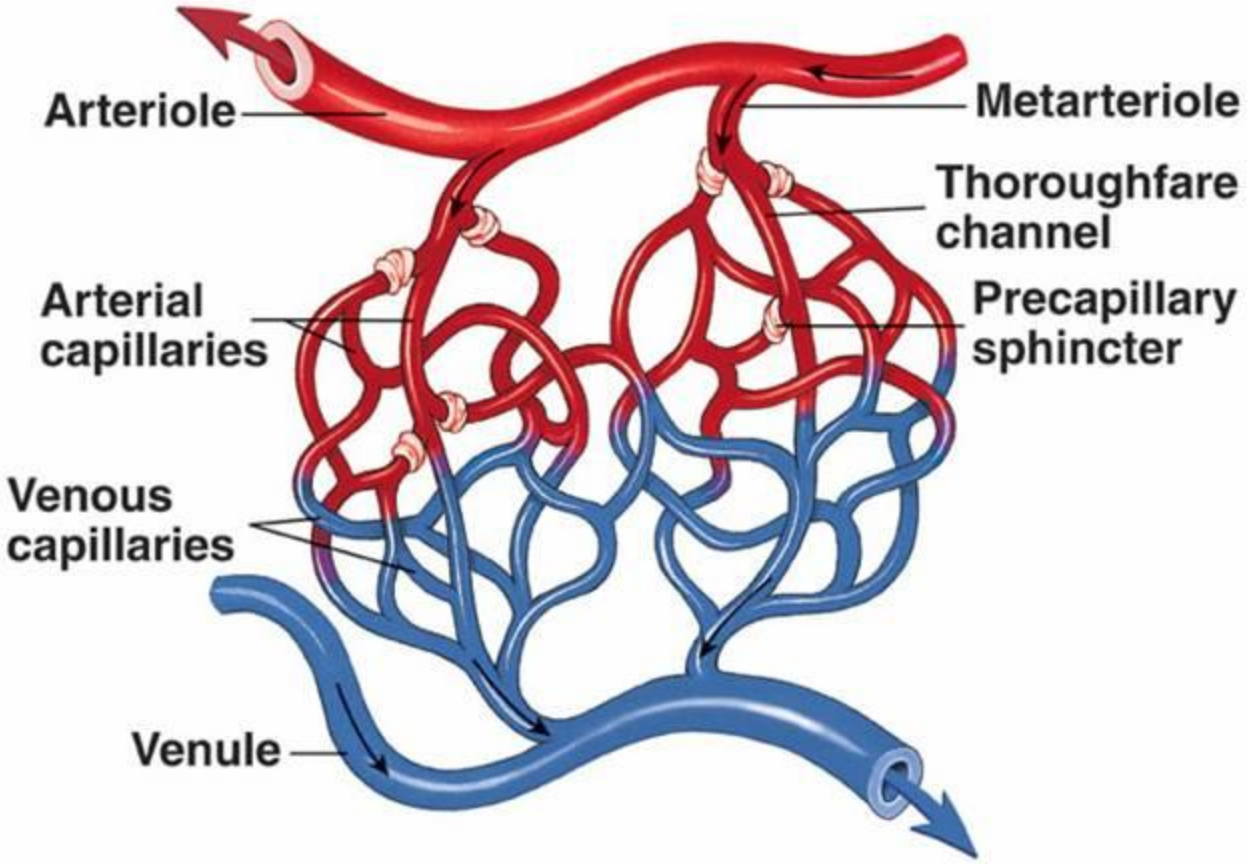
Normal Heart



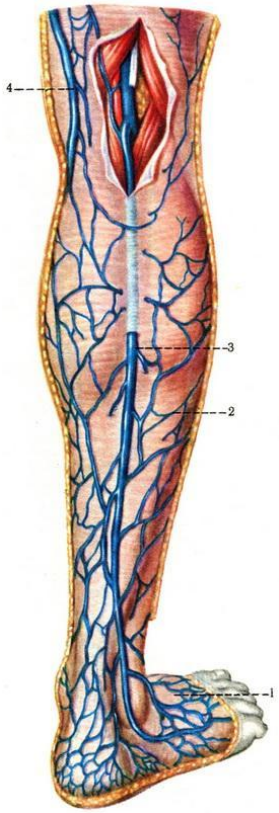
- **Arteries** - the blood vessels bearing blood enriched with oxygen from heart to bodies and fabrics.
- The wall of an artery is presented by three layers: external cover; average, consisting from the elastic fibers and smooth muscles; internal, educated endotely and connecting fabric.
- Diameter of arteries fluctuates is 0,4 - 2,5 cm. The total amount of blood in arterial system averages 950 ml.
- The aorta is the largest artery in the body.



- **Capillaries** (from armor. “capillus" - a hair) - the smallest vessels (average diameter doesn't exceed 0,005 mm, or 5 microns) of cardiovascular system. The capillaries form a close network all over the body. The walls of the capillaries are so thin that the dissolved nourishment that has come from the digestive system and the oxygen that has come from the lungs can pass through them into the tissues of the body and so nourish it.



- **Veins** - the blood vessels are bearing sated carbon dioxide, metabolism products, hormones and other substances of blood from organs to the heart.Blood volume in venous system averages 3200 ml. The pulmonary vein carries the freshly oxygenated blood to the left auricle. The pulmonary vein and pulmonary artery make up the pulmonary circulation.



Translate in English

1. Сердечно-сосудистая система включает сердце, артерии, вены и капилляры.
2. Кровь возвращается к сердцу по венам.
3. Правая и левая части сердца состоят из двух камер: предсердия и желудочка.
4. Стенки капилляров такие тонкие, что питательные вещества проходят через них в ткани.
5. Аорта – самая большая артерия тела человека.

Thank you for your attention