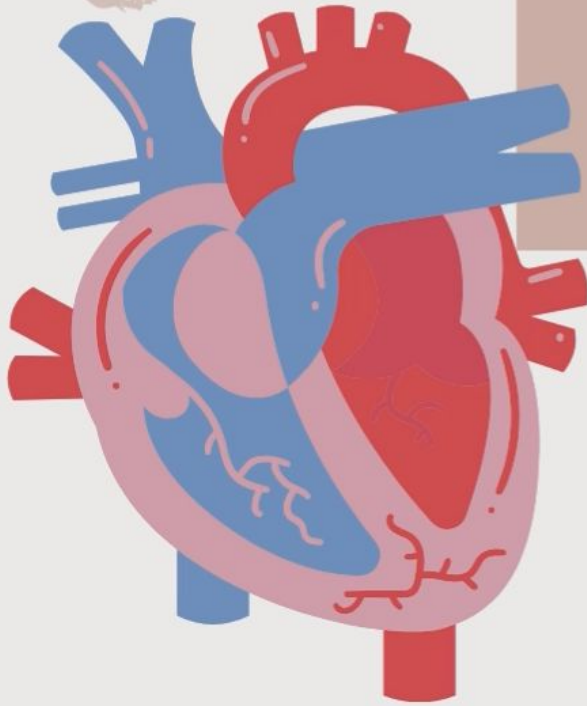


BLOOD CIRCULATION



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INTRODUCTION

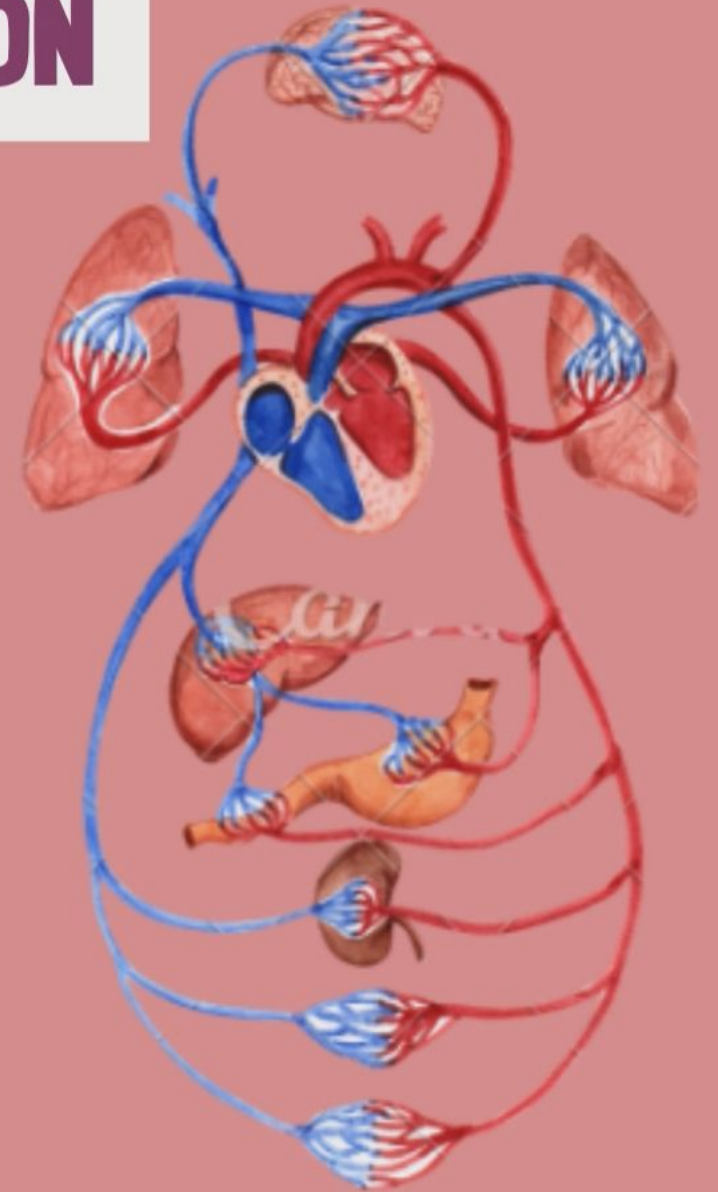


Blood circulation is a vital physiological process that ensures the continuous movement of blood throughout the body. This complex system is responsible for transporting oxygen, nutrients, hormones, and immune cells to various tissues, while simultaneously removing waste products like carbon dioxide and metabolic byproducts.



WHAT IS THE BLOOD CIRCULATION

The circulatory system consists of the heart, blood vessels (arteries, veins, and capillaries), and blood itself. It operates in two primary circuits: systemic circulation, which delivers oxygenated blood to the body, and pulmonary circulation, which facilitates the exchange of gases in the lungs.



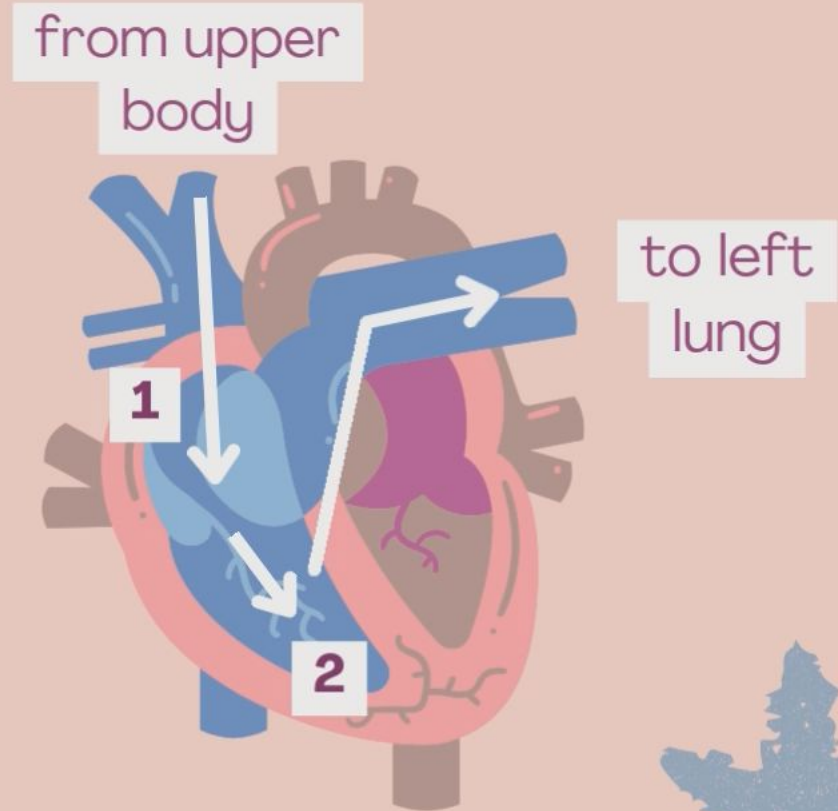
PULMONARY CIRCULATION

1

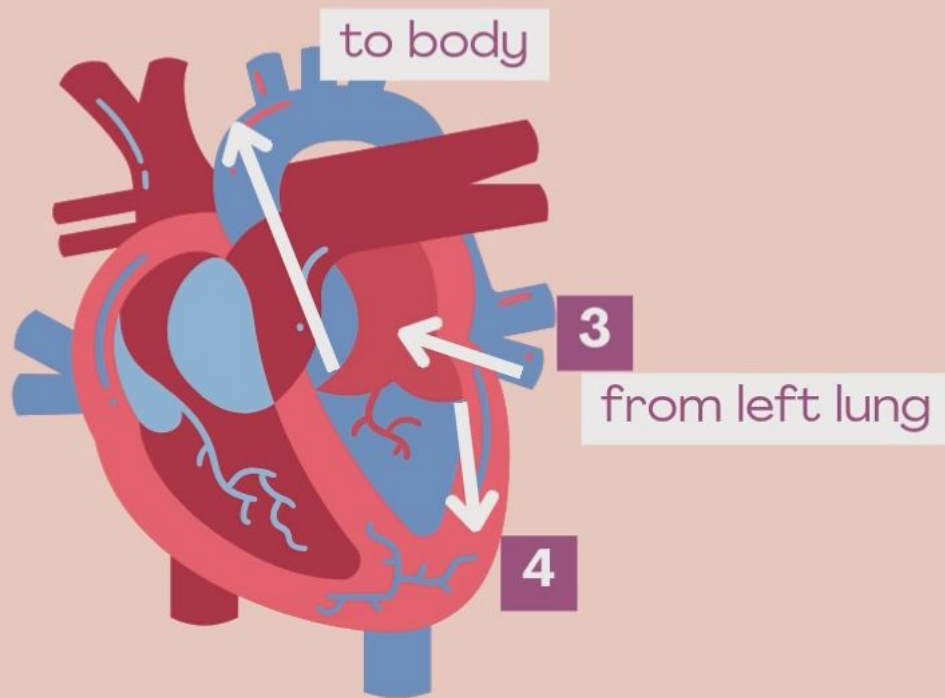
The pulmonary artery carries deoxygenated blood from the heart to the lungs, where it picks up oxygen and releases carbon dioxide.

2

The oxygenated blood then returns to the heart through the pulmonary veins



SYSTEMIC CIRCULATION



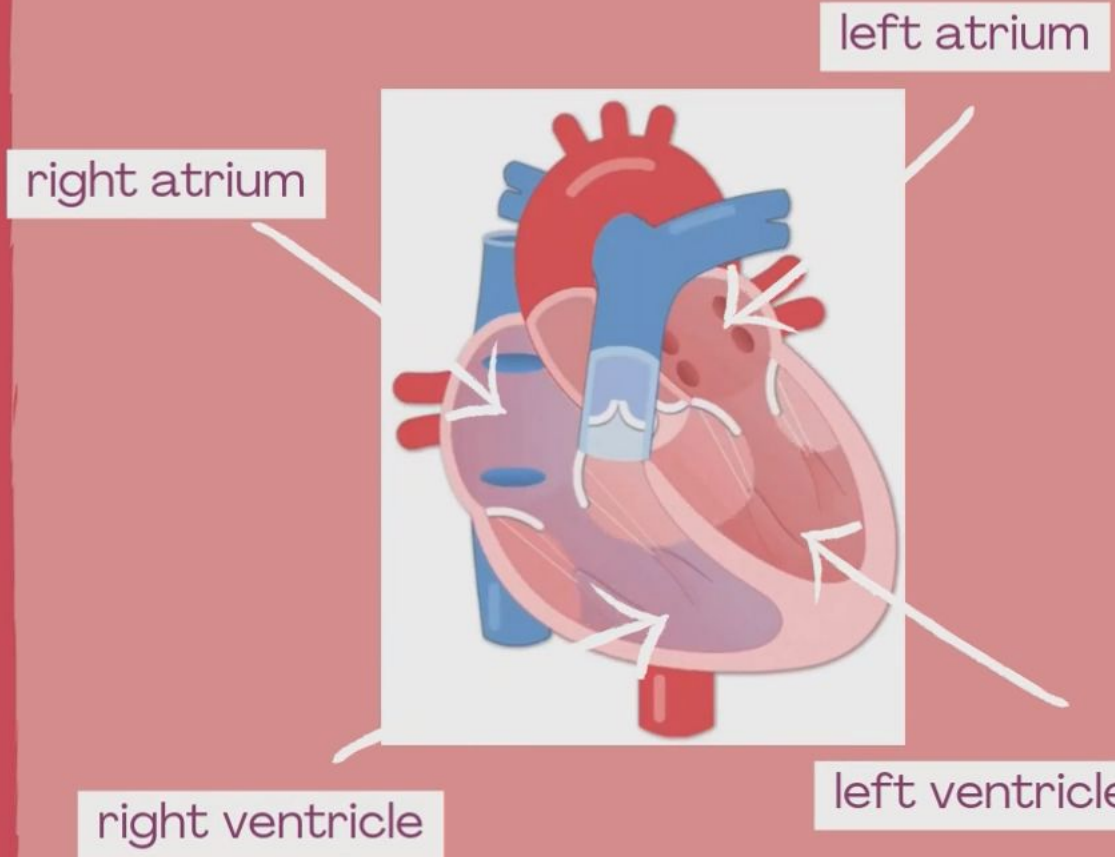
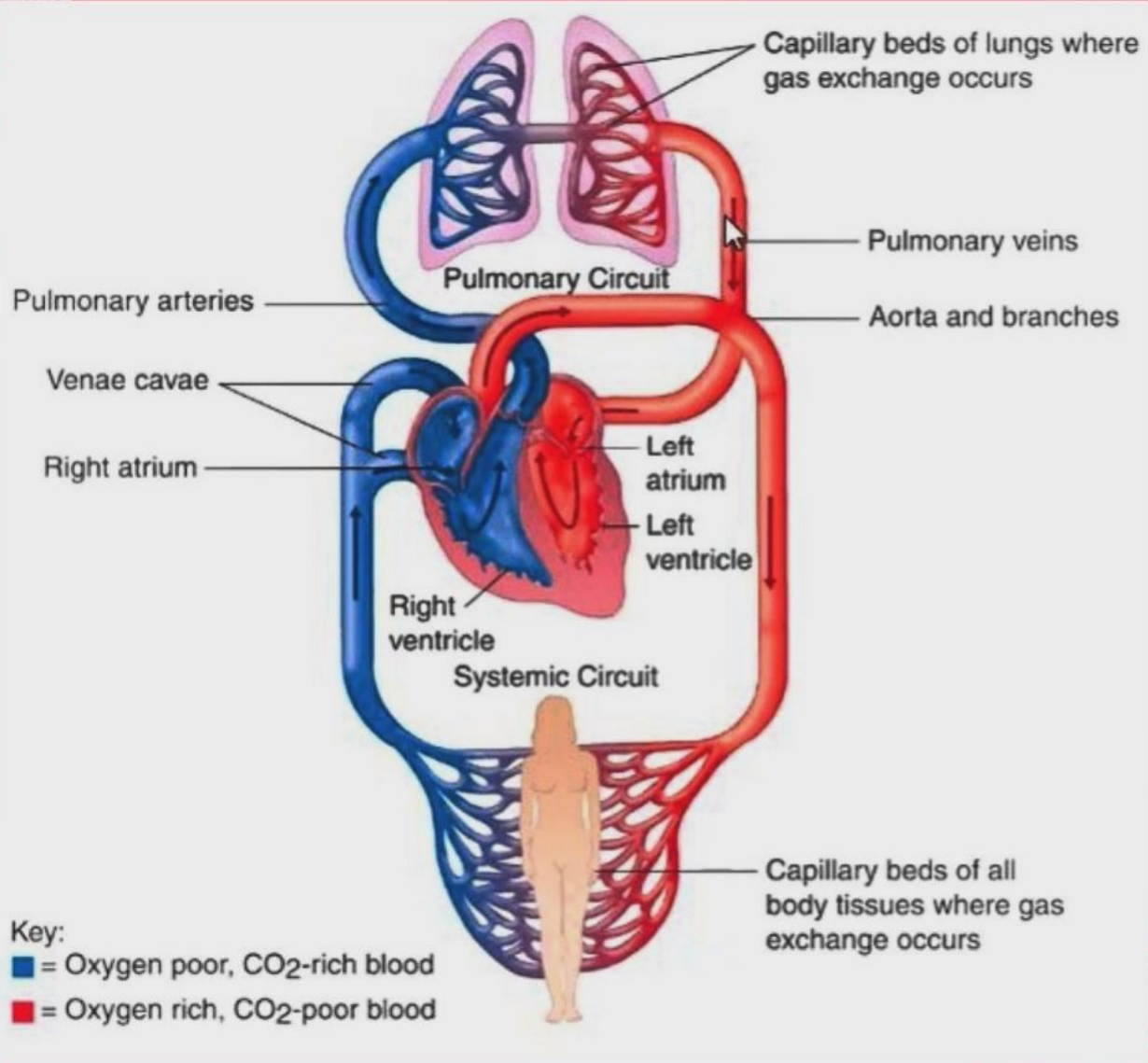
3

Oxygen-rich blood returns to the heart and is pumped out through the aorta,

4

which distributes it to the body and the heart muscles via its branches.

STRUCTURE

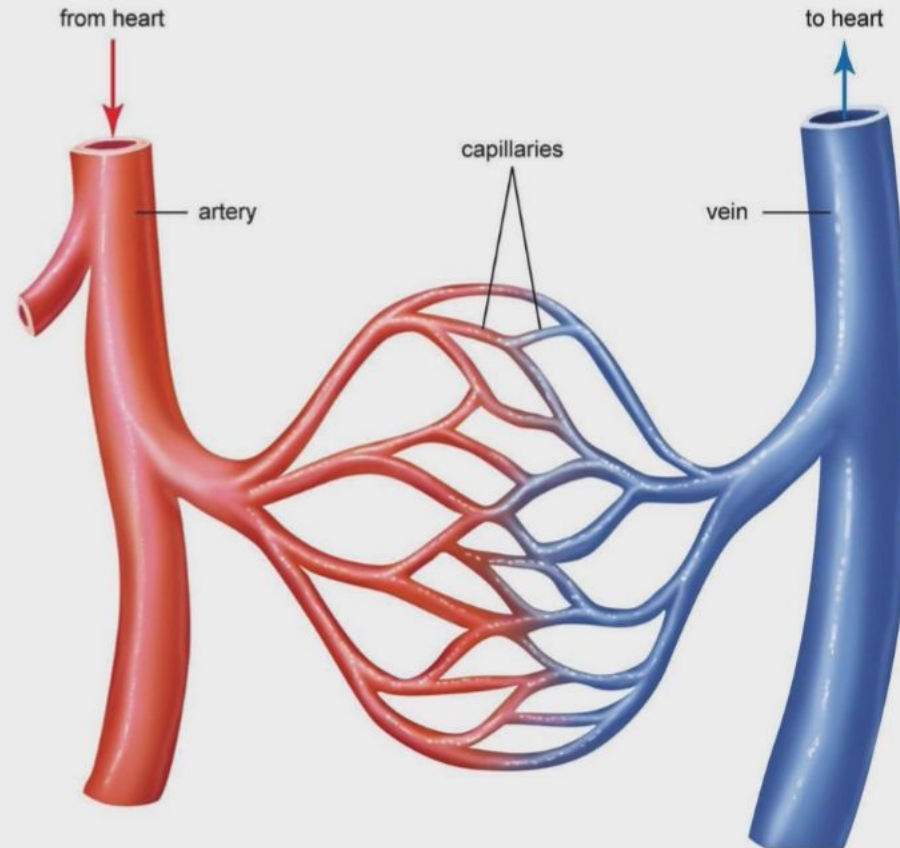


Difference Between



Artery

- They transport **oxygenated** blood
- They have thick walls.
- Blood moves with high pressure.
- Do not have valves
- Carries blood away from the heart



Vein

- They carry **deoxygenated** blood
- They have thin walls
- Blood is not under high pressure
- valves are present
- Carries blood back towards the heart

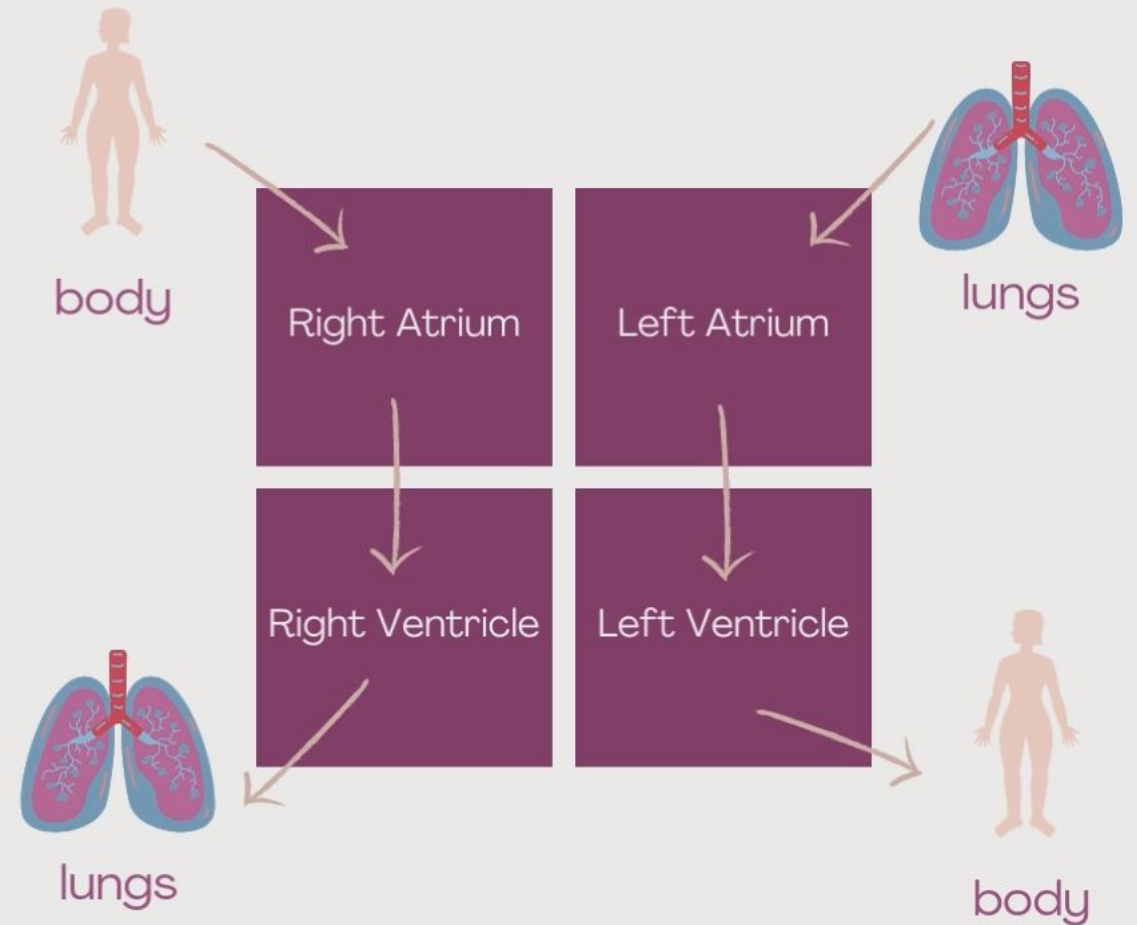


TIP

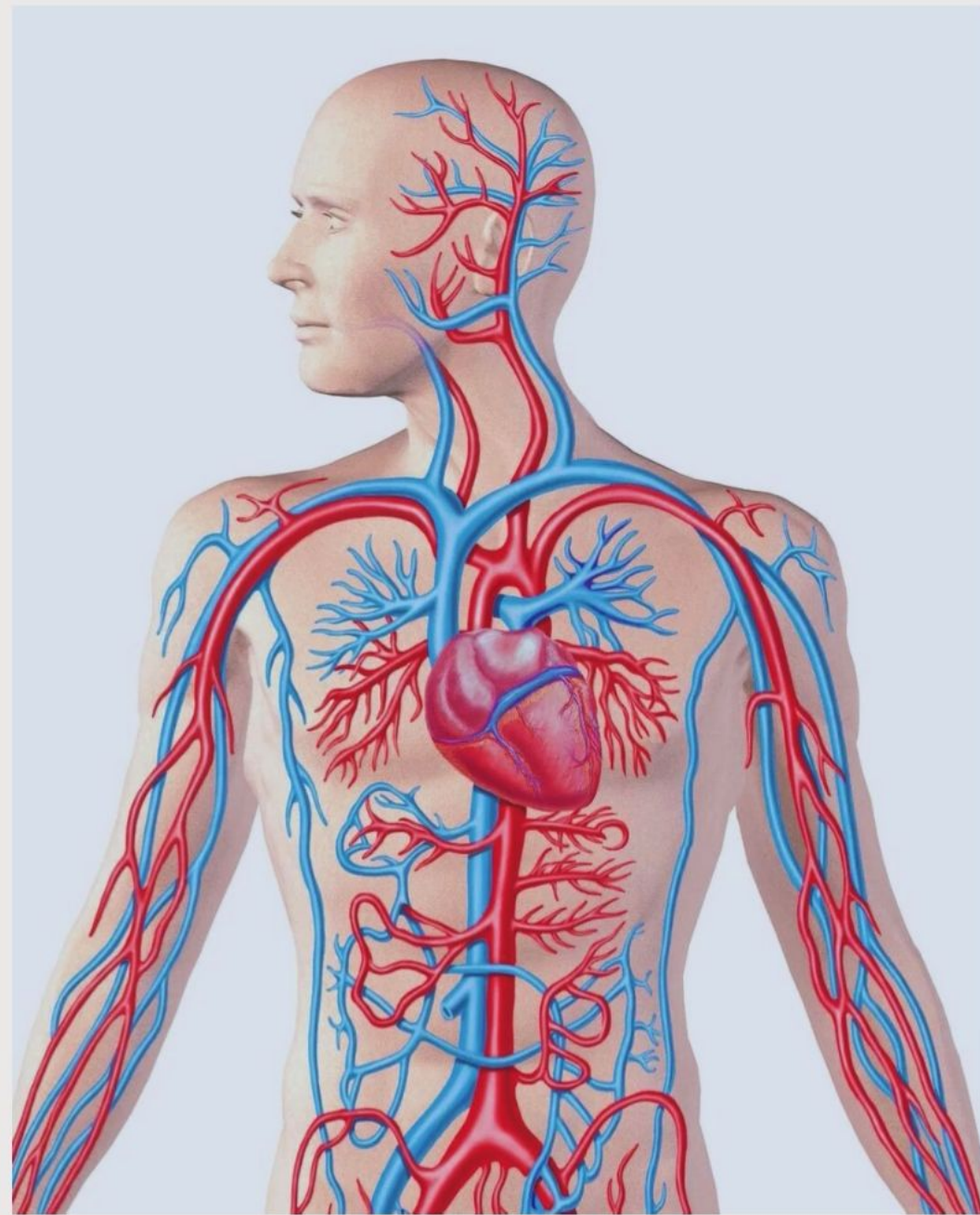
Remember 'A' for 'artery' and 'away' from the heart!

REGULATION OF BLOOD FLOW IN THE CIRCULATION

- Blood flow regulation is achieved by adjusting the contraction or relaxation of smooth muscle in arterioles and capillaries.
- This control can be systemic or localized to specific tissues or organs.
- Arterioles play a key role in local control due to their position in tissues and ability to vasodilate or vasoconstrict to influence blood flow.



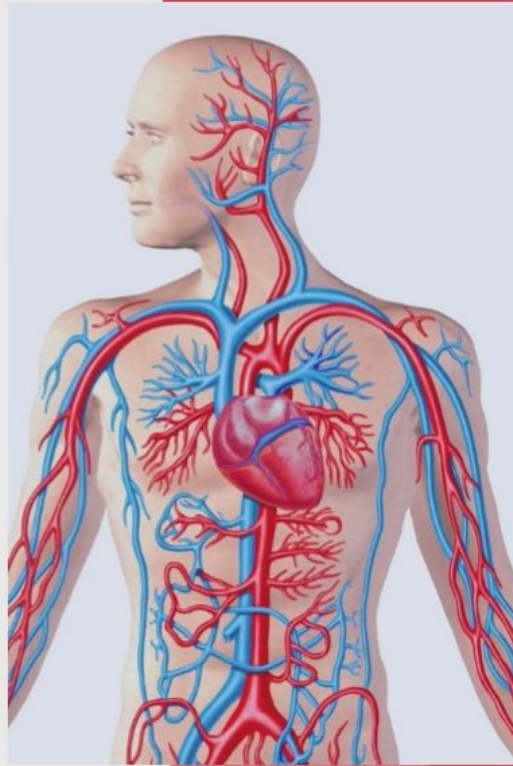
**HEALTHY
BLOOD
CIRCULATION !**



-Stress releases adrenaline, a hormone that causes The heart rate to speed up and your blood pressure to rise

Reducing stress can be done through meditation.

-Eating healthy food rich in vit C and contains high levels of antioxidants helps to keep the lining of the arteries strong

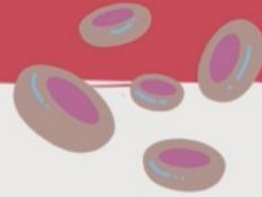


-High blood pressure can damage your arteries by making them less elastic. This decreases the flow of blood and oxygen to your heart and leads to heart disease

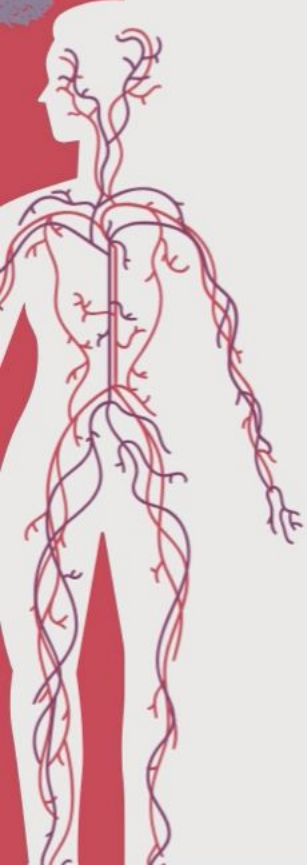
-Increasing your cardio exercise, such as running, cycling, or walking, can help boost your circulation.

A RECAP

The circulatory system delivers oxygen and nutrients to the body, while also removing wastes.



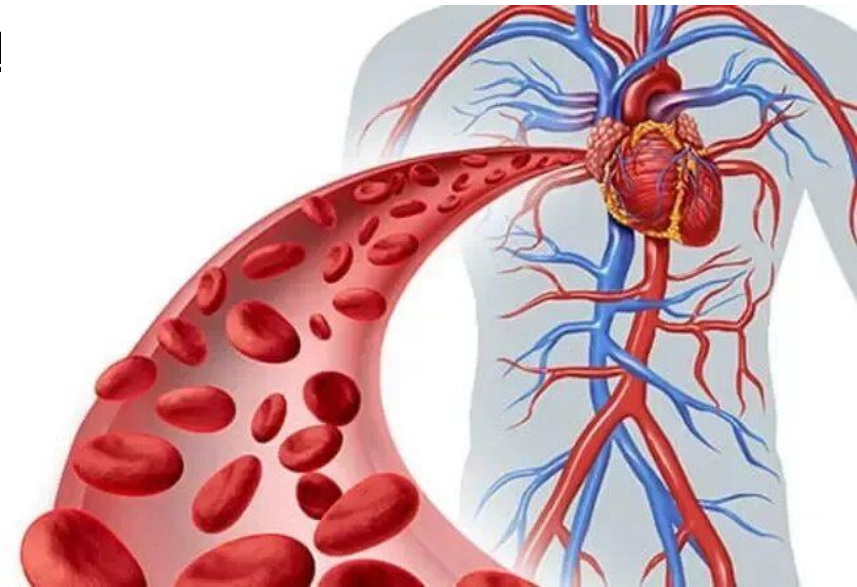
In this presentation we talked about the blood circulation is vital and it is have two important parts pulmonary circulation and systemic circulation , regulation of blood flow managed by adjusting and in the end talking about how to maintain a healthy blood circulation

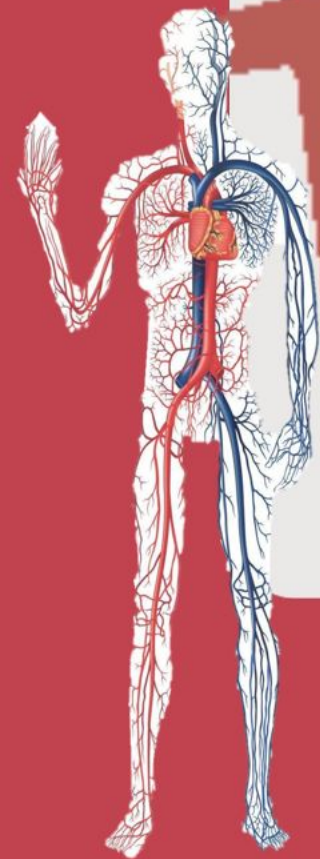


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THANK YOU