

The Circulatory System

Biology

Double circulation, vessel structure, and why each vessel is built as it is.

Vessel structure against function.

Vessel	Structure	Why
Artery	Thick muscular and elastic wall, narrow lumen	High pressure; smooths the pulse
Arteriole	Muscular, adjustable	Controls distribution
Capillary	One cell thick	Exchange
Venule	Thin	Collects
Vein	Thin wall, wide lumen, valves	Low pressure; prevents backflow

Double circulation means blood passes through the heart twice per circuit, which keeps systemic pressure high.