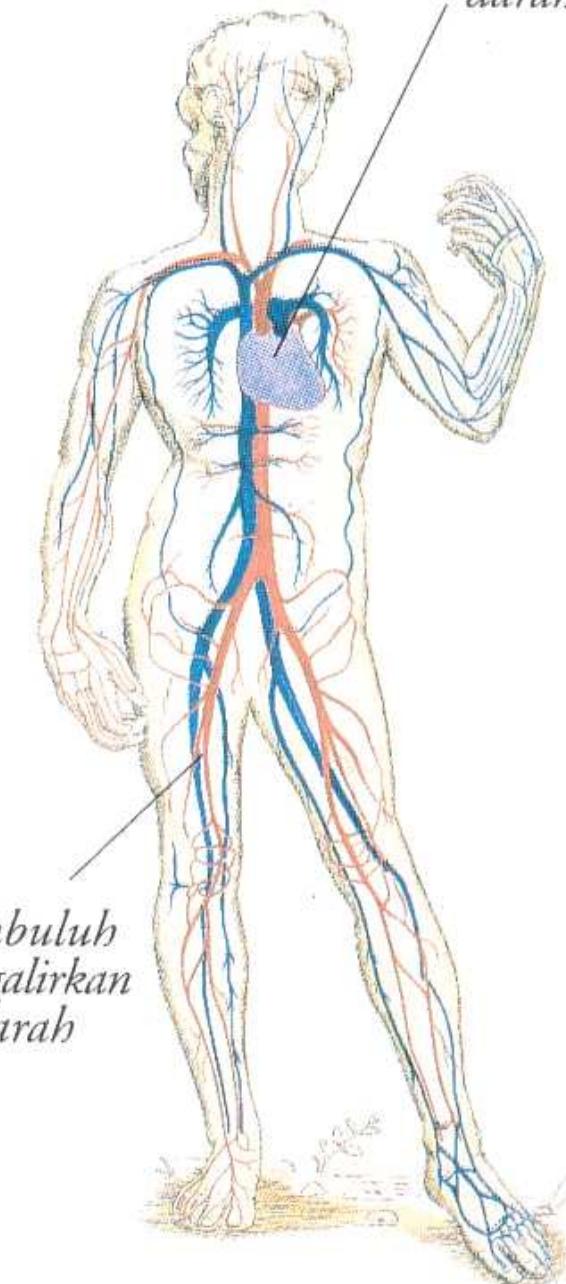


SISTEM PEREDARAN DARAH

Ana Ratna Wulan/UPI
Bahan Kuliah Kapsel
Biologi



*Jantung
memompa
darah*

*Pembuluh
mengalirkan
darah*

SISTEM PEREDARAN DARAH/ KARDIOVASKULER

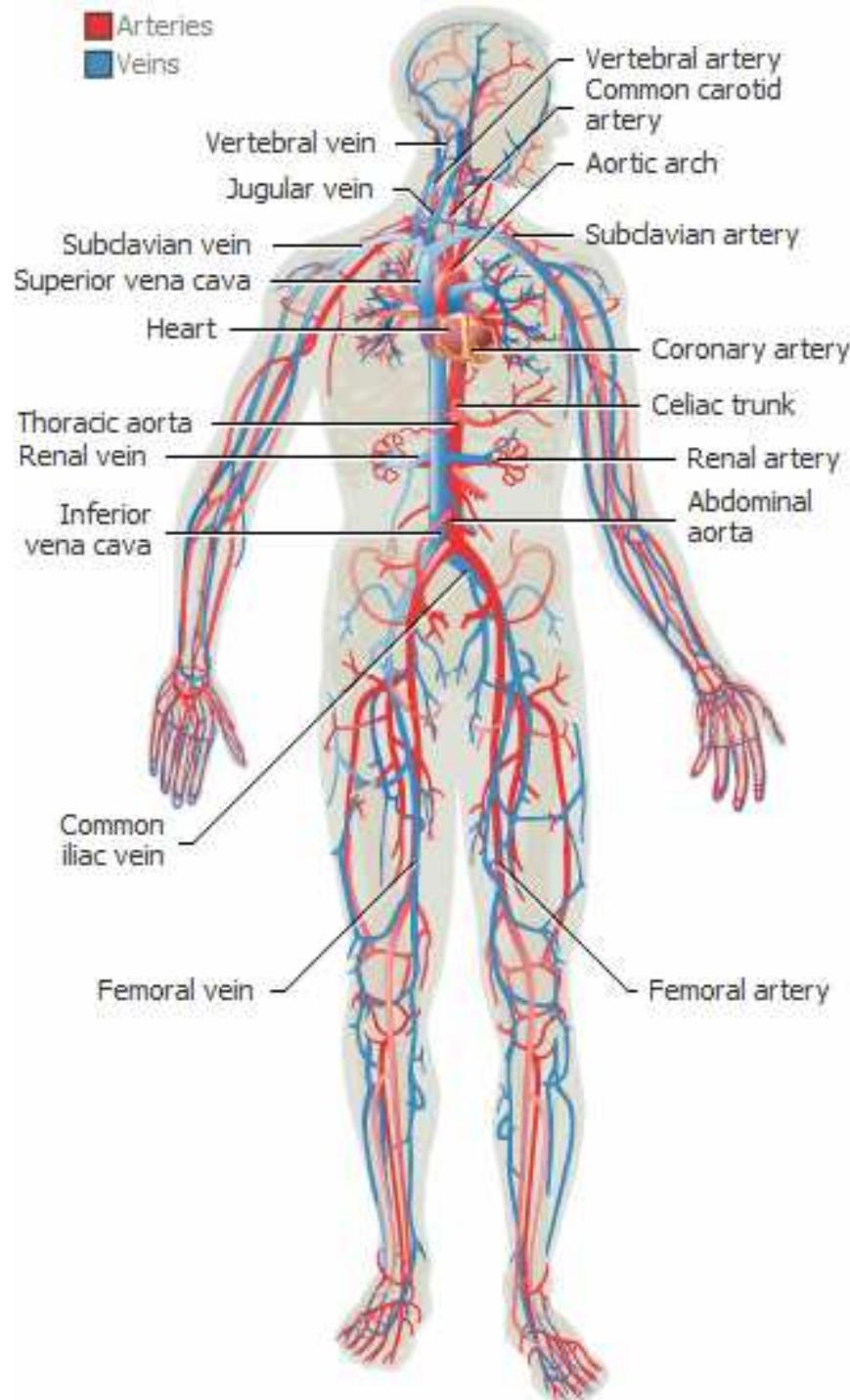
SISTEM KARDIOVASKULER :

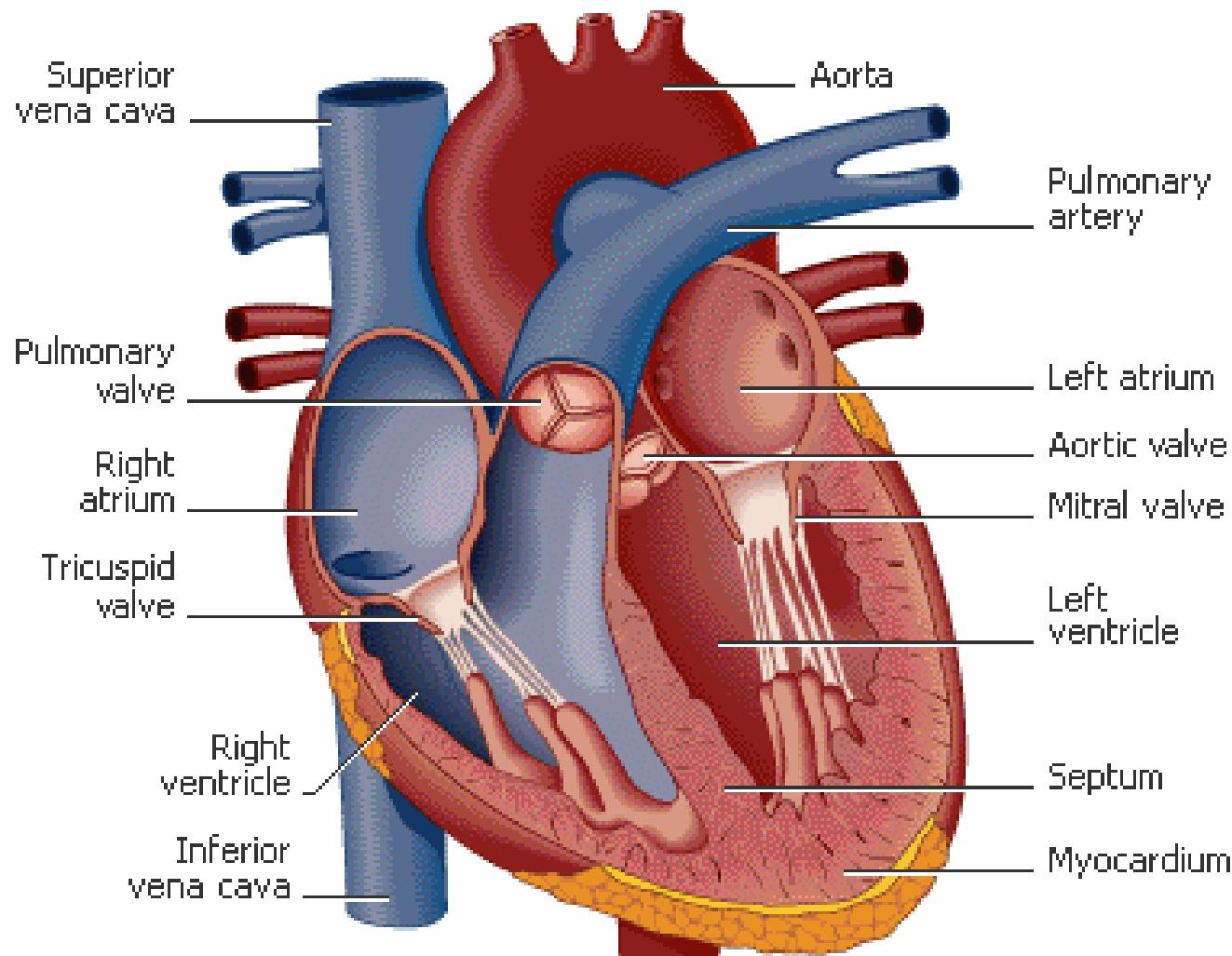
1. Jantung
2. Darah
3. Pembuluh darah

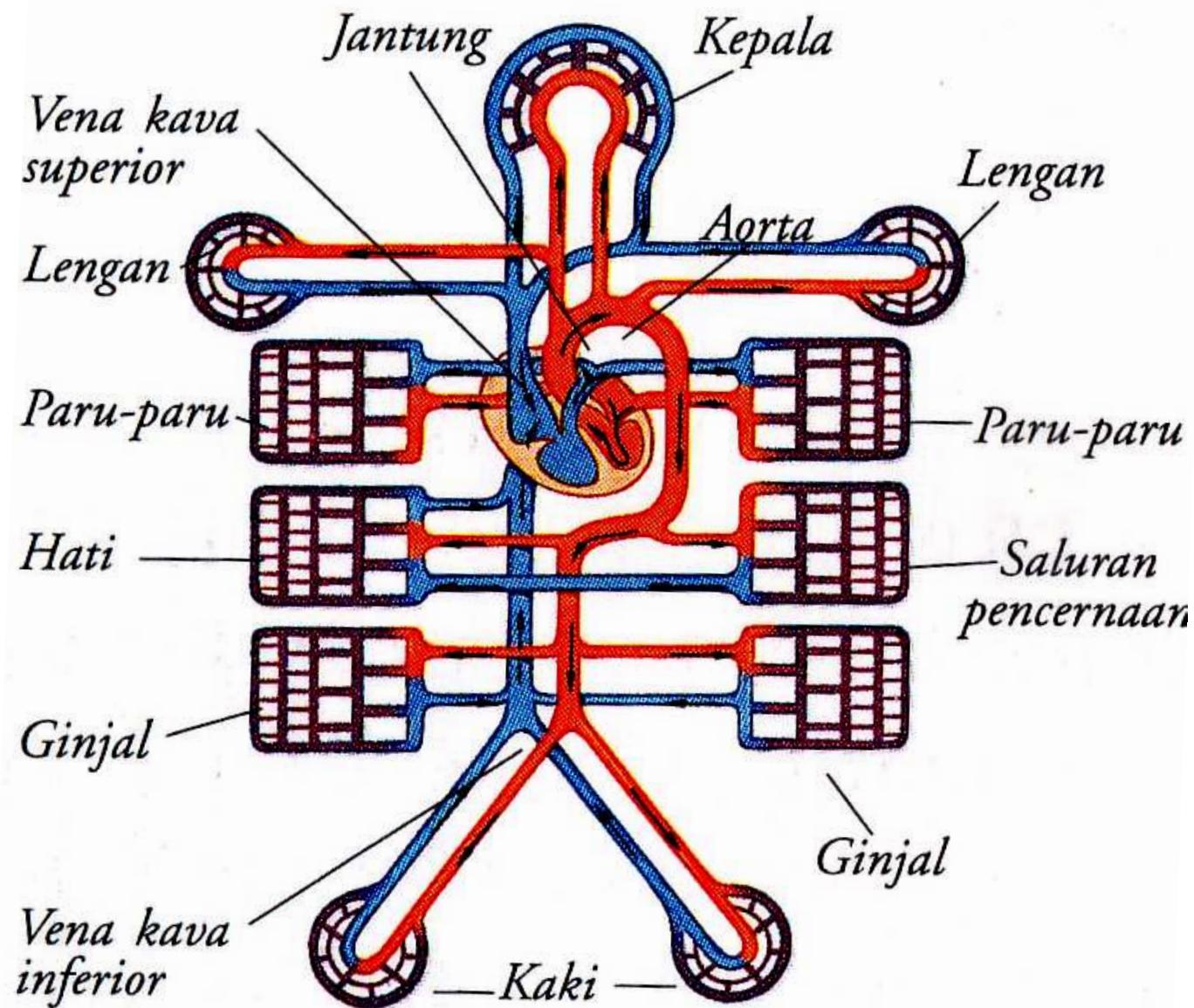
Sistem sirkulasi mengandung 150.000 km pembuluh darah

FUNGSI SISTEM PEREDARAN DARAH

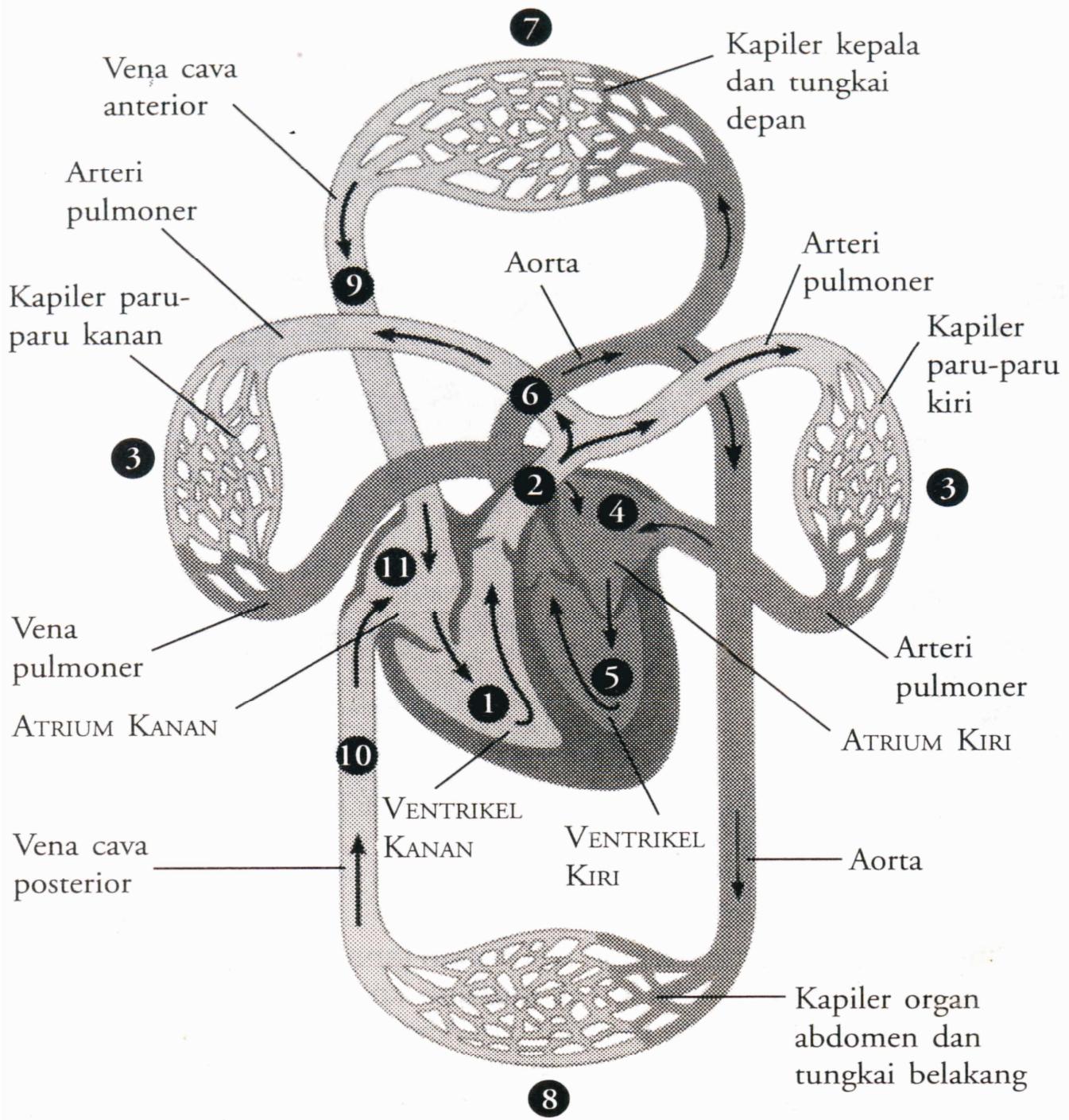
- Mengedarkan oksigen, nutrisi, dan zat kimia pengatur proses tubuh
- Membuang limbah dan karbondioksida

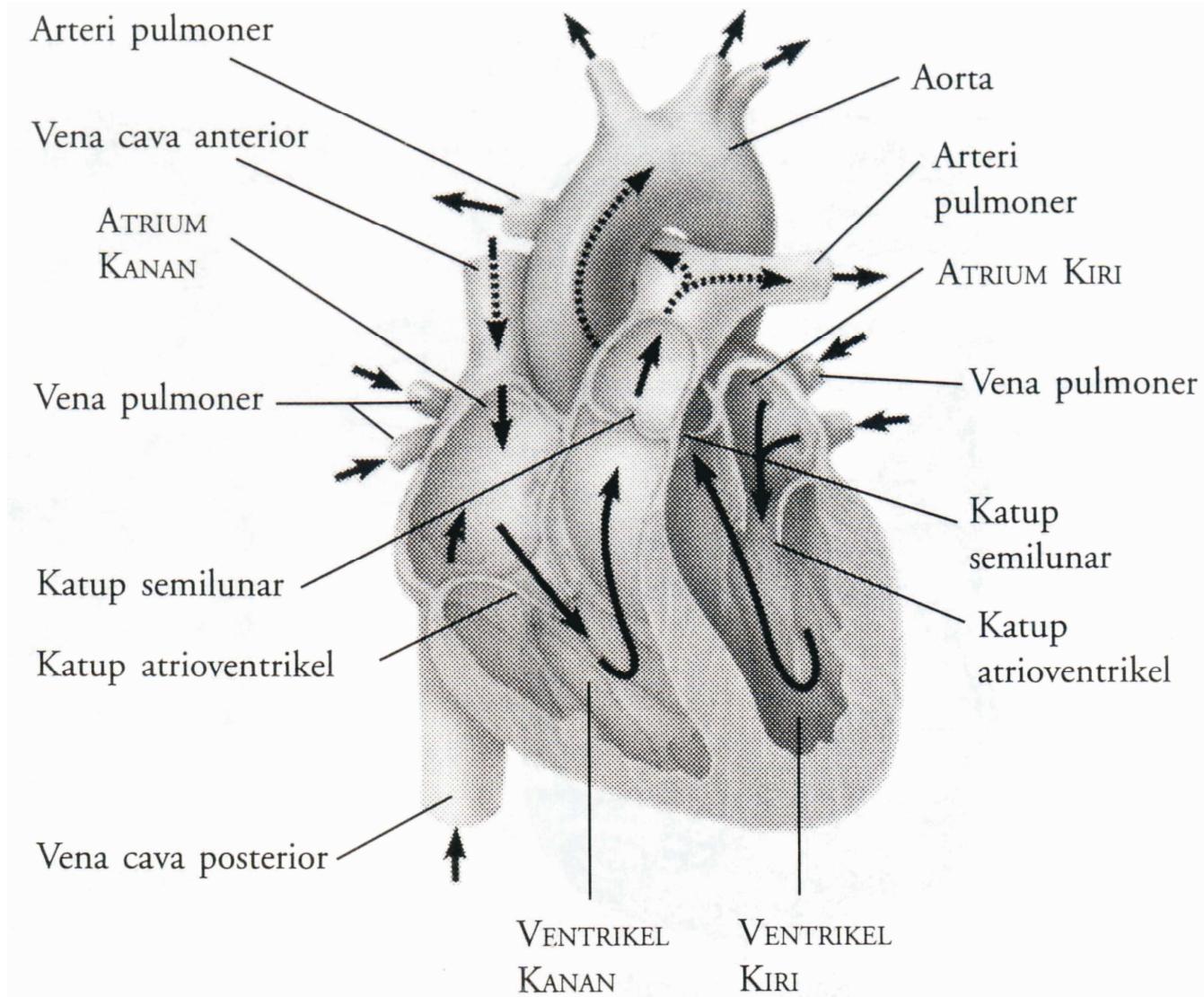


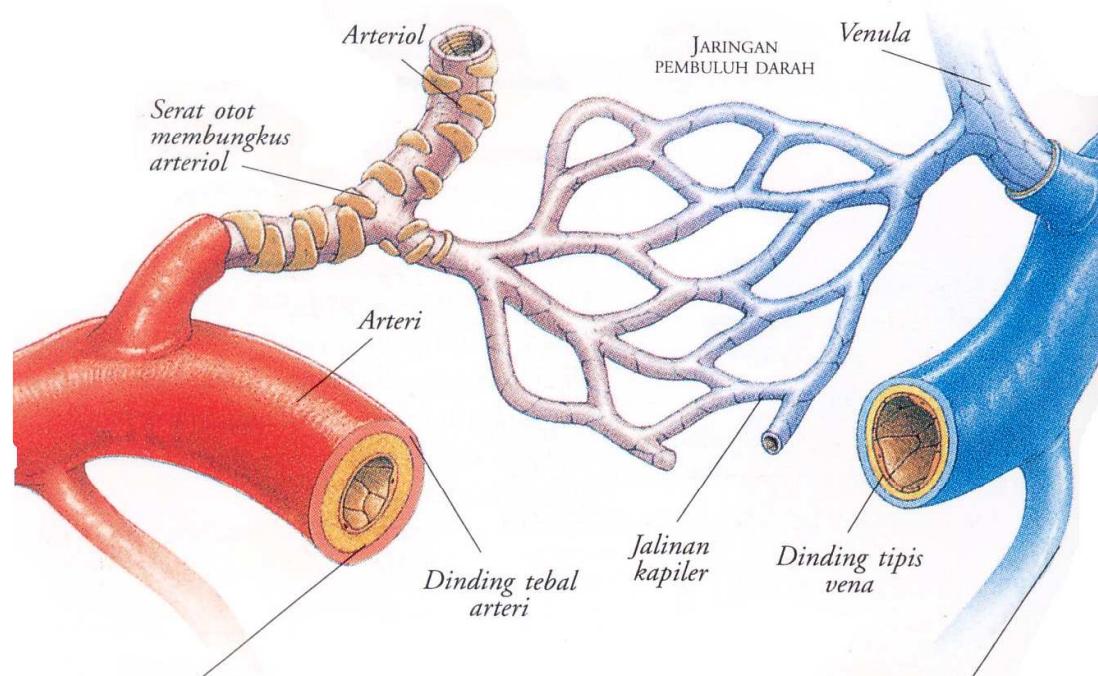




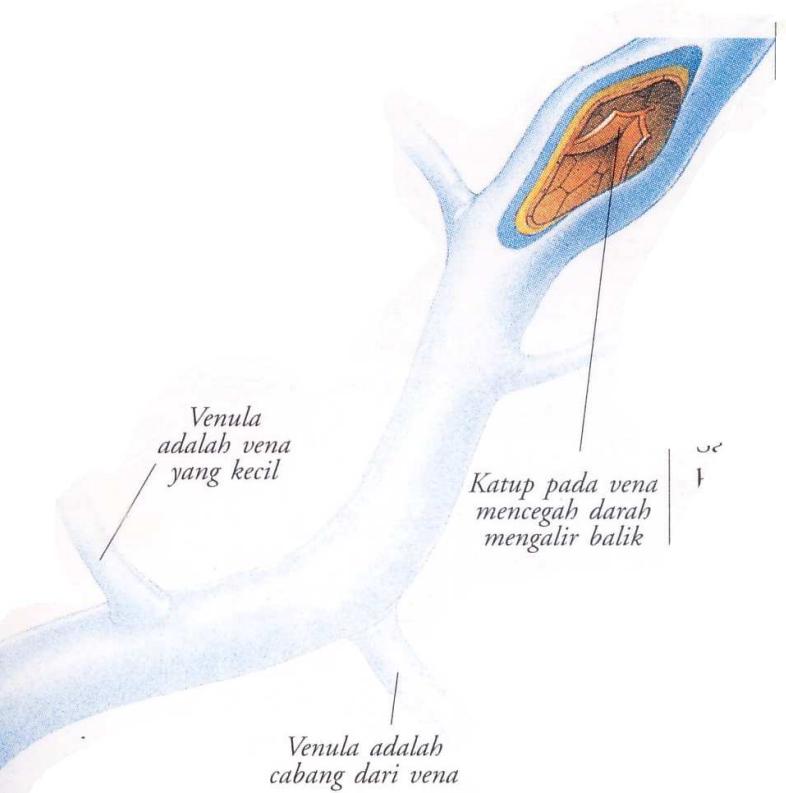
SIRKULASI GANDA

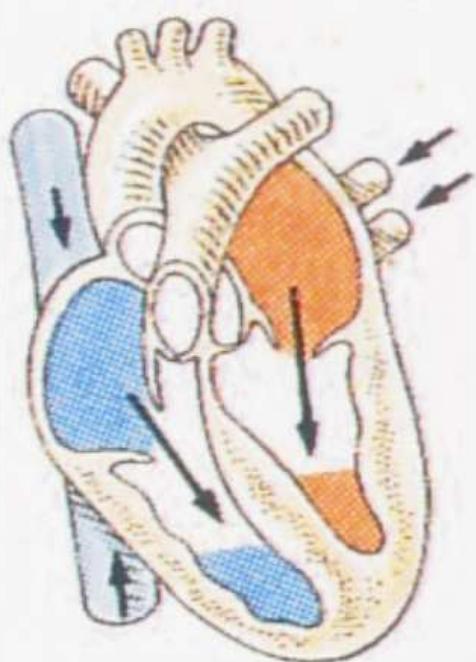




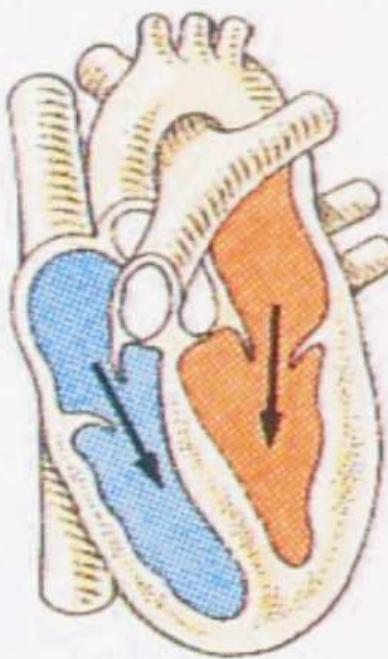


Serat otot halus membantu arteri dilatasi (melebar) dan kontraksi (menipis) untuk





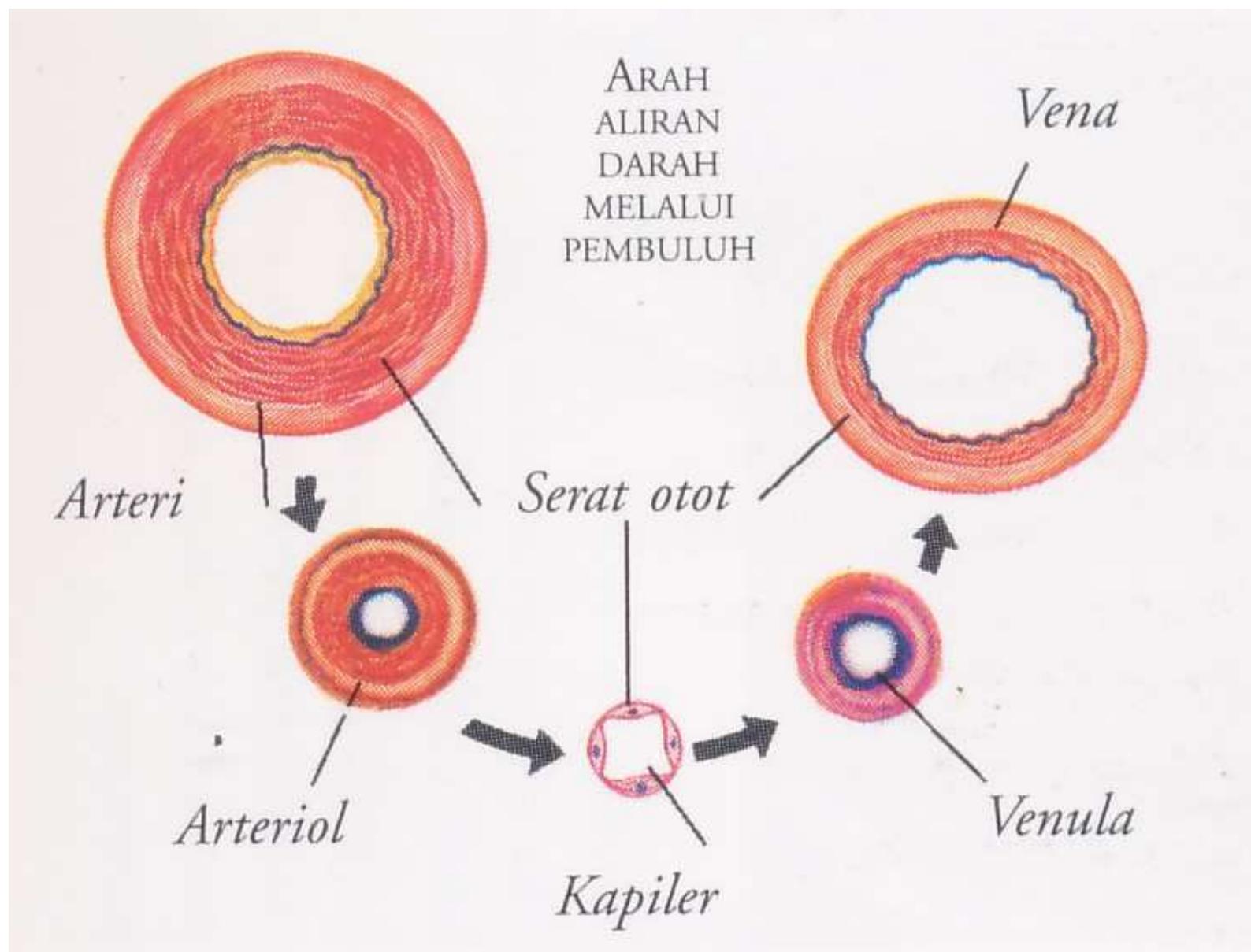
Tahap 1

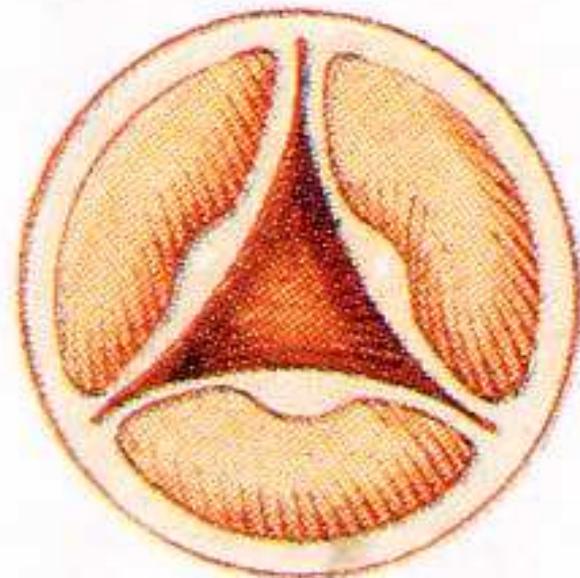


Tahap 2

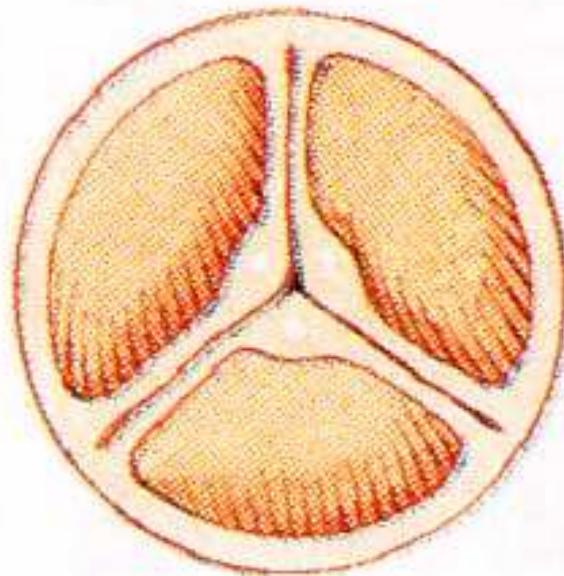


Tahap 3





KATUP TERBUKA



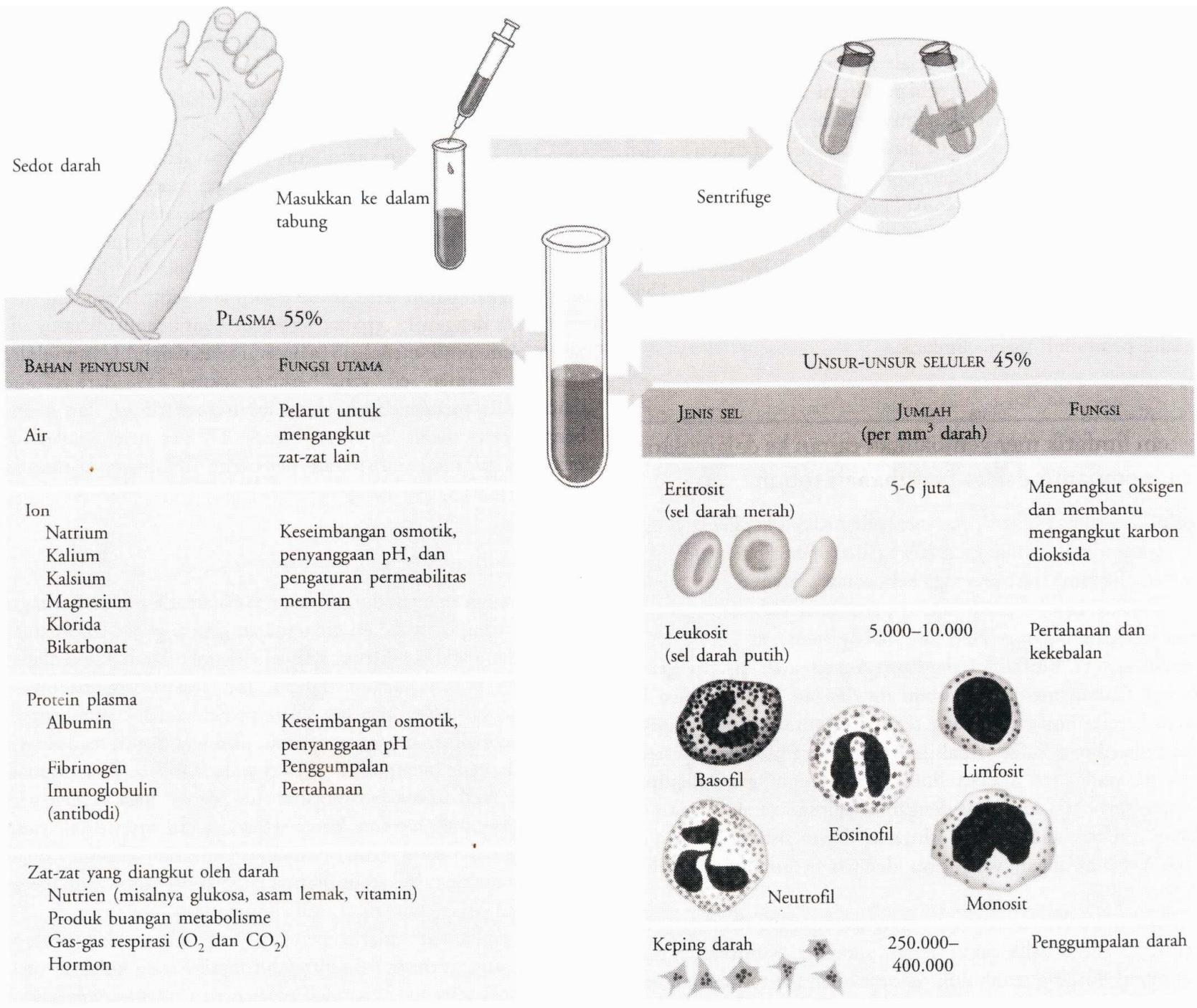
KATUP TERTUTUP

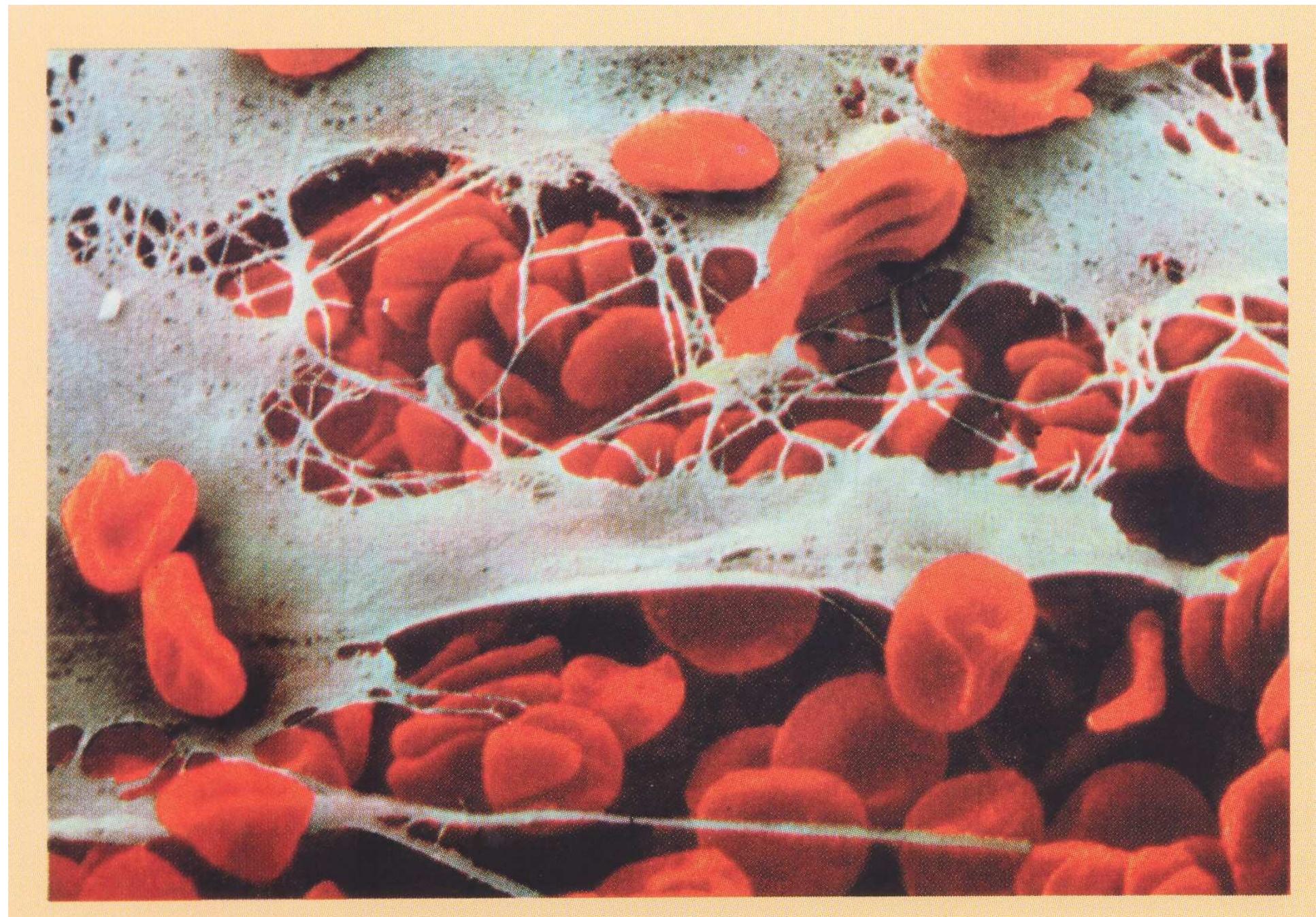
KATUP JANTUNG

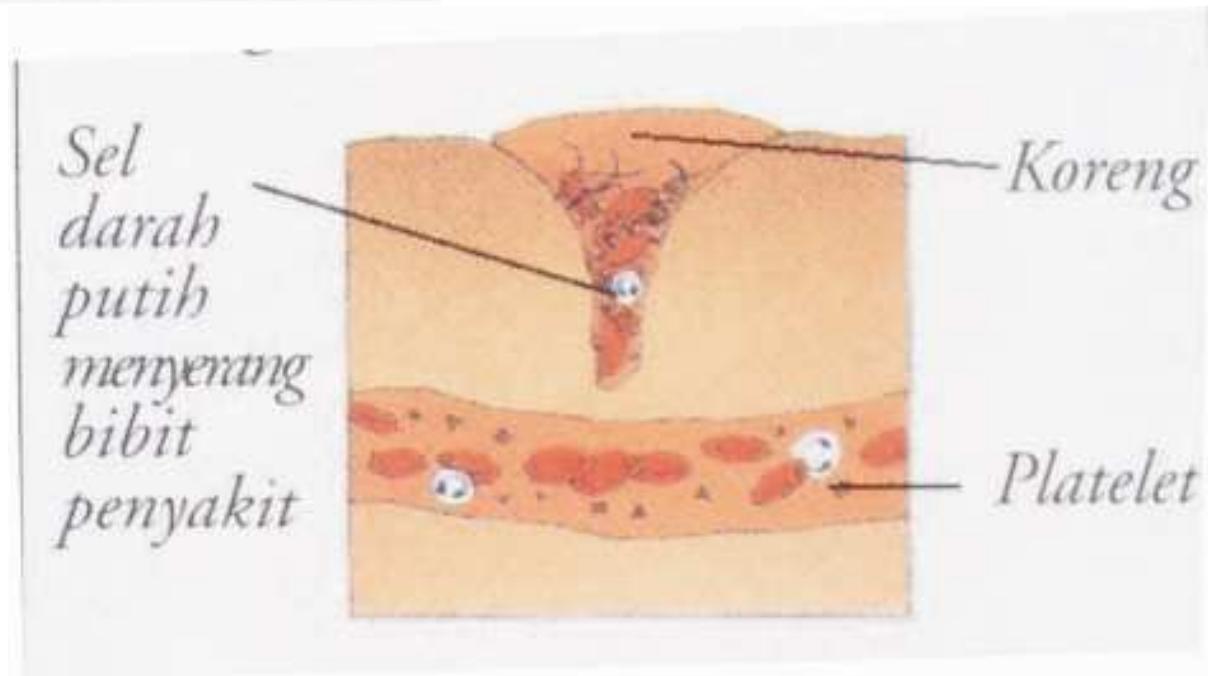
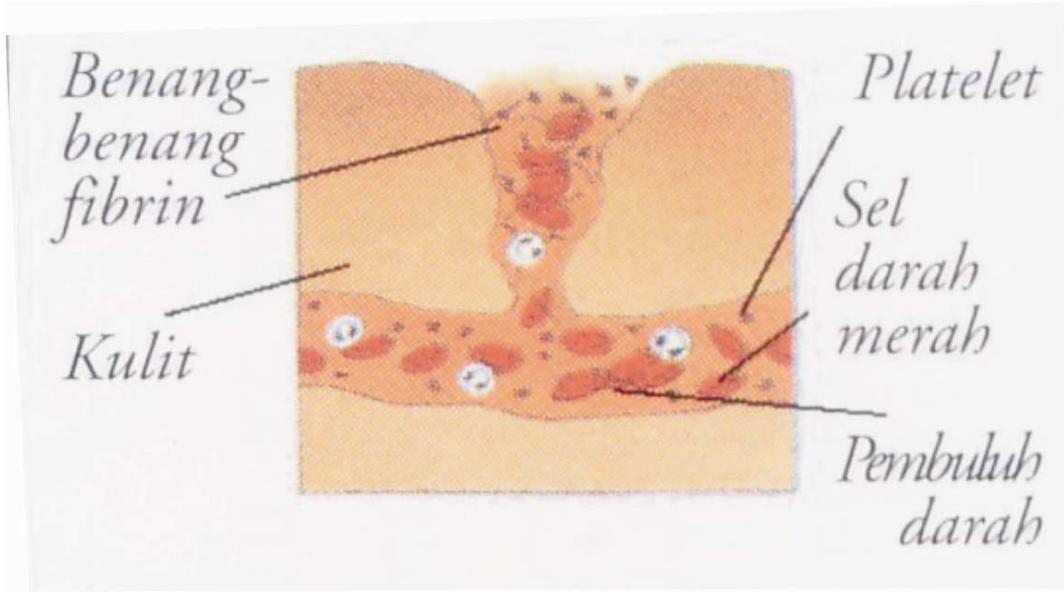
DARAH

Darah terdiri atas :

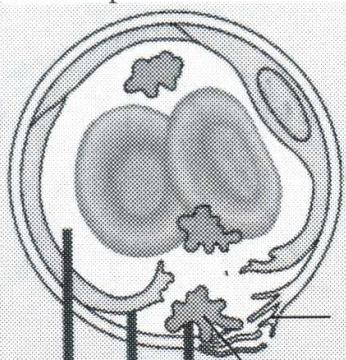
- Plasma darah (mengandung garam terlarut, hormon, lemak, gula, protein)
- Sel-sel darah merah (eritrosit)
- Sel darah putih (leukosit)
- Keping darah (platelet)



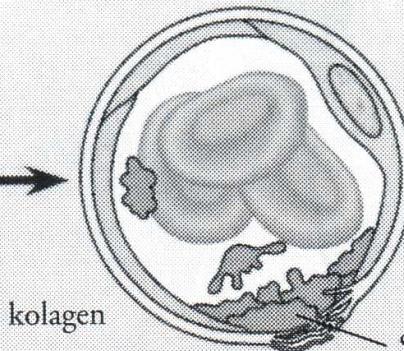




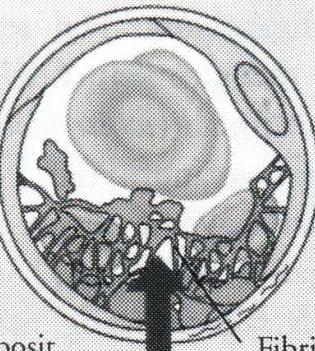
1 Perlukaan pada lapisan pembuluh darah memaparkan jaringan ikat; trombosit akan menempel



2 Sumbat trombosit terbentuk



3 Fibrin menggumpal dengan sel-sel yang terjerat

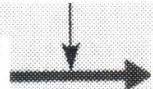


Trombosit membebaskan zat-zat kimia yang membuat trombosit yang berdekatan menjadi lengket

Faktor penggumpalan dari:

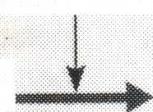
- Trombosit
- Sel-sel yang rusak
- Plasma (faktor-faktor termasuk kalsium, vitamin K)

Protrombin



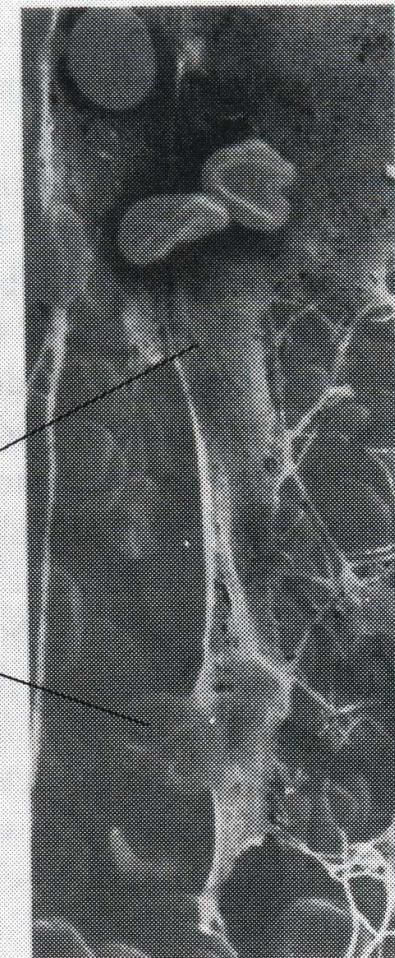
Trombin

Fibrinogen



Fibrin

(a)

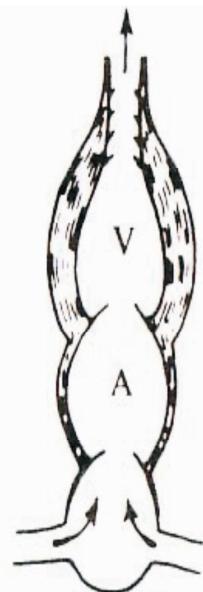


(b)

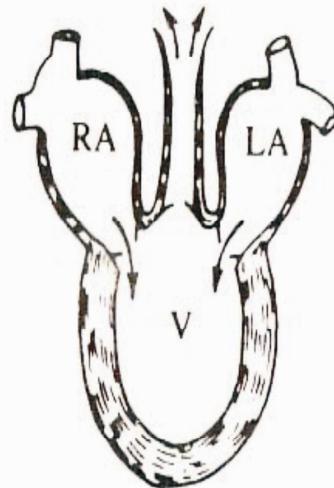
5 μm

Keterangan:

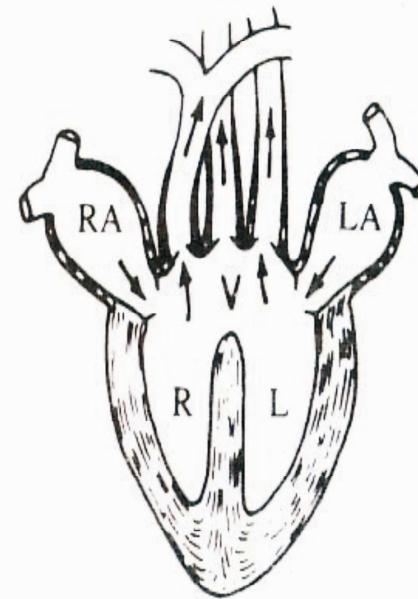
- A : Atrium atau aurikel
- V : Ventrikel
- RA : Aurikel kanan
- LA : Aurikel kiri
- RV : Ventrikel kanan
- LV : Ventrikel kiri
- R : Kanan
- L : Kiri



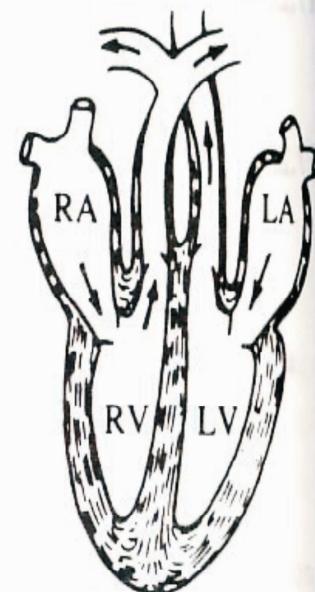
Ikan



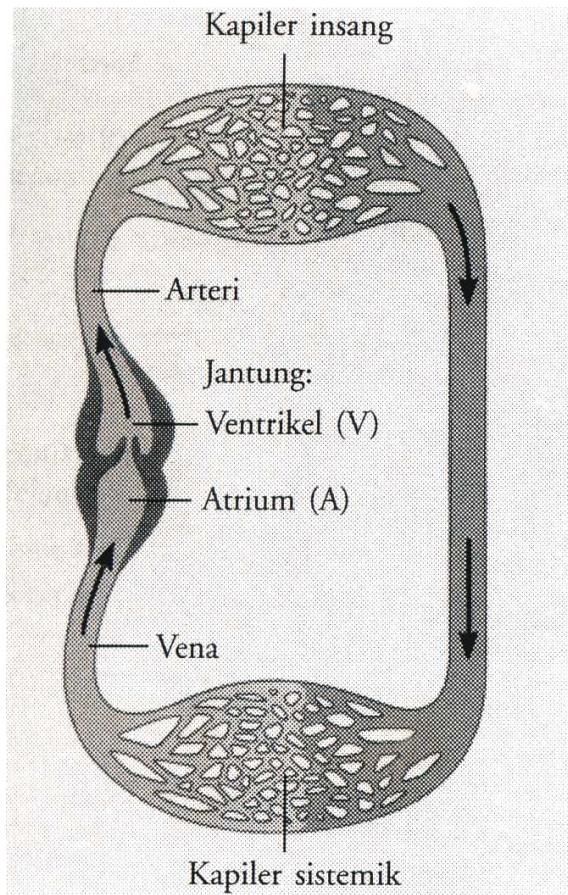
Amfibi



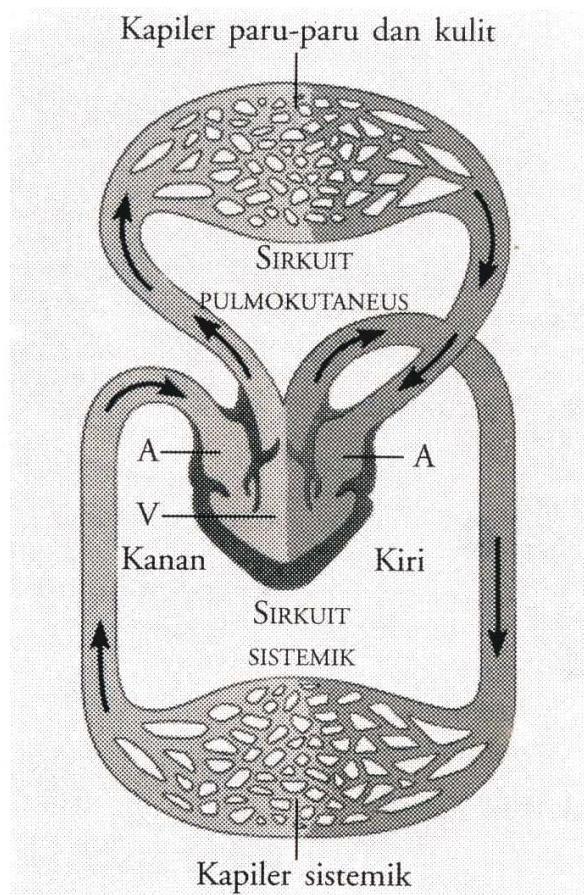
Reptil



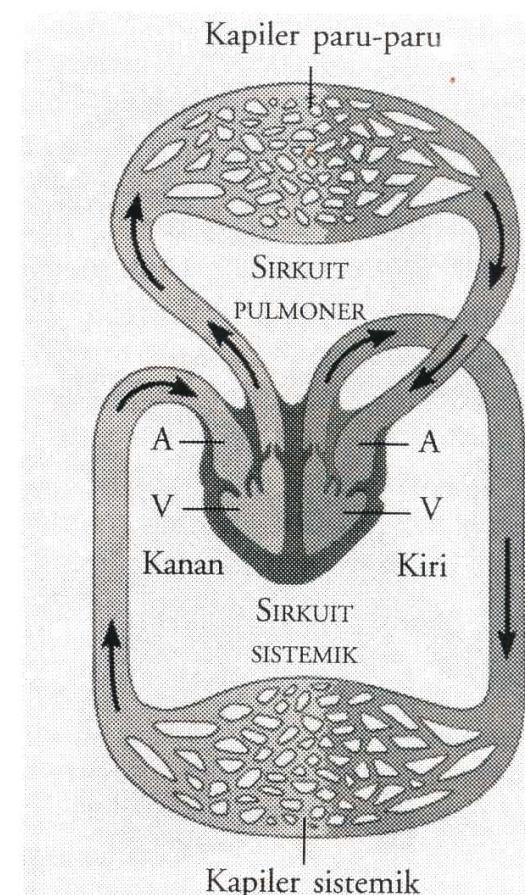
Burung atau mamalia



a) Ikan



(b) Amfibia



(c) Mamalia