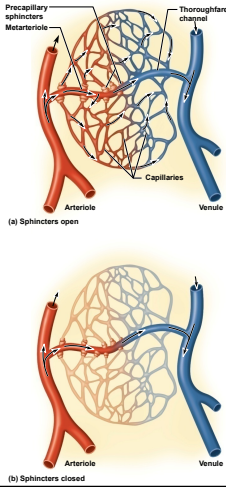


Fig. 20.7

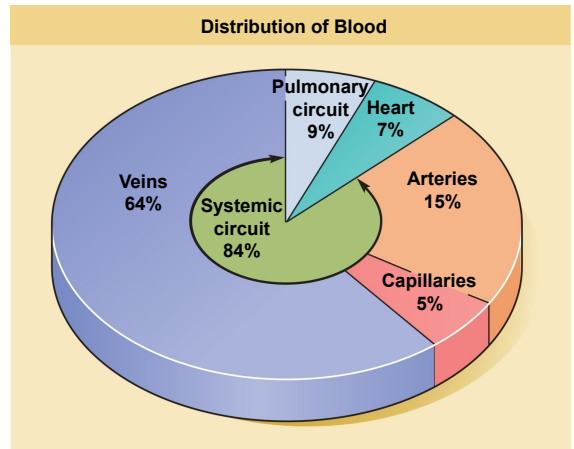
Copyright © McGraw-Hill Education. Permission required for reproduction or display.



7

Fig. 20.8

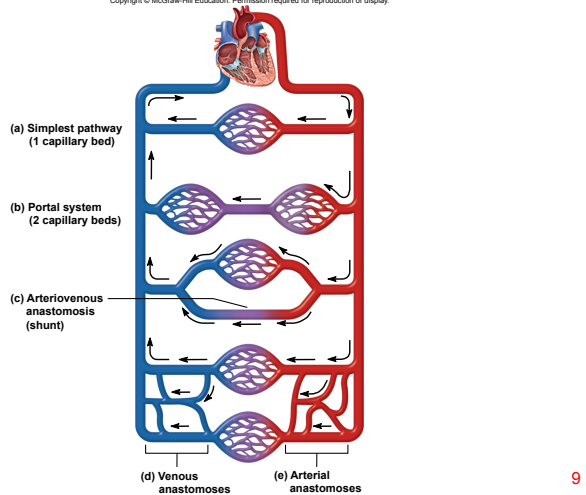
Copyright © McGraw-Hill Education. Permission required for reproduction or display.



8

Fig. 20.9

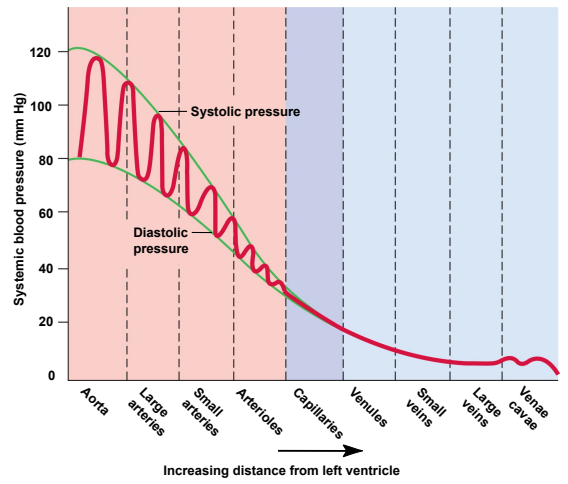
Copyright © McGraw-Hill Education. Permission required for reproduction or display.



9

Fig. 20.10

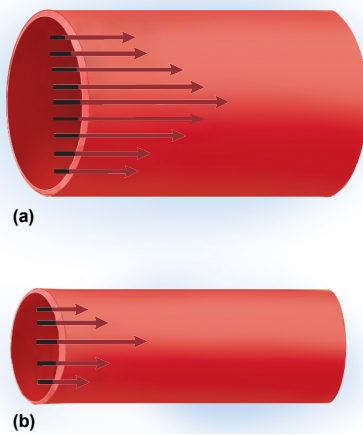
Copyright © McGraw-Hill Education. Permission required for reproduction or display.



10

Fig. 20.11

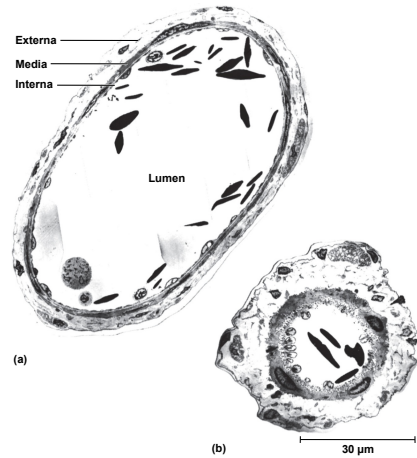
Copyright © McGraw-Hill Education. Permission required for reproduction or display.



11

Fig. 20.12

Copyright © McGraw-Hill Education. Permission required for reproduction or display.



a,b: Phelps, P. C. and Luft, J. H. (1969). "Electron microscopical study of relaxation and constriction in frog arterioles." *Am. J. Anat.*, 1969/125: 399-427. Reproduced with permission of Wiley Inc.

12

Table 20.1

Copyright © McGraw-Hill Education. Permission required for reproduction or display.

TABLE 20.1 Blood Velocity in the Systemic Circuit		
Vessel	Typical Lumen Diameter	Velocity*
Aorta	2.5 cm	1,200 mm/s
Arterioles	20–50 μm	15 mm/s
Capillaries	5–9 μm	0.4 mm/s
Venules	20 μm	5 mm/s
Inferior vena cava	3 cm	80 mm/s

*Peak systolic velocity in the aorta; mean or steady velocity in other vessels, assuming no upstream vasoconstriction adding to resistance

Fig. 20.13

Copyright © McGraw-Hill Education. Permission required for reproduction or display.

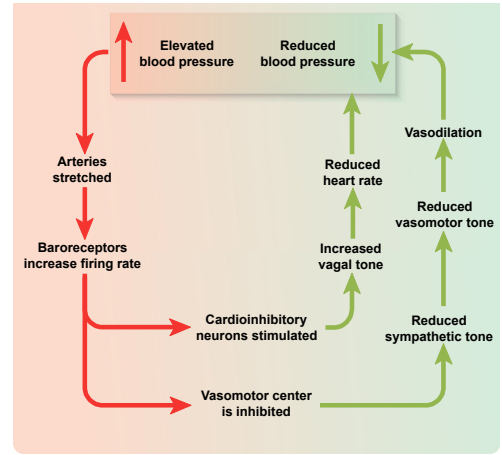


Fig. 20.14

Copyright © McGraw-Hill Education. Permission required for reproduction or display.

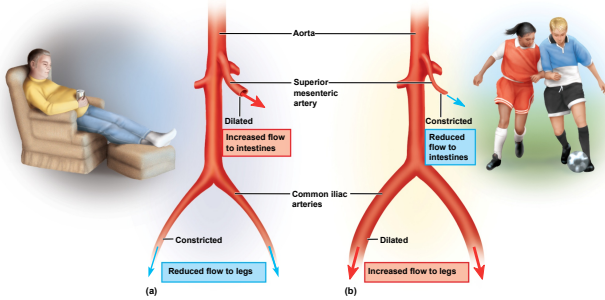


Fig. 20.15

Copyright © McGraw-Hill Education. Permission required for reproduction or display.

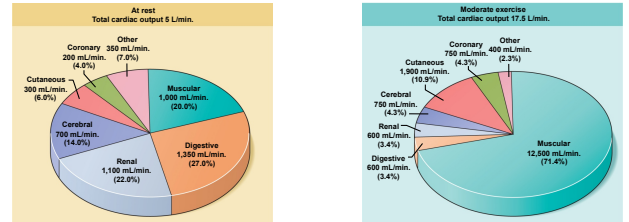


Fig. 20.16

Copyright © McGraw-Hill Education. Permission required for reproduction or display.

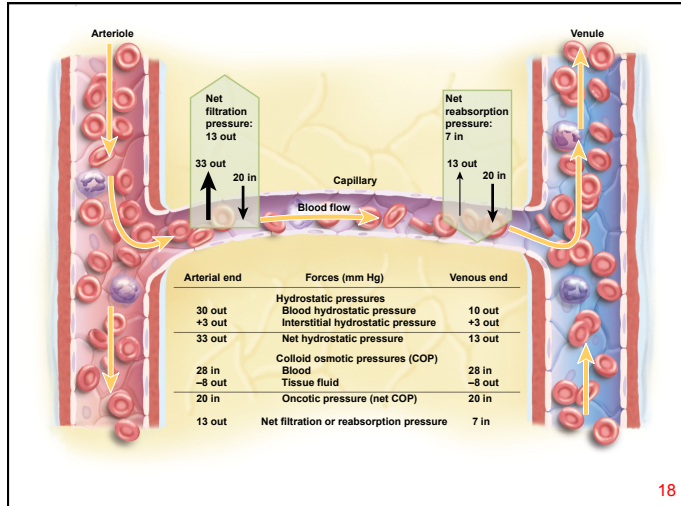
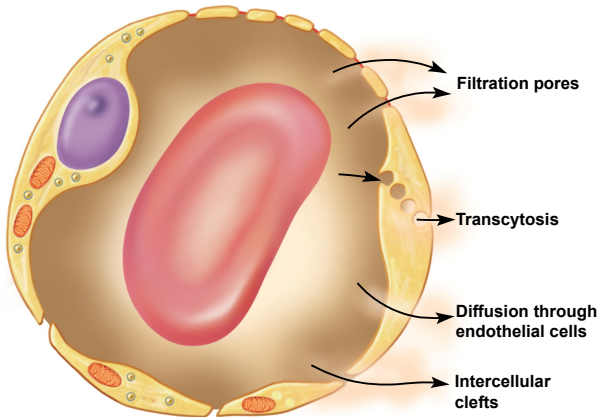
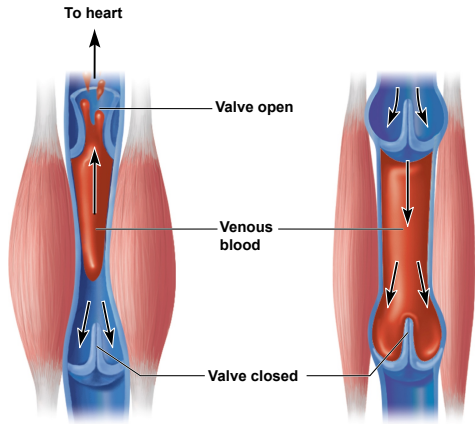


Fig. 20.19

Copyright © McGraw-Hill Education. Permission required for reproduction or display.



(a) Contracted skeletal muscles

(b) Relaxed skeletal muscles