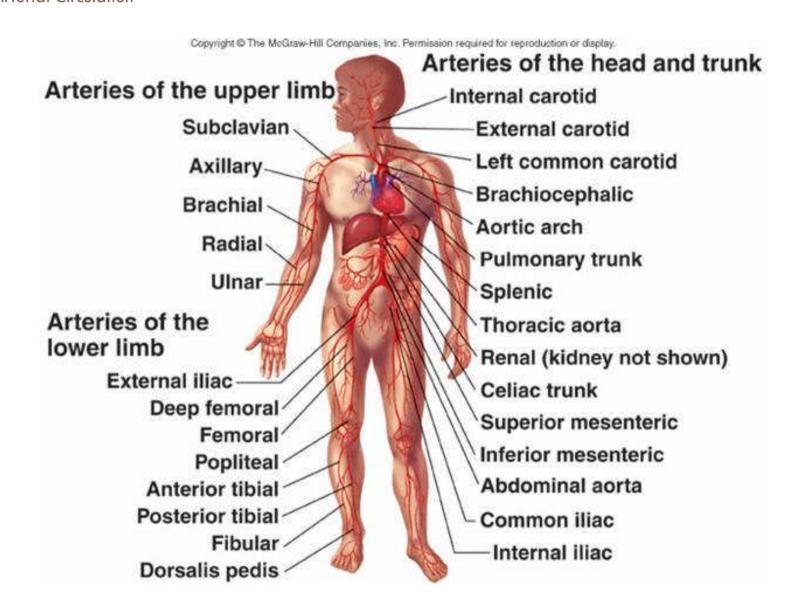
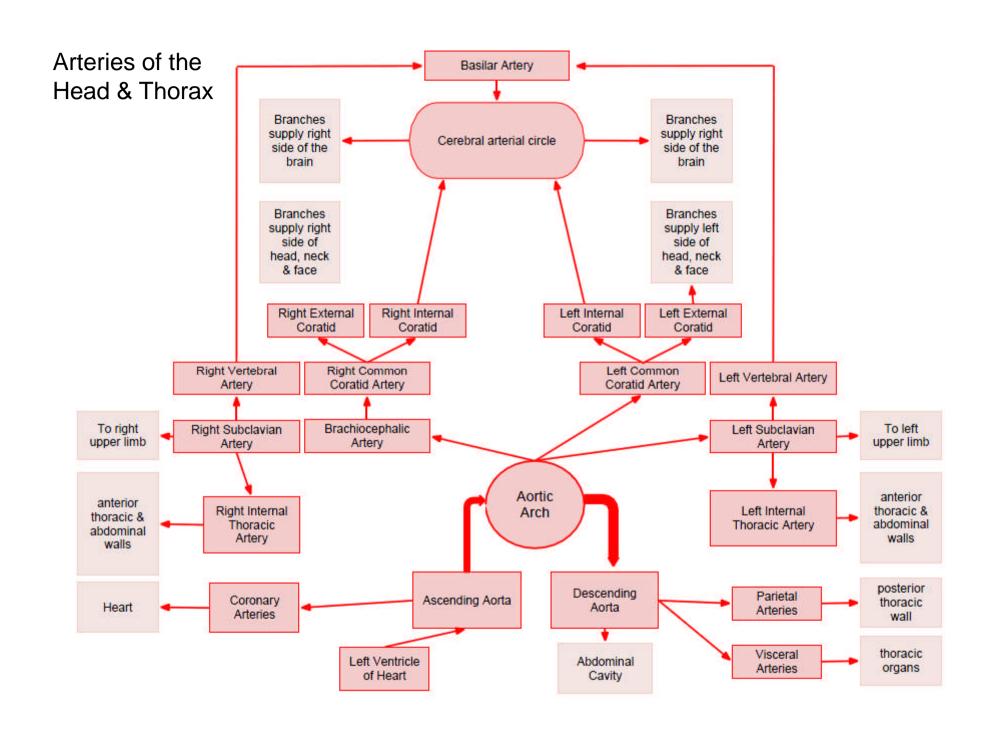
# SYSTEMIC CIRCULATION ARTERIES AND VEINS

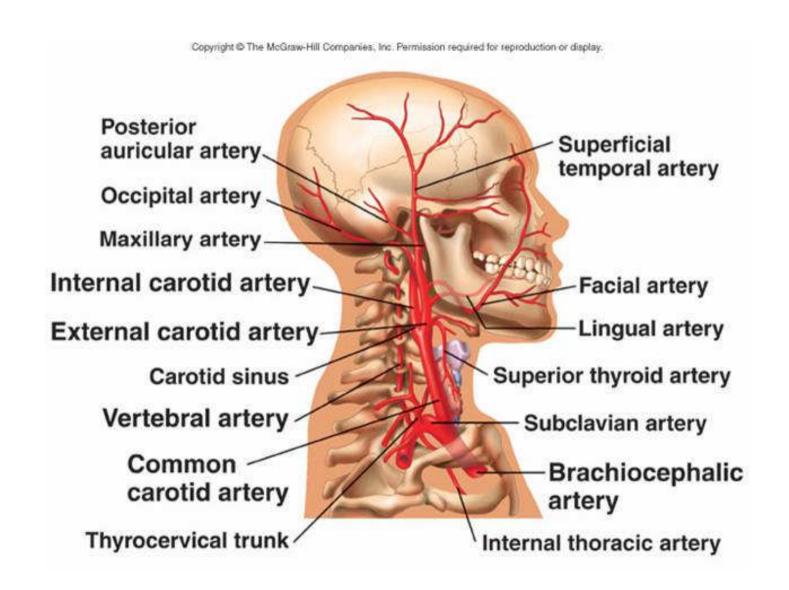
Brandon Thomson | Chelsea Thomson Bio 221 CCBC D.HAMMOUDI.MD

Arterial Circulation

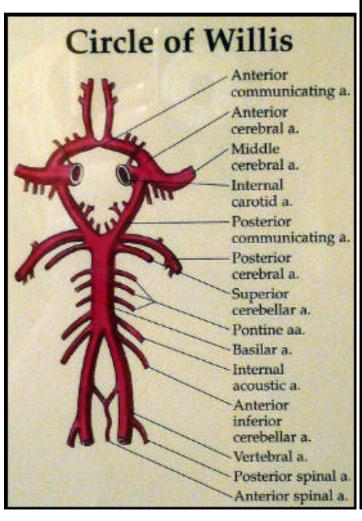


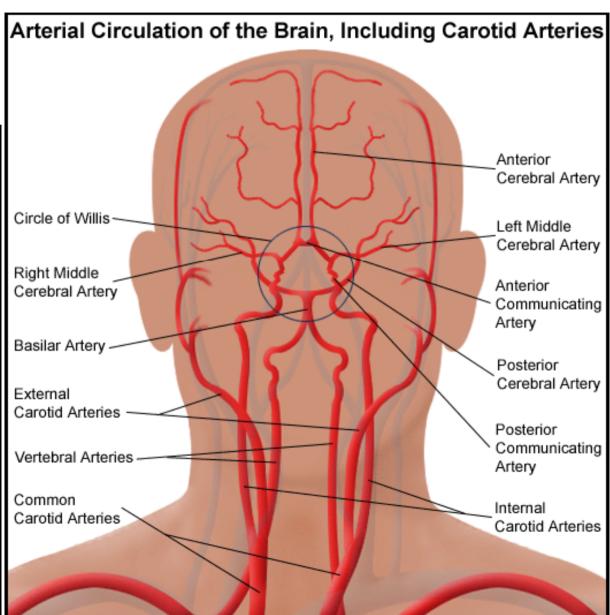


Arteries of the Head & Neck



# Arteries of the Head & Neck





Anterior communicating artery Middle cerebral artery Part of temporal lobe removed to reveal middle cerebral artery Posterior cerebral artery Basilar artery Vertebral artery Anterior spinal artery Part of cerebellum Posterior inferior removed to reveal cerebellar artery posterior cerebral

artery

Cerebral arterial circle (circle of Willis)

Anterior

artery

artery

Posterior

Posterior

Superior

Anterior inferior

cerebellar artery

cerebral artery

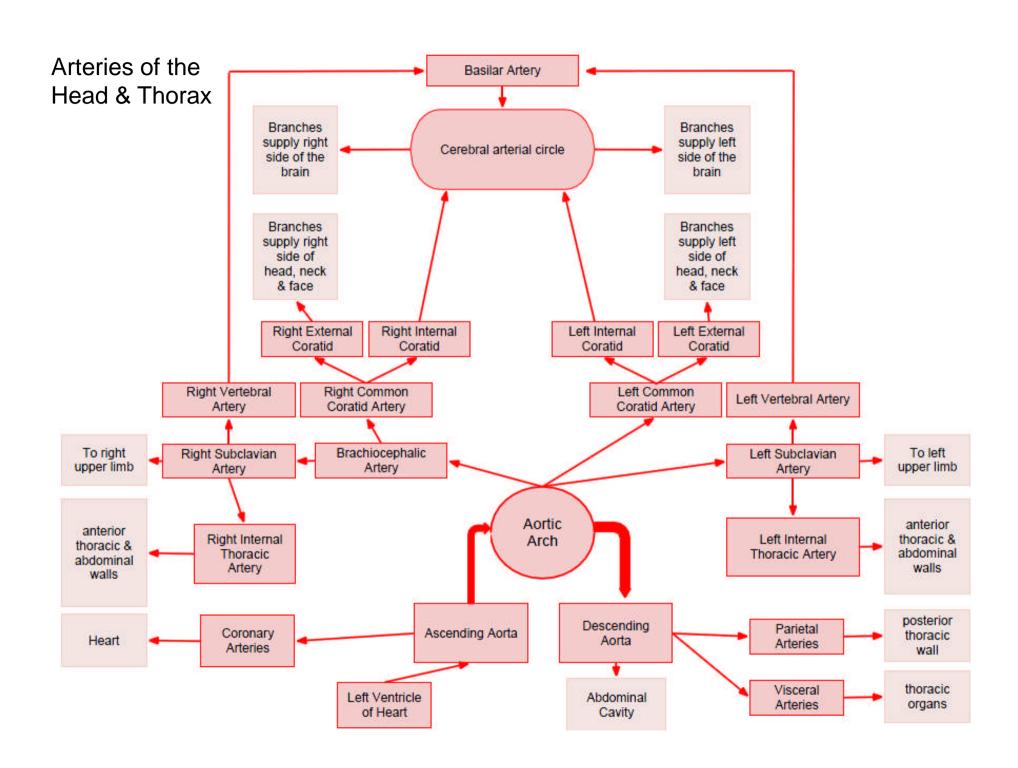
Internal carotid

communicating

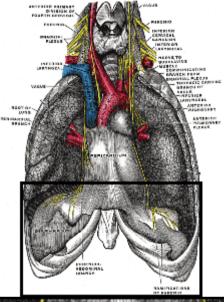
cerebral artery

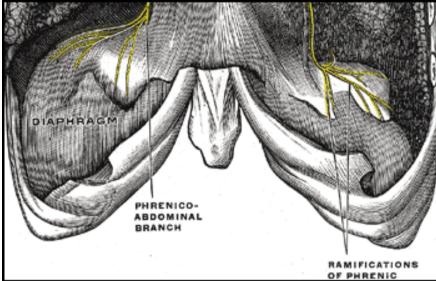
cerebellar artery

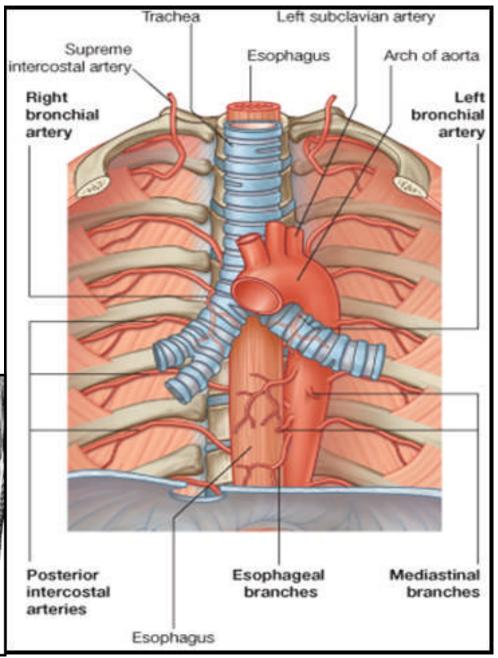
Systemic Circulation Arteries of the Head & Neck

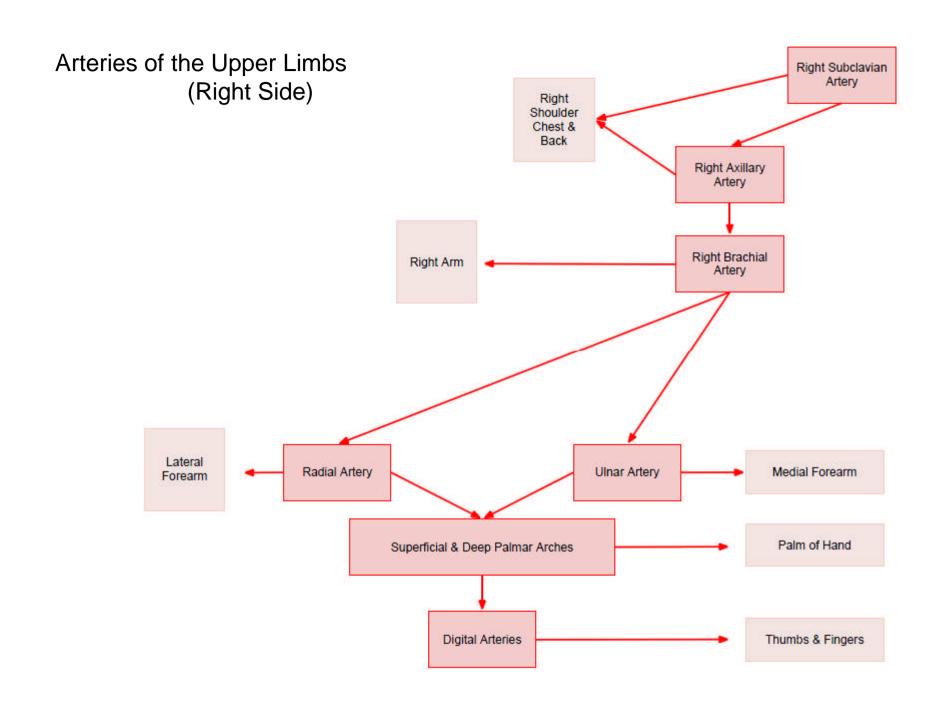


Arteries of the Thoracic Aorta

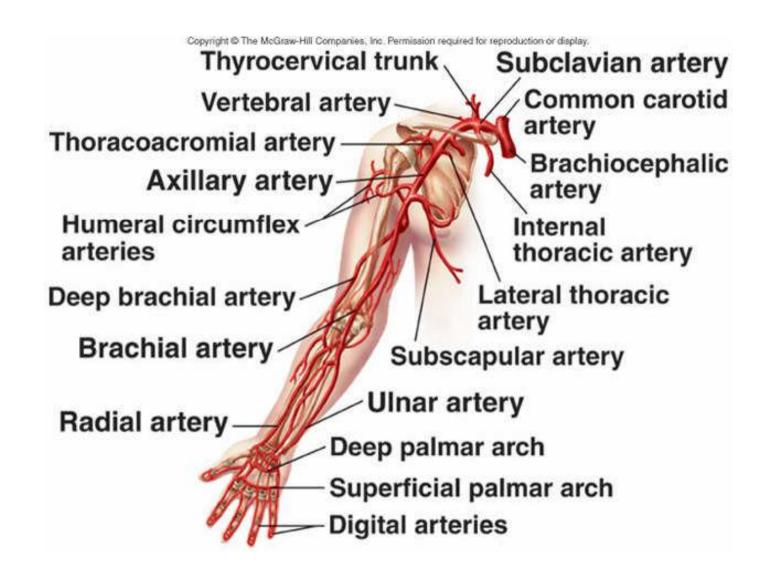


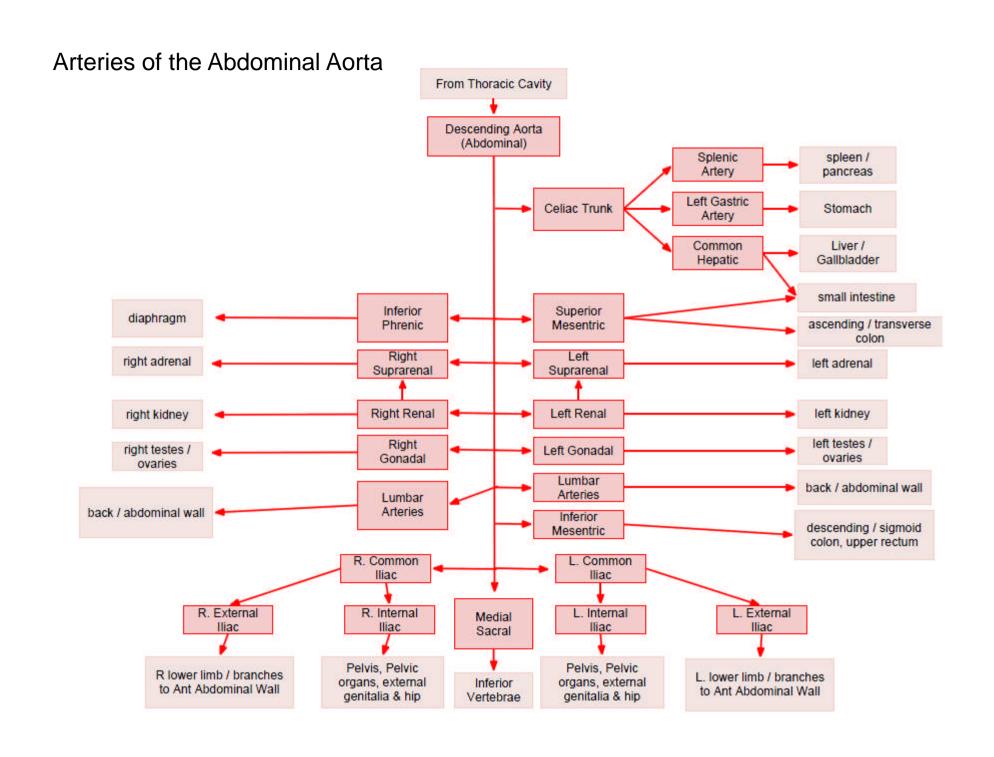




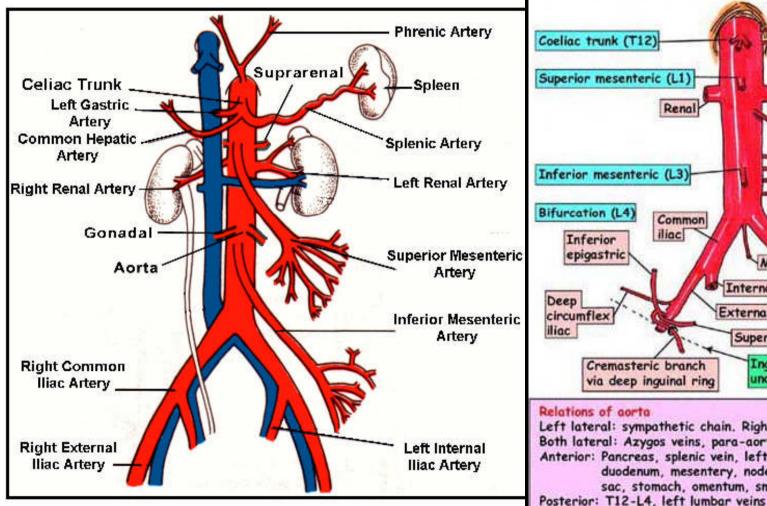


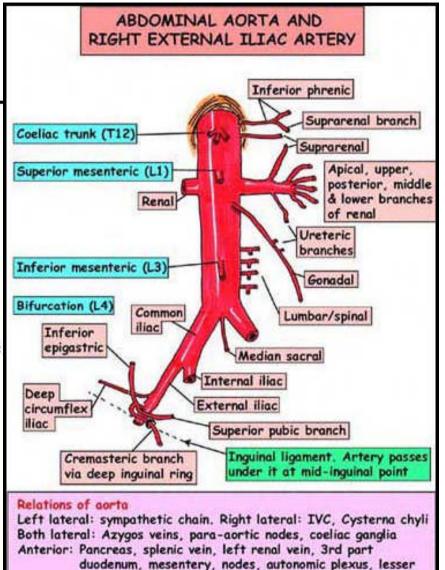
Arteries of the Upper Limbs





Arteries of the Abdominal Aorta

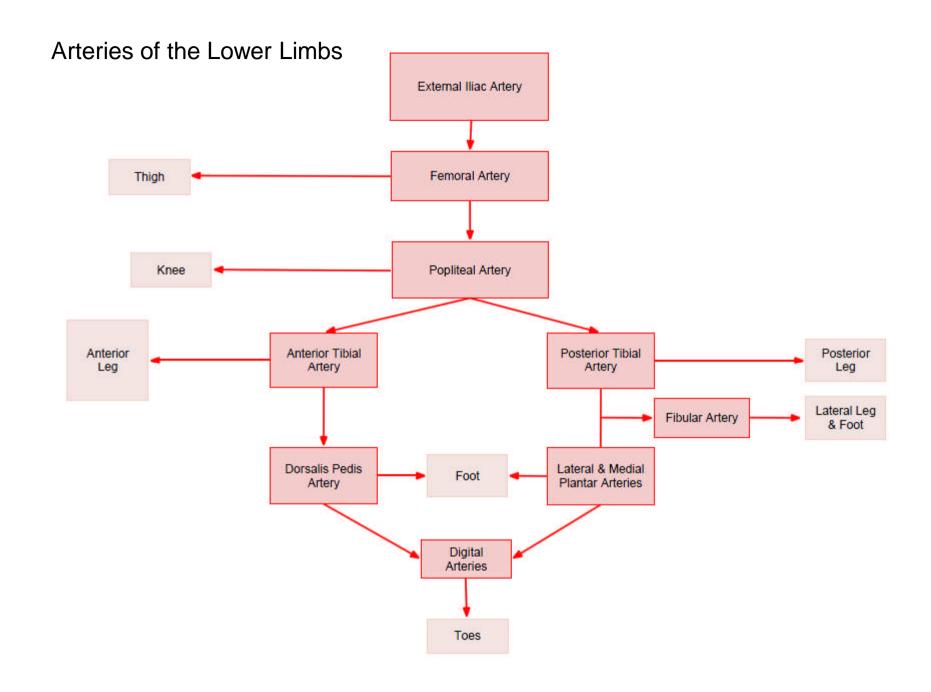




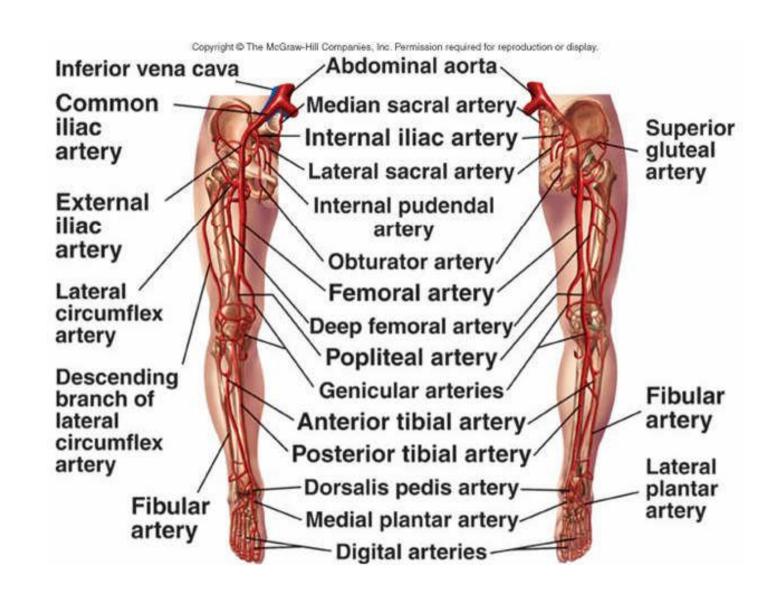
sac, stomach, omentum, small bowel

Arteries of the Abdominal Aorta

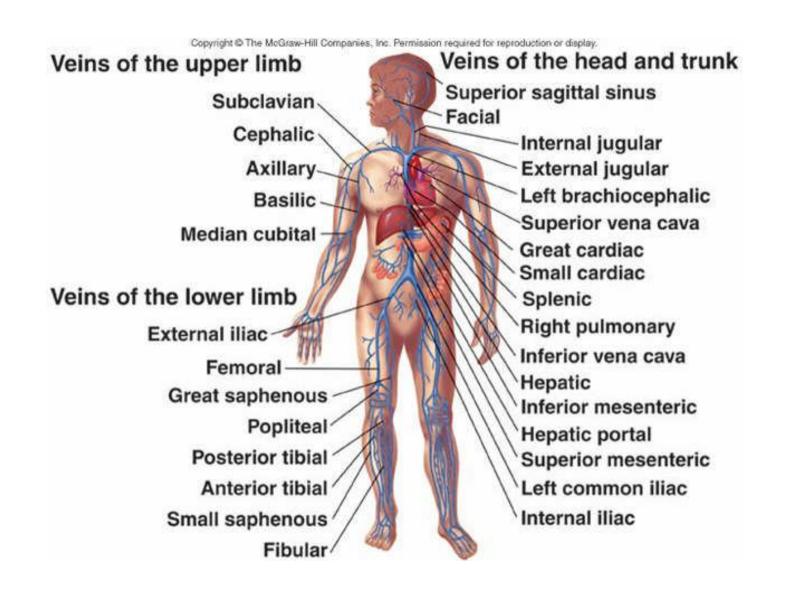
Copyright @ The McGraw-Hill Companies, Inc. Permission required for reproduction or display. Left common carotid artery Right common carotid artery Left subclavian artery Right subclavian artery Brachiocephalic artery-Aortic arch Ascending aorta Posterior intercostal arteries Internal thoracic artery Thoracic aorta Anterior inter-Spleen costal arteries Stomach Liver Abdominal aorta Celiac trunk Large intestine Superior mesenteric artery Left renal artery Inferior Left common iliac artery mesenteric artery Left internal iliac artery Median sacral artery Left external iliac artery

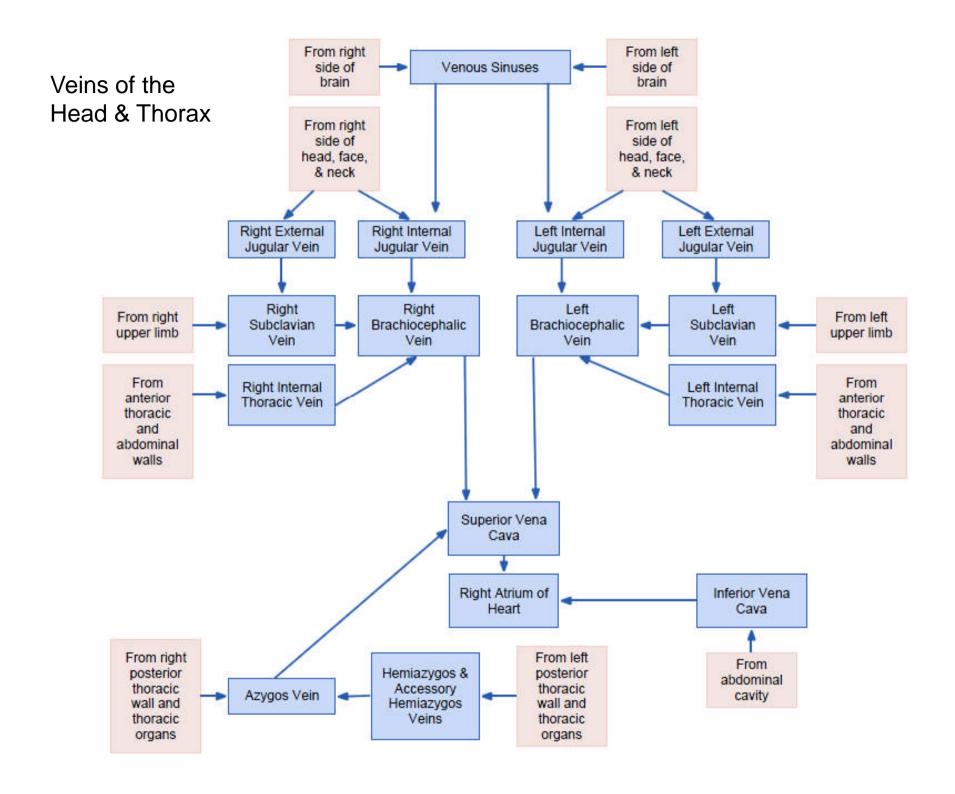


Arteries of the Lower Limbs

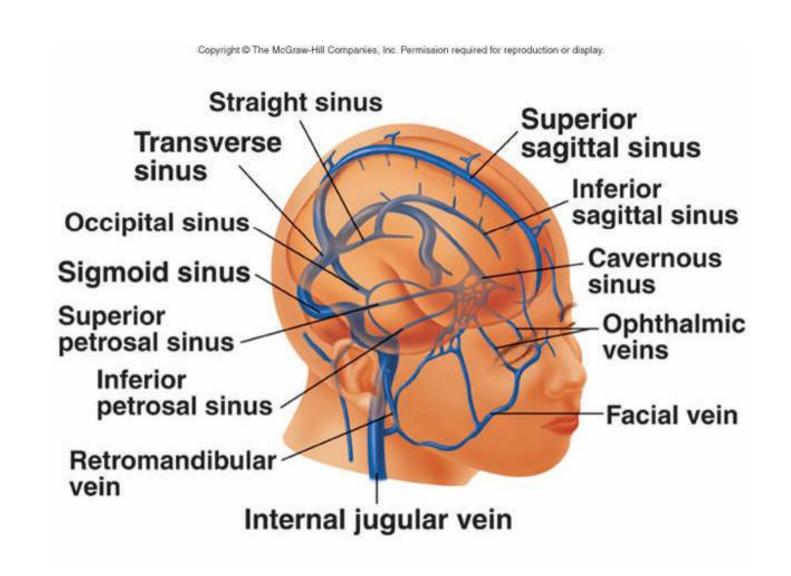


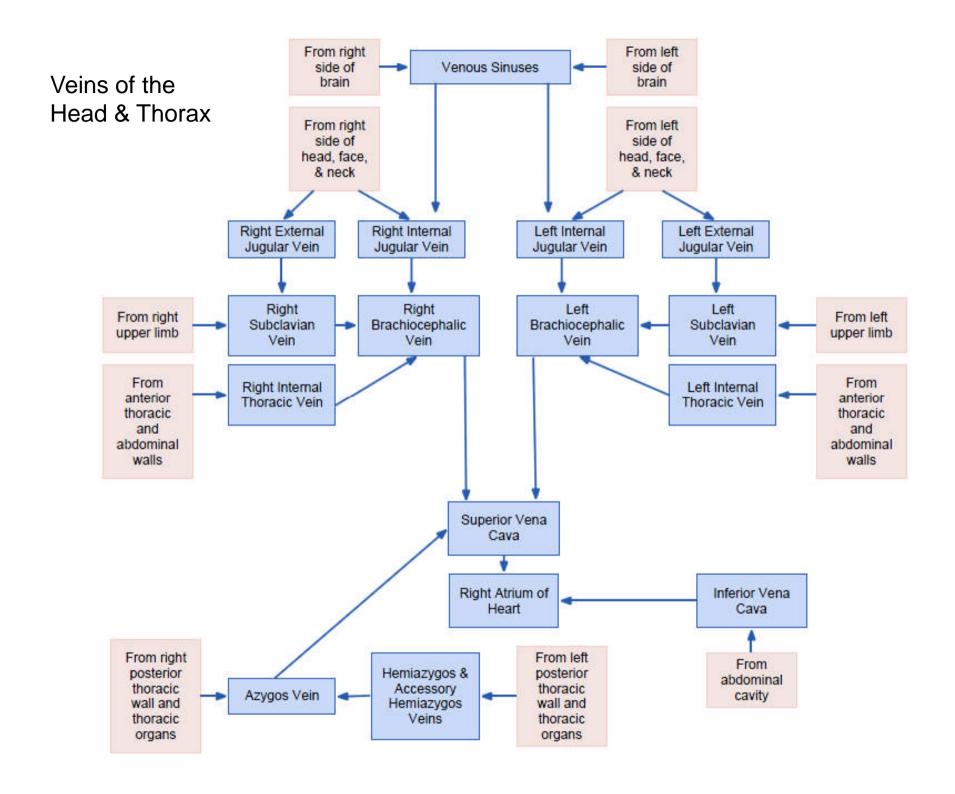
**Venous Circulation** 

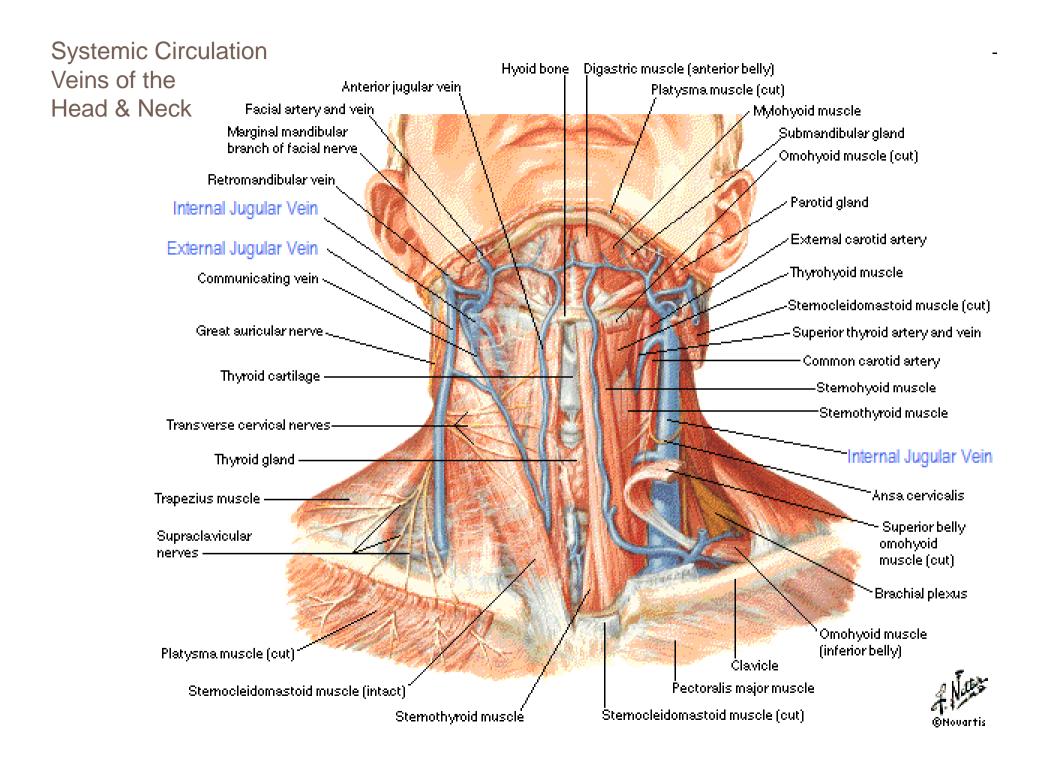




**Venous Sinuses** 

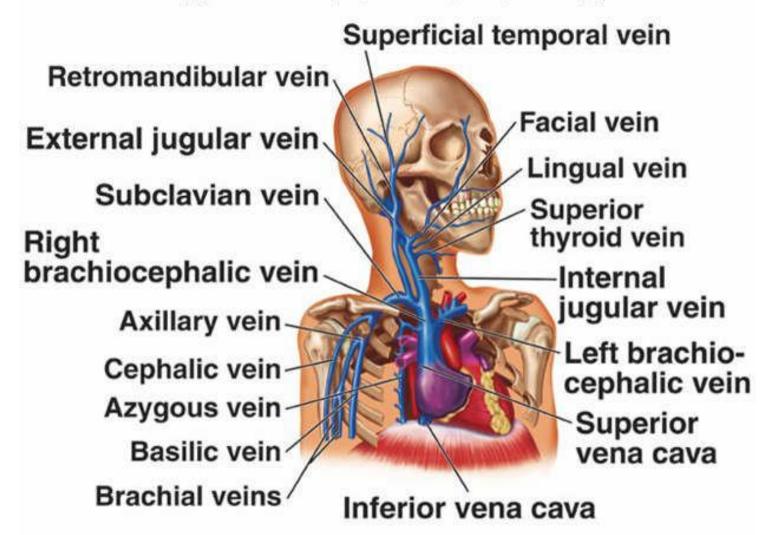


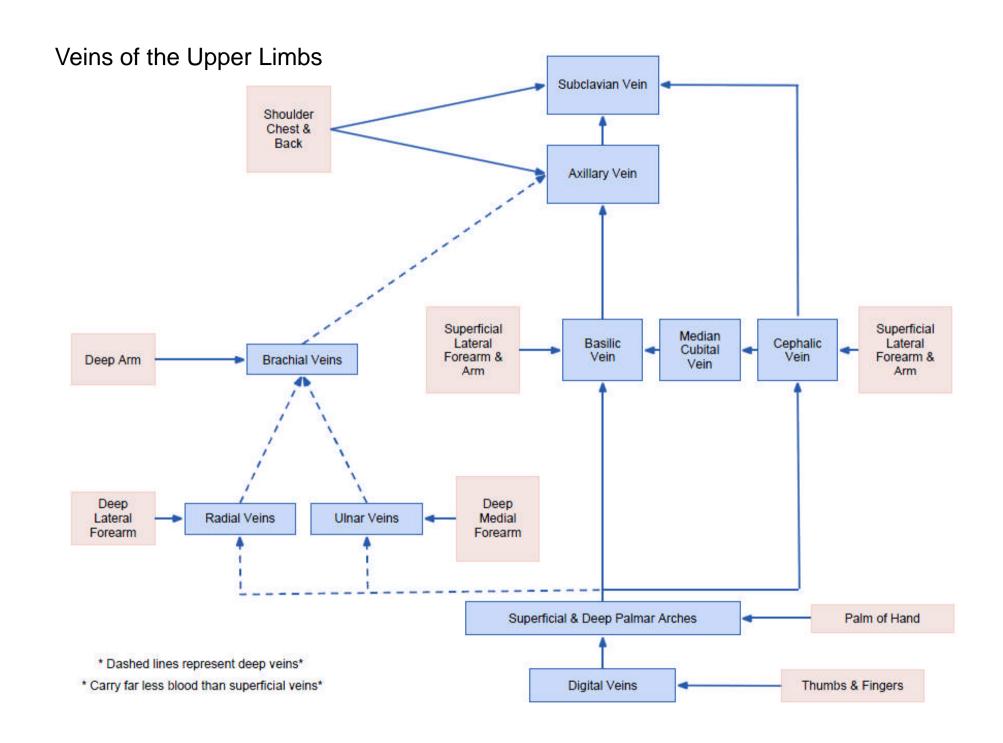




Veins of the Head & Neck

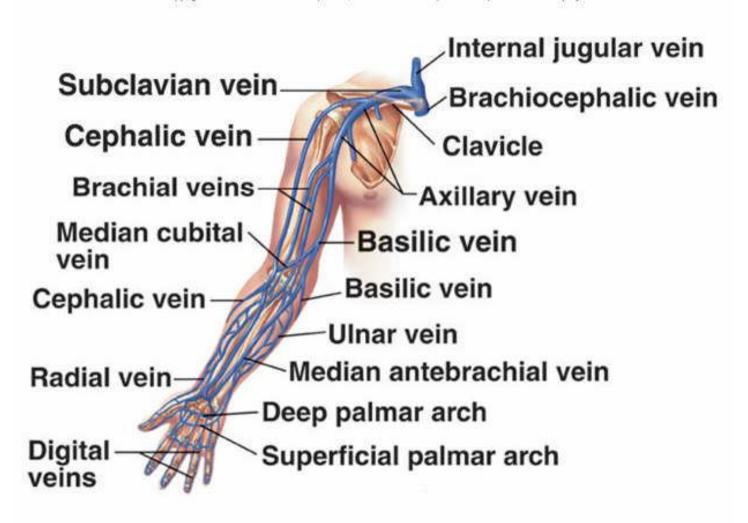
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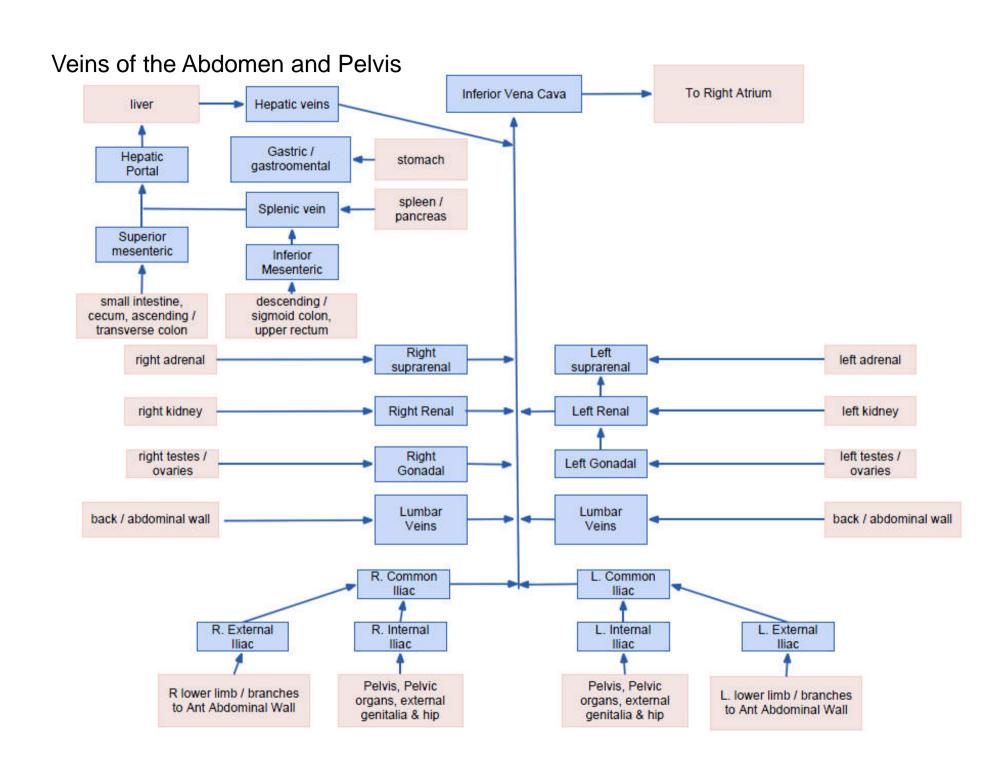




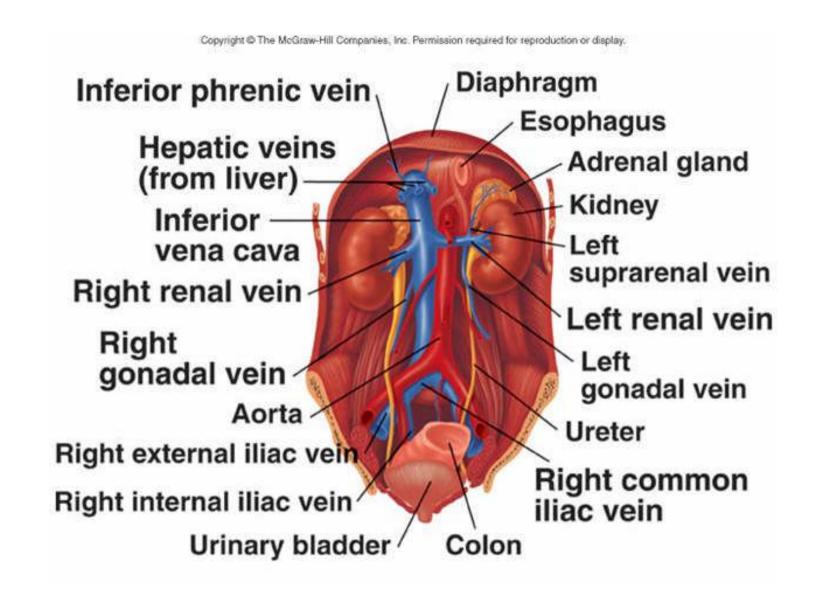
Veins of the Upper Limbs

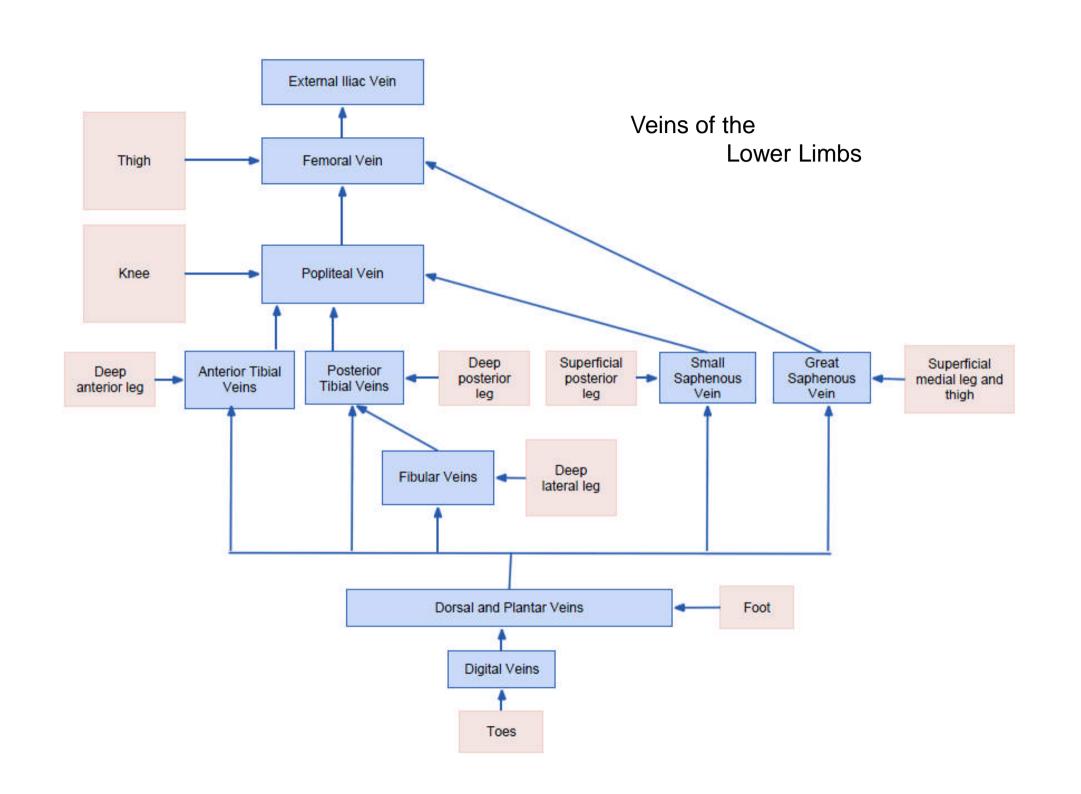
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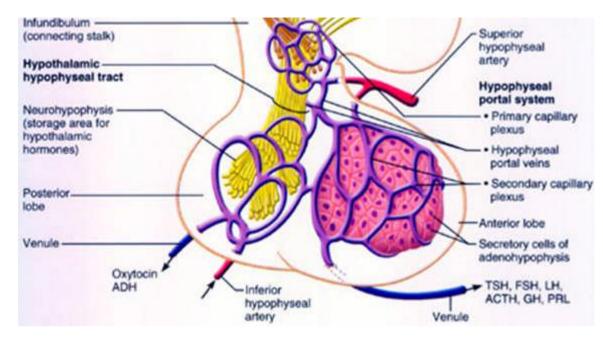
Veins of the Abdomen & Pelvis

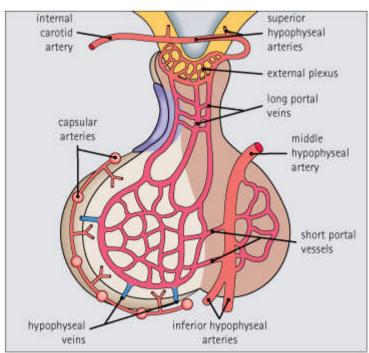




Veins of the Copyright © The McGraw-Hill Companies, Inc. Permission required for reproduction or display. **Lower Limbs** Inferior vena cava Common iliac vein External iliac vein Deep femoral vein Femoral vein-Great saphenous vein Popliteal vein-Small saphenous vein Anterior tibial vein Posterior tibial vein Fibular vein -Great saphenous vein Plantar veins -Dorsal veins of the foot Dorsal venous arch Digital veins

# Hypophyseal Portal System





Internal Carotid Artery →

Superior Hypophyseal Arteries →

Primary Capillary Plexus →

Hypophyseal Portal Veins →

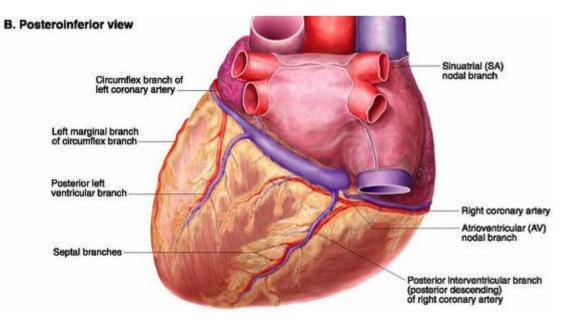
Secondary Capillary Plexus →

Venules →

Veins

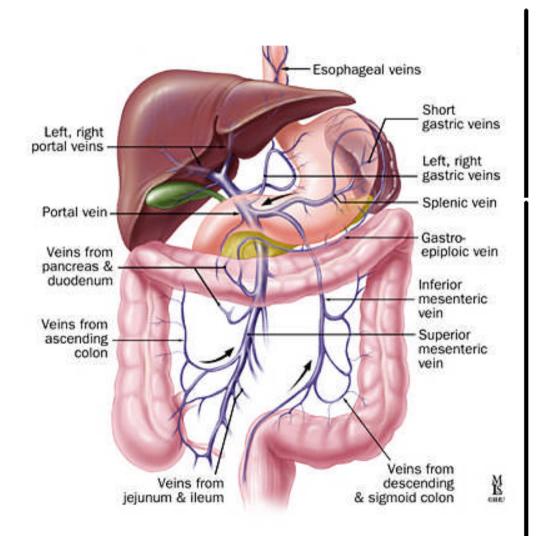
# Special Circulatory Patterns

#### A. Anterior view Ascending aorta Pulmonary trunk Coronary Left coronary artery (ghosted) Sinuatrial (SA) nodal branch (ghosted) Left auricle Circulation Circumflex branch of Right atrium and auricle left coronary artery Left marginal branch of circumflex branch Right coronary artery Diagonal branch Anterior interventricular branch (left anterior descending) of left coronary artery Right marginal branch of right coronary artery Aorta Right Coronary Left Coronary Artery Artery Right Posterior Anterior Circumflex Left Marginal Marginal Interventricular Interventricular Septal branches Artery Arterv Artery Artery Artery



Veins:
Great Cardiac Vein
Small Cardiac Vein
Middle Cardiac Vein
Anterior Cardiac Veins

# Hepatic Portal System



Blood drained from capillaries →

Inferior Mesenteric Vein + Pancreatic Vein →

Splenic Vein
+ Superior Mesenteric →

Hepatic Portal Vein
+ Gastric Veins →

Enters Liver →

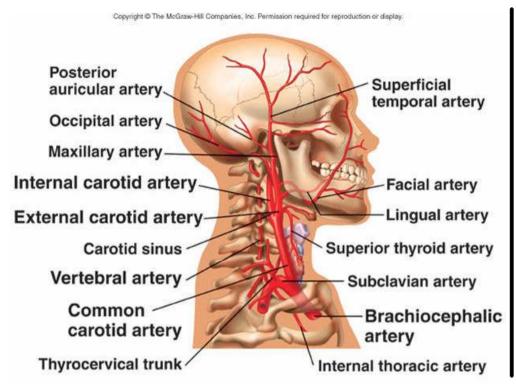
Through Liver Sinusoids →

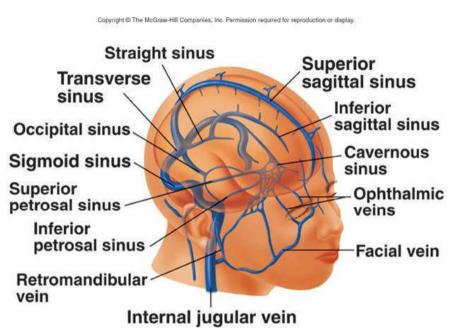
To Central Veins →

Hepatic Veins →

Inferior Vena Cava

### **Cerebral Circulation**





Which arteries carry oxygen-rich blood to the brain?

Which veins drain oxygen-poor blood from the brain?

#### **Fetal Circulation**

The ligamentum arteriosum is a remnant of what fetal structure?

How many of each does a fetus have?

Umbilical Veins
Umbilical Arteries

An umbilical vein carries oxygenated/deoxygenated blood.

Oxygenated/deoxygenated blood is carried from the fetus to the placenta through the umbilical \_\_\_\_\_.

