



# Cardiovascular System

Introduction to Anatomy and Embryology

Lab 10

(Heart and Associated Great Vessels)

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## **Identify**

### **Chambers of the heart**

- ✓ Right atrium
- ✓ Right Ventricle
- ✓ Left atrium
- ✓ Left ventricle

### **External features of the heart**

- ✓ Right auricle (right atrial appendage)
- ✓ Left auricle (left atrial appendage)
- ✓ Coronary sulcus
- ✓ Anterior interventricular sulcus
- ✓ Posterior interventricular sulcus

### **Valves**

- ✓ Right AV valve (tricuspid)
- ✓ Left AV valve (mitral or bicuspid)
- ✓ Aortic semilunar valve
- ✓ Pulmonary semilunar valve

### **Associated Great Vessels**

- ✓ Pulmonary trunk (right and left pulmonary arteries)
- ✓ Pulmonary veins
- ✓ Superior vena cava
- ✓ Inferior vena cava
- ✓ Aorta:

#### **Ascending aorta:**

Coronary arteries

#### **Arch of aorta:**

Brachiocephalic trunk

Left common carotid artery

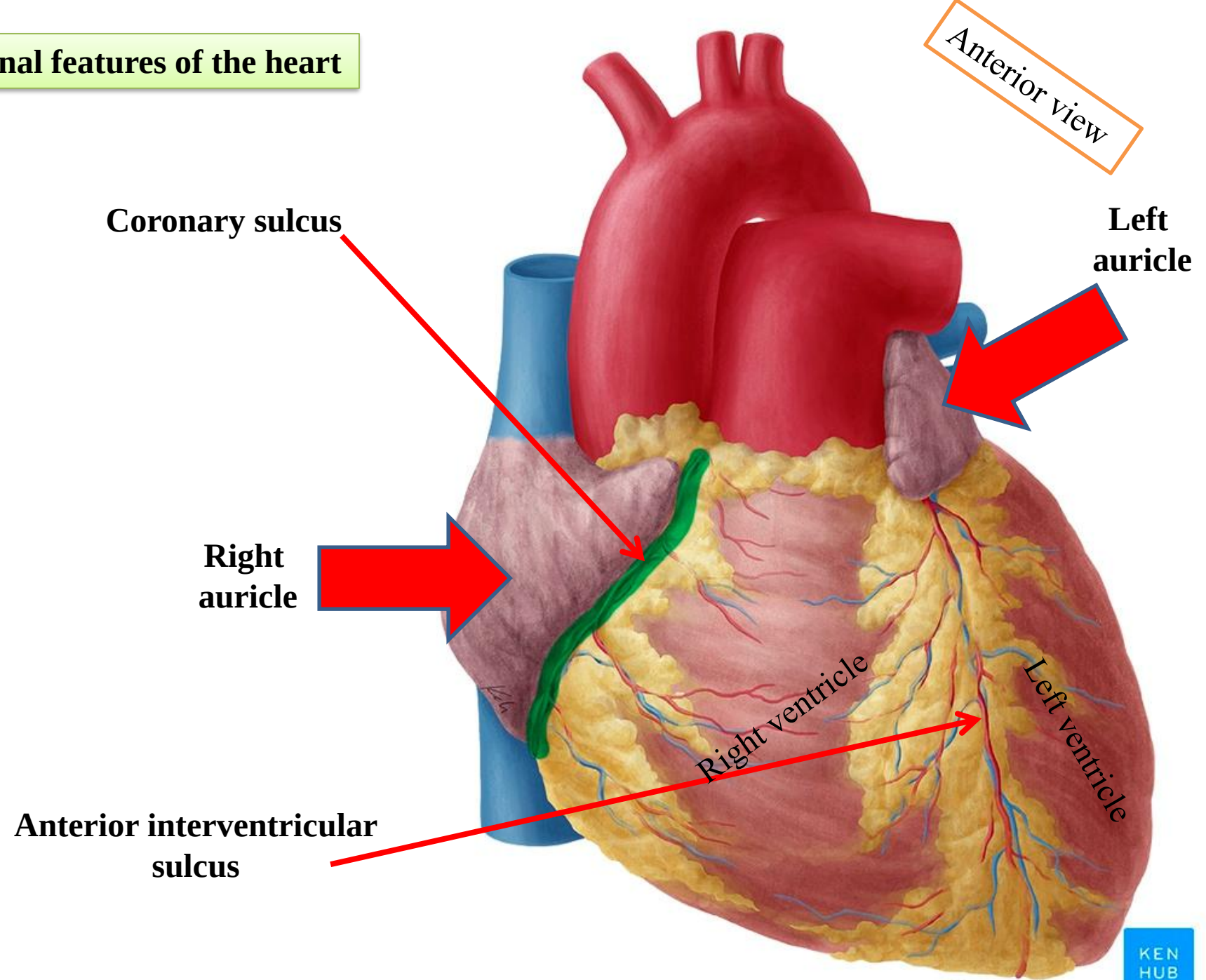
Left subclavian artery

#### **Descending (thoracic) aorta**

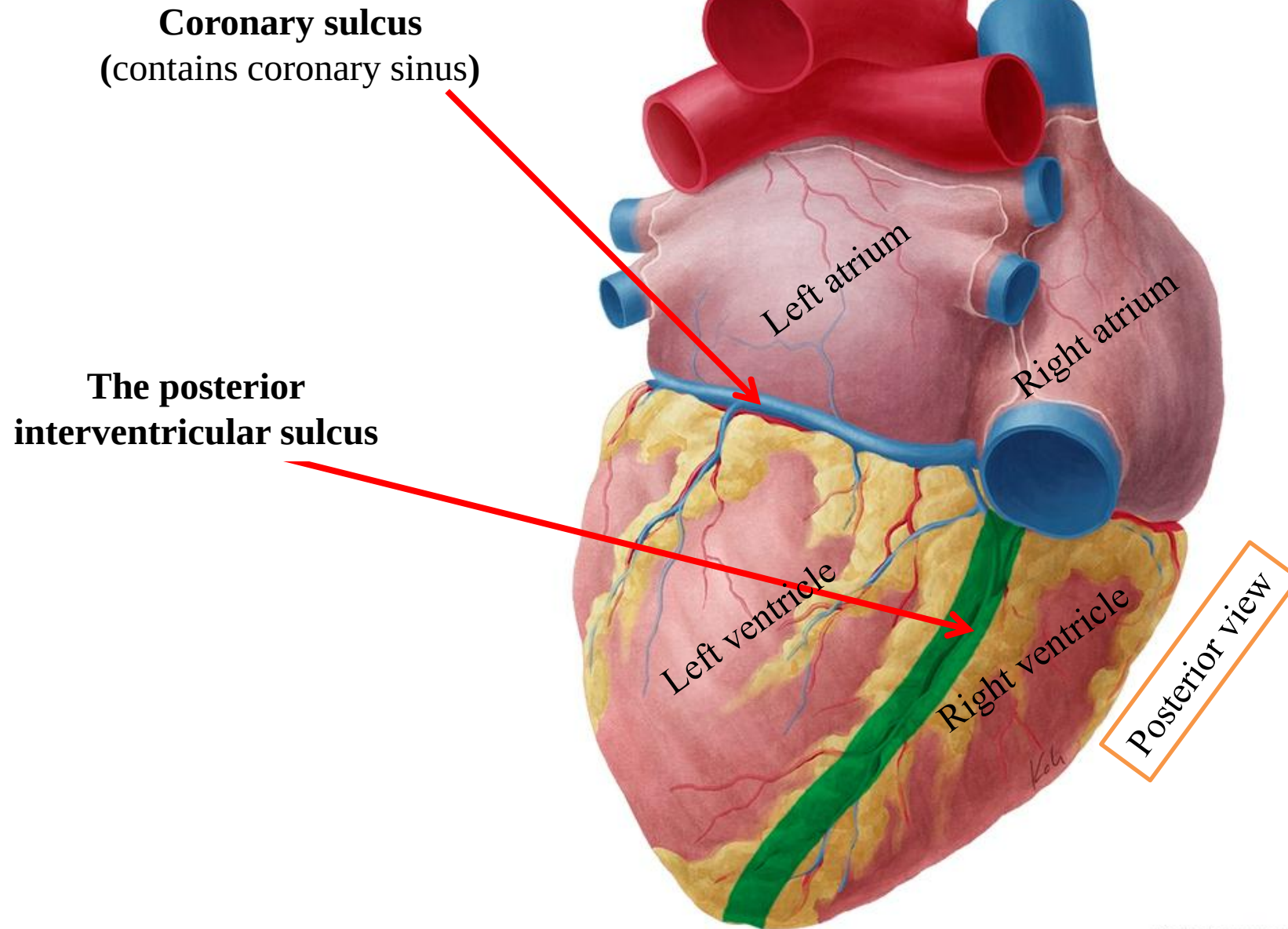
#### **Abdominal aorta:**

Common iliac arteries

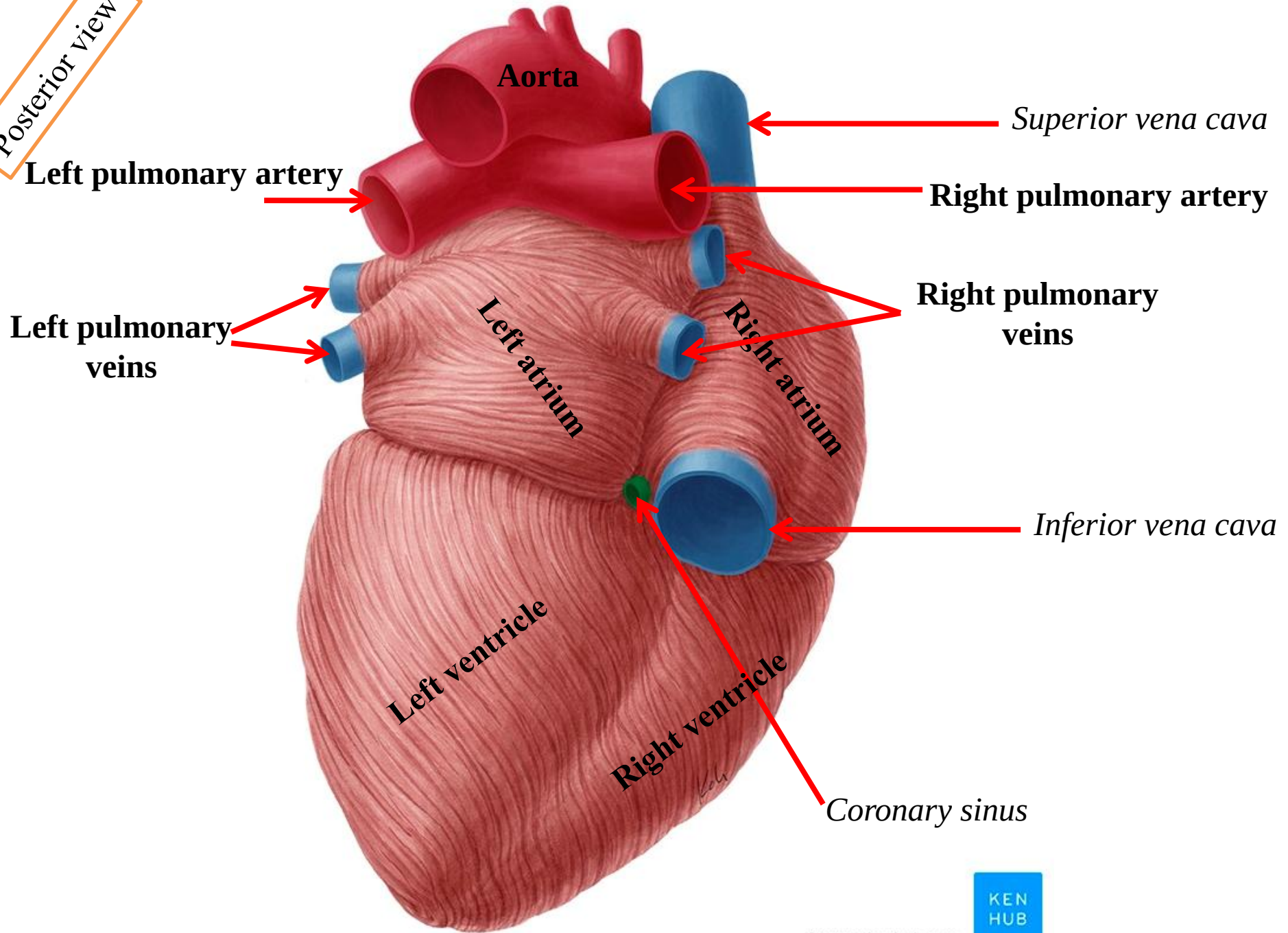
## External features of the heart



## External features of the heart



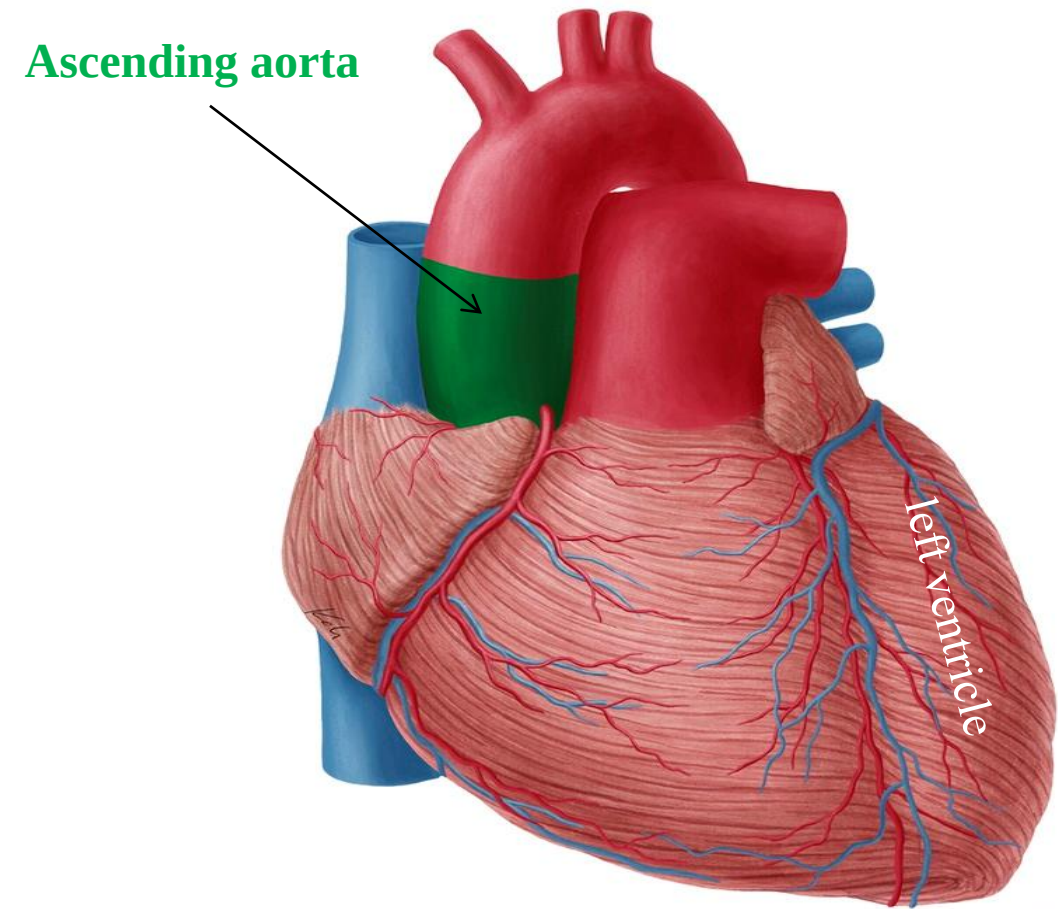
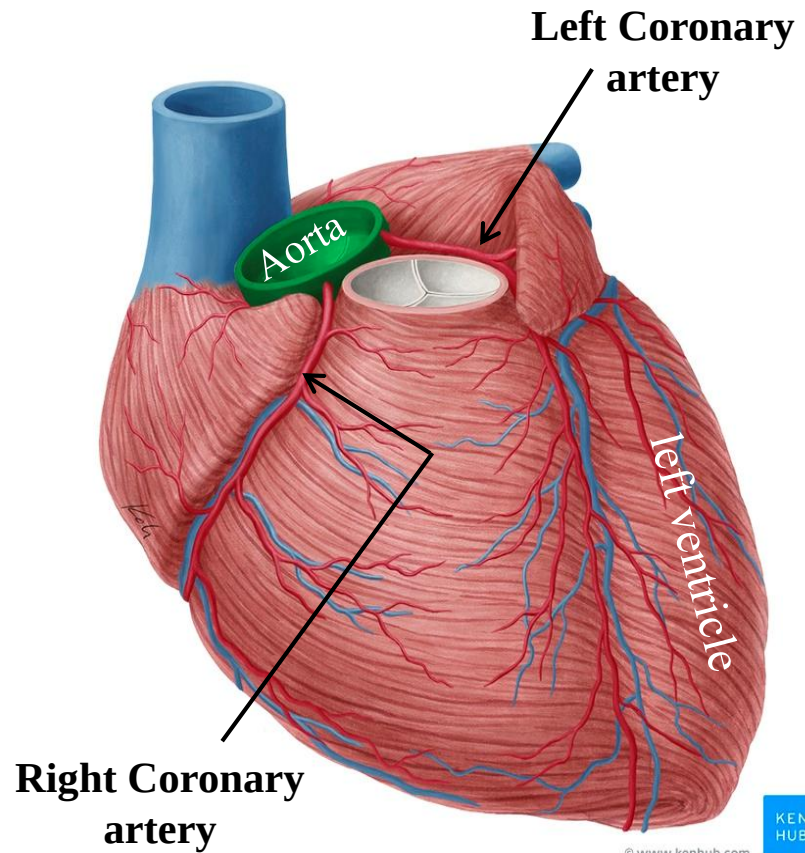
Posterior view





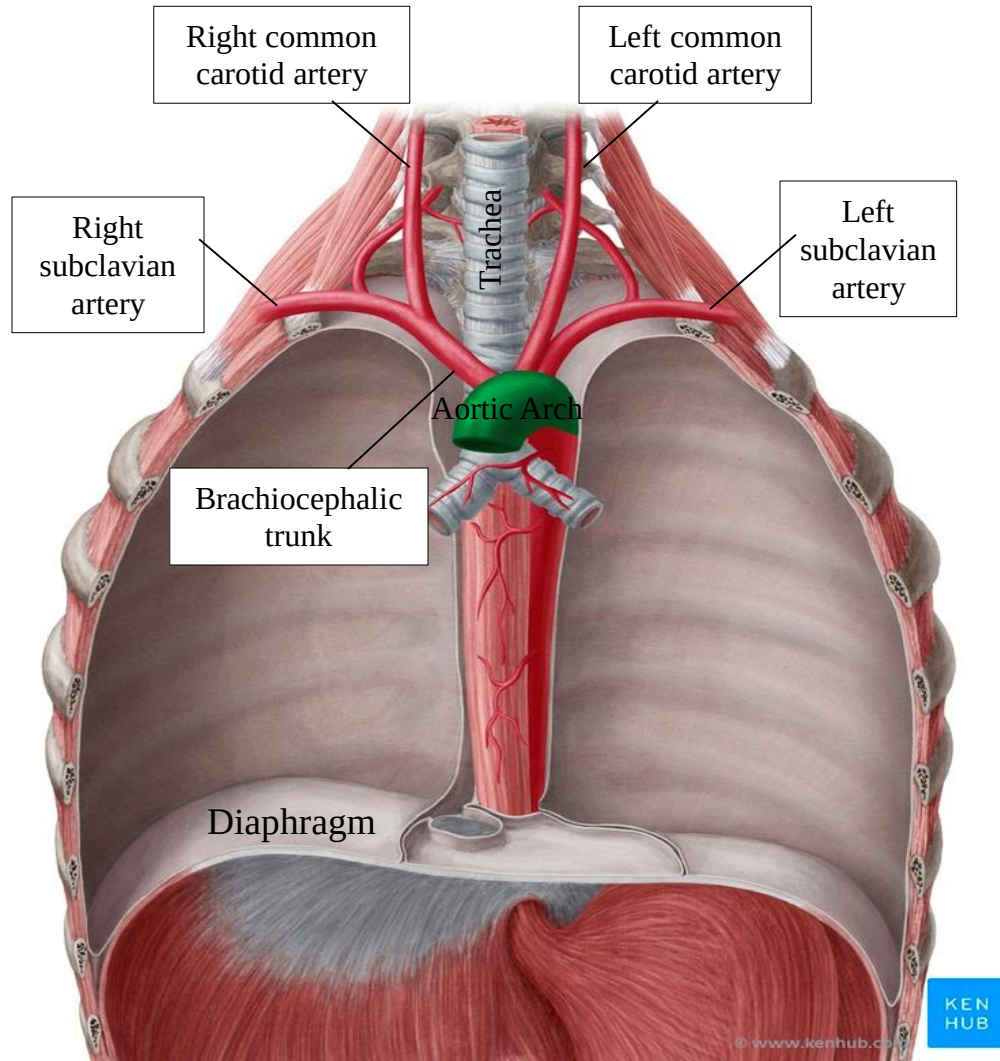
# Branches of the Ascending aorta:

## Coronary arteries

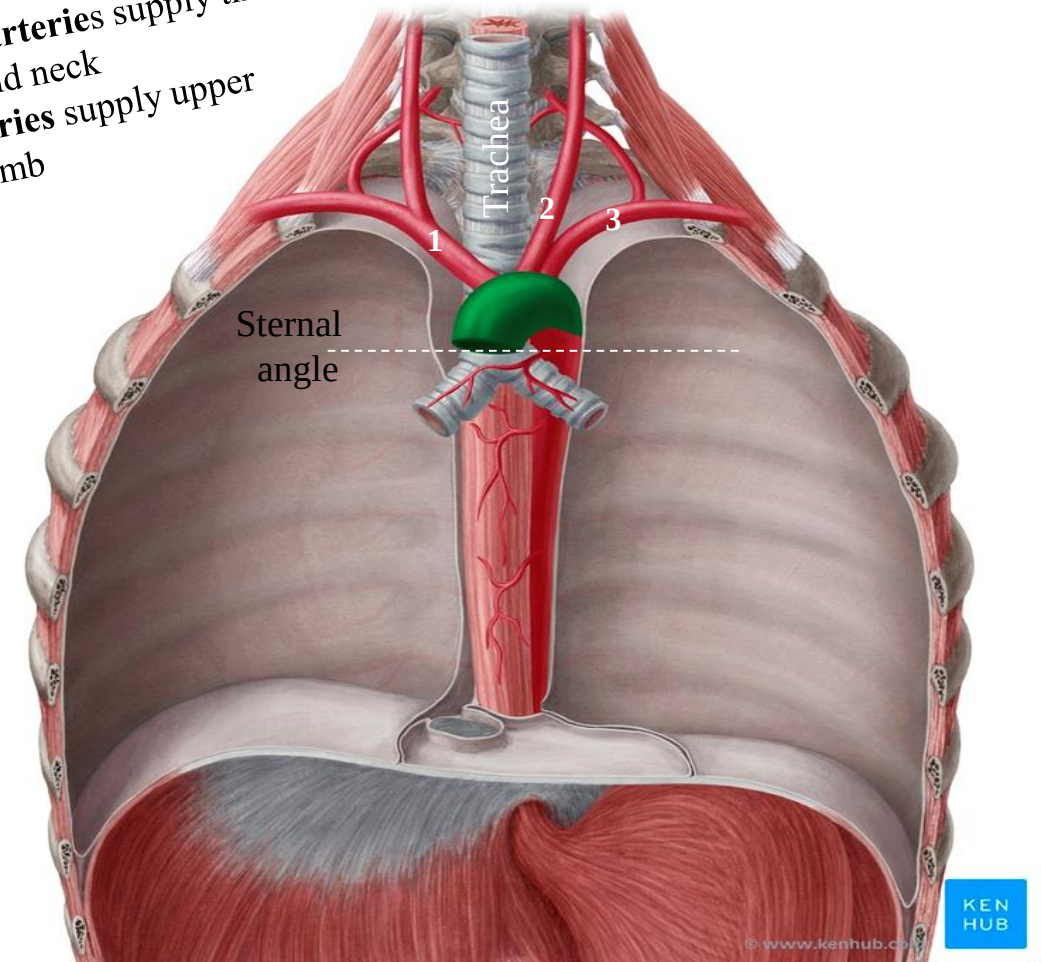


# Branches of the Aortic Arch:

- 1- **Brachiocephalic trunk:** splits into the right common carotid artery and right subclavian artery
- 2- **Left common carotid artery**
- 3- **Left subclavian artery**

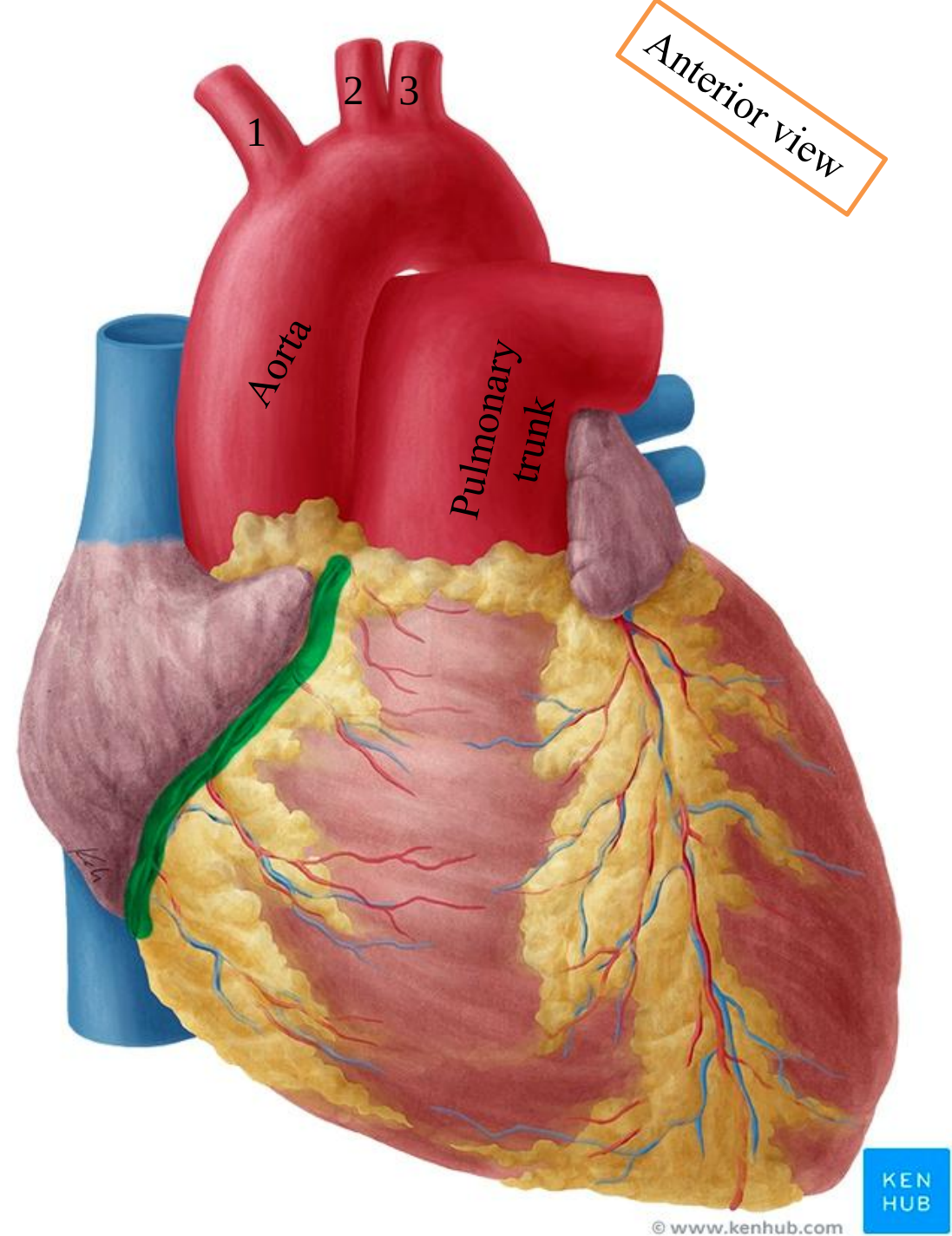


*Common carotid arteries supply the head and neck  
Subclavian arteries supply upper limb*

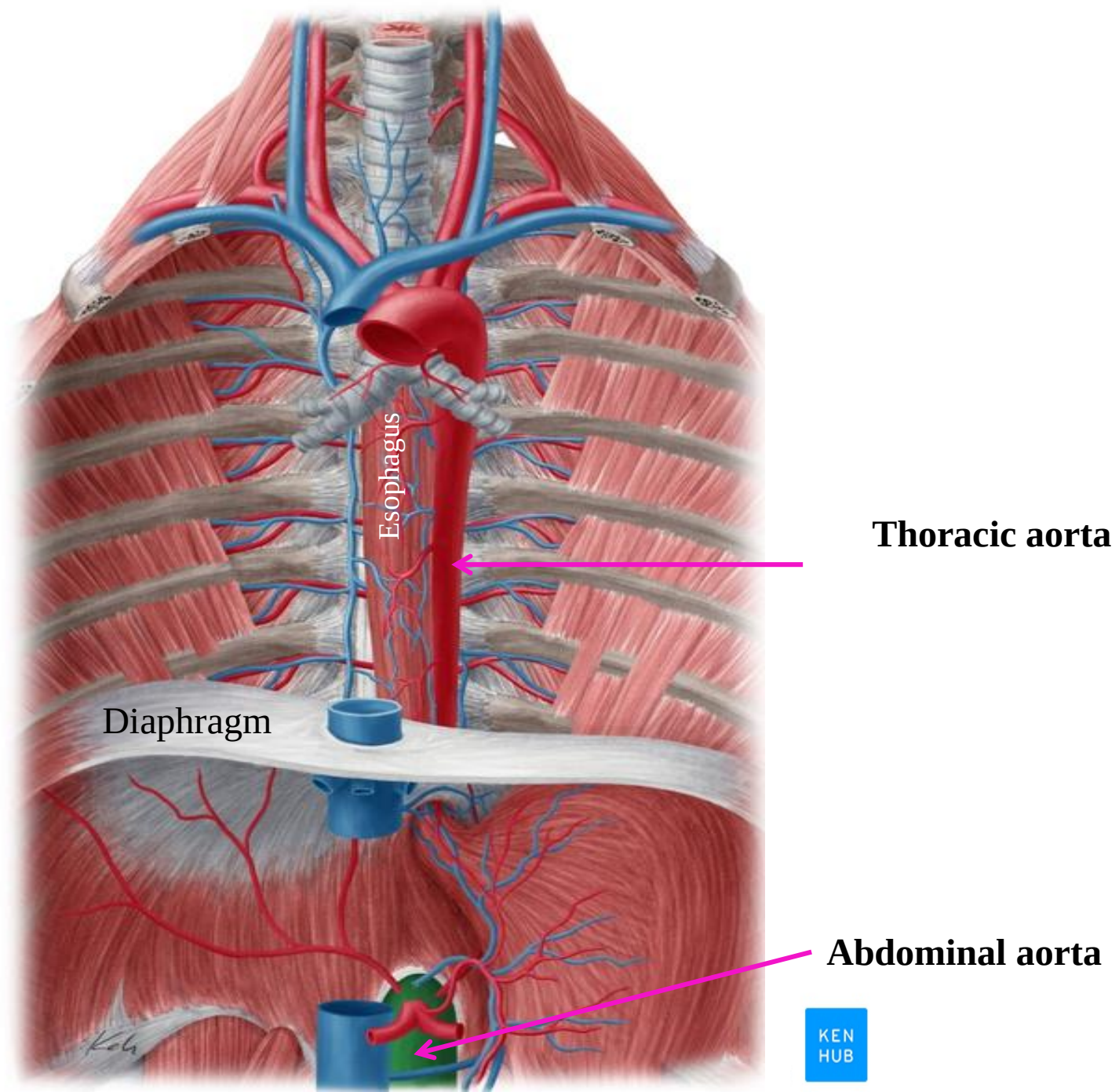
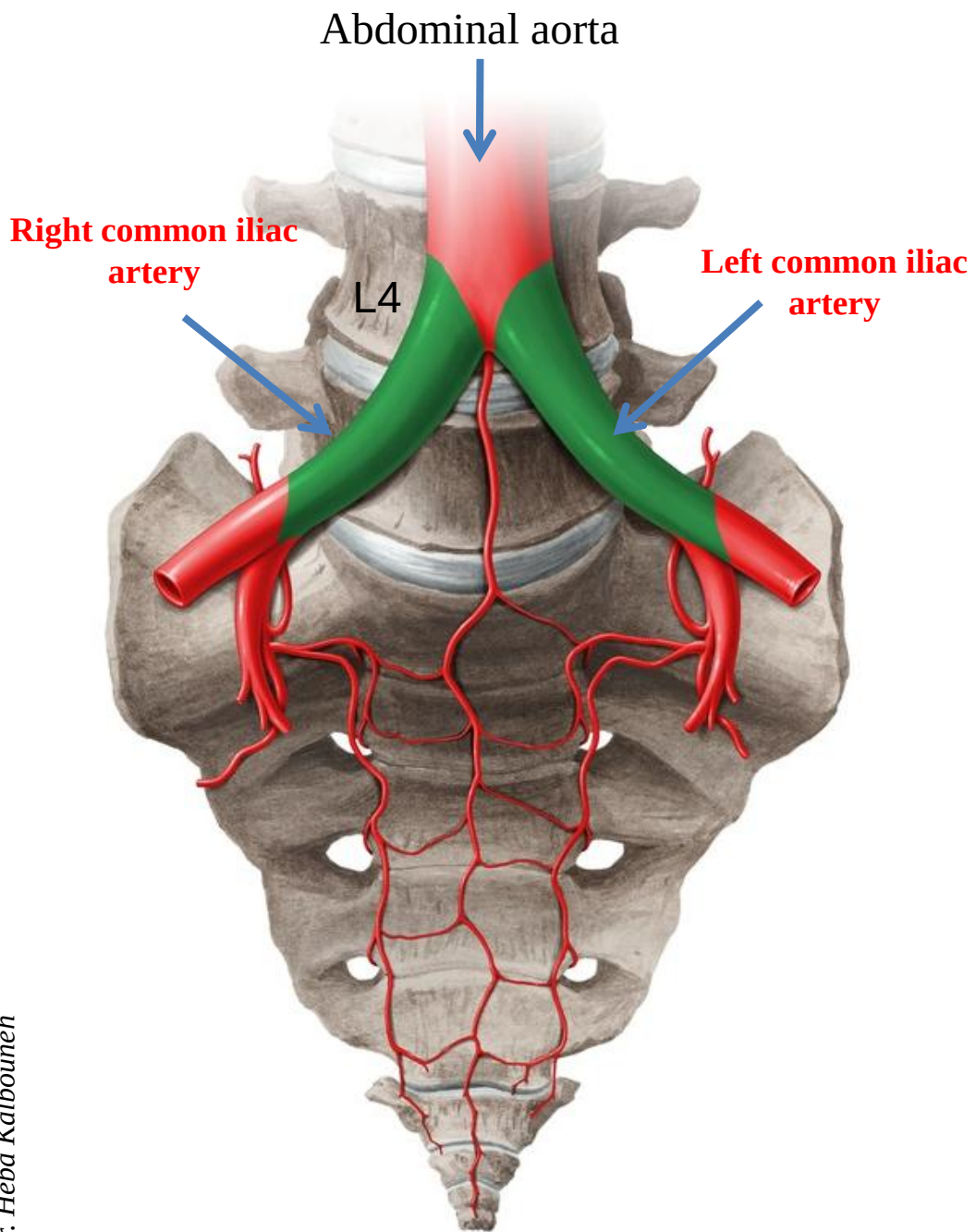




1. Brachiocephalic trunk
2. Left common carotid artery
3. Left subclavian artery









# Digestive System

Introduction to Anatomy and Embryology

Lab 10

# The Digestive System

- **The GI tract** (gastrointestinal tract)

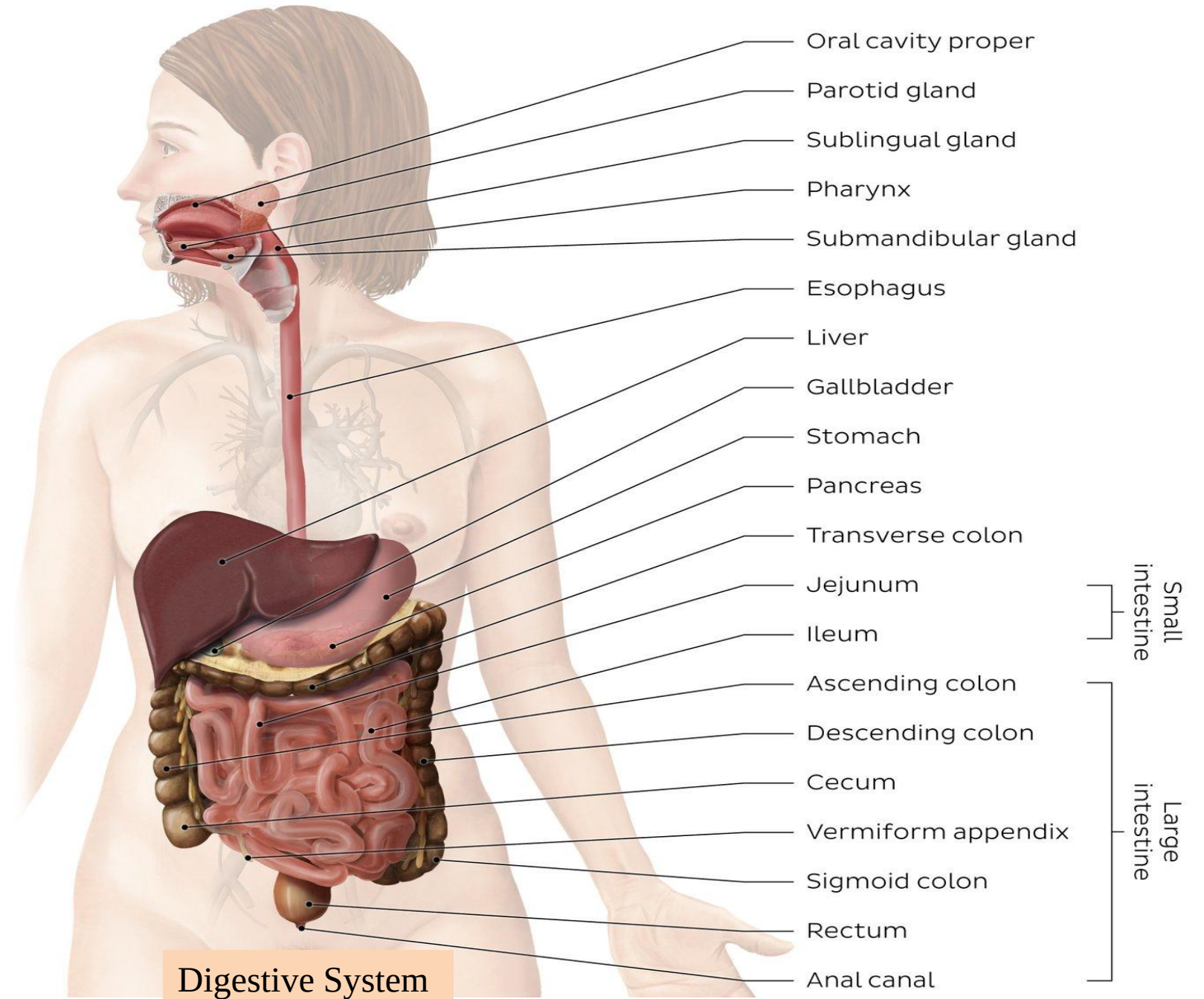
*The muscular alimentary canal*

- Mouth
- Pharynx
- Esophagus
- Stomach
- Small intestine
- Large intestine
- Anus

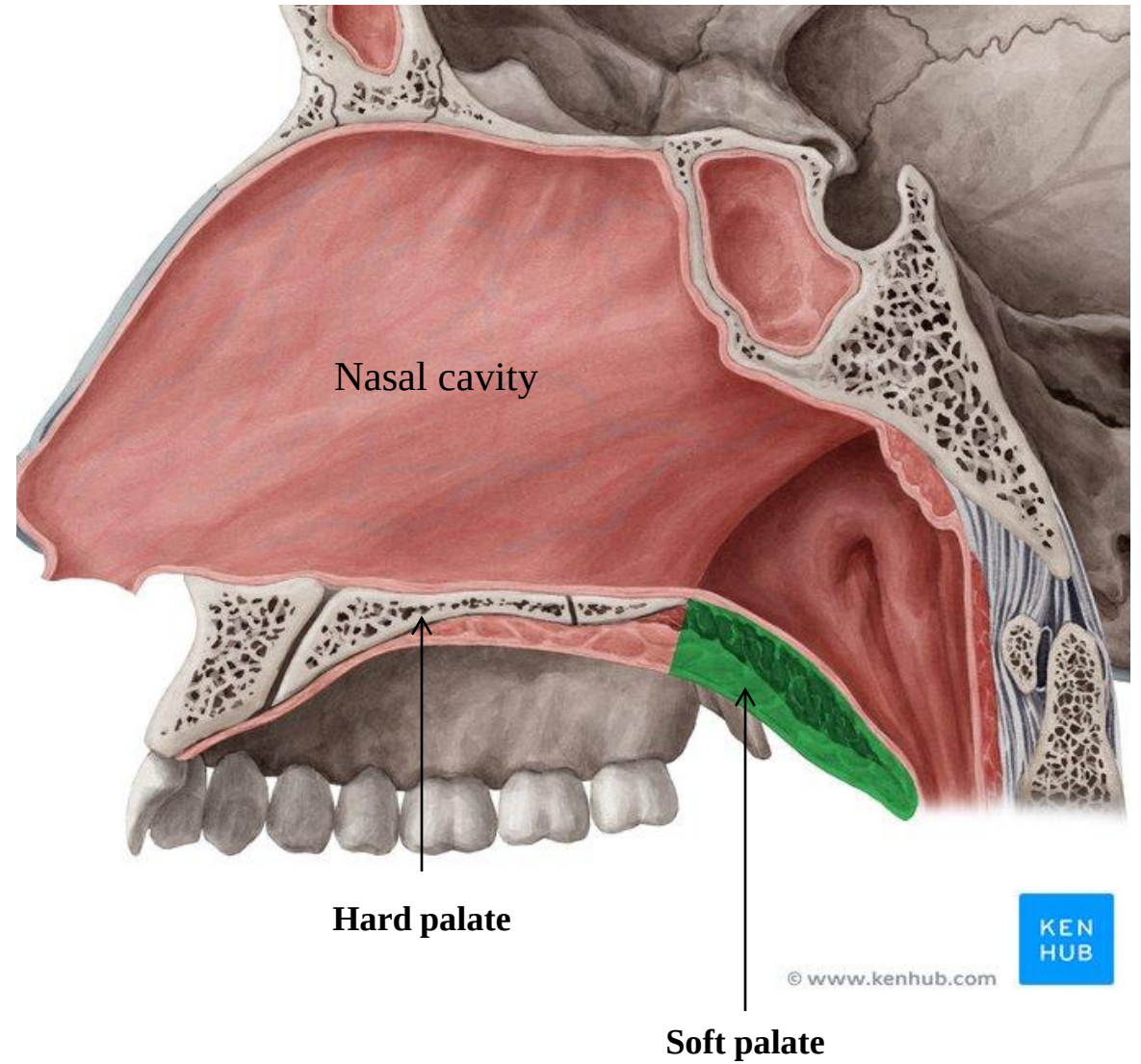
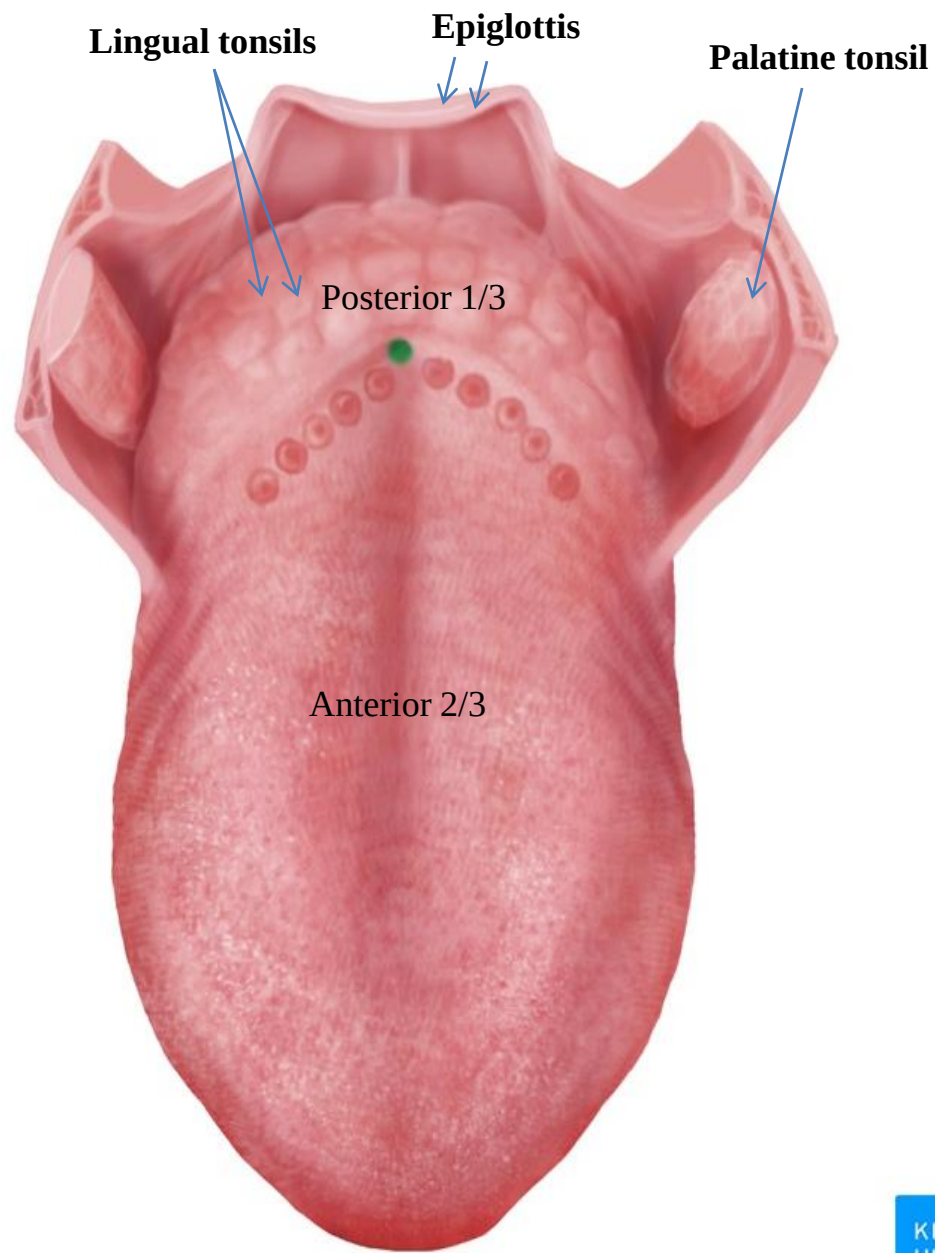
- **The accessory digestive organs**

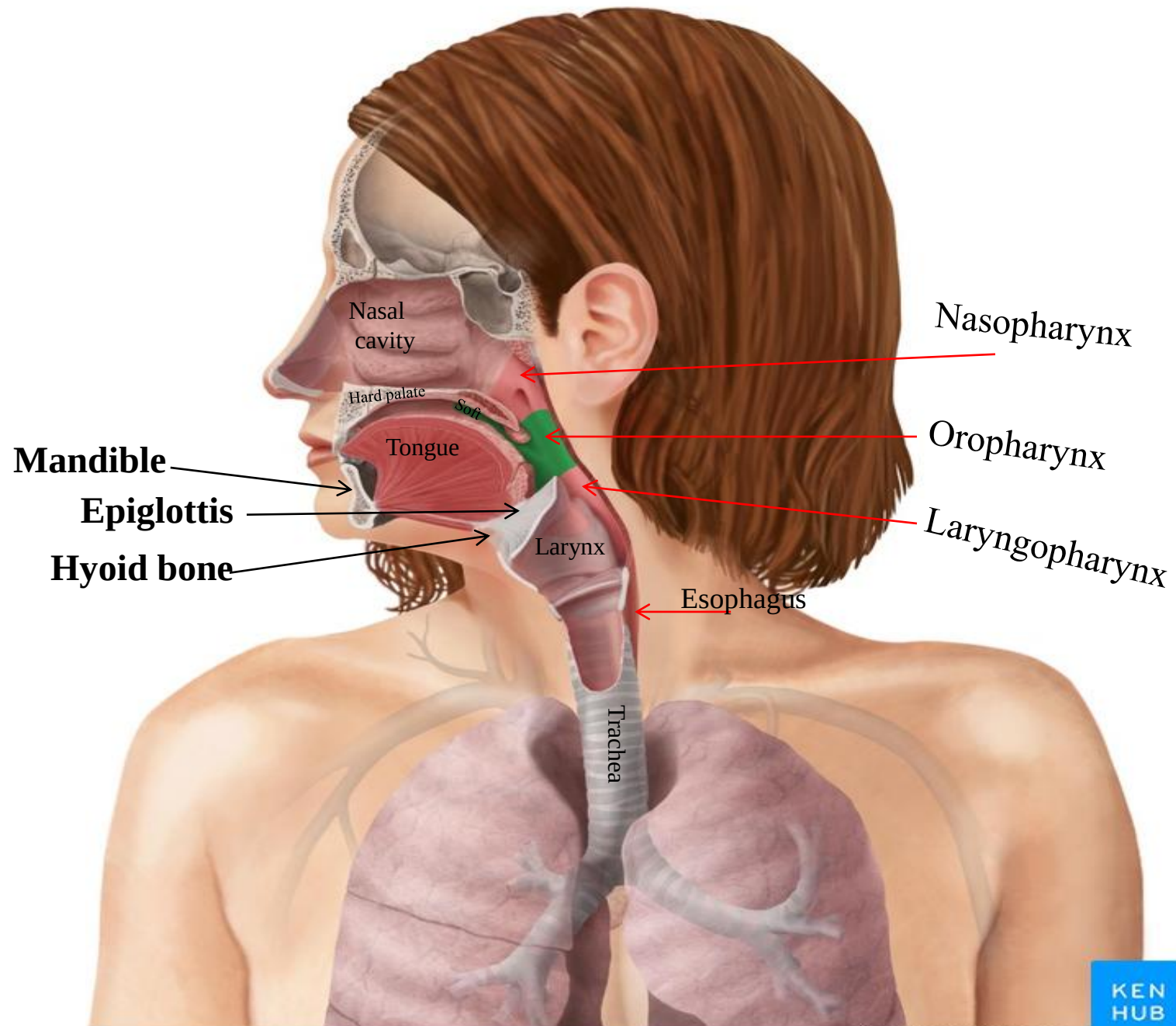
- Teeth & tongue
- Salivary glands
- Gallbladder
- Liver
- Pancreas

*Supply secretions  
contributing to the  
breakdown of food*

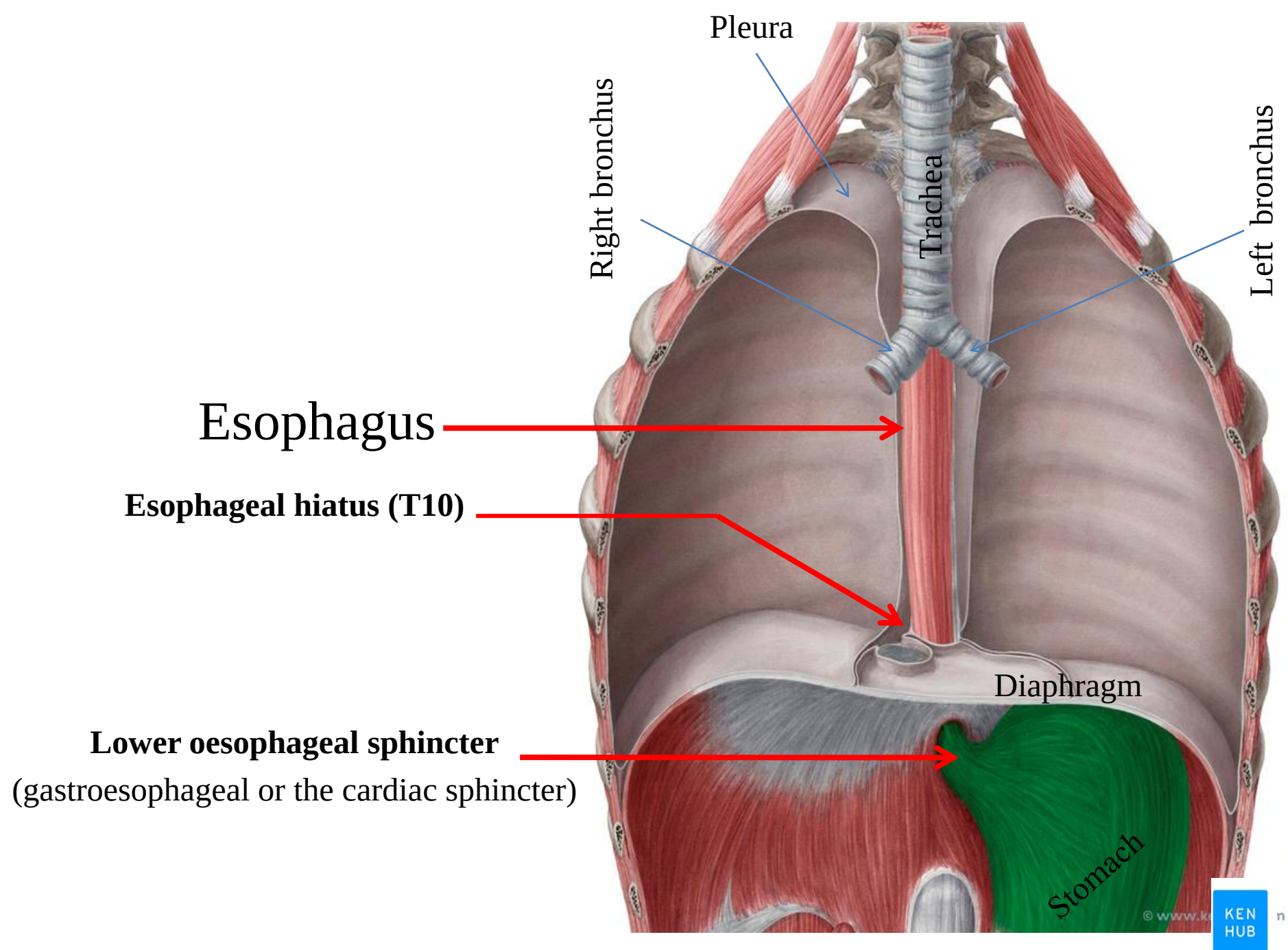






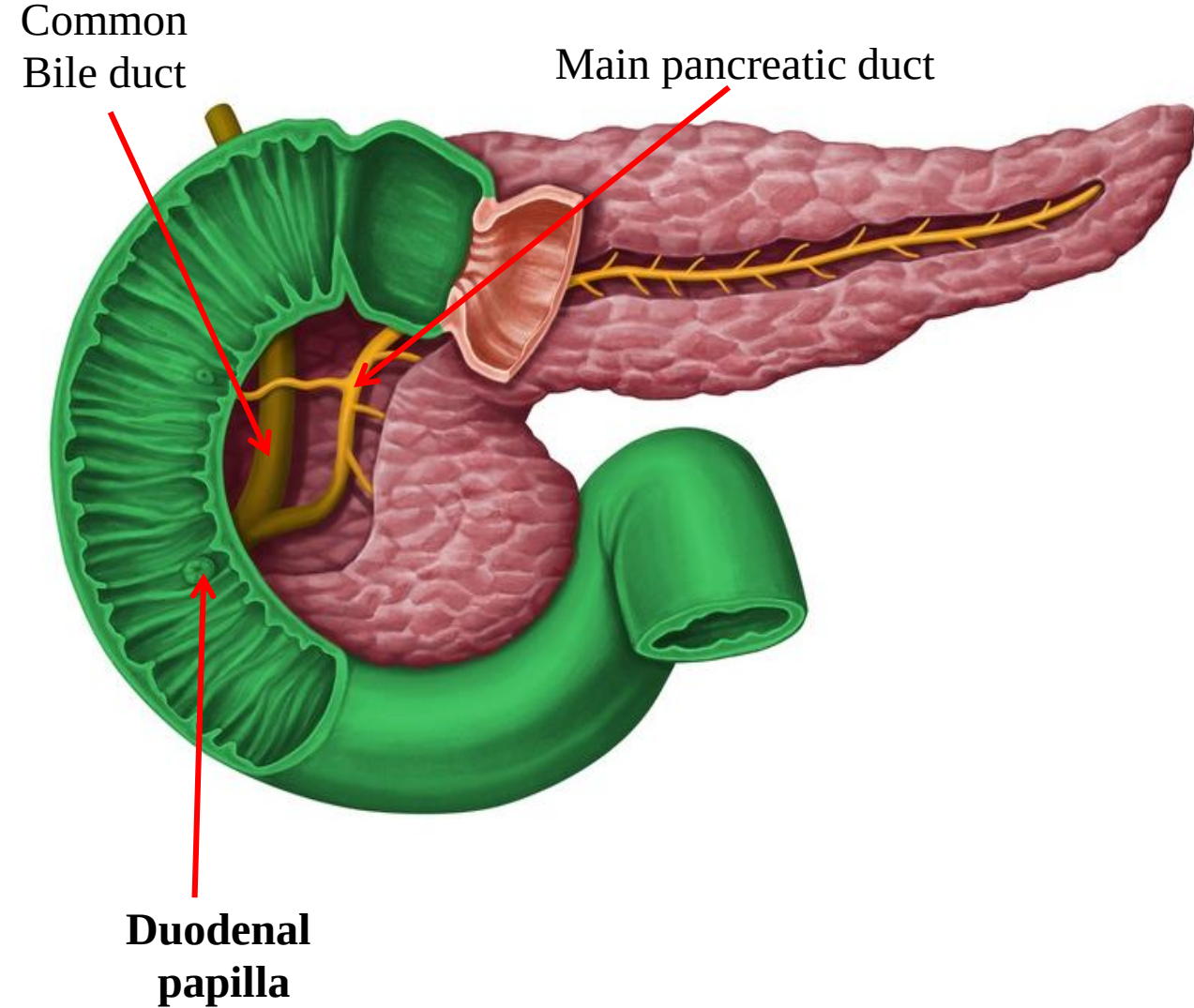






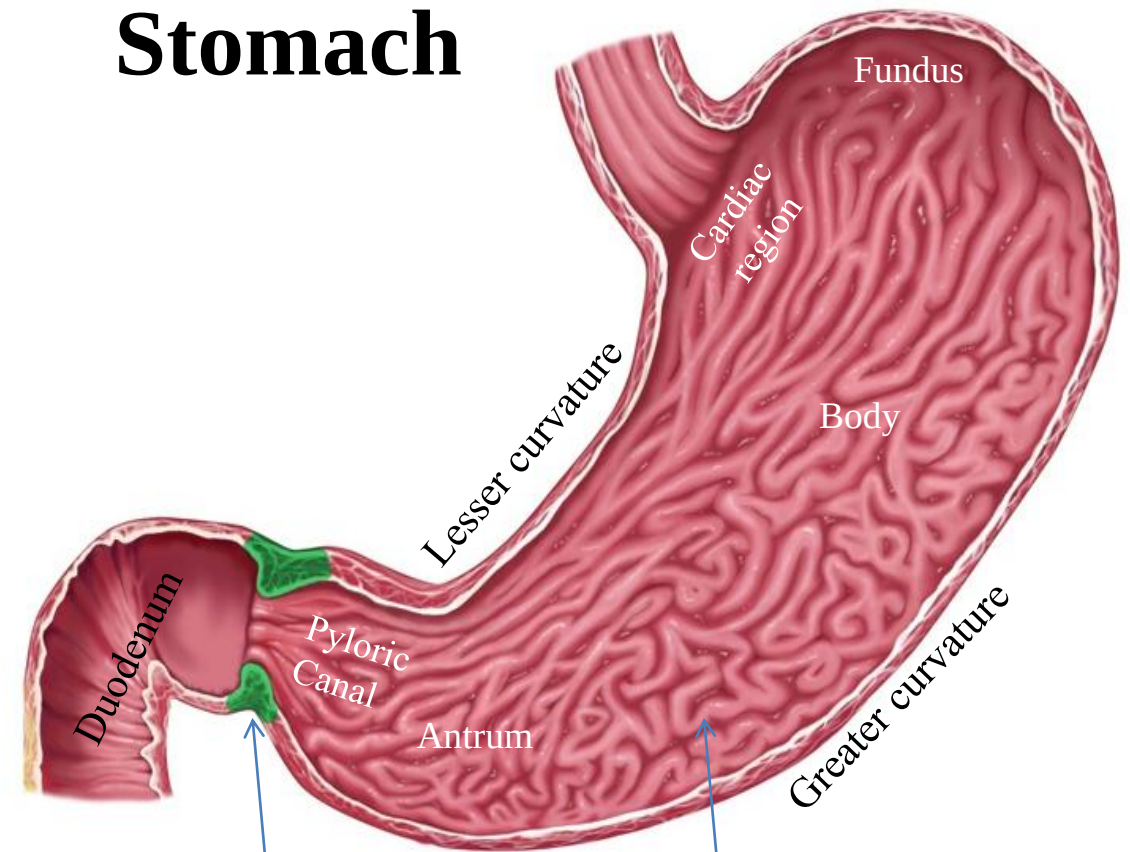


# Duodenum

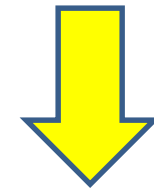


Dr. Heba Kalbouneh

# Stomach



Rugae



**Rugae** are longitudinal folds on internal surface when stomach is empty (helps distensibility)

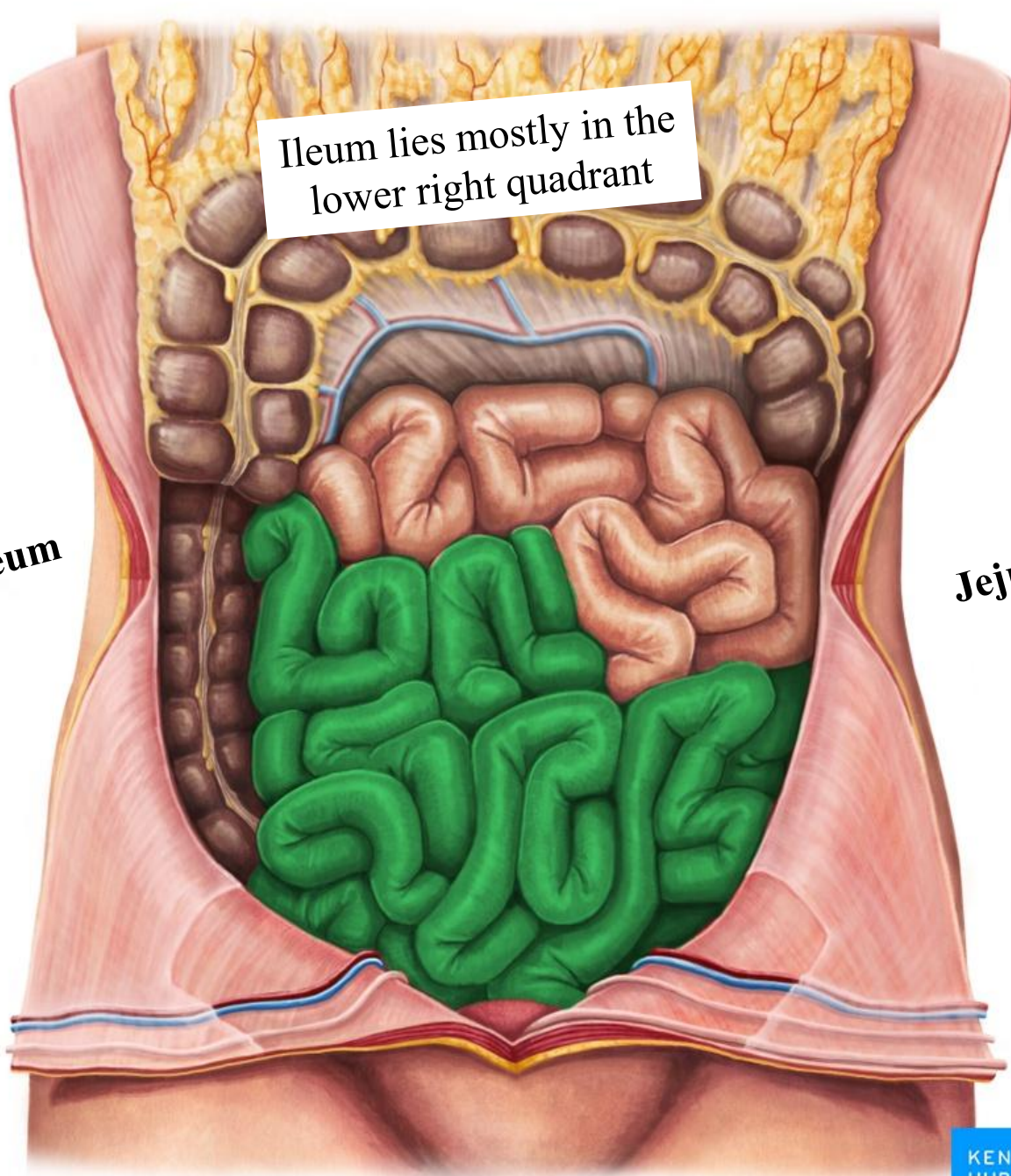
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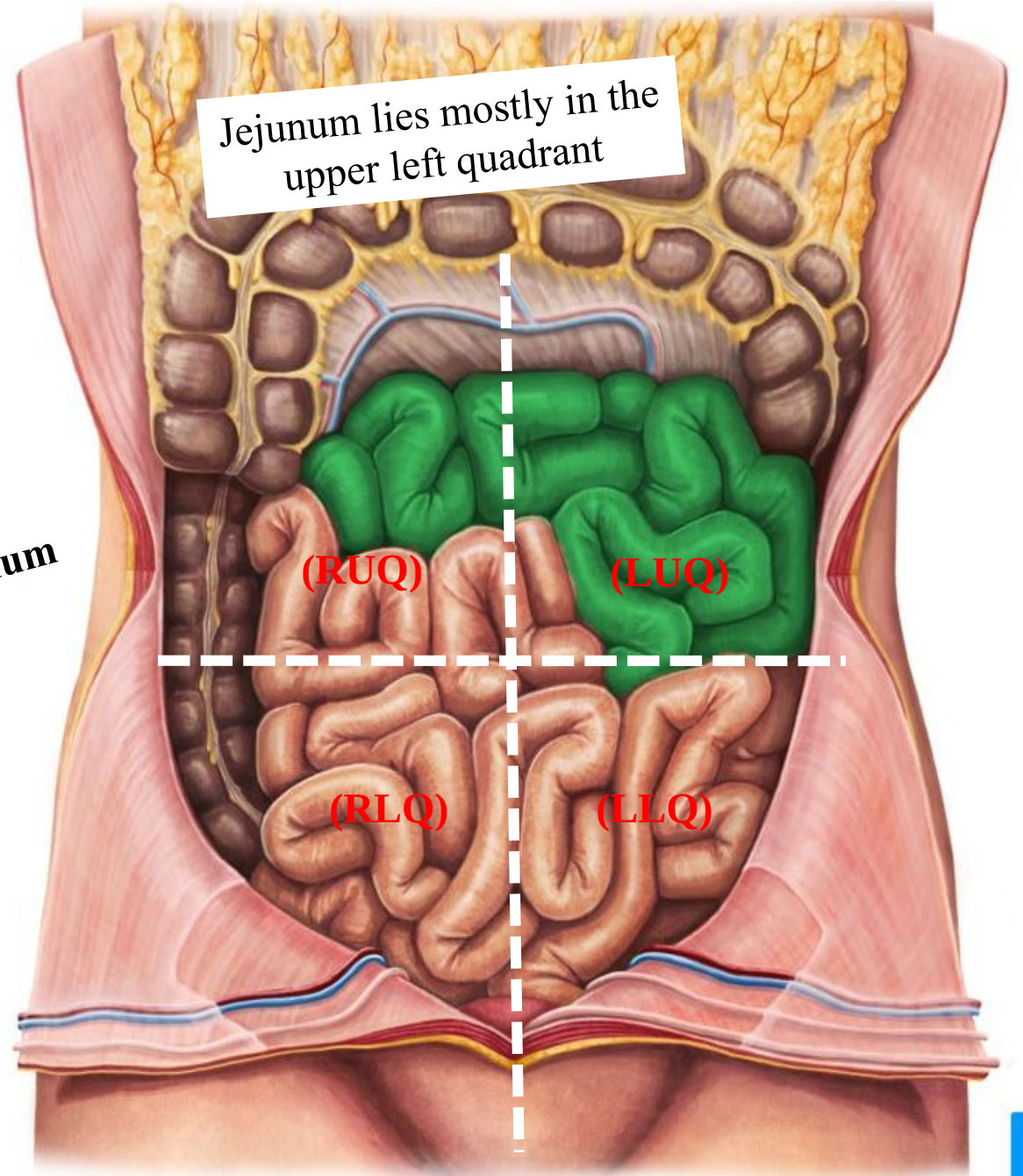
Ileum lies mostly in the lower right quadrant

Ileum

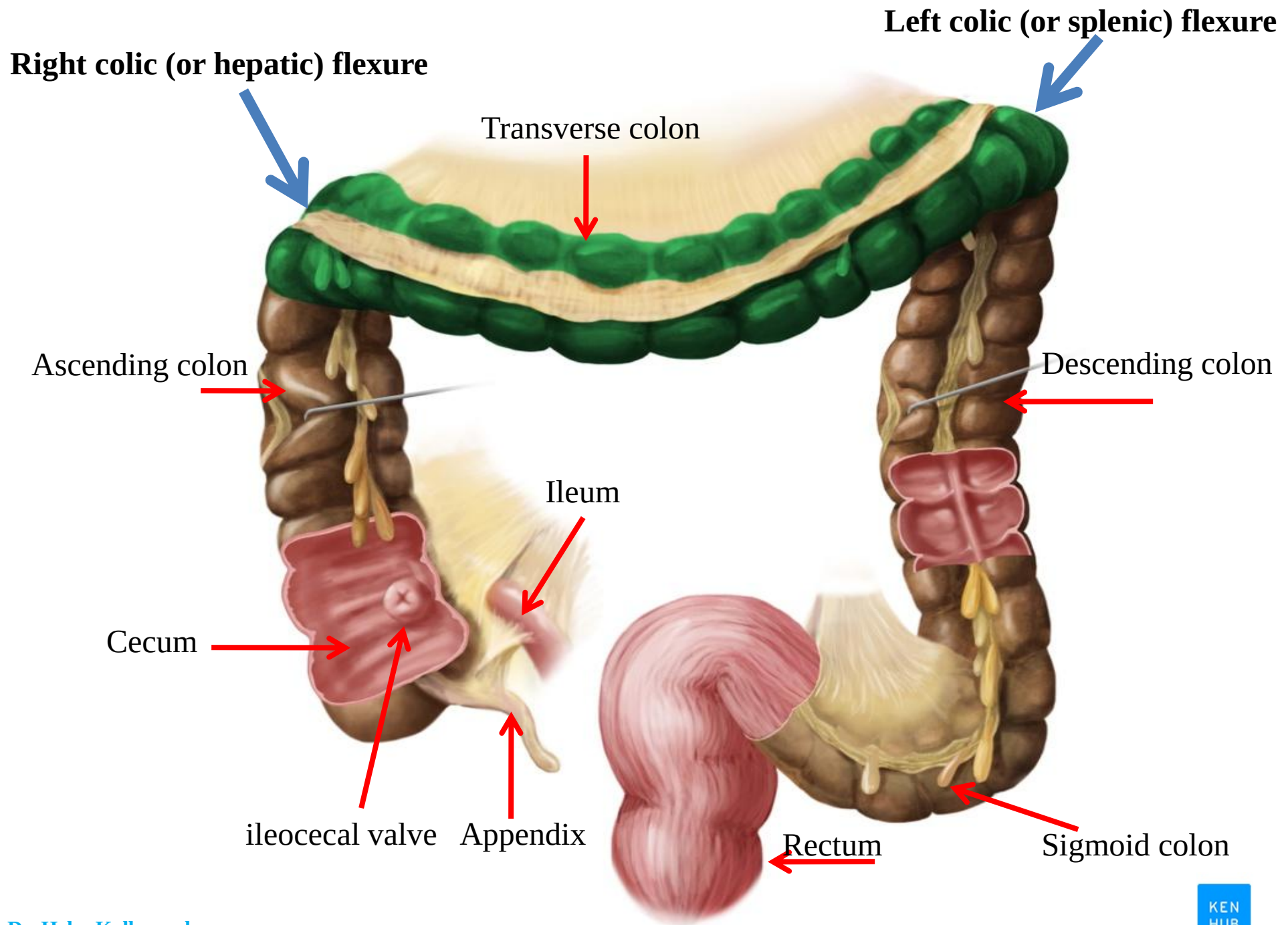


Jejunum lies mostly in the upper left quadrant

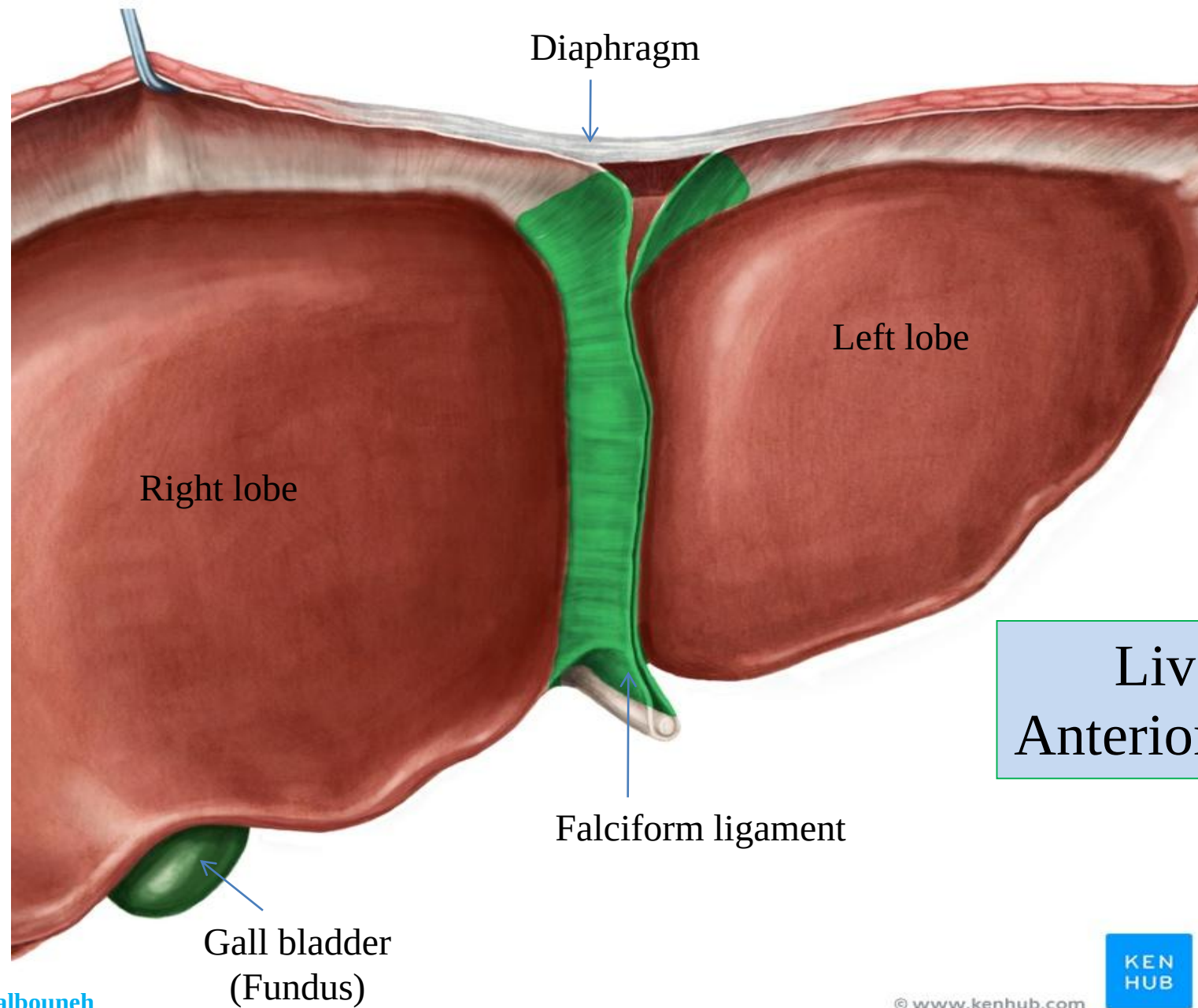
Jejunum





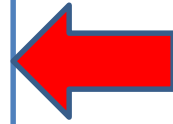




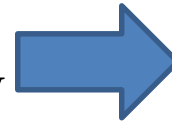


## Hepatic artery

Supplies  
hepatocytes with  
oxygen rich blood



Liver receives a  
dual blood supply



## Portal vein

Supplies  
hepatocytes with  
nutrients rich blood

