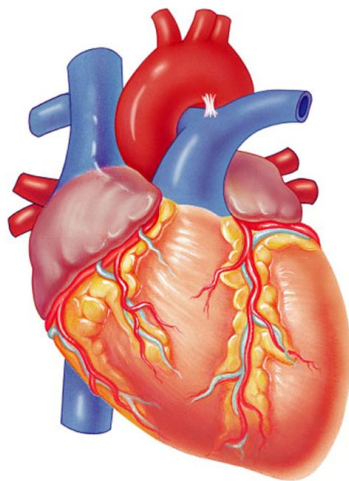


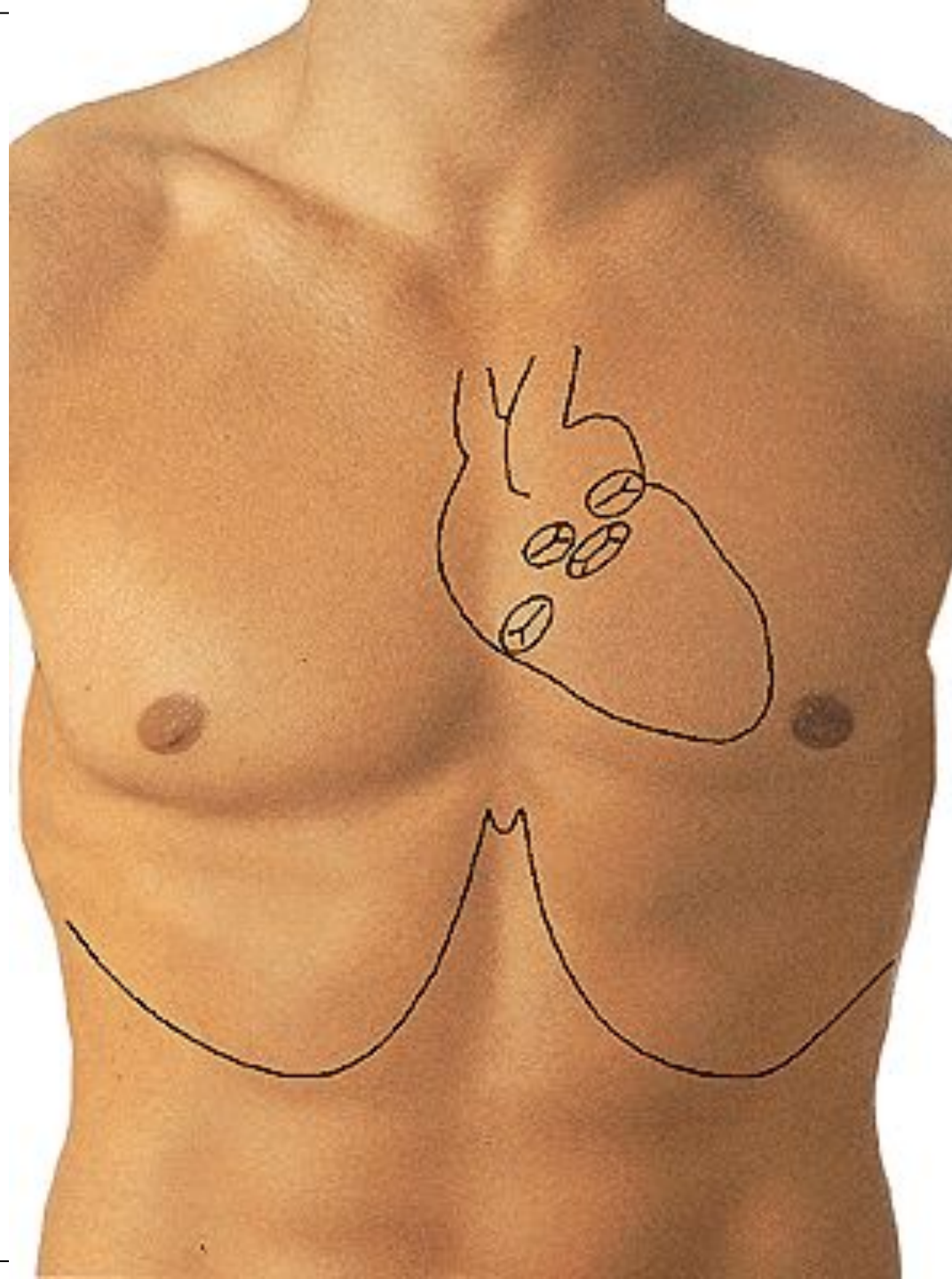
# *Anatomy of the heart*

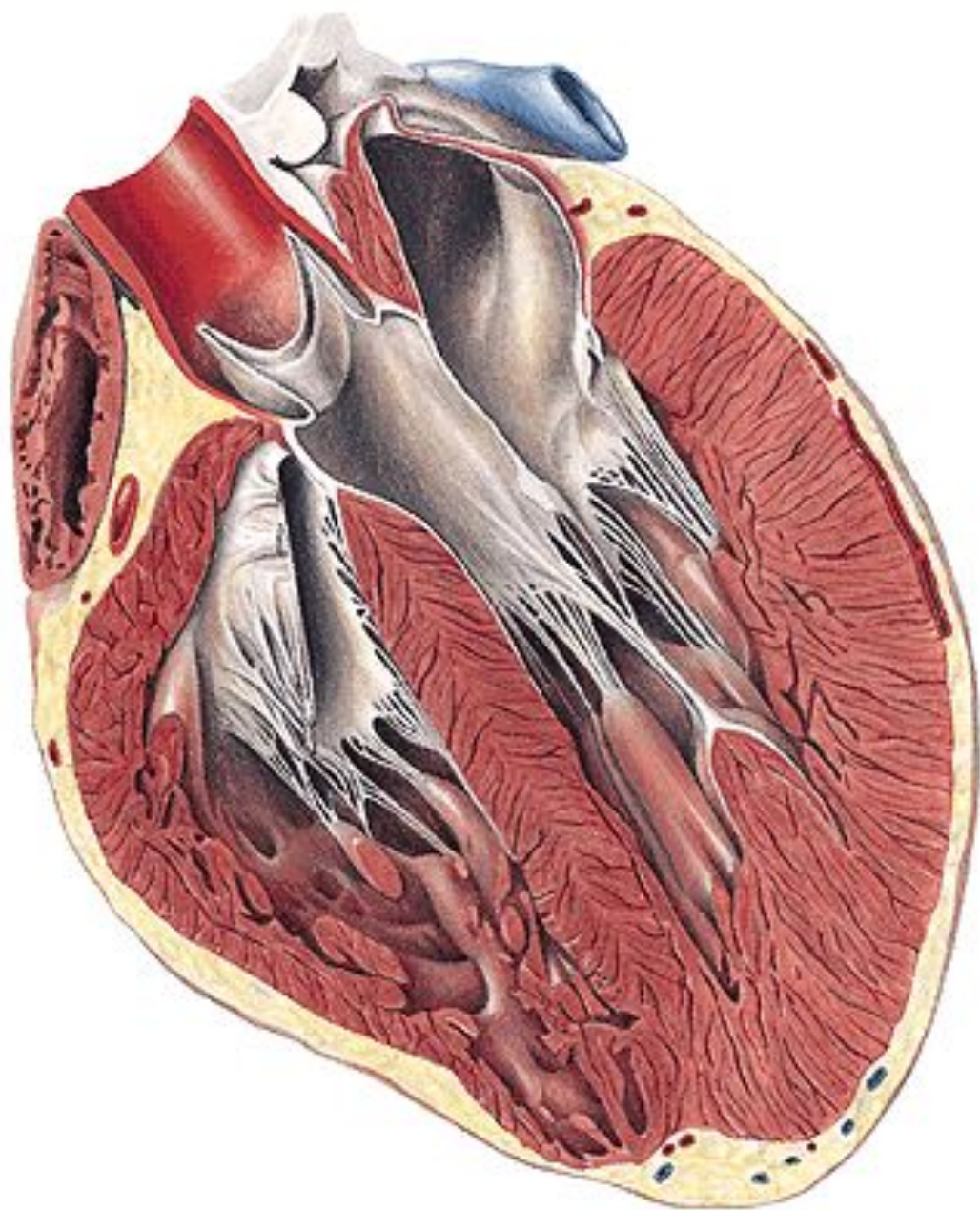


work was made by Imangali Maira

# Plan:

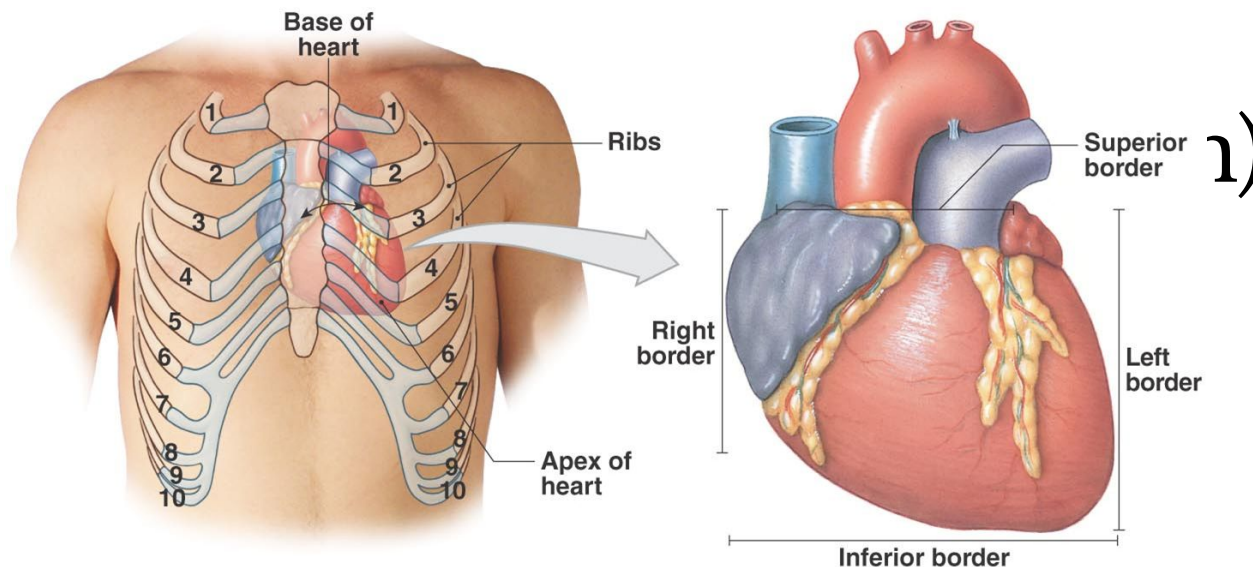
- **Size, Location, and Orientation**
- **Coverings**
- **Heart Wall**
- **Chambers**
- **Chest x ray**





# Heart Anatomy

- **Size, Location, and Orientation**
- Enclosed in the mediastinum
- Base (posterior superior





# Heart Anatomy

- **Coverings**

- Pericardium

- protects the heart
- anchors the heart to surrounding structures such as the diaphragm and the great vessels
- prevents overfilling of the heart with blood

# Heart Anatomy

## ● Coverings

- pericardial cavity contains a film of serous fluid
- pericarditis: inflammation of the pericardium which may lead to adhesions between the layers or the buildup of fluid in the pericardial cavity (cardiac tamponade)

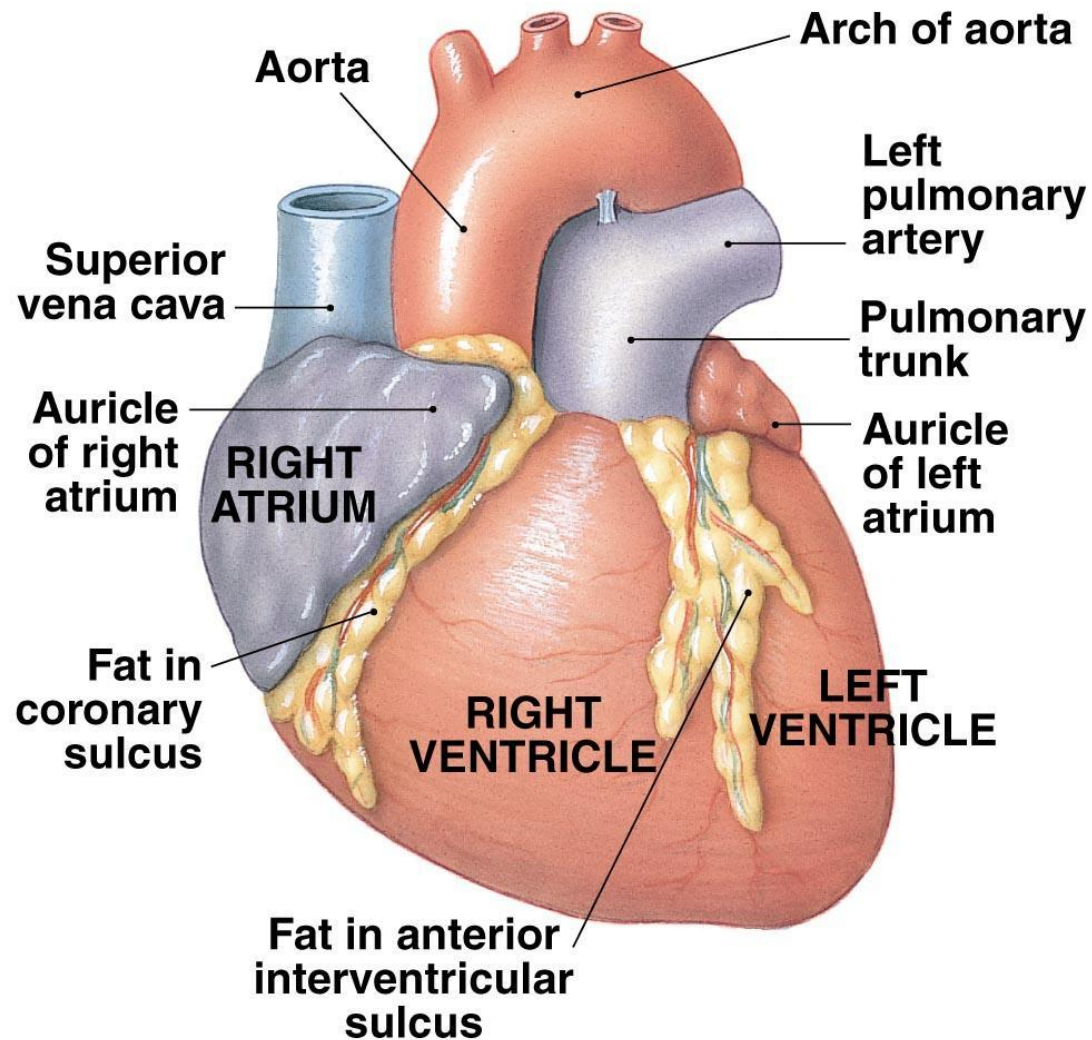
# Heart Anatomy

- **Heart Wall**
  - Epicardium
  - Myocardium
    - bulk of the heart consisting mainly of cardiac muscle



# Heart Anatomy

- **Heart Wall**
  - Endocardium
    - simple squamous epithelium and a thin CT layer that lines the heart chambers and valves and is continuous with the endothelial lining of the blood vessels



**(a) Anterior surface (1 of 2)**

# Heart Anatomy

- Chambers

- Atria

- Features

- small, thin-walled chambers

- Functions

- receiving chambers for blood returning to the heart from the circulation

- push the blood into the adjacent ventricles.

# Heart Anatomy

- Chambers

- Atria

- Receive blood from

- right side

- ❖ Superior and Inferior Vena Cava

- ❖ Coronary Sinus (draining the myocardium)

- left side

- ❖ Pulmonary Veins

# Heart Anatomy

- Chambers

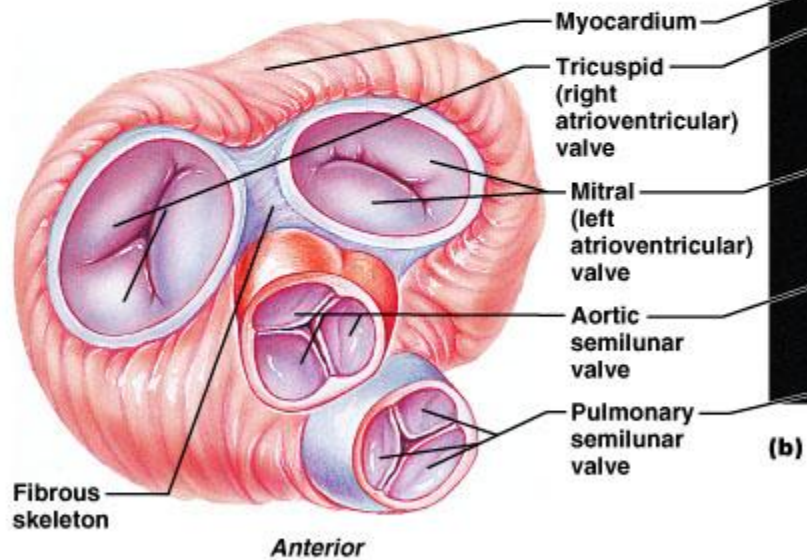
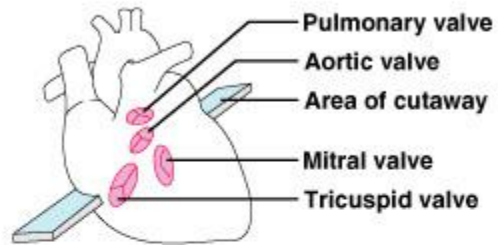
- Ventricles

- Features

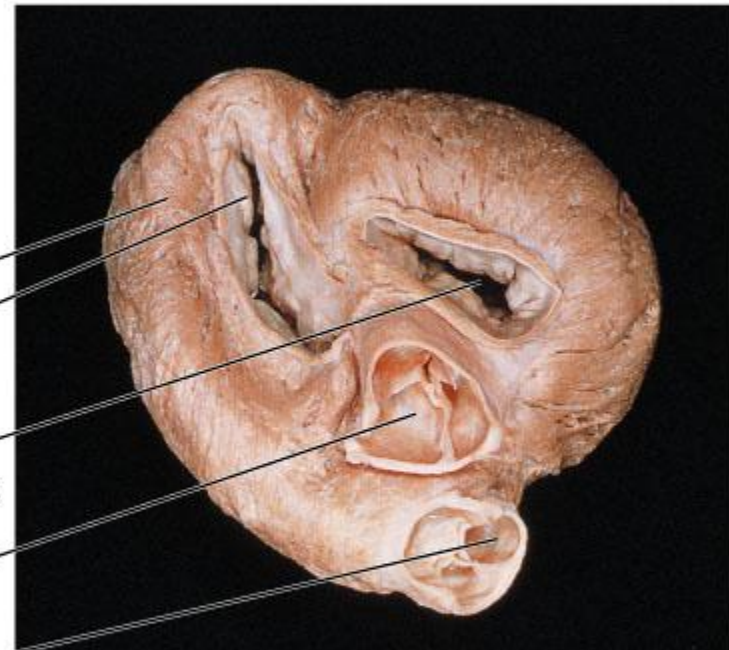
- make up most of the mass of the heart
- the walls of the left ventricle are 3X thicker than those of the right

# Heart Anatomy

- Chambers
- Ventricles
- Functions
  - discharging chambers of the heart
  - propel blood to Pulmonary Trunk (right ventricle), Aorta (left ventricle)



**(a)**



**(b)**



CXR  
(chest x ray)



Normal male



Normal female

## List of bibliographies:

<http://www.innerbody.com/image/card01.html>

<http://www.texasheartinstitute.org/HIC/Anatomy/anatomy2.cfm>

<http://www.cardioconsult.com/Anatomy/>