

# The Musculoskeletal System

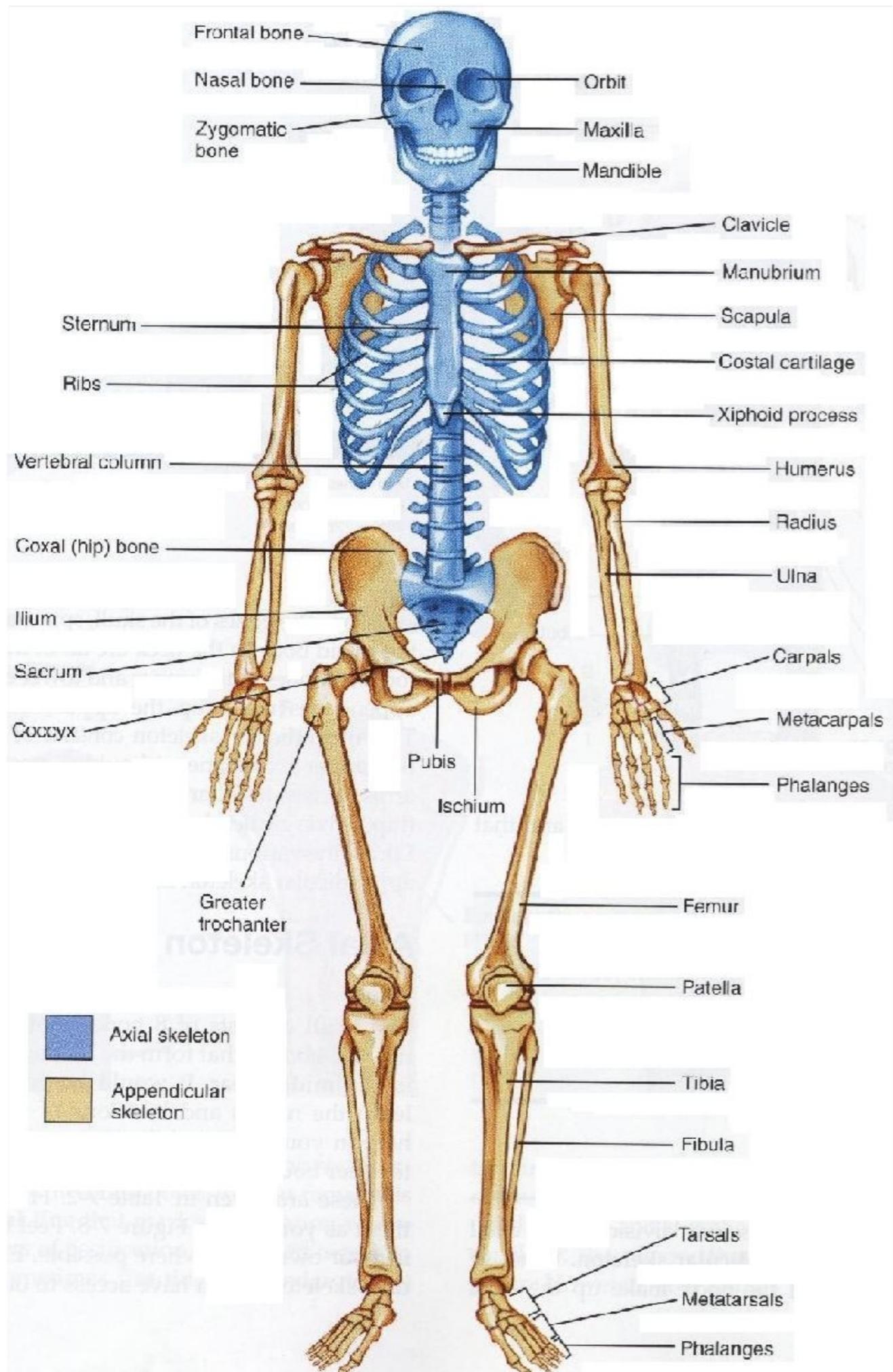
*Bartolo Natoli, M.A; M.Ed.*

# Big Questions:

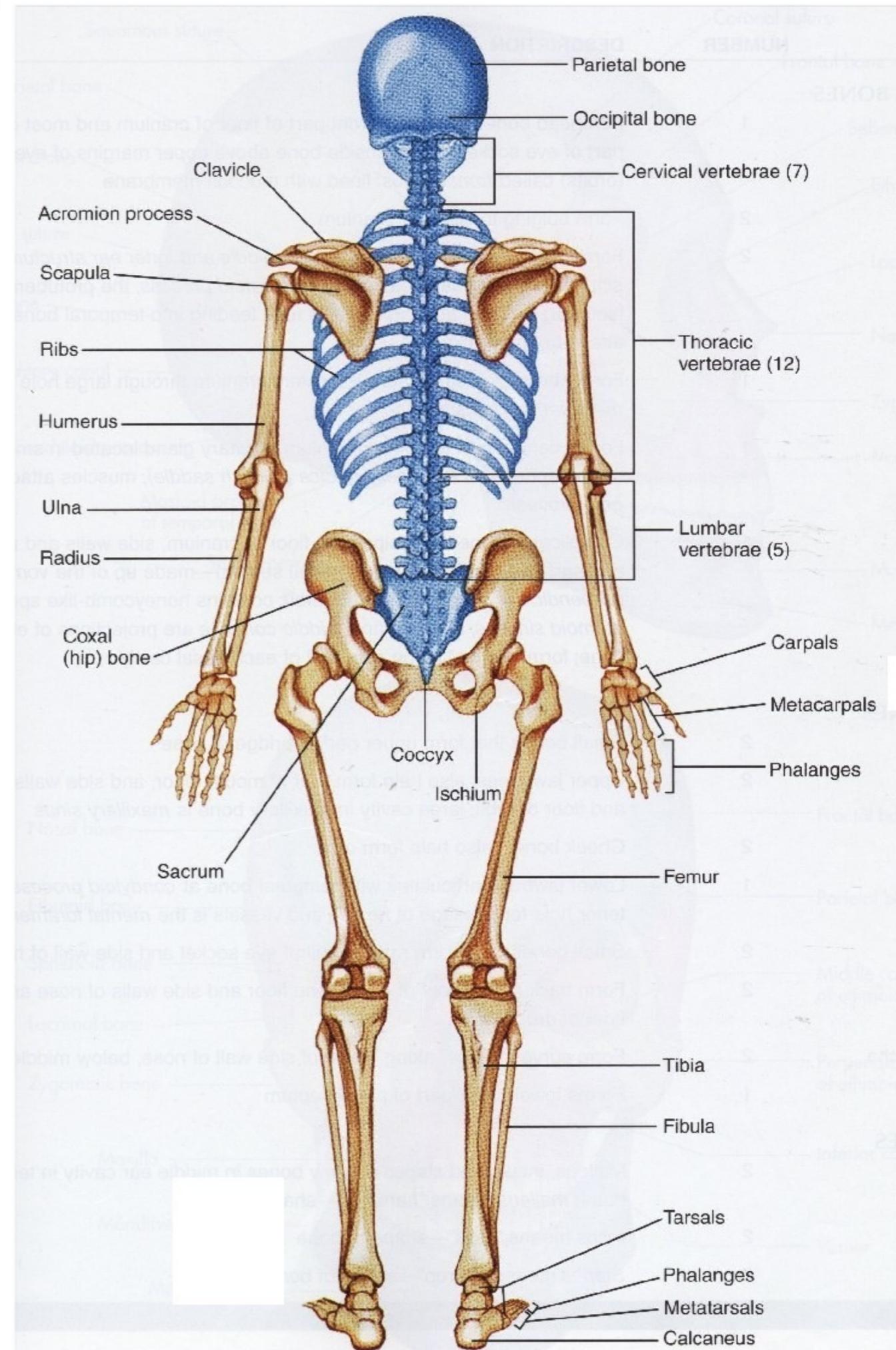
1. What does the Musculoskeletal System do?
2. What are the basic combining forms used to describe the Musculoskeletal System?
3. Where are pieces of the Musculoskeletal System located?
4. What are the basic diseases of the Musculoskeletal System?

# Functions of the Skeleton

- Provide support & shape to the body through a framework of bones and cartilage
- Store calcium and other minerals
- Produce certain blood cells within bone marrow



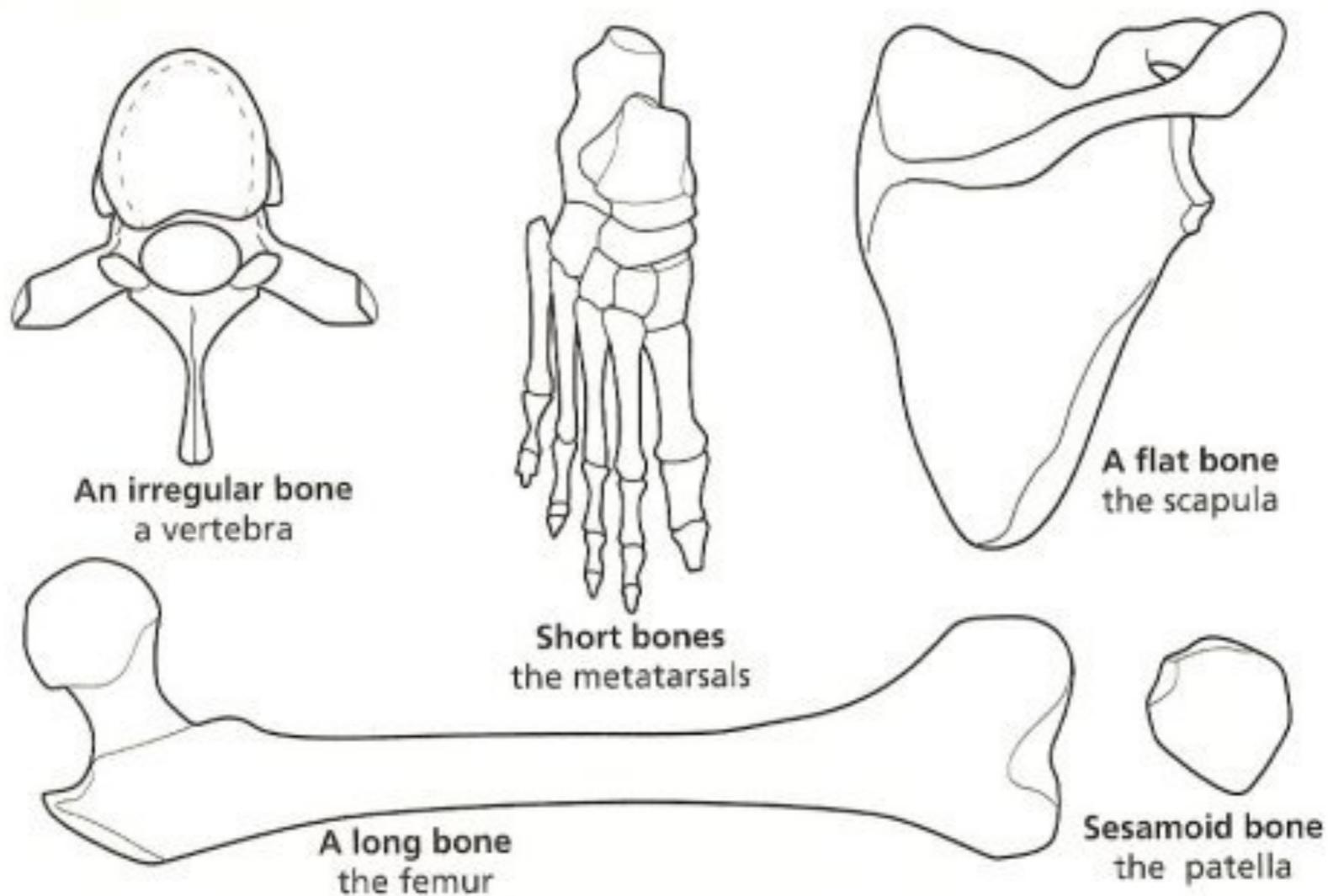
Axial skeleton  
 Appendicular skeleton



# Types of Bones

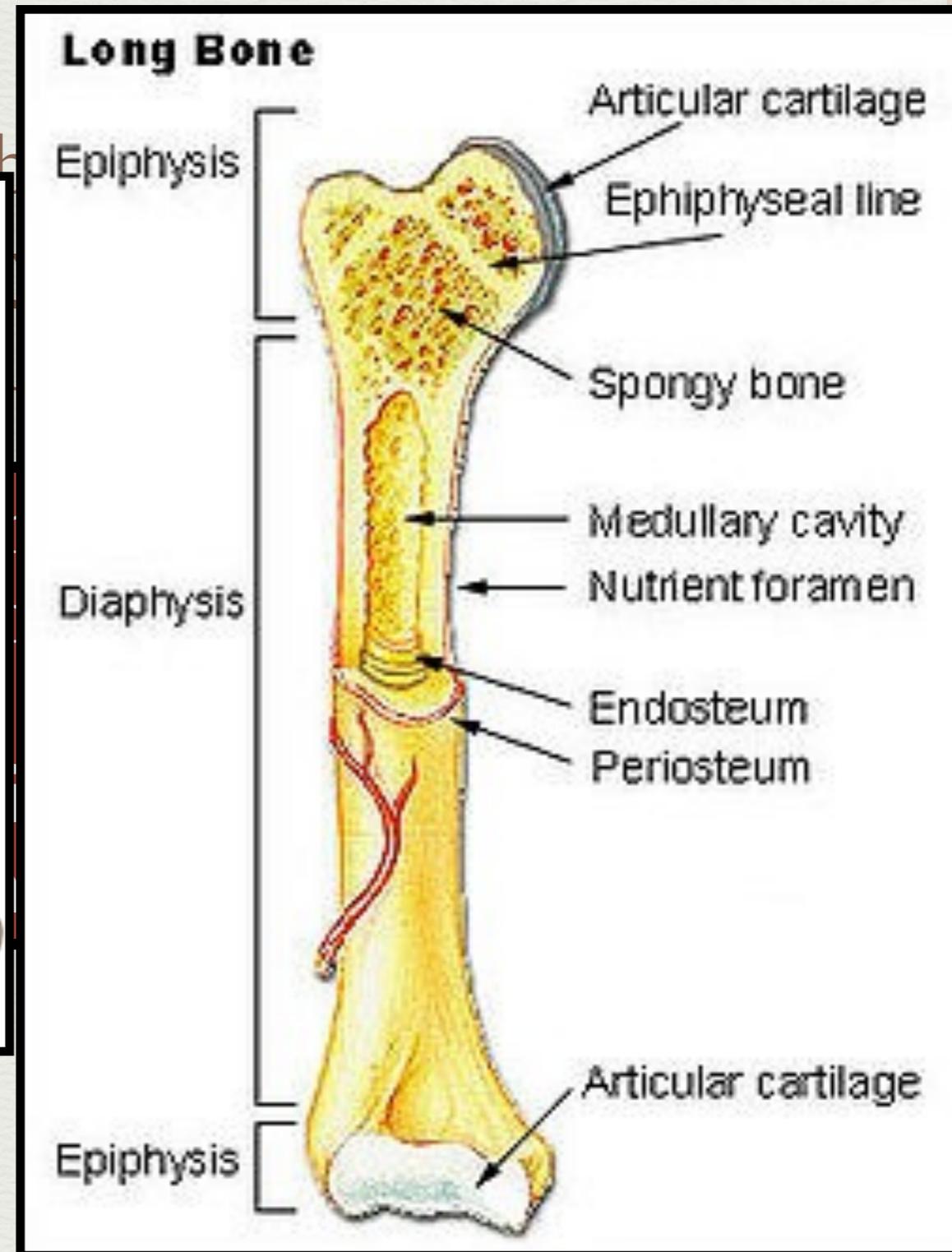
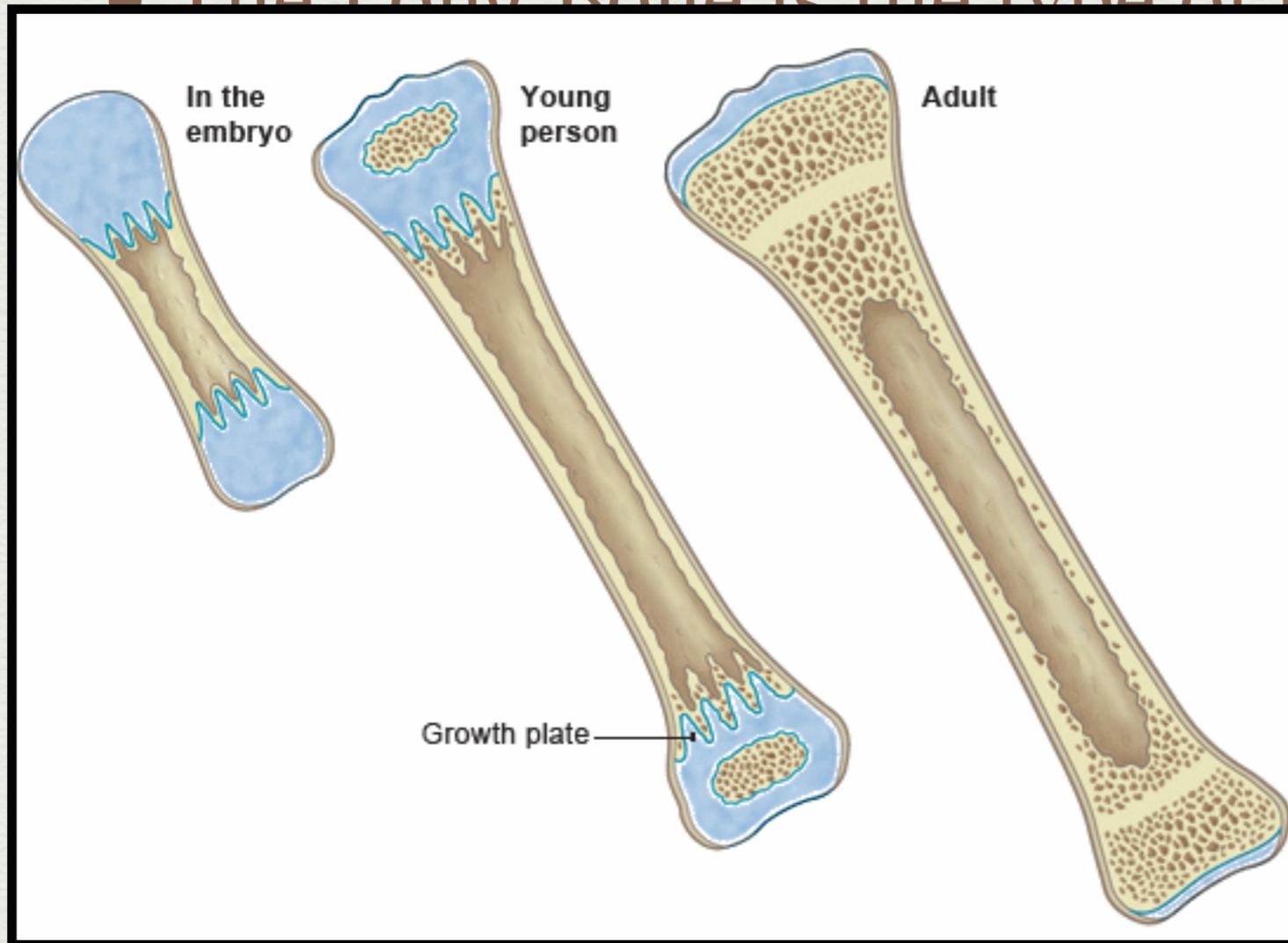
- In the human body, there are 5 types of bones:

Examples of each type of bone are shown in *Figure 1.1*.



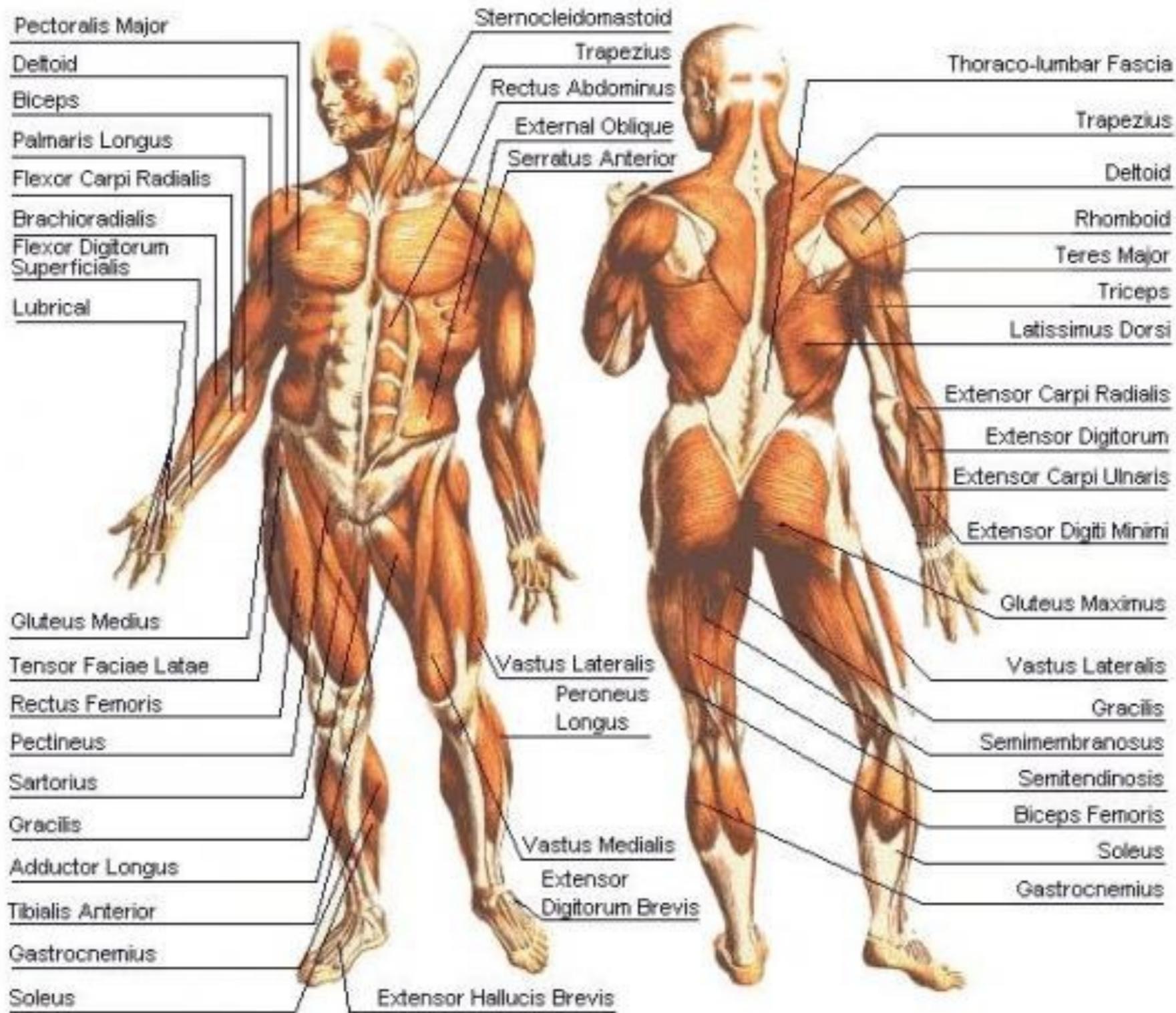
# The Long Bone

• The Long Bone is the type of h



# Functions of the Muscles

- Supply the forces that make body movements possible
- Provide a protective covering for the internal organs
- Produce body heat

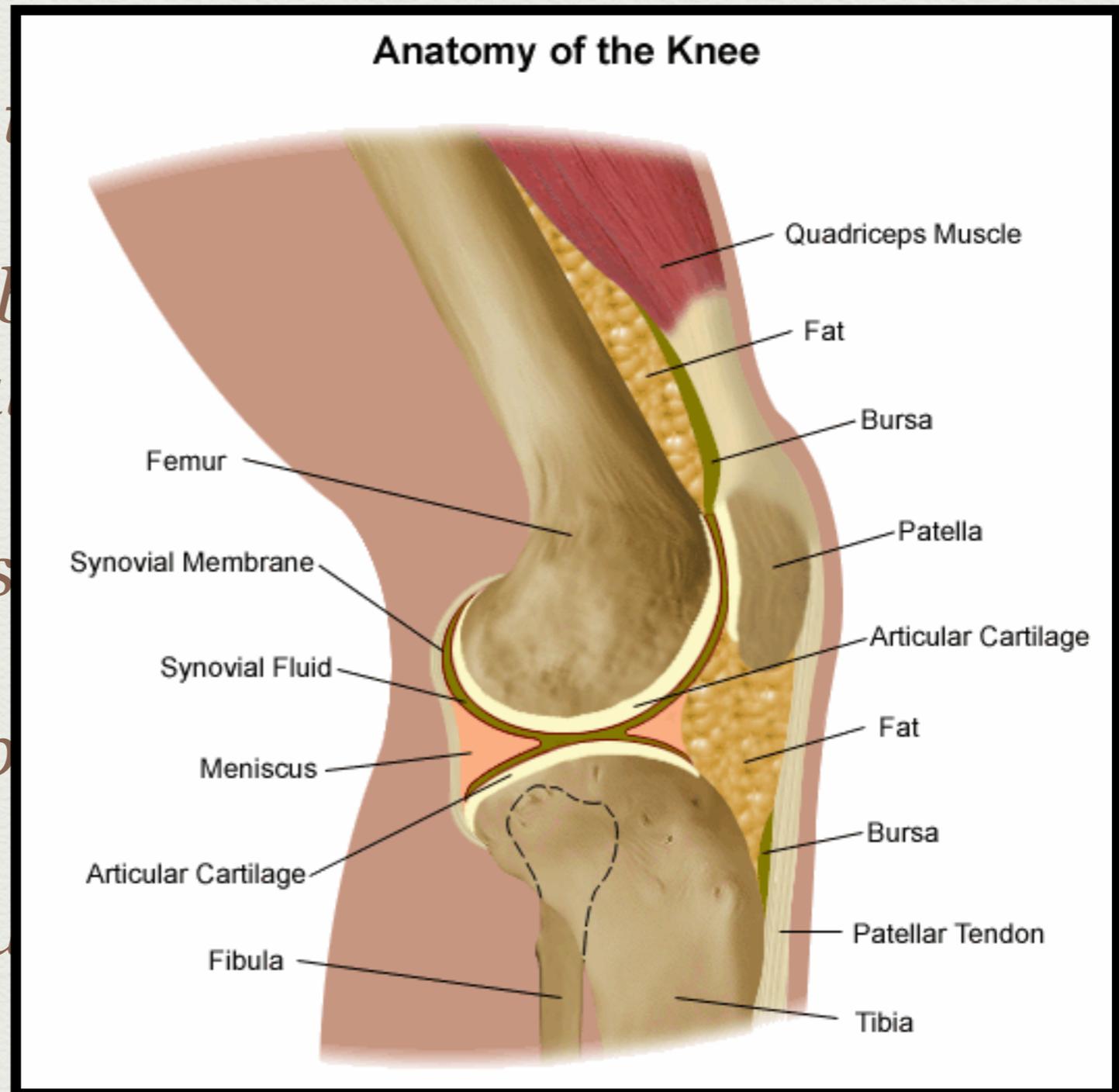


**Anterior**

**Posterior**

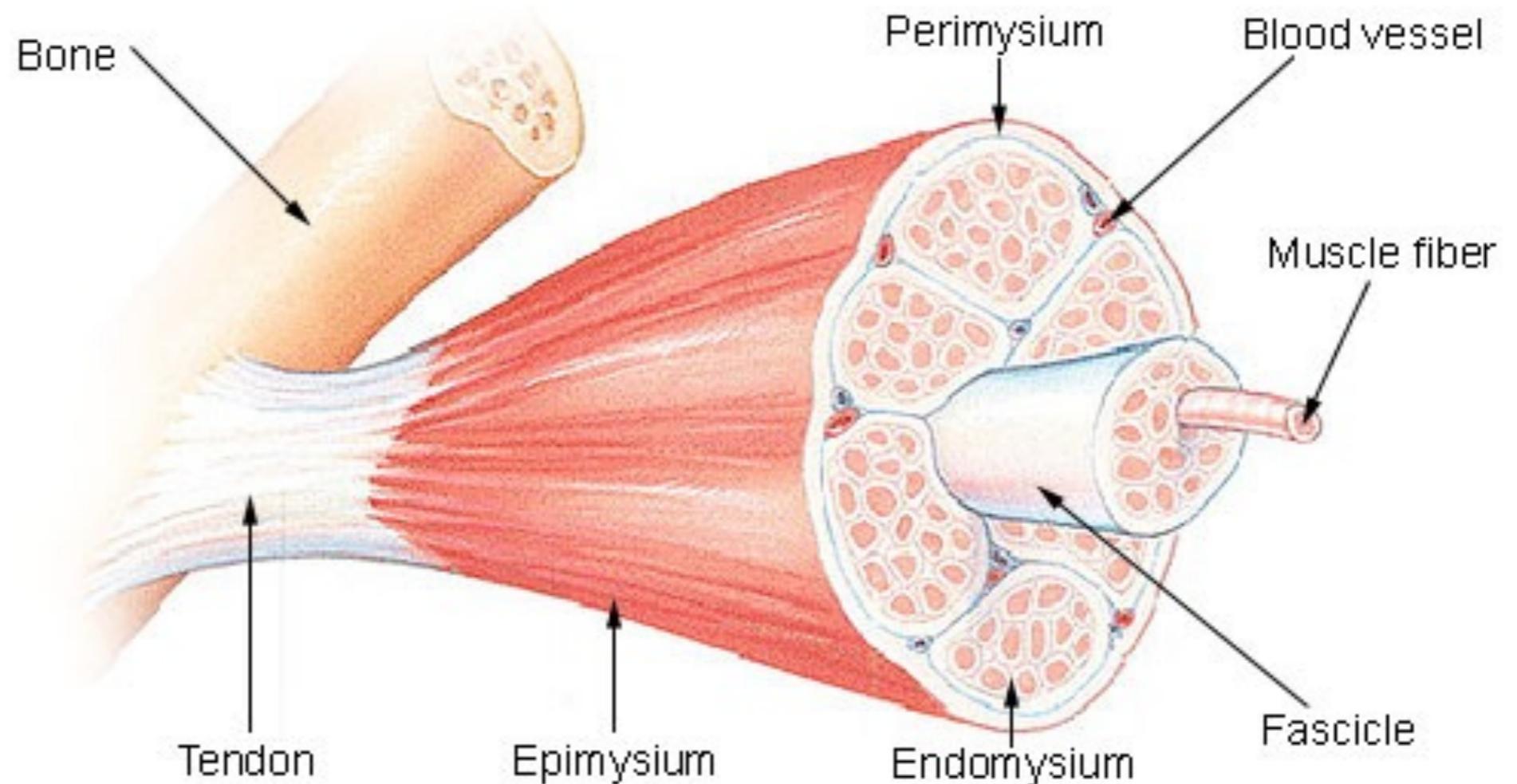
# Basic Muscular Terminology

- articulation: *a joint*
- bursa: *fibrous sac lined with synovial*
- ligament: *a fibrous*
- tendon: *a fibrous b*
- fascia: *fibrous tissue separates muscle*

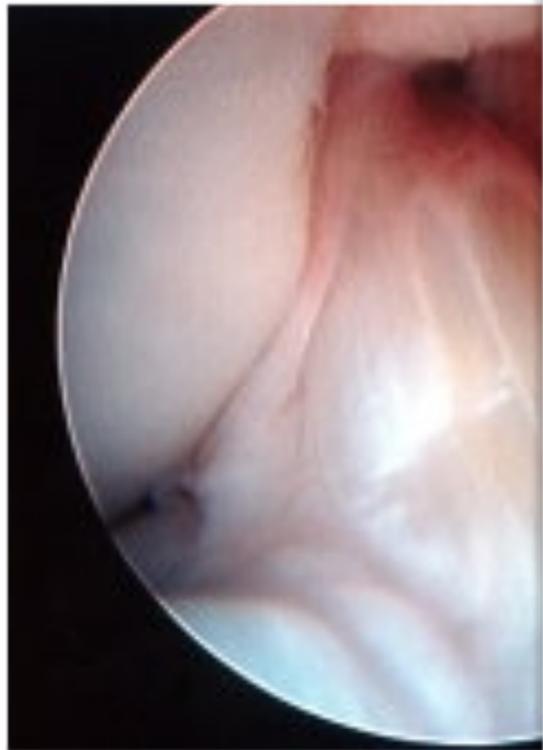


# Other Muscular Terminology

perimysium  
epimysium  
endomysium



Anatom



# General Symptomatic Terms

# Atrophy



**Shrinking of muscle size**

# Exostosis



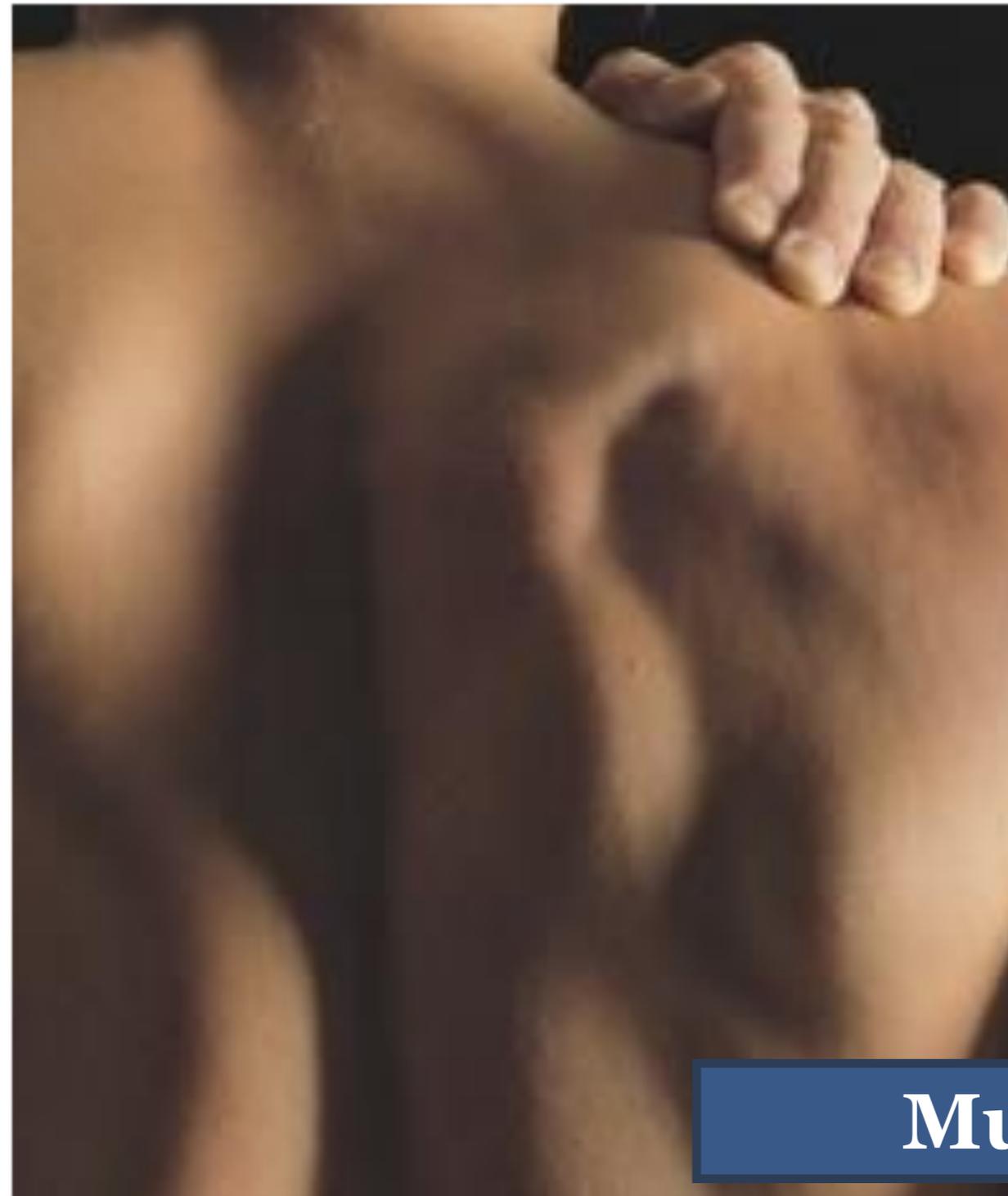
**A projection from a bone that develops from cartilage**

# Hypertrophy



**Increase in muscle  
size**

# Myalgia



**Muscle pain**

# Bursitis



**Inflammation of a bursa**

# Chondromalacia



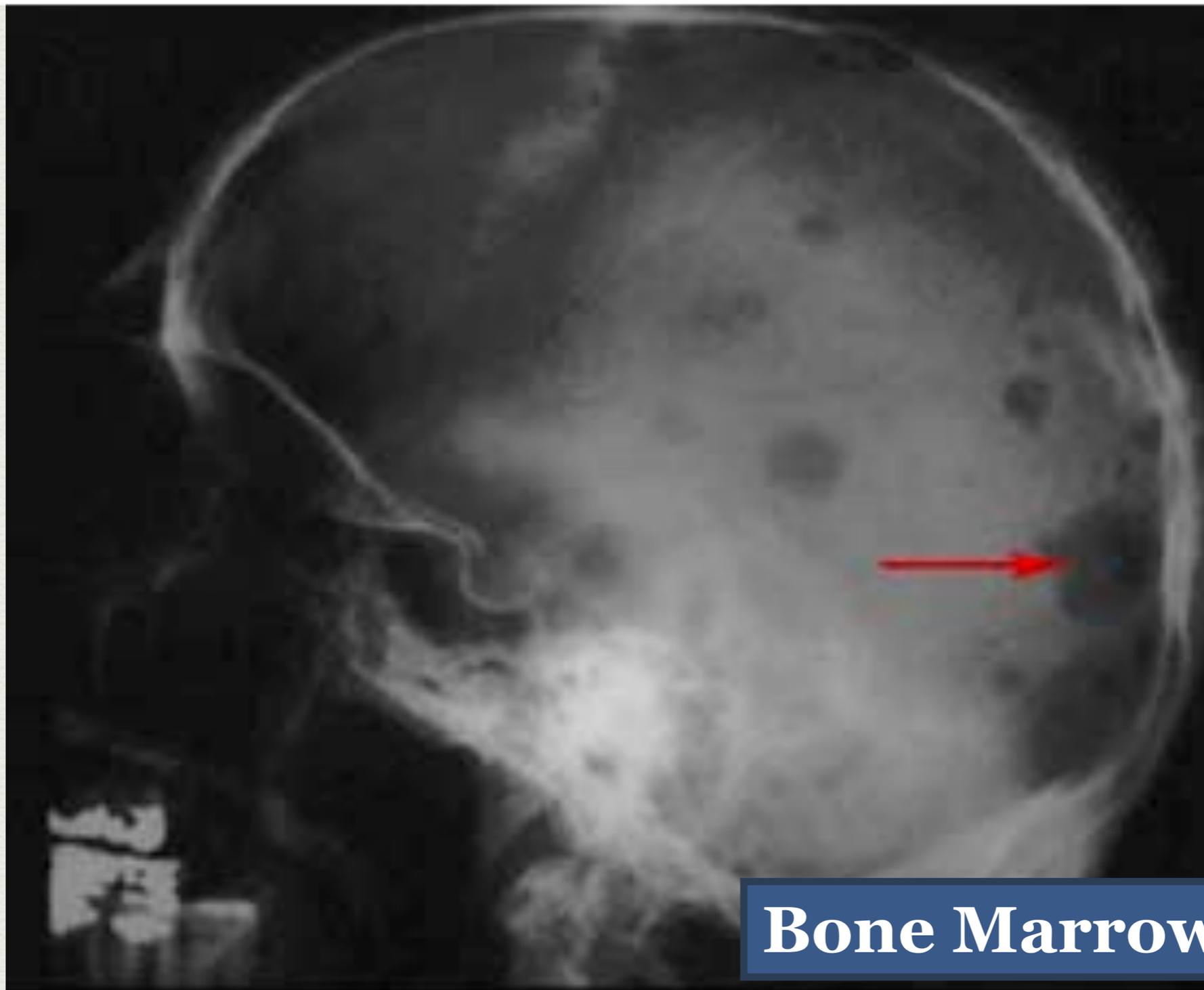
**Softening of cartilage**

# Epiphysitis



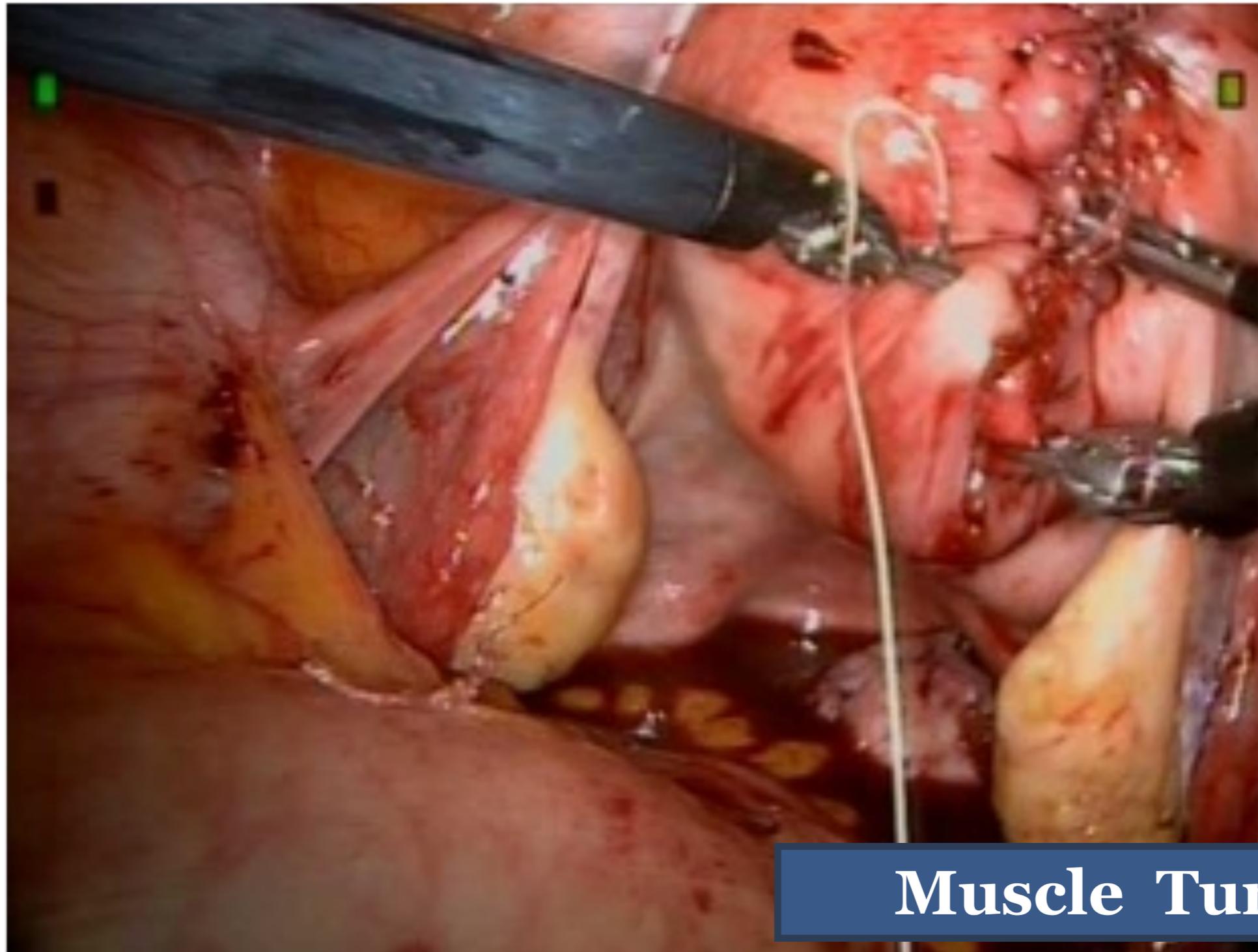
**Inflammation of the  
epiphysis**

# Myeloma



**Bone Marrow Tumor**

# Myoma



**Muscle Tumor**

# Leiomyosarcoma



**Malignant skeletal  
muscle tumor**

# Kyphosis



**Abnormal posterior curvature of the thoracic spine**

# Lordosis



**Abnormal anterior curvature of the lumbar spine**

# Scoliosis



**Abnormal lateral  
curvature of the  
spine**

# Spondylolisthesis



**Forward slipping of a lumbar vertebra**

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