



# Chapter 4

## The Muscular System

# 20 medical terms

**Ambulate**

**Atrophy**

**Bradykinesia**

**Dysphagia**

**Dystrophy**

**Electromyogram**

**Hemiplegia**

**Hypertrophy**

**Kinesiology**

**Leiomyoma**

**Myalgia**

**Myasthenia**

**Myoma**

**Myorrhexis**

**Paraplegia**

**Quadriplegia**

**Sarcolemma**

**Tendinitis**

**Tendinoplasty**

**Tetanus**

# Major Structures

- ◉ **Muscles** – my/o
- ◉ **Fascia** – fasci/o
- ◉ **Tendons** – ten/o, tend, tendin

# Muscles

## ⦿ Functions

- Make body movement possible.
- Hold body erect.
- Move body fluids.
- Produce body heat.

## ⦿ Related Combining Form

- my/o

# Types of Muscle Tissue



Skeletal muscle



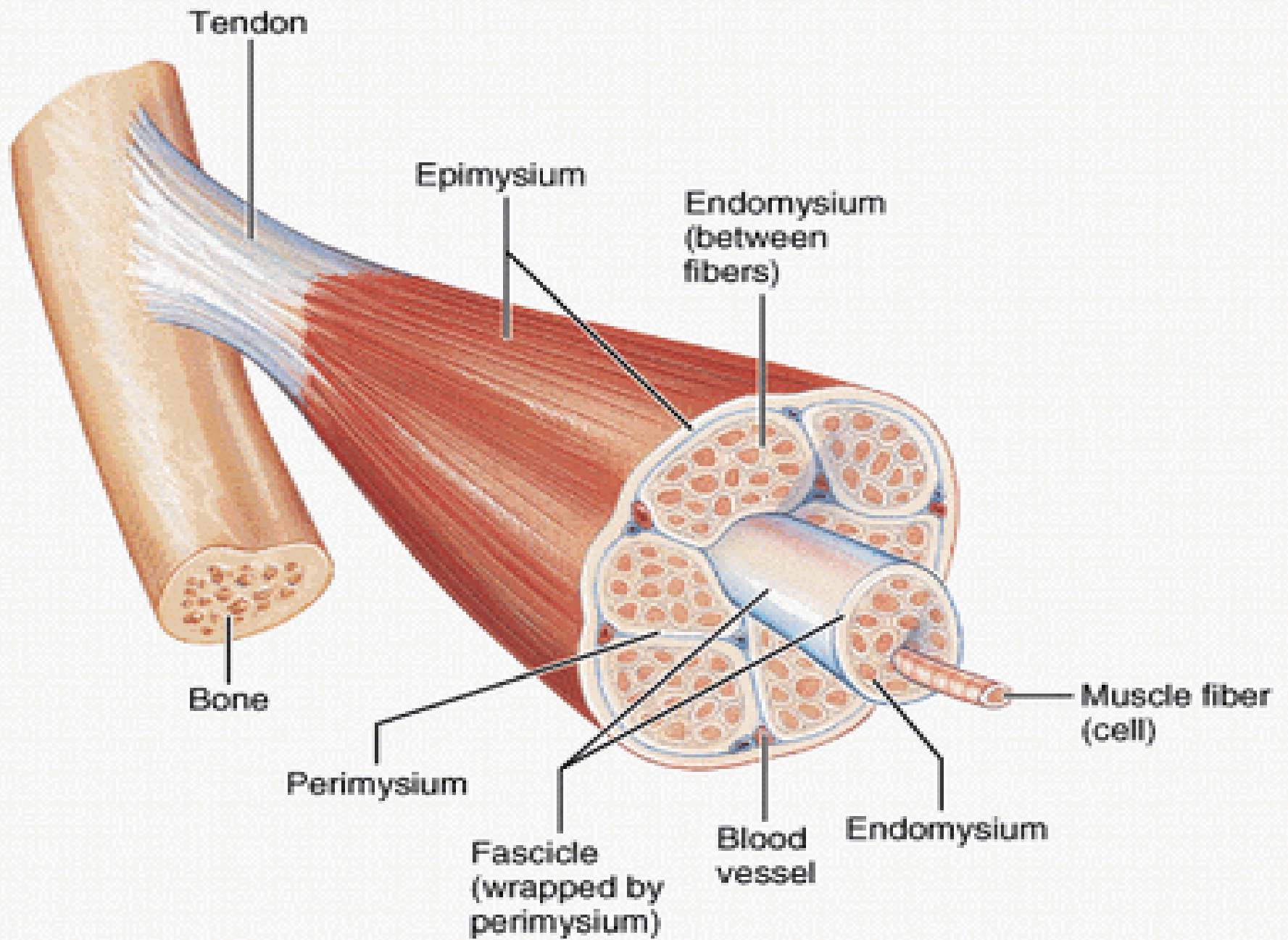
Smooth muscle



Cardiac muscle

# Skeletal Muscle

- ◉ Attach to the bones
- ◉ Make movements possible
- ◉ Are striated muscles
- ◉ voluntary muscles (conscious control)



# Smooth Muscles

- ◉ Location: walls of internal organs, blood vessels, and ducts leading from glands
- ◉ Function: move and control the flow of fluids through these structures
- ◉ Are un-striated muscles
- ◉ Involuntary Muscles (under control of the autonomic nervous system)
- ◉ Visceral muscles



# Cardiac Muscles

- ◉ Location: only in the walls of the Heart
- ◉ Function: make the heart beat
- ◉ Also known as myocardial muscle or the myocardium

# Fascia

- ◎ Primary Functions
  - Cover, support, and separate muscles.
- ◎ Related Combining Form
  - fasci/o

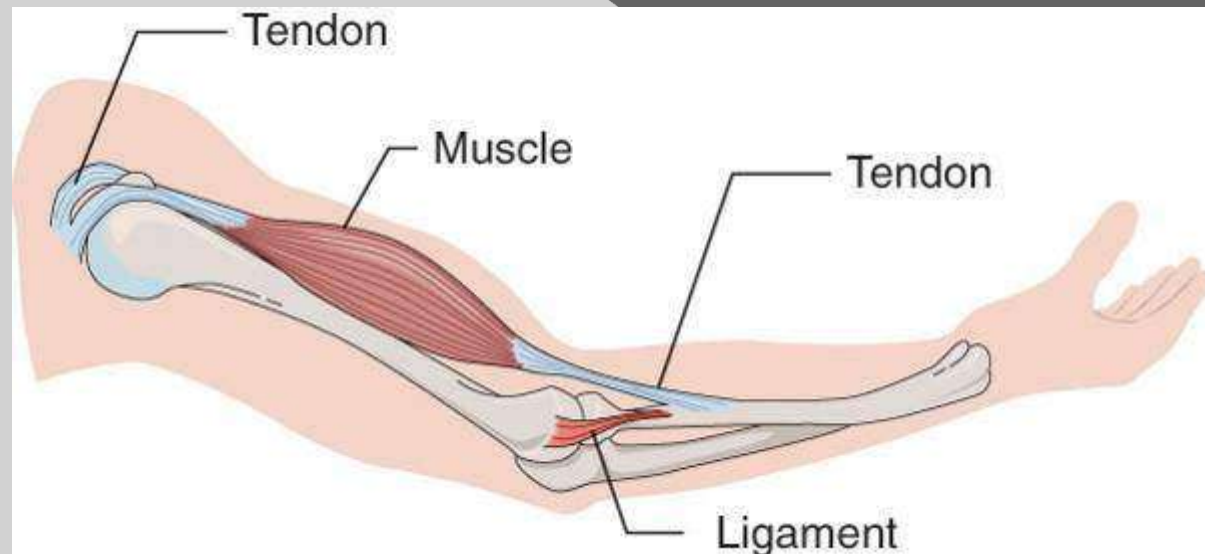
# Tendons

- Primary Function

- Attach muscles to bones.

- Related Combining Forms

- ten/o, tend/o, tendin/o



# Aponeurosis

- ◉ Flat fibrous sheet of connective tissue, like tendons
- ◉ Connect muscle to bones and muscle to other tissues