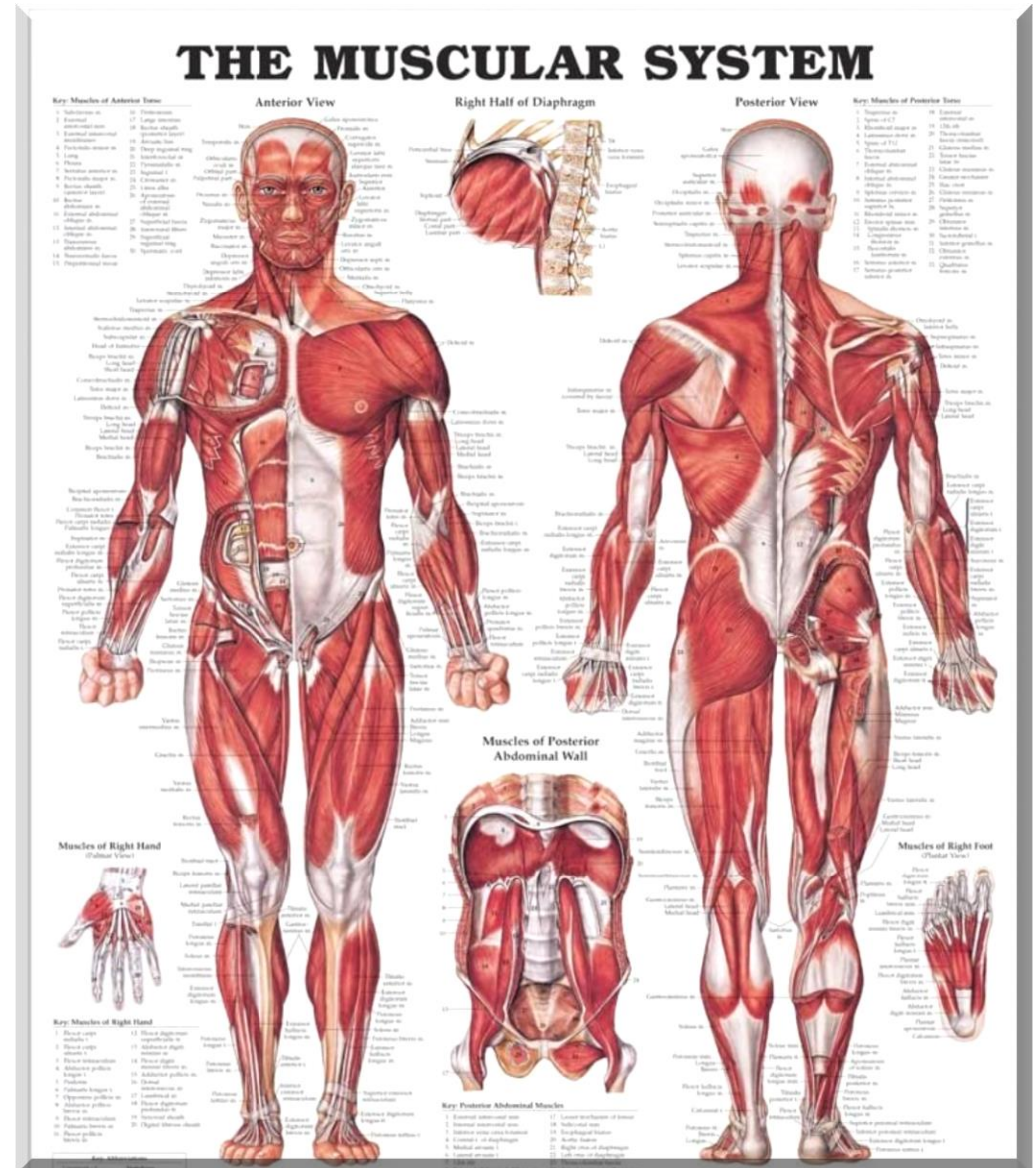


The Muscular System

Created by:

- Pakara Yiemphat #8 511
- Thanik Suppagormmongkol #19 511



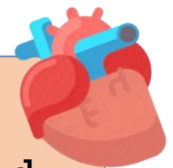
What is “Muscular System”?



- An organ system consisting of skeletal, smooth, and cardiac muscle.
- Responsible for the movement of human body.
- Maintains posture
- Circulates blood throughout the body
- Essential for many other human functions
- Found in ventral and thoracic cavity

Fun Fact:

The heart is the hardest-working muscle in the body. It pumps about 1.25 gallons of blood per minute and 2,000 gallons daily.

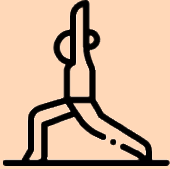


11 Muscular System Functions

1) Mobility



2) Stability



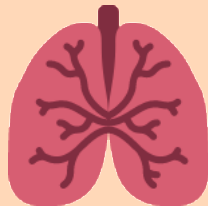
3) Posture



4) Circulation



5) Respiration



6) Digestion



7) Urination



8) Childbirth



9) Vision

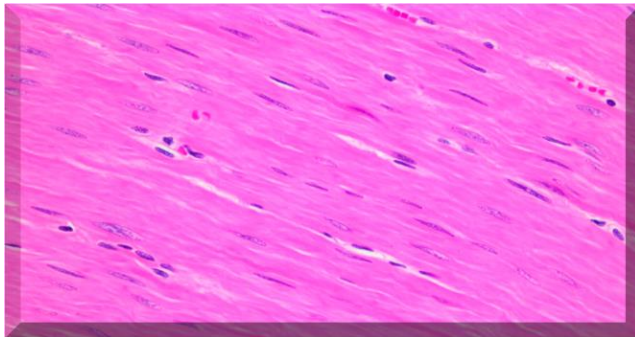
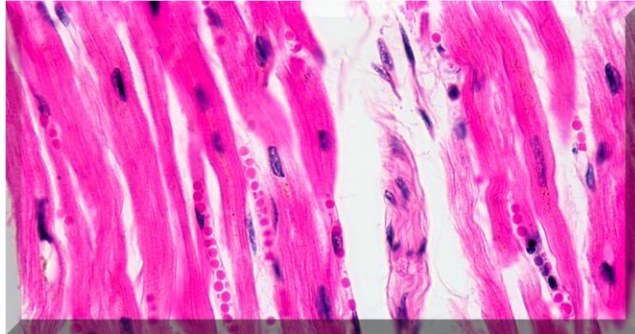


10) Organ protection



11) Temperature regulation





Kinds of Tissues Involved

1) Skeletal muscle

- Only muscles that can be consciously controlled
- Attached to bones, contracting muscles causes movements of the bones
- Long cylindrical fiber, striated, many peripherally located nuclei

2) Cardiac muscle

- Only in the heart
- Pumps blood around body
- Stimulate its own contractions that form heartbeat
- Signals nervous system to control rate of contraction
- Strong, involuntary muscle
- Short, branched, striated, single central nuclei

3) Smooth muscle

- Lines the inside of blood vessels and organs
- Weakest type of muscle but has an essential role in digestion and blood circulation
- Acts involuntary
- Short, spindle-shaped, no evident striation, single nucleus in each fiber

Importance of Muscular System in Daily Life

Did you know? There are more than 600 muscles working together in our body which contributes to about 40 percent of our body mass.

What happens when Muscle function fails?

- Total muscle function loss is often seen in people with severe spinal cord injuries
- Inability to properly operate the affected parts of the body
- Can be permanent or temporary, should be treated as a medical emergency

Healthy muscles=

- Lets you move freely and keep your body strong
- Lower risks of injuries
- Muscle tissues burn more calories
- Assist in maintaining good balance and posture



How to keep your muscles healthy?

Five Tips to make your muscles healthy:

1. Warm up and Cool down
2. 15-20 minures stretch
3. Balanced Diet
4. Staying Hydrated
5. Regular Exercises



References

- <https://www.premierortho.com/sports-injuries/top-five-tips-keeping-muscles-healthy/>
- <https://www.nmortho.com/what-are-the-main-functions-of-the-muscular-system/>
- <https://www.niams.nih.gov/health-topics/kids/healthy-muscles>
- <https://www.innerbody.com/image/musfov.html>
- <https://www.medicalnewstoday.com/articles/321617#how-the-muscular-system-works>