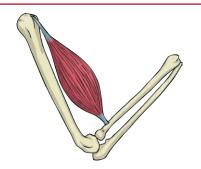
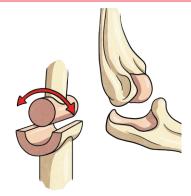
Muscles, Joints, Tendons and Ligaments and Their Role in Movement



Muscles

Muscles are specialised tissues in the body that are responsible for movement. They are attached to bones via tendons and can contract and relax, allowing body parts to move. Muscles work in pairs, with one muscle contracting and another relaxing, to move in a particular direction.



Joints

Joints are the locations where bones come together, and they are responsible for allowing movement in the body. Joints can be divided into three categories: fibrous, cartilaginous, and synovial. Synovial joints are the most common type of joint in the body and are fully movable. Examples of synovial joints include the knee, elbow, and shoulder joints.



Tendons

Tendons are strong, fibrous connective tissues that attach muscles to bones. They are responsible for transferring the force generated by muscles to the bone, allowing body parts to move.



Ligaments

Ligaments are also strong, fibrous connective tissues, but they connect bones to other bones at joints. Ligaments provide stability to the joint and help to prevent too much movement or dislocation.

Muscles, joints, tendons, and ligaments play important roles in movement. Muscles generate force to move body parts, tendons transmit that force to bones and ligaments provide stability to the joints to prevent excessive movement or dislocation. Without these structures working together, movement in the body would not be possible.



Questions

- 1. What do muscles do?
- 2. What are joints, and how do they help us move?

- 3. What are tendons and what do they do?
- 4. What are ligaments, and what do they do?
- 5. Why are muscles, joints, tendons, and ligaments important for moving your body?





Answers

1. What do muscles do?

Muscles are parts of your body that help you move by generating force.

- 2. What are joints, and how do they help us move? Joints are where two bones meet in your body. They are like hinges that allow you to bend and move different parts of your body. Your elbow, knee, and shoulder are all examples of joints.
- 3. What are tendons and what do they do?

Tendons are strong, stretchy cords that attach your muscles to your bones. They help your muscles pull on your bones to make you move.

4. What are ligaments, and what do they do?

Ligaments are tough, stretchy bands that hold your bones together at your joints. They help your joints stay in the right position so you can move without hurting yourself.

5. Why are muscles, joints, tendons, and ligaments important for moving your body? Muscles help you move by pulling on your bones. Tendons help your muscles pull on your bones, and ligaments keep your bones in the right place so you can move smoothly and without hurting yourself. All these parts work together to help you move your body.



