

Muscular System

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What is it?

- The **musculoskeletal system** provides form, support, stability, and movement to the body. It is made up of the bones of the skeleton, muscles, cartilage, tendons, ligaments, joints, and other connective tissue that supports and binds tissues and organs together.

Function

- The body's bones (the skeletal system), **muscles** (**muscular** system), cartilage, tendons, ligaments, joints, and other connective tissue that supports and binds tissues and organs together comprise the musculoskeletal system. Most importantly, the system provides form, support, stability, and **movement** to the **body**.

structure

- The **musculoskeletal system** is made up of bones, cartilage, ligaments, tendons and muscles, which form a framework for the body. Tendons, ligaments and fibrous tissue bind the **structures** together to create stability, with ligaments connecting bone to bone, and tendons connecting muscle to bone.

organs

- The musculoskeletal system provides form, support, stability, and movement to the **body**. It is made up of the **bones** of the **skeleton**, **muscles**, **cartilage**, **tendons**, **ligaments**, **joints**, and other **connective tissue** that supports and binds **tissues** and organs together.

diseases

- **What are musculoskeletal disorders?**
- **tendinitis.**
- **carpal tunnel syndrome.**
- **osteoarthritis.**
- **rheumatoid arthritis (RA)**
- **fibromyalgia.**
- **bone fractures.**

Meanings

- Muscles(a band or bundle of fibrous tissue in a human or animal body that has the ability to contract, producing movement in or maintaining the position of parts of the body.
- "the calf muscle")
- Cartilage(firm, flexible connective tissue found in various forms in the larynx and respiratory tract, in structures such as the external ear, and in the articulating surfaces of joints. It is more widespread in the infant skeleton, being replaced by bone during growth.)
- Tendons(a flexible but inelastic cord of strong fibrous collagen tissue attaching a muscle to a bone.)
- Ligaments(a short band of tough, flexible fibrous connective tissue which connects two bones or cartilages or holds together a joint.)
- Joints(a point at which parts of an artificial structure are joined.)
- binds tissues(Areolar **tissue**, a type of loose connective **tissue**, **binds** organs together. You can find this type of connective **tissue** beneath the skin and between muscles, according to Midlands Technical College. Adipose **tissues**, which are loose connective **tissues**, store fat that the body can use as energy and insulation)
- fibrous tissue(A simple, strong structural or repair **tissue** consisting of twisted stands of COLLAGEN and laid down by cells known as fibroblasts. These are among the commonest cells in the body and occur everywhere. **Tissue** damaged beyond recovery by disease processes is replaced by **fibrous tissue** (scar **tissue**).)

Things from the videos

- Each time you take a step 200 muscles help you to lift your foot and propel it forwards and set it down
- The Muscular system performs thousands of tasks
- There is a network of more than 650 muscles that cover the human body
- The muscles help us run, smile, blink, jump, stand still and make our heart make a thump

Things from the videos

- Skeletal muscle which attaches into our bones
- Cardiac Muscle which is only found in the heart
- Smooth Muscle which lines blood vessels and certain organs like the intestines and uterus
- All 3 muscles are made up of muscle cells, also known as fibres and tightened tightly
- These bundles receive signals from the nervous system which can track the fibres that create general force. This produces almost all the movements we make.
- The motions that are not governed by the muscular system are sperm cells, the hair-like cilia in our airways and certain white blood cells

Things from the videos

- As muscles work they produce a by-product call heat and muscles provide 85% of your warmth

Cardiac Muscle

- The muscle that makes up the heart is called cardiac muscle. It is also known as the **myocardium** (say: my-uh-KAR-dee-um). The thick muscles of the heart contract to pump blood out and then relax to let blood back in after it has circulated through the body.
- Just like smooth muscle, cardiac muscle works all by itself with no help from you. A special group of cells within the heart are known as the pacemaker of the heart because it controls the heartbeat.