
THE SKELETAL SYSTEM STRUCTURE**Xurramkulov Zarif Ma'ruf o'g'li***Supervisor: Asatullayev Rustam Baxtiyorovich**Trainee Assistant at Samarkand State Medical University*

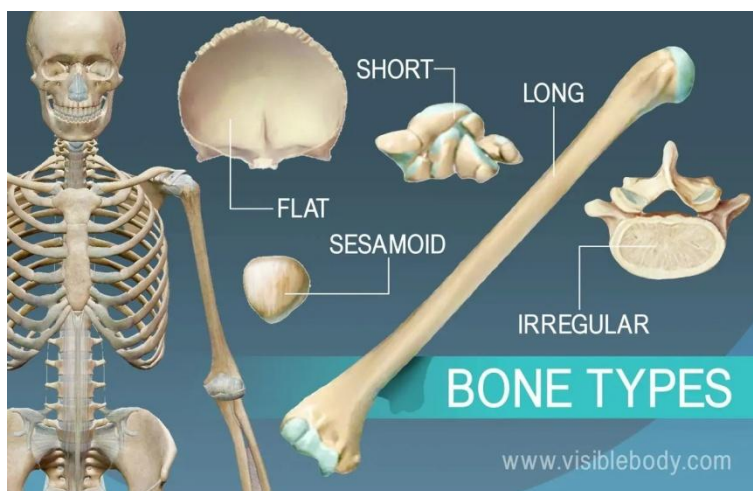
Annotation: *This article examines the structure of the skeletal system, its main components, and its functions in the human body. The classification of bones, their composition, and their role in supporting movement and protecting vital organs are discussed. In addition, the article highlights the importance of maintaining bone health. The findings emphasize that understanding the skeletal system is essential for preventing diseases and maintaining overall health.*

Key words: *Skeletal system, bones, human anatomy, bone structure, skeleton, joints, cartilage, calcium, bone tissue, movement, support, protection, phosphorus, osteon, bone marrow, ligament*

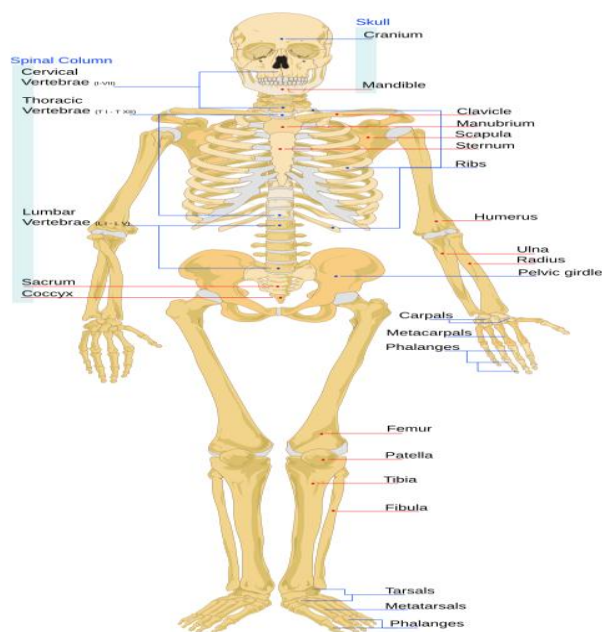
The skeletal system is one of the most essential systems in the human body. It provides the framework that supports the body and allows movement. Without the skeleton, the human body would not maintain its shape or structure. The skeletal system works closely with muscles to enable movement and plays a crucial role in protecting internal organs such as the brain, heart, and lungs. Understanding its structure is important for studying human anatomy and maintaining overall health.

The skeletal system includes more than 200 bones, of which 85 are paired bones. Each bone is considered an organ composed of various types of connective tissues, it contains bone marrow and is supplied with blood vessels and nerves.

From the outside, the bone is covered with a thin connective tissue membrane called the periosteum, which consists of fibrous and osteogenic layers. The human skeleton consists of 205-208 bones, of which 32-34 are unpaired, while the remaining bones are paired. 23 bones form the skull, 32-34 bones make up the vertebral column, 25 bones form the ribs and sternum, 64 bones belong to the upper limbs, and 62 bones form the lower limbs.



The human skeleton is built according to a common principle for all vertebrate animals. The bones of the skeleton are divided into two groups: the axial skeleton and the appendicular skeleton. The axial skeleton includes the bones located in the center that form the framework of the body, these include all the bones of the head, the vertebral column, the ribs, and the sternum. The appendicular skeleton consists of the clavicles, shoulder girdle, bones of the upper limbs, pelvic bones, and bones of the lower limbs.



1. Types of Bones

Bones are classified based on their shape and function:

Long bones (e.g., femur, humerus)

Short bones (e.g., wrist bones)

Flat bones (e.g., skull, ribs)

Irregular bones (e.g., vertebrae)

Each type of bone plays a unique role in the body's structure and movement.

2. Bone Composition and Structure

Bones are made of living tissue and consist of several layers:

Compact bone (dense outer layer)

Spongy bone (inner porous structure)

Bone marrow (produces blood cells)

Bones are rich in minerals such as calcium and phosphorus, which give them strength and durability.

3. Functions of the Skeletal System

The skeletal system performs several important functions:

Support: Provides structure to the body

Protection: Shields vital organs

Movement: Works with muscles

Blood cell production: Occurs in bone marrow

Mineral storage: stores calcium and phosphorus.

CONCLUSION:

The skeletal system is a fundamental part of the human body that provides structure, protection, and movement. Its complex organization allows the body to function efficiently and maintain stability.

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