

UNIT 2- SUPPORT SYSTEMS

Skeletal System

Lecture Notes

THE BASIC FUNCTIONS OF THE SKELETAL SYSTEM

A. Hematopoiesis (Hemopoiesis)

1.

B. _____

1. Provide a rigid _____ that supports the soft tissues of the body and maintains the body's shape.

C. _____

1. Bones serve as _____ to convert muscular contraction to movement.

2. Serves as a point of _____ for ligaments, tendons, and muscles.

D. _____

1. Bones store _____ in bone matrix.

a. It is essential that normal calcium intake be maintained because calcium provides many critical physiological functions in the body. For example, every time a muscle contracts calcium is required. If calcium intake is not adequate, calcium can be acquired from the bones.

Therefore, maintaining proper calcium intake helps to assure strong bones.

BASIC BONES OF THE SKELETON

A. Cranium

1. Frontal ()
2. Parietal ()
3. Occipital ()
4. Temporal ()
5. Mandible ()
6. Maxillae (1)

B. The Vertebral Column

1. Cervical Vertebrae ()
2. Thoracic Vertebrae ()
3. Lumbar Vertebrae ()
4. Sacral Vertebrae ()
5. Coccygeal Vertebrae (Coccyx) ()

C. The Bones of the Thoracic Cavity

1. Sternum
2. Ribs

D. Bones of the Upper Extremities

1. Humerus
2. Radius
3. Ulna
4. Carpals
5. Metacarpals
6. Phalanges (fingers)

E. Bones of the Pelvis

1. Ilium
2. Ischium
3. Pubis

F. Bones of the Lower Extremities

1. Femur
2. Patella

3. Tibia
4. Fibula
5. Tarsals
6. Metatarsals
- 7.
8. Phalanges

ARTICULATIONS

- A. Definition of Articulation
- B. Types and locations of joints
 - 1.
 - 2.

02.03 DESCRIBE THE FUNCTION OF LIGAMENTS

1. Ligaments -

DISEASES AND DISORDERS OF THE SKELETAL SYSTEM

- A. Fractures
 - Definition:
 - Open Fracture:
 - Closed Fracture:
 - Signs and symptoms:
 - Cause:
 - Treatment:
 - Treatment of Compound Fractures:
- B. Scoliosis
 - Definition:
 - Signs and symptoms:

-Cause:

- Cause:

- Treatment:

C. Osteoarthritis

-Definition:

-Cause:

-Symptoms:

-Treatment:

D. Sprain

- Definition:

- 1st Degree

- 2nd Degree

- 3rd Degree

- Signs & Symptoms:

- Treatment: