Introduction to human body
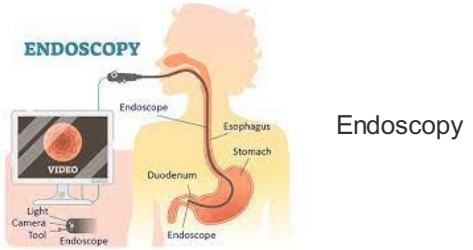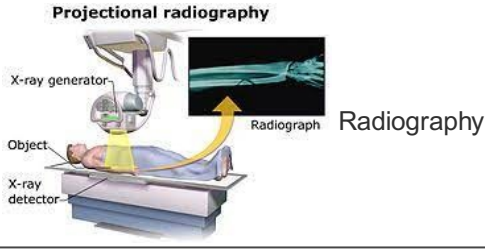
Anatomy & Physiology

; ana- = up; -tomy = process of cutting

physio- = nature; -logy = study of

Level of structural organism

- Chemical level
- Cellular Level
- Tissue Level
- Organ Level
- System Level
- Organism Level

Medical Imaging Techniques

Endoscopy
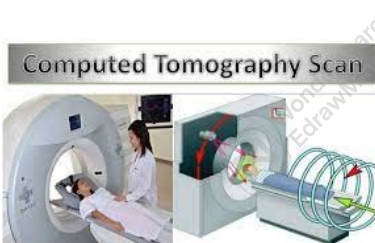
Projectional radiography

Radiography

Ultrasound Scannning

Magnetic Resonance Imagining
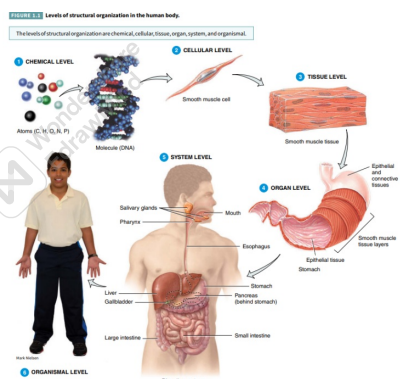
Coronary computed tomography angiography

Computed Tomography Scan

Computed Tomography
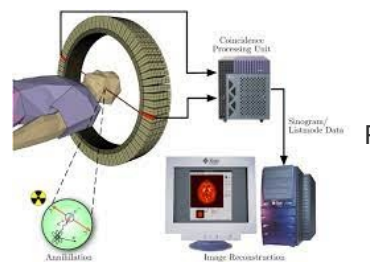
Positron Emission Tomography

Homeostasis

Control System Components

- Receptor
- Control centre
- Effector

Feedback system

- Positive Feedback
- Negative Feedback

control

The nervous system and the endocrine system, working together or independently, provide the needed corrective measures.

Nervous System

The nervous system regulates homeostasis by sending electrical signals known as nerve impulses (actionpotentials) to organs that can counteract changes from the balanced state.
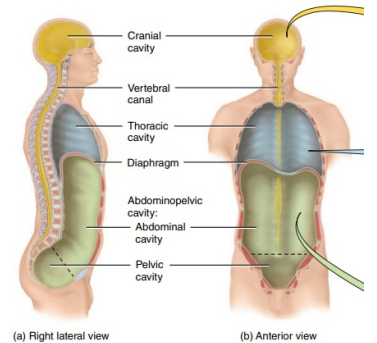
Endocrine system

. The endocrine system includes many glands that secrete messenger molecules called hormones into the blood.

Aging & Homeostasis

Aging is associated with impaired homeostasis, or homeostenosis, in the form of diminished capacity to respond to varied challenges

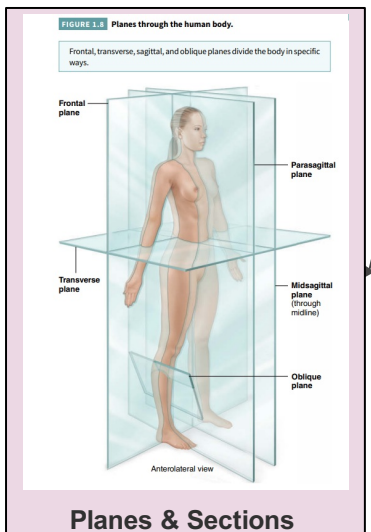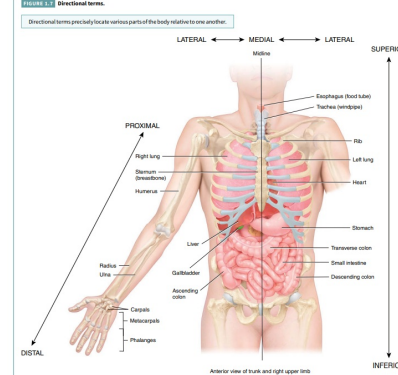## Anatomical Terminlogy

Body Cavities

(a) Right lateral view   (b) Anterior view

Body Positions

- Prone-body is lying facedown
- supine-body is lying faceup

Regionals name

- Head
- Neck
- Trunk
- Upper Limb
- Lower Limb

Directional Terms

Planes & Sections