



Aanantha
Yoga & Meditation

BASIC ANATOMY WITH YOGIC APPROACH



The foundation of yoga is to understand one self physically, mentally & spiritually.

Contents

- **Main Systems of the Human Body**
- **Dietary approach**
- **Yogic approach**



Main Systems of the Human Body

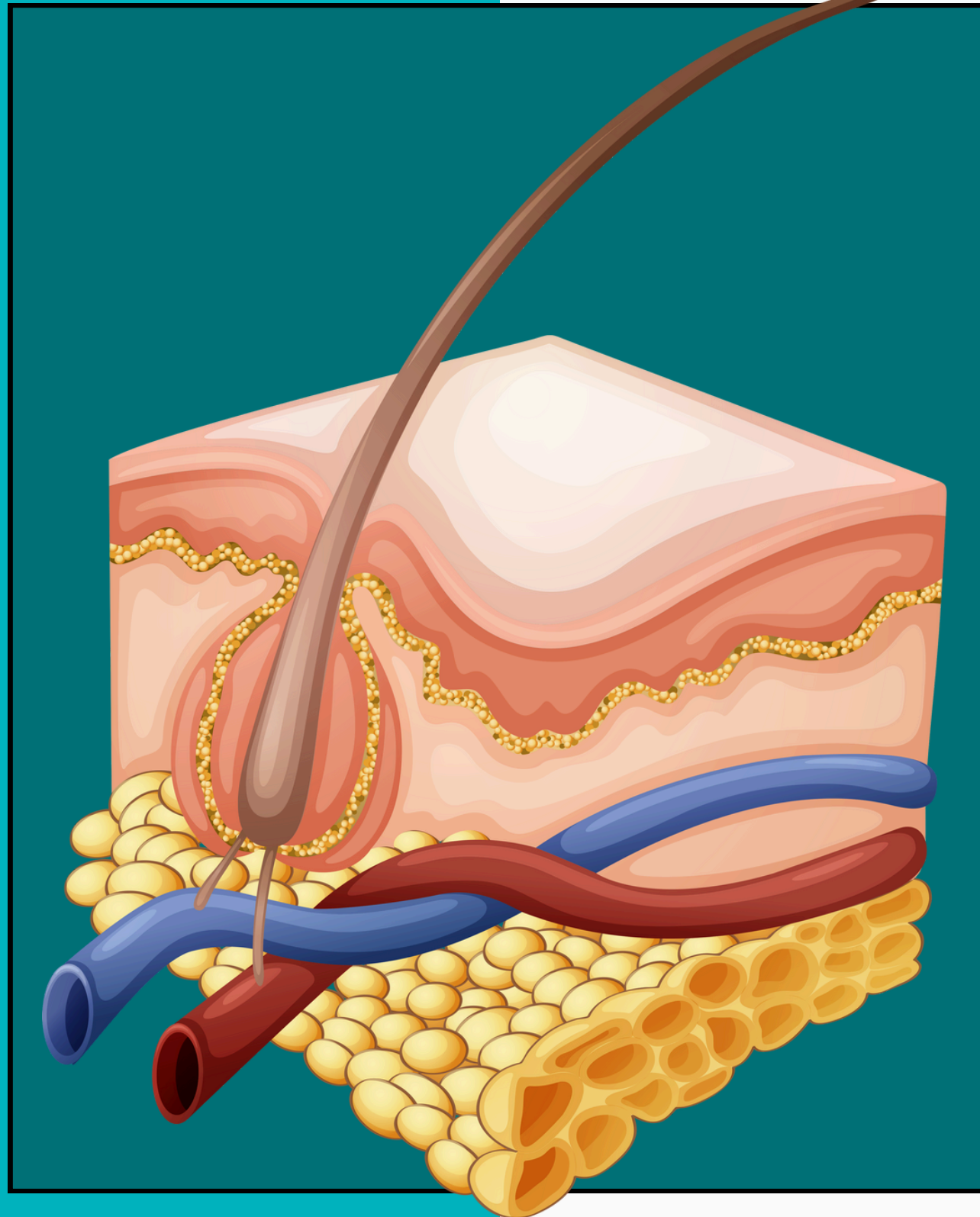


SYSTEMS



01 Main Systems of the Human Body

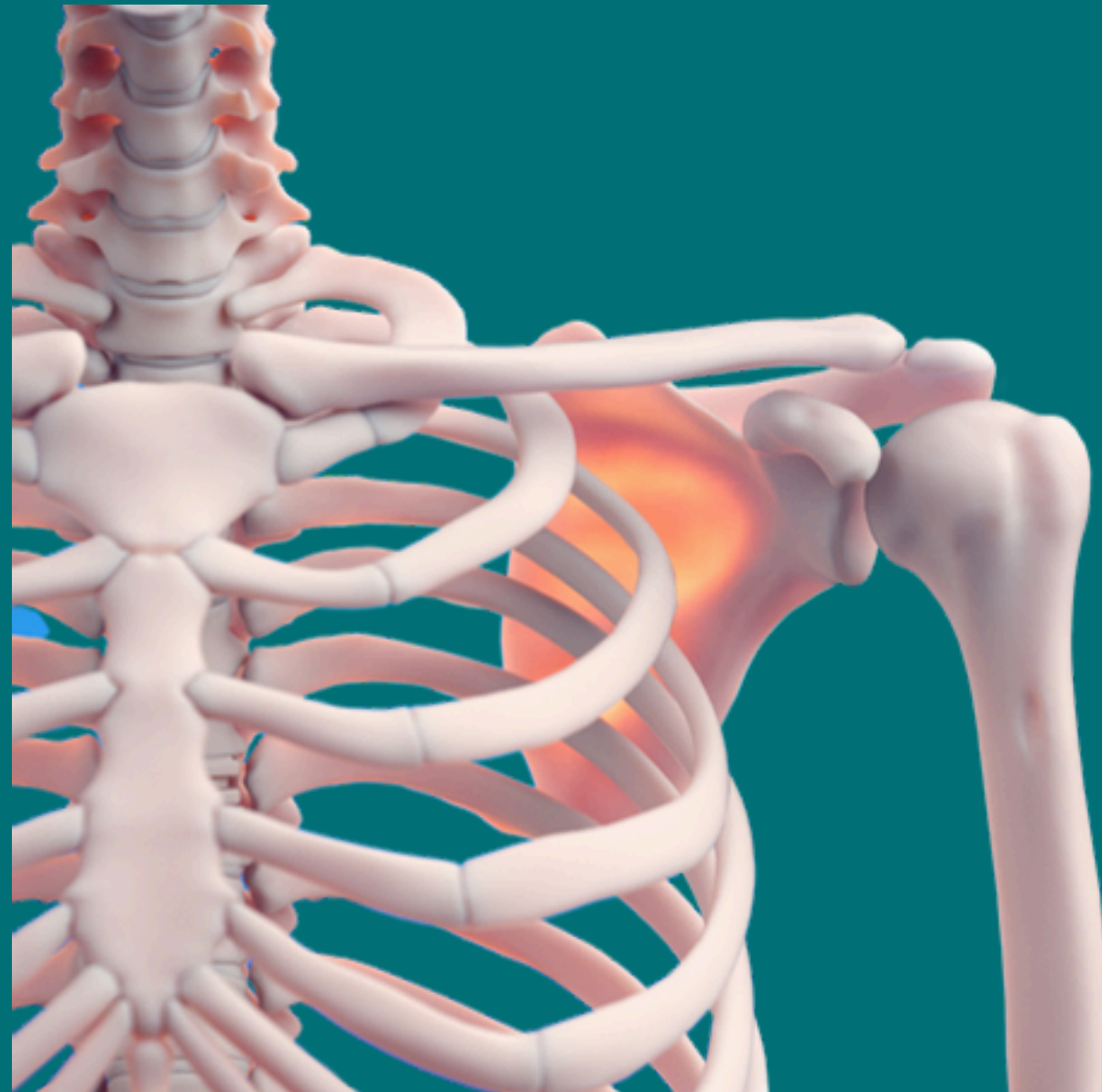
1. Integumentary System
2. Skeletal System
3. Muscular System
4. Nervous System
5. Endocrine System
6. Cardiovascular (Circulatory) System
7. Lymphatic (Immune) System
8. Respiratory System
9. Digestive System
10. Urinary (Excretory) System
11. Reproductive System



1. Integumentary System

- **Main parts:**
Skin, hair, nails, sweat and oil glands.
- **Functions:**
 - Acts as the body's first line of defense against infection.
 - Regulates body temperature through sweating and blood flow control.
 - Prevents dehydration by reducing water loss.
 - Contains sensory receptors for touch, pressure, pain, and temperature.
 - Produces Vitamin D when exposed to sunlight.





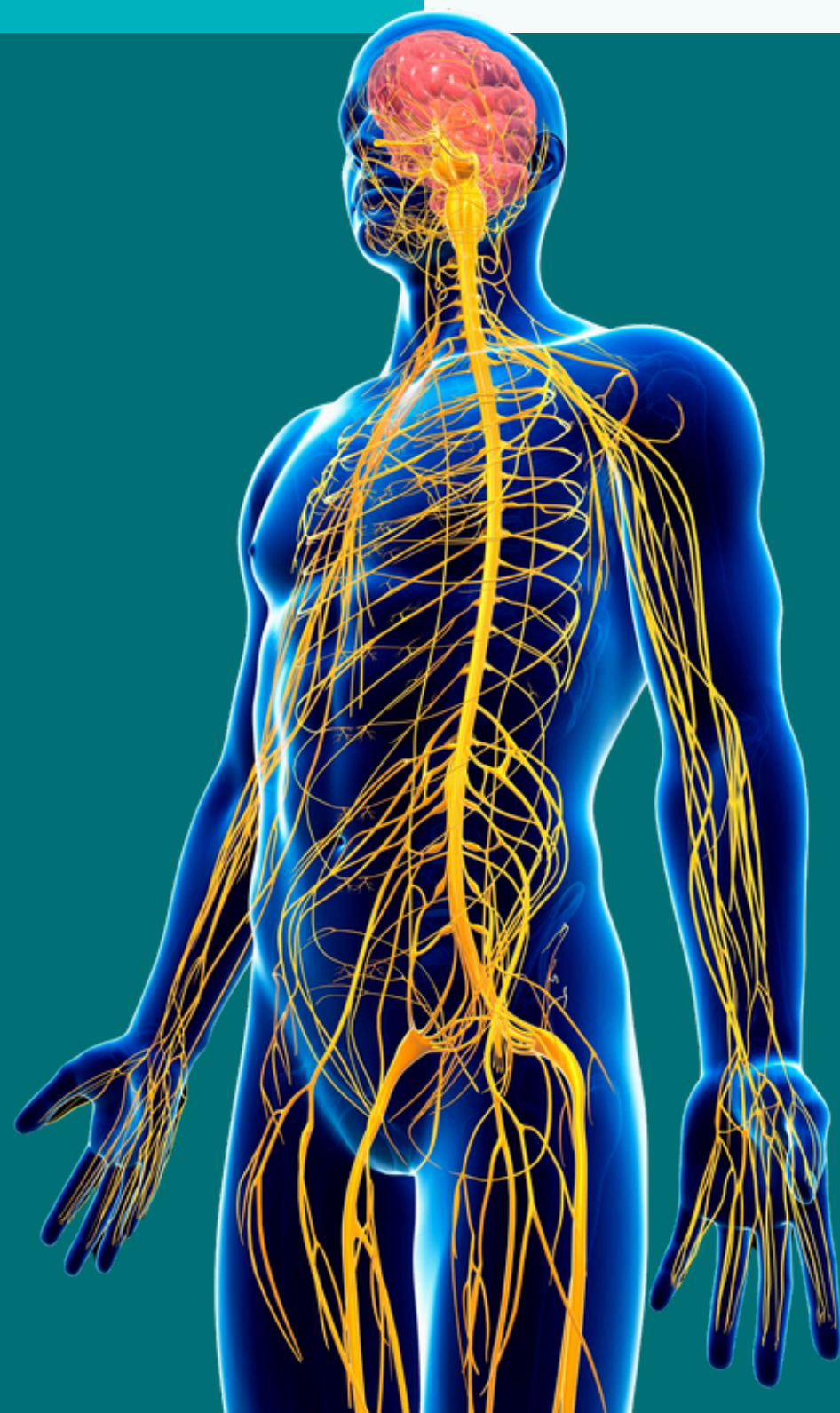
2.Skeletal System

- **Main parts:**
Bones, joints, ligaments, cartilage.
- **Functions:**
 - Provides structural support and shape to the body.
 - Protects vital organs (skull protects brain, rib cage protects heart/lungs).
 - Works with muscles for movement.
 - Stores minerals like calcium and phosphorus.
 - Produces blood cells in the bone marrow (hematopoiesis).



3. Muscular System

- **Main types:**
Skeletal muscle, smooth muscle, cardiac muscle.
- **Functions:**
 - Enables movement of the body and internal organs.
 - Maintains posture and stabilizes joints.
 - Produces heat during contraction (important for body temperature control).
 - Involuntary muscles (like in intestines) control internal movements like digestion.



4.Nervous System

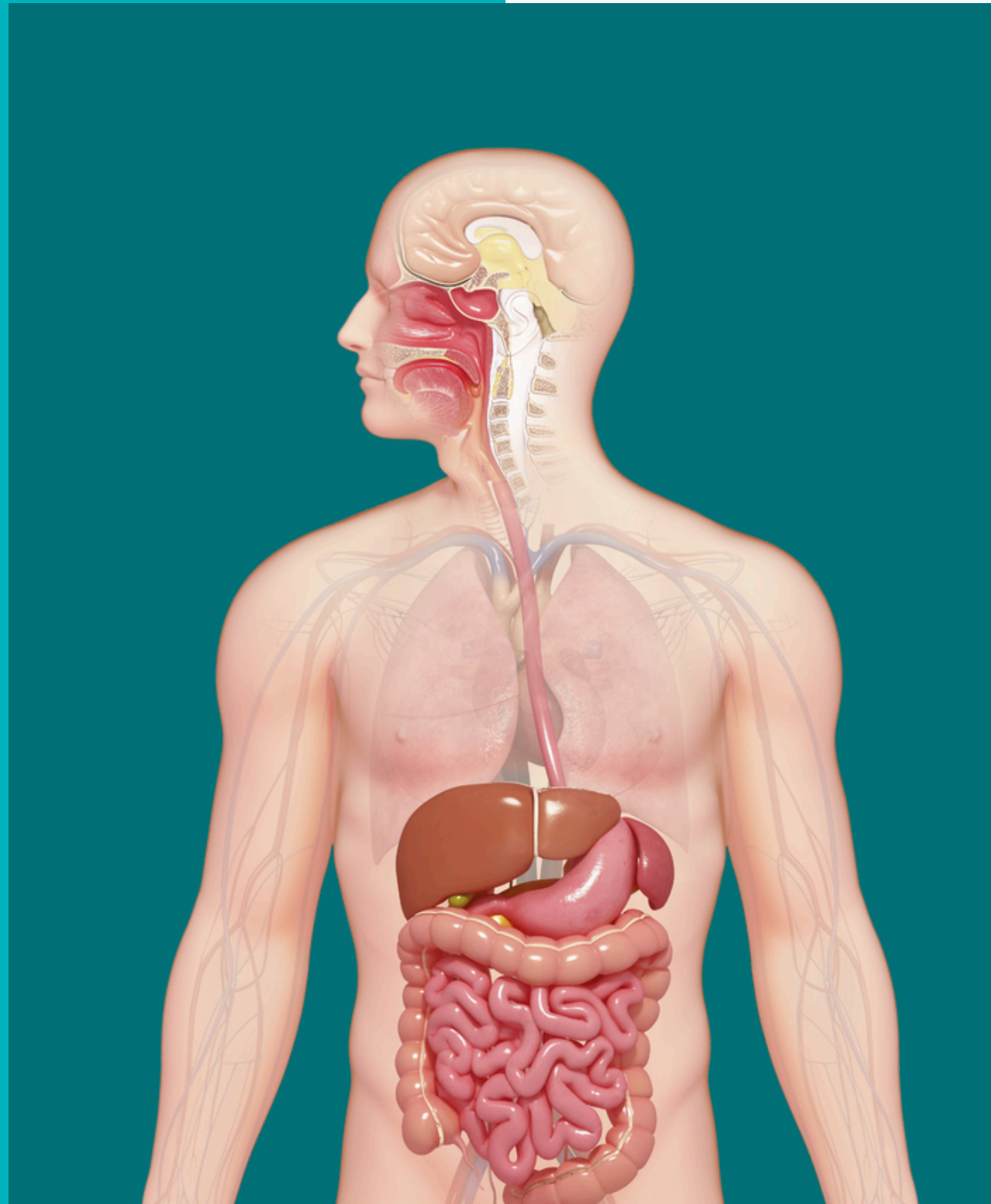
- **Main parts:**

Brain, spinal cord, peripheral nerves, sense organs.

- **Functions:**

- Controls and coordinates all body activities.
- Receives sensory input, processes information, and sends responses.
- Regulates voluntary and involuntary actions.
- Responsible for thought, memory, emotions, and reflexes.
- Works with endocrine system to maintain homeostasis.





5. Endocrine System

- **Main parts:**

Pituitary gland, thyroid, adrenal glands, pancreas, gonads, hypothalamus, pineal gland.

- **Functions:**

- Produces hormones that regulate body processes like metabolism, growth, reproduction, and mood.
- Works slower but has long-lasting effects compared to the nervous system.
- Maintains balance of water, salts, and nutrients in the body.





6. Cardiovascular System

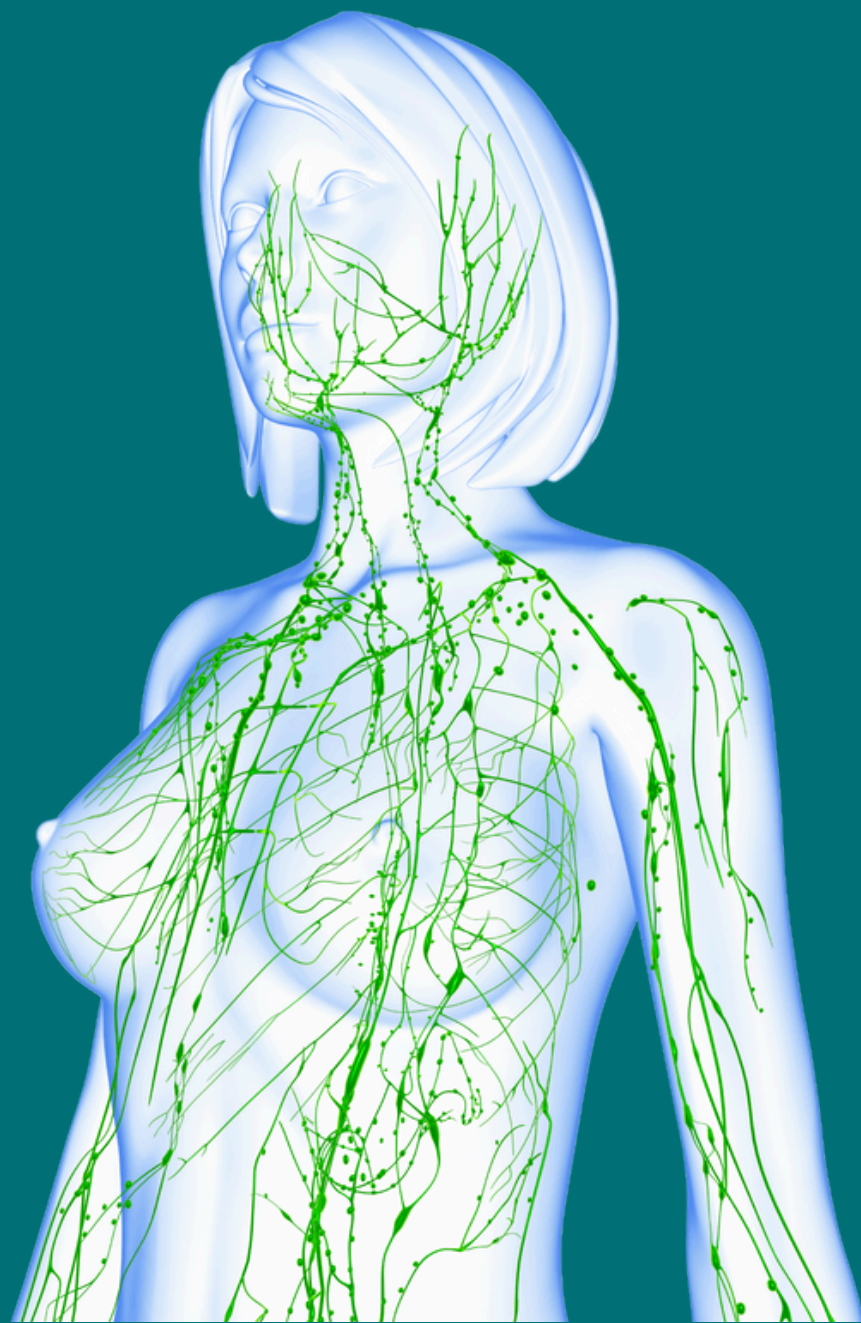
- **Main parts:**

Heart, blood, blood vessels (arteries, veins, capillaries).

- **Functions:**

- Pumps and circulates blood throughout the body.
- Transports oxygen, nutrients, hormones, and waste products.
- Helps regulate body temperature and pH balance.
- Protects against disease through white blood cells and antibodies.





7.Lymphatic System

- **Main parts:**
- Lymph nodes, lymph vessels, spleen, thymus, tonsils, bone marrow.
- **Functions:**
- Defends the body against pathogens (bacteria, viruses, parasites).
- Removes excess fluid from tissues and returns it to the bloodstream.
- Helps in absorption of dietary fats.
- Produces immune cells (lymphocytes) for fighting infections.





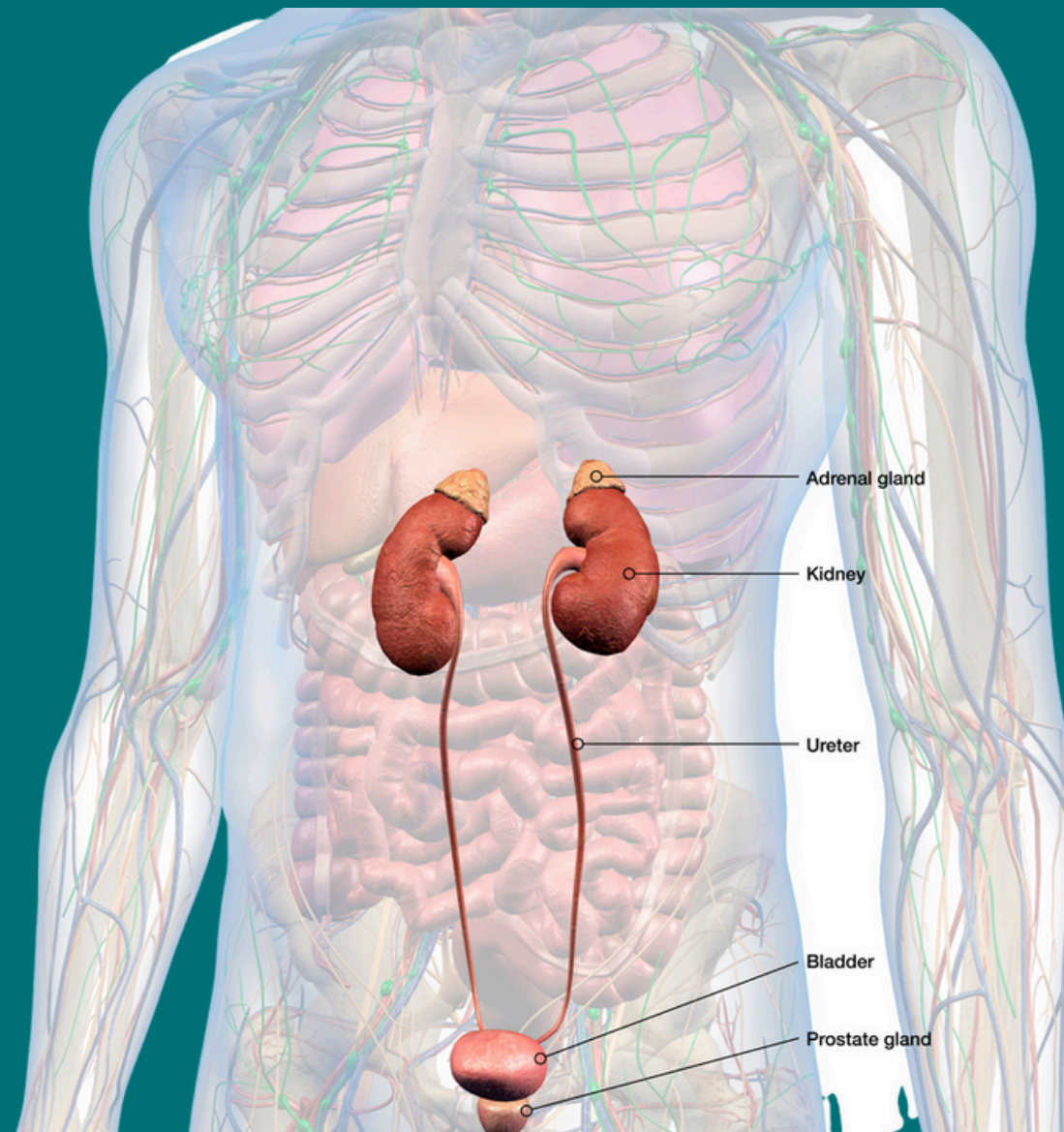
8. Respiratory System

- **Main parts:**
- Nose, nasal cavity, pharynx, larynx, trachea, bronchi, lungs, alveoli.
- **Functions:**
- Supplies oxygen to the blood and removes carbon dioxide.
- Helps regulate blood pH.
- Filters, warms, and humidifies the air we breathe.
- Produces sounds for speech.



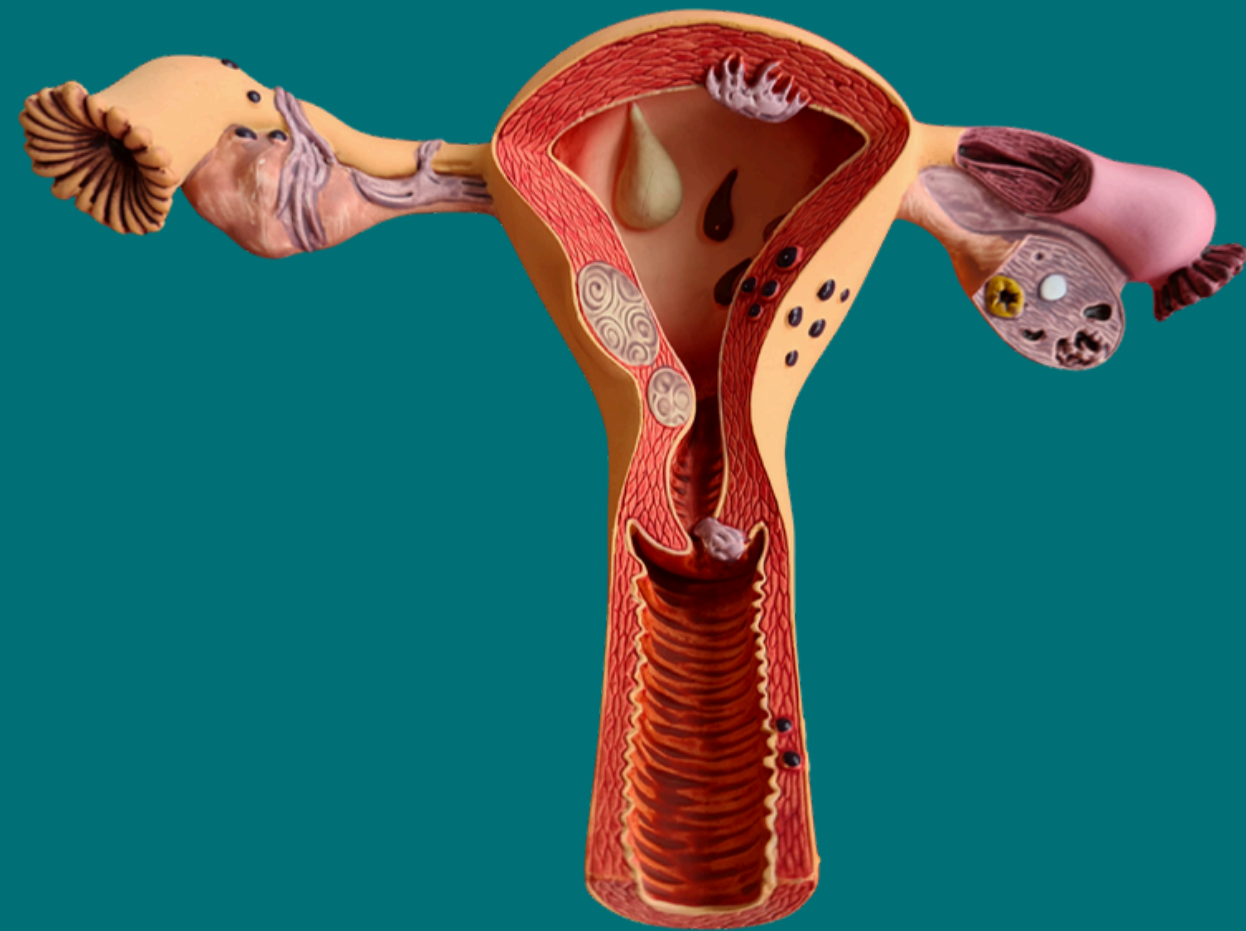
9. Digestive System

- **Main parts:**
- Mouth, esophagus, stomach, small intestine, large intestine, liver, pancreas, gallbladder.
- **Functions:**
- Breaks down food into nutrients for absorption.
- Eliminates undigested waste.
- Produces enzymes and digestive juices for chemical breakdown.
- Maintains a healthy gut for immunity and digestion.



10. Excretory System

- **Main parts:**
- Kidneys, ureters, bladder, urethra.
- **Functions:**
- Removes waste products from the blood.
- Maintains fluid, electrolyte, and pH balance.
- Regulates blood pressure.
- Produces hormones for red blood cell production.



11.Reproductive System

- **Main parts:**
- Male: Testes, penis, prostate gland .
- Female: Ovaries, uterus, fallopian tubes, vagina.
- **Functions:**
- Produces gametes (sperm in males, eggs in females).
- Enables fertilization and development of offspring.
- Produces sex hormones that influence secondary sexual characteristics.