

# Human Body and Health: Basic Science Facts

Basic Science · Answer Key · 25 Questions

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**1. Which blood component is primarily responsible for transporting oxygen throughout the body?**

- A) Platelets
- B) White blood cells
- C) Plasma
- D) Red blood cells**

**2. What is the main function of the alveoli in the lungs?**

- A) Producing digestive enzymes
- B) Filtering waste products from the blood
- C) Exchanging oxygen and carbon dioxide**
- D) Storing energy as glycogen

**3. The human heart is divided into how many chambers?**

- A) Two
- B) Three
- C) Four**
- D) Six

**4. Which vitamin is synthesized in the skin upon exposure to sunlight?**

- A) Vitamin C
- B) Vitamin K
- C) Vitamin D**
- D) Vitamin A

**5. What is the largest organ in the human body?**

- A) Brain
- B) Liver
- C) Skin**
- D) Heart

**6. Which part of the brain is primarily responsible for balance and coordination?**

- A) Cerebrum
- B) Cerebellum**
- C) Brainstem
- D) Hypothalamus

**7. What is the primary role of the pancreas in the digestive system?**

- A) Producing bile
- B) Absorbing nutrients
- C) Secreting digestive enzymes and insulin**
- D) Breaking down fats

**8. The process by which plants convert light energy into chemical energy is called:**

- A) Respiration
- B) Transpiration
- C) Photosynthesis**
- D) Fermentation

**9. What is the basic structural and functional unit of the nervous system?**

- A) Neuron**
- B) Mitochondrion
- C) Ribosome
- D) Synapse

**10. Which mineral is essential for strong bones and teeth?**

- A) Iron
- B) Potassium
- C) Calcium**
- D) Sodium

**11. What is the scientific term for the process of breathing in and out?**

- A) Digestion
- B) Circulation
- C) Respiration**
- D) Metabolism

**12. Which of the following is a type of white blood cell that helps fight infections?**

- A) Erythrocyte
- B) Thrombocyte
- C) Lymphocyte**
- D) Osteocyte

**13. The small intestine is the primary site for what process?**

- A) Water absorption
- B) Protein synthesis
- C) Nutrient absorption**
- D) Waste elimination

**14. What is the main function of antibodies?**

- A) Carrying oxygen
- B) Clotting blood
- C) Identifying and neutralizing foreign substances**
- D) Producing hormones

**15. Which type of muscle is found in the walls of internal organs like the stomach and intestines?**

- A) Skeletal muscle
- B) Cardiac muscle
- C) Smooth muscle**
- D) Voluntary muscle

**16. What is the outermost layer of the skin called?**

- A) Dermis
- B) Epidermis**
- C) Hypodermis
- D) Melanin

**17. Which part of the ear is responsible for converting sound vibrations into nerve impulses?**

- A) Outer ear
- B) Eardrum
- C) Ossicles
- D) Cochlea**

**18. What is the main energy currency of the cell?**

- A) DNA
- B) RNA
- C) ATP**
- D) Glucose

**19. The process by which cells break down glucose to release energy is known as:**

- A) Anabolism
- B) Catabolism**
- C) Photosynthesis
- D) Fermentation

**20. Which organ filters waste products and excess fluid from the blood to produce urine?**

- A) Liver
- B) Spleen
- C) Kidneys**
- D) Bladder

**21. What is the genetic material found in the nucleus of most living cells?**

- A) Protein
- B) Lipid
- C) Carbohydrate
- D) DNA**

**22. Which hormone regulates blood sugar levels?**

- A) Thyroxine
- B) Adrenaline
- C) Insulin**
- D) Estrogen

**23. What is the primary function of red blood cells?**

- A) Fighting infection
- B) Transporting oxygen**
- C) Clotting blood
- D) Producing antibodies

**24. The sclera is the white, outer layer of which human organ?**

- A) Liver
- B) Eye**
- C) Brain
- D) Stomach

**25. What is the substance that gives skin, hair, and eyes their color?**

- A) Collagen
- B) Keratin
- C) Melanin**
- D) Elastin