

## Human Immune System Trivia: Questions, Answers, and Facts Printable Trivia Pack

Human Immune System trivia explores the remarkable defenses that help the body recognize and respond to germs, injuries, and other threats. From early ideas about disease and immunity to breakthroughs such as vaccination and modern immunology, this topic blends scientific history with surprising facts that make learning both approachable and entertaining.

### HARD HUMAN IMMUNE SYSTEM TRIVIA

1. What is the name of the human major histocompatibility complex?

Answer: HLA, which stands for human leukocyte antigen.

2. On nearly all nucleated human cells, which class of MHC molecule is present?

Answer: MHC class I.

3. Professional antigen-presenting cells mainly express which class of MHC molecule?

Answer: MHC class II.

4. In which organ do T cells undergo both positive and negative selection?

Answer: The thymus.

5. Which transcription factor is important for central immune tolerance in the thymus?

Answer: AIRE.

6. Which pair of genes is essential for V(D)J recombination in developing lymphocytes?

Answer: RAG1 and RAG2.

7. Activated B cells use what process to improve antibody affinity by introducing variation?

Answer: Somatic hypermutation.

8. Which mechanism changes an antibody's isotype while leaving antigen specificity unchanged?

Answer: Class-switch recombination.

9. During many antibody responses, what structures form in secondary lymphoid organs?

Answer: Germinal centers.

10. What is the name of the process that raises the average binding strength of antibodies over time?

Answer: Affinity maturation.

11. Which Toll-like receptor recognizes bacterial lipopolysaccharide?

Answer: TLR4.

12. What is the pore-forming terminal structure of the complement cascade called?

Answer: The membrane attack complex.

13. Which complement component sits at the center of all three activation pathways?

Answer: C3.

14. Cytotoxic lymphocytes rely on which molecule to help deliver granzymes into target cells?

Answer: Perforin.

#### FUNNY HUMAN IMMUNE SYSTEM TRIVIA

1. Your nose has decided to become a faucet during allergy season. What often makes that mucus thicker?

Answer: Inflammation during infection or allergy often makes the mucus in a runny nose thicker.

2. What reflex is basically your nose yelling, "Evict the irritants!"?

Answer: Sneezing helps expel irritants from the nose.

3. When your airways want to clear out unwanted gunk, what common action helps remove mucus and irritants?

Answer: Coughing helps clear mucus and irritants from the airways.

4. True or false: Tears are just emotional water with no antibacterial helper in them.?

Answer: False

5. Your mouth is not just a snack lobby. What fluid contains antimicrobial components including lysozyme and IgA?

Answer: Saliva contains antimicrobial components, including lysozyme and IgA.

6. Which harsh stomach resident helps destroy many microbes you accidentally swallow?

Answer: Stomach acid helps destroy many swallowed microbes.

7. It may not win beauty awards, but what sticky ear canal substance helps trap dust and small particles?

Answer: Earwax helps trap dust and small particles entering the ear canal.

8. What goo in the airways acts like flypaper for inhaled particles and microbes?

Answer: Mucus in the airways helps trap inhaled particles and microbes.

9. Which tiny airway structures beat upward to move mucus out of the lungs, like microscopic janitors on overtime?

Answer: Cilia lining the airways beat upward to help move mucus out of the lungs.

10. What community of normal gut residents can help stop harmful microbes from moving in uninvited?

Answer: The normal gut microbiome can help block harmful microbes from taking hold.

11. True or false: Body odor can stay exactly the same during every infection because the immune system never affects skin chemistry.?

Answer: False

12. Those little bean-shaped checkpoints in your neck or armpit can get sore when busy. What are they?

Answer: Lymph nodes can become swollen and tender during an active immune response.

13. If a cut starts looking red like it is showing off, what classic process does that redness point to?

Answer: Redness around a cut is a classic sign of inflammation.

#### FUN HUMAN IMMUNE SYSTEM TRIVIA

1. What everyday medical word traces back to the Latin word for cow, "vacca"?

Answer: Vaccine

2. When your body turns up the temperature during an infection, what immune response is happening?

Answer: A fever

3. That gross yellowish gunk in an infected pimple is made largely of dead white blood cells, microbes, and tissue debris. What is it called?

Answer: Pus

4. What helps train your immune system before it meets a disease-causing germ for real?

Answer: Vaccination

5. White blood cells go by what other name?

Answer: Leukocytes

6. Which white blood cell is the most abundant in normal human blood?

Answer: Neutrophils

7. If parasitic worms had a least-favorite white blood cell, which one would it be?

Answer: Eosinophils

8. During many allergic reactions, which cells can release histamine like tiny chemical confetti cannons?

Answer: Basophils

9. Which immune cells live in tissues and also release histamine?

Answer: Mast cells

10. What chemical helps make many allergic reactions feel itchy and look swollen?

Answer: Histamine

11. After activation, which cells can transform into plasma cells that secrete antibodies?

Answer: B cells

12. Which immune cells can destroy some infected or cancerous cells without prior sensitization?

Answer: Natural killer cells

13. What proteins help cells resist viral infection, acting like an early warning system?

Answer: Interferons

#### HUMAN IMMUNE SYSTEM FAMILY TRIVIA

1. Who is widely credited with introducing the first successful vaccine in 1796?

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2. Which scientist discovered penicillin in 1928?

Answer: Alexander Fleming discovered penicillin in 1928.

3. Who discovered the ABO blood group system?

Answer: Karl Landsteiner discovered the ABO blood group system.

4. Which pioneer is known for important work on phagocytes, the cells that gobble up tiny invaders?

Answer: Elie Metchnikoff is known for pioneering work on phagocytes.

5. Who discovered dendritic cells?

Answer: Ralph Steinman discovered dendritic cells.

6. Who shared the 2011 Nobel Prize for work on innate immunity?

Answer: Bruce Beutler shared the 2011 Nobel Prize for work on innate immunity.

7. Jules Hoffmann shared the 2011 Nobel Prize for discoveries about what?

Answer: Jules Hoffmann shared the 2011 Nobel Prize for discoveries about innate immune activation.

8. Who won the 1987 Nobel Prize for discovering the genetic principle of antibody diversity?

Answer: Susumu Tonegawa won the 1987 Nobel Prize for discovering the genetic principle of antibody diversity.

9. Peter Doherty shared the 1996 Nobel Prize for findings on how which cells recognize infected cells?

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10. Who shared the 1996 Nobel Prize with Peter Doherty?

Answer: Rolf Zinkernagel shared the 1996 Nobel Prize with Peter Doherty.

11. Which scientist demonstrated the immune function of the thymus in the 1960s?

Answer: Jacques Miller demonstrated the immune function of the thymus in the 1960s.

12. Who is known for identifying regulatory T cells?

Answer: Shimon Sakaguchi is known for identifying regulatory T cells.

#### EASY HUMAN IMMUNE SYSTEM TRIVIA

1. What body covering acts as a major physical barrier against pathogens?

Answer: The skin

2. Which tissue is a primary site of blood cell production, including many immune cells?

Answer: Bone marrow

3. Which immune organ lies in the upper chest behind the sternum?

Answer: The thymus

4. What organ is found in the left upper part of the abdomen?

Answer: The spleen

5. Which cells produce antibodies?

Answer: Plasma cells

6. CD4 is commonly associated with which type of T cell?

Answer: Helper T cells

7. Which immunoglobulin is found on the surface of many naive B cells?

Answer: IgD

8. The MMR vaccine targets which three diseases?

Answer: Measles, mumps, and rubella

9. Which vaccine is derived from *Mycobacterium bovis*?

Answer: BCG

10. What are allergy shots a form of?

Answer: Allergen immunotherapy

11. Which blood protein group helps fight microbes?

Answer: The complement system

12. What name is given to signaling molecules used by immune cells?

Answer: Cytokines

13. Major entry points where immune defenses operate include what kind of surfaces?

Answer: Mucosal surfaces

Source: <https://triviagong.com/themes/human-immune-system>