

# Animal Immunity and Biotechnology

Biology · Practice Test · 29 Questions

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**1. What bodily fluid in the nose and throat helps prevent pathogens from entering the body?**

- A) Tears
- B) Mucus
- C) Hydrochloric acid
- D) Skin

**2. What are the small hair-like structures lining the nasal passages and trachea that help clear them of pathogens?**

- A) Cilia
- B) Mucus
- C) White blood cells
- D) Conjunctiva

**3. Which part of the eye produces tears that help protect against pathogens?**

- A) Nasal passages
- B) Stomach
- C) Eye
- D) Throat

**4. What substance in the stomach helps to kill ingested microorganisms?**

- A) Mucus
- B) Cilia
- C) Hydrochloric acid
- D) Skin

**5. Which of the following is a physical barrier that prevents pathogens from entering the body?**

- A) White blood cells
- B) Hydrochloric acid
- C) Tears
- D) Unbroken Skin

**6. What type of blood cells are involved in the immune response against infecting microorganisms?**

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

**7. What is the definition of vaccinations?**

- A) A type of antibiotic
- B) A method of growing microorganisms
- C) The administration of a weakened or inactive form of a pathogen to stimulate immunity
- D) A traditional fermentation process

**8. What is a primary importance of vaccinations?**

- A) To produce cheese
- B) To prevent diseases
- C) To make wine
- D) To grow bread mould

**9. Antibiotics primarily affect which type of organism?**

- A) Viruses
- B) Bacteria
- C) Fungi
- D) Protists

**10. Which of the following is an example of using microorganisms to produce medicines?**

- A) Beer production
- B) Wine production
- C) Insulin production
- D) Cheese production

**11. Which traditional technology involves the fermentation of sugars by yeast?**

- A) Cheese production
- B) Bread production
- C) Beer production
- D) Antibiotic production

**12. What is the process of growing microorganisms on a nutrient-rich gel called?**

- A) Fermentation
- B) Vaccination
- C) Culturing on agar plates
- D) Digestion

**13. What type of organism is commonly found growing on bread?**

- A) Bacteria
- B) Yeast
- C) Mould
- D) Viruses

**14. The conjunctiva is part of which protective system?**

- A) Digestive system
- B) Respiratory system
- C) Immune system of the eye
- D) Circulatory system

**15. The acidic environment of the stomach is a defense mechanism against:**

- A) Dehydration
- B) Pathogens
- C) Lack of oxygen
- D) Nutrient deficiency

**16. Which of the following is NOT a direct defense mechanism against pathogen entry mentioned in the text?**

- A) Mucus
- B) Cilia
- C) White blood cells
- D) Unbroken Skin

**17. What is the term for the body's defense system against illness?**

- A) Digestion
- B) Immunity
- C) Respiration
- D) Circulation

**18. What is the main goal of a vaccination?**

- A) To cause illness
- B) To strengthen the immune system
- C) To produce antibiotics
- D) To ferment beverages

**19. Which substance is used to treat bacterial infections?**

- A) Vaccine
- B) Antibiotic
- C) Insulin
- D) Yeast

**20. Which of these is a product of traditional technology that involves fermentation?**

- A) Insulin
- B) Antibiotics
- C) Wine
- D) Bread mould

**21. Growing cultures on agar plates is a method used for:**

- A) Producing vaccines
- B) Investigating microorganisms
- C) Making antibiotics
- D) Fermenting wine

**22. The text mentions the use of microorganisms to produce which essential human hormone?**

- A) Adrenaline
- B) Thyroxine
- C) Insulin
- D) Growth hormone

**23. What is the primary role of cilia in the respiratory tract?**

- A) To produce mucus
- B) To trap pathogens
- C) To move mucus and trapped particles away from the lungs
- D) To absorb oxygen

**24. Which of the following is a key component of the innate immune system that acts as a physical barrier?**

- A) White blood cells
- B) Antibiotics
- C) Unbroken skin
- D) Vaccines

**25. The presence of hydrochloric acid in the stomach is an example of which type of defense?**

- A) Mechanical defense
- B) Chemical defense
- C) Biological defense
- D) Passive defense

**26. What is the conjunctiva's role in immunity?**

- A) Filtering air
- B) Lubricating the eye and trapping debris
- C) Producing digestive enzymes
- D) Transporting oxygen

**27. Which of these is a biotechnological application mentioned?**

- A) Cheese production
- B) Beer production
- C) Vaccination
- D) Bread mould observation

**28. The use of drugs like antibiotics to combat microorganisms falls under which category?**

- A) Traditional technology
- B) Investigations
- C) Animal immunity
- D) Biotechnology

**29. What is a common method for studying bacteria and fungi in a laboratory setting?**

- A) Drinking wine
- B) Eating cheese
- C) Growing cultures on agar plates
- D) Getting vaccinated