



## Study reveals microplastics present in all human testicles | Plastics

### Description

Microplastics have been discovered in human testicles, possibly contributing to declining sperm counts in men. Researchers found microplastic pollution in all 23 human testes and 47 dog testes they examined. The study showed that dogs with higher PVC contamination had lower sperm counts. While the impact of microplastics on sperm count needs further research, their presence in human bodies is becoming more widespread, including in blood, placentas, and breast milk. The particles can cause inflammation or harm due to chemical exposure. With plastic waste polluting the environment and human consumption of microplastics, the health implications are concerning. The study, featured in Toxicological Sciences, found a higher plastic concentration in human testes compared to dog testes, raising alarms about potential reproductive health risks. Further studies, including one in China, support these findings, highlighting the urgent need for more research on the impact of microplastics on human health.

### Vocabulary List:

1. **Microplastics** // (noun): Tiny plastic particles typically less than 5mm in size.
2. **Pollution** // (noun): Contamination of the environment with harmful substances.
3. **Contamination** // (noun): The presence of unwanted substances or pollutants.
4. **Sperm** // (noun): The male reproductive cells.
5. **Inflammation** // (noun): A localized physical condition in which part of the body becomes reddened, swollen, hot, and often painful, especially as a reaction to injury or infection.
6. **Chemical** // (noun): A substance produced by or used in a chemical process.

### Vocabulary quizzes

#### Multiple Choice ( Select the Correct answer for each question. )

1. What tiny particles may cause harm to marine life and ecosystems?  
Option: Chemicals  
Option: Microplastics  
Option: Pollution  
Option: Sperm
2. What type of substances are often found in polluted environments?  
Option: Sperm



- Option: Chemical
- Option: Inflammation
- Option: Pollution

3. How might one feel if caught in a situation that draws unwanted attention?

- Option: Hopeless
- Option: Embarrassed
- Option: Breakthrough
- Option: Receptor

4. What type of medication is specifically designed to combat viruses?

- Option: Antiviral
- Option: Pandemic
- Option: Surveillance
- Option: Infections

5. Which field of study involves the study of heredity and variation of organisms?

- Option: Resilience
- Option: Genetics
- Option: Cognitive
- Option: Antioxidants

6. Which type of DNA is passed down from the mother to her offspring?

- Option: Mitochondrial
- Option: Preventive
- Option: Issued
- Option: Reckless

7. What behavior is characterized by a lack of concern for the consequences of one's actions?

- Option: Endorsed
- Option: Reckless
- Option: Compulsive
- Option: Impulsive

8. Which neurotransmitter is associated with pleasure and reward?

- Option: Inflammation
- Option: Chemical
- Option: Obesity
- Option: Dopamine

9. What biological response occurs when the body is combating infection or injury?

- Option: Agonist
- Option: Inflammation



- Option: Detected  
Option: Pandemic

10. Which emotion might a person feel when facing a seemingly impossible situation?

- Option: Resilience  
Option: Hopeless  
Option: Breakthrough  
Option: Surveillance

**Gap-Fill ( Fill in the blanks with the correct word from the vocabulary list. )**

11. High levels of \_\_\_\_\_ can have detrimental effects on the environment.
12. The \_\_\_\_\_ of water sources by harmful substances can pose serious health risks.
13. A sedentary lifestyle and poor diet can contribute to the development of \_\_\_\_\_.
14. The presence of microplastics was \_\_\_\_\_ in the water samples collected from the river.
15. Efficient \_\_\_\_\_ systems are crucial for early detection and response to disease outbreaks.
16. Building \_\_\_\_\_ can help individuals cope with life's challenges and setbacks.
17. Taking necessary \_\_\_\_\_ can help prevent the spread of infectious diseases.
18. The policy change was \_\_\_\_\_ by a majority of the committee members.
19. Individuals with \_\_\_\_\_ behaviors may engage in repetitive actions despite negative consequences.
20. Regular exercise has been shown to improve \_\_\_\_\_ function in older adults.

**Matching Sentences ( Match each definition to the correct word from the vocabulary list. )**

21. A substance that binds to a receptor and activates a response in the cell.



22. An outbreak of a disease that occurs over a wide geographic area.
23. Ensuring the right person is assigned to the correct task.
24. A protein on the cell surface where specific molecules can bind.
25. Acting without thinking about the consequences.
26. Molecules that can prevent or slow damage to cells caused by free radicals.
27. Male reproductive cells involved in fertilizing the female egg.
28. A significant development or discovery that advances knowledge or technology.
29. The invasion and multiplication of harmful microorganisms in the body.
30. Feeling of despair with no expectation of a positive outcome.

## Answer

**Multiple Choice:** 1. Microplastics 2. Chemical 3. Embarrassed 4. Antiviral 5. Genetics 6. Mitochondrial 7. Reckless 8. Dopamine 9. Inflammation 10. Hopeless

**Gap-Fill:** 11. Pollution 12. Contamination 13. Obesity 14. Detected 15. Surveillance 16. Resilience 17. Precautions 18. Endorsed 19. Compulsive 20. Cognitive

**Matching sentence:** 1. Agonist 2. Pandemic 3. Matching 4. Receptor 5. Impulsive 6. Antioxidants 7. Sperm 8. Breakthrough 9. Infections 10. Hopeless

## CATEGORY

1. Health - LEVEL1

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