



Alzheimer's Hidden Sign: Your Breathing Reveals All

Description

It's important to find Alzheimer's disease early so we can help people better. Scientists from the UK and Slovenia discovered that changes in brain activity and breathing can show signs of Alzheimer's.

They studied 19 people with Alzheimer's and 20 without it to see how their brains worked. They found differences in how oxygen moved in the brain and how blood flow changed. People with Alzheimer's breathed faster than others.

This finding could help us understand and treat Alzheimer's sooner. By looking at breathing patterns, we might detect the disease early. Alzheimer's might be connected to how our brain and blood vessels work together to give the brain energy.

We still need more research, but this simple and cheap method shows promise. It could lead to new ways to help people with Alzheimer's. The study was published in a journal called Brain Communications.

Vocabulary List:

1. **Alzheimer's** /'æltʃaɪmərz/ (noun): A progressive disease that destroys memory and other important mental functions.
2. **Activity** /æk'tɪvɪti/ (noun): The state of being active; a specific deed or task.
3. **Oxygen** /'ɒksɪdʒən/ (noun): A chemical element essential for respiration in most living organisms.
4. **Breathing** /'briːðɪŋ/ (noun): The process of taking air into and expelling it from the lungs.
5. **Promise** /'prɒmɪs/ (noun): A declaration or assurance that one will do something or that a particular thing will happen.
6. **Research** /'riːsɜːrtʃ/ (noun): The systematic investigation into and study of materials and sources to establish facts and reach new conclusions.

Comprehension Questions

Multiple Choice

1. What did scientists from the UK and Slovenia discover about Alzheimer's disease?
Option: Changes in brain activity and breathing can indicate signs of Alzheimer's



- Option: Changes in diet can prevent Alzheimer's
- Option: Changes in exercise routines can cure Alzheimer's
- Option: Changes in sleep patterns can cause Alzheimer's

2. How many people with Alzheimer's were studied by the scientists?

- Option: 19
- Option: 20
- Option: 39
- Option: 40

3. What did the scientists find about oxygen movement and blood flow in the brains of people with Alzheimer's?

- Option: Decreased oxygen movement and blood flow
- Option: Increased oxygen movement and blood flow
- Option: No difference in oxygen movement and blood flow
- Option: Irrelevant to Alzheimer's

4. How did people with Alzheimer's differ in terms of breathing compared to those without the disease?

- Option: They breathed slower
- Option: They breathed normally
- Option: They breathed faster
- Option: Their breathing pattern was irregular

5. What could the findings about breathing patterns potentially help in terms of Alzheimer's?

- Option: Diagnosing the disease early
- Option: Developing a new drug treatment
- Option: Replacing traditional therapies
- Option: Identifying new symptoms

6. Where was the study on Alzheimer's disease published?

- Option: Brain Communications
- Option: Medical Journal of Neurology
- Option: Alzheimer's Research Journal
- Option: Human Brain Studies Journal

True-False

7. Changes in brain activity and breathing can indicate early signs of Alzheimer's.



8. The study involved 20 people with Alzheimer's and 19 without the disease.
9. The findings suggest that Alzheimer's is not related to brain and blood vessel function.
10. The research implies that early detection methods for Alzheimer's are expensive and complex.
11. Breathing patterns of individuals can potentially provide clues for detecting Alzheimer's early.
12. The study on Alzheimer's was conducted by scientists solely from the UK.

Gap-Fill

13. According to the text, the study on Alzheimer's was published in a journal called _____ Communications.
15. The research suggested that by analyzing _____ patterns, Alzheimer's disease could be detected early.
16. The potential application of the study findings is to develop new ways to help individuals with _____ disease.
17. The study emphasized the importance of early detection methods to better _____ people.
18. The scientists conducted research on a total of _____ people to analyze brain activity and breathing.

Answer

Multiple Choice: 1. Changes in brain activity and breathing can indicate signs of Alzheimer's 2. 19 3. Decreased oxygen movement and blood flow 4. They breathed faster 5. Diagnosing the disease early 6. Brain Communications

True-False: 7. True 8. False 9. False 10. False 11. True 12. False

Gap-Fill: 13. Brain 15. breathing 16. Alzheimer's 17. help 18. 39



Vocabulary quizzes

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

1. Which disease is characterized by memory loss and cognitive decline?
Option: Alzheimer's
Option: Oxygen
Option: Activity
Option: Evolution
2. What type of planet orbits a star outside of our solar system?
Option: Research
Option: Exoplanet
Option: Astronomers
Option: Oxygen
3. What force keeps planets in orbit around stars?
Option: Toxins
Option: Gravitational
Option: Pollution
Option: Poisonous
4. What process causes fruits to become mature and ready to eat?
Option: Ripens
Option: Chemicals
Option: Toxins
Option: Astronomers
5. Which type of cancer originates in glandular tissue?
Option: Evolution
Option: Adenocarcinoma
Option: Tobacco
Option: Activity
6. Which term describes something with large mass or size?
Option: Domestication
Option: Chemicals
Option: Massive
Option: Evolved
7. What is the process of taking in oxygen and expelling carbon dioxide called?



- Option: Breathing
- Option: Research
- Option: Promising
- Option: Observations

8. What is collected and analyzed to gain information?

- Option: Identifying
- Option: Data
- Option: Strategies
- Option: Ripens

9. What process describes the gradual development of something over time?

- Option: Evolution
- Option: Microlensing
- Option: Significant
- Option: Activity

10. Which substances are harmful and can cause adverse effects when present in the body?

- Option: Toxins
- Option: Intermediate-mass
- Option: Research
- Option: Breathing

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

11. Scientists conduct _____ to discover new findings.
12. The new treatment shows great _____ in curing the disease.
13. The _____ of animals led to changes in their behavior and genetics.
14. Some _____ in the environment can be harmful to human health.
15. _____ study celestial objects and phenomena in the universe.
16. Efforts are being made to reduce _____ levels in major cities.
17. The new discovery will have a _____ impact on the field of medicine.
18. Businesses need effective _____ to achieve success in the market.



19. Scientists make detailed _____ to understand natural phenomena.
20. The _____ force between planets keeps them in their orbits.

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

21. Species have over time to adapt to their environments.
22. is a technique used by astronomers to discover distant planets.
23. key characteristics is important in classifying different species.
24. Astronomers use various methods to detect new beyond our solar system.
25. Regular physical is important for maintaining good health.
26. Some plants produce substances to deter herbivores from eating them.
27. The new drug has shown results in early trials.
28. Living organisms require for respiration and survival.
29. Long-term use of products can lead to serious health issues.
30. Stars with have properties between low-mass and high-mass stars.

Answer

Multiple Choice: 1. Alzheimer’s 2. Exoplanet 3. Gravitational 4. Ripens 5. Adenocarcinoma 6. Massive 7. Breathing 8. Data 9. Evolution 10. Toxins

Gap-Fill: 11. Research 12. Promise 13. Domestication 14. Chemicals 15. Astronomers 16. Pollution 17. Significant 18. Strategies 19. Observations 20. Gravitational

Matching sentence: 1. Evolved 2. Microlensing 3. Identifying 4. Exoplanet 5. Activity 6. Poisonous 7. Promising 8. Oxygen 9. Tobacco 10. Intermediate-mass

CATEGORY

1. Health - LEVEL2

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