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# Memory decline associated with sleep apnea during REM sleep

## Description

New Study Links Sleep Apnea during REM Sleep to Memory Issues in Older Adults

A recent study led by the University of California, Irvine has found a connection between sleep apnea events during REM sleep and verbal memory problems in older adults at risk for Alzheimer's disease. The research emphasizes the importance of focusing on the severity of apnea during specific sleep stages for accurate diagnosis and treatment.

Women were discovered to have more REM-related sleep apnea events, potentially increasing their risk of developing Alzheimer's. The findings underscore the necessity for personalized assessments of sleep apnea to address cognitive decline.

The study, published in the journal Alzheimer's Research & Therapy, revealed that higher apnea events during REM sleep were linked to worse verbal memory. This discovery highlights the need to pay attention to REM-specific apnea events for effective diagnosis and treatment.

By identifying and addressing REM-specific events, medical professionals can tailor personalized approaches to assessment and treatment, ultimately benefiting individuals with a genetic predisposition to Alzheimer's and those with a family history of the disease.

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## Vocabulary List:

1. **Apnea** // (noun): A temporary cessation of breathing especially during sleep.
2. **Verbal Memory** // (noun): The ability to remember words and spoken information.
3. **Cognitive Decline** // (noun): The gradual loss of cognitive functions such as memory and reasoning.
4. **Genetic Predisposition** // (noun): An increased likelihood of developing a particular disease based on genetic factors.
5. **Personalized** // (adjective): Tailored or adapted to meet individual needs.
6. **Assessments** // (noun): Evaluations or appraisals of a situation or condition.

## Vocabulary quizzes

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

1. Which type of diet emphasizes fruits vegetables whole grains and healthy fats?

Option: Mediterranean

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- Option: Ultraprocessed  
Option: Processed  
Option: Varied
2. What is the natural biological process that occurs in women as they age?  
Option: Menopause  
Option: Premature  
Option: Ovarian  
Option: Insufficiency
3. Which category of diseases occur when the immune system mistakenly attacks the body?  
Option: Cognitive Decline  
Option: Genetic Predisposition  
Option: Autoimmune  
Option: Apnea
4. What term refers to the actions and mannerisms made by individuals?  
Option: Artificial intelligence  
Option: Behavior  
Option: Predict  
Option: Exclusive
5. Which term refers to the extent to which a concept conclusion or measurement are well-founded and dependable?  
Option: Detected  
Option: Reassured  
Option: Precautions  
Option: Validity
6. Which term describes something innovative or pioneering?  
Option: Groundbreaking  
Option: Generative  
Option: Outbreak  
Option: Mortality
7. What type of memory involves the ability to remember words and language?  
Option: Verbal Memory  
Option: Cognitive Decline  
Option: Assessments  
Option: Insufficiency
8. What term describes tailored or customized approaches for individuals?  
Option: Personalized



- Option: Assessments
- Option: Exclusive
- Option: Detected

9. What term refers to the potential of gaining or losing something of value?

- Option: Risk
- Option: Innovative
- Option: Premature
- Option: Ovarian

10. What field of computer science involves the development of machines that can perform tasks that typically require human intelligence?

- Option: Artificial intelligence
- Option: Behavior
- Option: Predict
- Option: Mortality

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

11. A balanced diet should provide essential \_\_\_\_\_ to support overall health.
12. Vitamin D \_\_\_\_\_ can lead to bone-related health issues.
13. Regular mental exercises may help prevent \_\_\_\_\_ in older adults.
14. Some individuals have a \_\_\_\_\_ to certain hereditary conditions.
15. Medical professionals use various \_\_\_\_\_ to evaluate a patient's health status.
16. The test results \_\_\_\_\_ the patient that their condition was not severe.
17. The new screening method accurately \_\_\_\_\_ early signs of the disease.
18. The company prided itself on its \_\_\_\_\_ approach to product development.
19. The event was by invitation only making it \_\_\_\_\_ and prestigious.
20. It is essential to take necessary \_\_\_\_\_ to prevent accidents at the workplace.

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



21. Consuming high amounts of foods is linked to various health risks.
22. Weather forecasters use advanced technology to changes in atmospheric conditions.
23. Studies show that smoking is a leading cause of premature .
24. Early detection of cancer is crucial for successful treatment.
25. Continuous positive airway pressure (CPAP) devices are used to treat sleep .
26. Including a range of foods in your diet can help ensure adequate nutrient intake.
27. The workshop aimed to foster a environment for creative ideas.
28. The health department quickly responded to the recent disease in the community.
29. Investors weigh the potential when making financial decisions.
30. Many convenience foods are highly and contain added preservatives.

## Answer

**Multiple Choice:** 1. Mediterranean 2. Menopause 3. Autoimmune 4. Behavior 5. Validity 6. Groundbreaking 7. Verbal Memory 8. Personalized 9. Risk 10. Artificial intelligence

**Gap-Fill:** 11. Nutrients 12. Insufficiency 13. Cognitive Decline 14. Genetic Predisposition 15. Assessments 16. Reassured 17. Detected 18. Innovative 19. Exclusive 20. Precautions

**Matching sentence:** 1. Ultraprocessed 2. Predict 3. Mortality 4. Ovarian 5. Apnea 6. Varied 7. Generative 8. Outbreak 9. Risk 10. Processed

## CATEGORY

1. Health - LEVEL2

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