



Reduced Dementia Risk: Insights from Neuroscientist

Description

There is no cure for dementia yet, but some new drugs show promise in slowing it down. These drugs are expensive and might not help everyone. However, a recent study found that common prescription drugs like antibiotics, antivirals, and vaccines could lower the risk of dementia. This could lead to quicker and cheaper clinical trials for finding a cure.

The study looked at data from 130 million people, including one million with dementia. They found that antibiotics, antivirals, and anti-inflammatory drugs could reduce the risk of dementia. Vaccines for hepatitis A, typhoid, and diphtheria were also linked to lower dementia risk.

These drugs may help by reducing inflammation, controlling infections, and improving brain health. Infections, especially long-lasting ones, can harm the brain by triggering an immune response. Drugs that fight infections or prevent them, like vaccines, can protect brain health.

More research is needed to confirm these findings and understand how these drugs affect dementia risk. Using existing drugs in new ways could offer hope in the fight against dementia.

Vocabulary List:

1. **Dementia** /dɪ'menʃə/ (noun): A chronic or persistent disorder of the mental processes caused by brain disease or injury characterized by memory disorders personality changes and impaired reasoning.
2. **Antibiotics** /,æntɪbaɪ'ɒtɪks/ (noun): A type of medicine that inhibits the growth of or destroys microorganisms.
3. **Inflammation** /,ɪnflə'meɪʃən/ (noun): A localized physical condition characterized by redness swelling warmth and pain often as a reaction to injury or infection.
4. **Clinical** /'klɪnɪkəl/ (adjective): Relating to the examination and treatment of patients.
5. **Vaccine** /væk'si:n/ (noun): A substance used to stimulate the production of antibodies and provide immunity against one or several diseases.
6. **Research** /rɪ'sɜ:rtʃ/ (noun/verb): The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

Comprehension Questions

Multiple Choice



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1. What is one potential benefit of common prescription drugs like antibiotics, antivirals, and vaccines in relation to dementia?
 - Option: Reducing inflammation
 - Option: Curing dementia
 - Option: Improving memory recall
 - Option: Increasing brain size

 2. According to the study, what common prescription drugs were found to be linked to lowering the risk of dementia?
 - Option: Antibiotics, antivirals, and anti-inflammatory drugs
 - Option: Painkillers and allergy medications
 - Option: Vitamins and minerals
 - Option: Sleeping pills and antidepressants

 3. How do drugs that fight infections or prevent them, like vaccines, contribute to protecting brain health?
 - Option: By triggering immune responses
 - Option: By lowering oxygen levels in the brain
 - Option: By increasing inflammation in the brain
 - Option: By reducing infections that can harm the brain

 4. What is one area where more research is needed regarding the use of common prescription drugs for dementia risk?
 - Option: Side effects
 - Option: Drug costs
 - Option: Drug availability
 - Option: Patient age

 5. In what way do infections, especially long-lasting ones, harm the brain?
 - Option: By enhancing memory
 - Option: By triggering an immune response
 - Option: By reducing inflammation
 - Option: By improving brain health

 6. What does the study suggest about the potential impact of vaccines for hepatitis A, typhoid, and diphtheria on dementia risk?
 - Option: No impact on dementia risk
 - Option: Increase in dementia risk
 - Option: Lowering dementia risk
 - Option: Aggravating dementia symptoms



True-False

7. Common prescription drugs like antibiotics, antivirals, and vaccines have been proven to cure dementia.
8. The study found that vaccinations for hepatitis A, typhoid, and diphtheria are associated with higher dementia risk.
9. Infections can harm the brain by triggering an immune response.
10. Slowing down dementia progression is an expensive but promising aspect of new drugs.
11. The study looked at data from 230 million people to explore the link between drugs and dementia risk.
12. More research is needed to fully understand how drugs that fight infections affect dementia risk.

Gap-Fill

13. According to the study, common prescription drugs like antibiotics, antivirals, and anti-inflammatory drugs could reduce the risk of dementia through _____.
14. By protecting brain health, drugs that fight infections or prevent them, such as vaccines, help in _____.
15. The study suggests that more research is needed to confirm findings and understand how these drugs affect dementia risk, highlighting the importance of investigating potential _____.
16. Infections, particularly long-lasting ones, can harm the brain by triggering an _____.
17. The use of existing drugs in new ways could provide hope in the battle against dementia by offering a chance to explore alternative _____.
18. The study looked at data from 130 million people, including one million with dementia, to investigate the link between _____ and dementia risk.



Answer

Multiple Choice: 1. Reducing inflammation 2. Antibiotics, antivirals, and anti-inflammatory drugs 3. By reducing infections that can harm the brain 4. Side effects 5. By triggering an immune response 6. Lowering dementia risk

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

Gap-Fill: 13. reducing inflammation, controlling infections, and improving brain health 14. reducing infections that can harm the brain 15. side effects 16. immune response 17. treatment options 18. common prescription drugs like antibiotics, antivirals, and vaccines

Vocabulary quizzes

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

1. Who are scientists who study celestial objects like stars planets and galaxies?

- Option: Biologists
- Option: Meteorologists
- Option: Astronomers
- Option: Geologists

2. Which state of matter has a definite volume but takes the shape of its container?

- Option: Solid
- Option: Gas
- Option: Liquid
- Option: Plasma

3. What are medications used to treat bacterial infections called?

- Option: Painkillers
- Option: Vitamins
- Option: Antibiotics
- Option: Antihistamines

4. What force is responsible for keeping planets in orbit around the sun?

- Option: Magnetic
- Option: Nuclear
- Option: Gravitational
- Option: Frictional

5. Which type of radiation has a wavelength just shorter than that of visible light?

- Option: Infrared



- Option: Ultraviolet
- Option: X-ray
- Option: Gamma-ray

6. The process of growth maturation and change in living organisms is known as what?

- Option: Decay
- Option: Development
- Option: Stagnation
- Option: Destruction

7. What is the term for a general decline in mental ability severe enough to interfere with daily life?

- Option: Depression
- Option: Anxiety
- Option: Dementia
- Option: Paranoia

8. What product can be applied to the skin to protect it from the harmful effects of the sun?

- Option: Body lotion
- Option: Sunscreen
- Option: Perfume
- Option: Makeup

9. What term is used to describe the effect or influence of one thing on another?

- Option: Collision
- Option: Impact
- Option: Avoidance
- Option: Detachment

10. What is the systematic investigation into and study of materials and sources to establish facts and reach new conclusions?

- Option: Guesswork
- Option: Research
- Option: Imagination
- Option: Supposition

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

11. A _____ planet is one that has conditions suitable for life to exist.

12. _____ variants can play a role in the development of regulating disorders.



13. Excessive exposure to ultraviolet _____ can cause skin cancer.
14. In case of a gravitational impact it is crucial to have a plan for _____ to minimize risk.
15. A new asteroid was _____ in orbit around Jupiter.
16. Antibiotics are often used to treat bacterial infections that cause _____.
17. People with light sensitivity may benefit from wearing _____ glasses.
18. _____ trials are essential in the development of new vaccines.
19. The asteroid's _____ orbit indicated its potential to come close to Earth.
20. One way to reduce damage from solar radiation is to _____ exposure to the sun.

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

21. Scientists conducted extensive to understand the effects of the new medication.
22. An is a small rocky body that orbits the sun often found in the asteroid belt.
23. The moon stays in orbit around Earth due to the pull between the two celestial bodies.
24. A is a biological preparation that helps develop immunity to a specific disease.
25. Water is a common example of a substance that flows and takes the shape of its container.
26. Doctors prescribe to treat bacterial infections and prevent their spread.
27. Genetic can lead to different expressions of traits within a population.
28. As individuals age the risk of developing and other cognitive disorders increases.
29. Applying before going out in the sun can help protect your skin from UV rays.
30. Swelling redness and pain are common symptoms of caused by infections or injuries.

Answer

Multiple Choice: 1. Astronomers 2. Liquid 3. Antibiotics 4. Gravitational 5. Ultraviolet 6. Development
7. Dementia



8. Sunscreen 9. Impact 10. Research

Gap-Fill: 11. Habitable 12. Genetic 13. Radiation 14. Evacuation 15. Discovered 16. Inflammation 17. Tinted
18. Clinical 19. Astronomical 20. Minimize

Matching sentence: 1. Research 2. Asteroid 3. Gravitational 4. Vaccine 5. Liquid 6. Antibiotics 7. Variants
8. Dementia 9. Sunscreen 10. Inflammation

CATEGORY

1. Health - LEVEL2

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