



ScienceAlert: Surprising Discovery Reveals Link Between Menthol and Alzheimer's in Mice

Description

A recent study has found a surprising link between the sense of smell and cognitive abilities in mice with Alzheimer's disease. Researchers discovered that inhaling menthol can actually improve the cognitive abilities of these mice by reducing the levels of a protein called interleukin-1-beta (IL-1 β), which plays a role in regulating the body's inflammatory response.

The study, led by a team of scientists at the Center for Applied Medical Research in Spain, suggests that certain smells could potentially be used as therapies for Alzheimer's disease. By understanding how specific odors impact the brain and immune system, researchers believe they could develop new treatments to improve cognitive function in patients with Alzheimer's and other related diseases.

The findings, published in a recent issue of *Frontiers in Immunology*, show that menthol inhalation not only prevented cognitive decline in mice with Alzheimer's but also improved the cognitive abilities of healthy young mice. The researchers observed that exposure to menthol over a six-month period stopped the deterioration of cognitive abilities and memory in mice with Alzheimer's.

This groundbreaking study highlights the potential of using odors and immune modulators to prevent and treat Alzheimer's and other central nervous system-related diseases. Further research is needed to fully understand the connection between the immune system, the central nervous system, and the sense of smell.

Vocabulary List:

1. **Link** // (noun): A connection or relationship between two or more things.
2. **Inhaling** // (verb): Breathing in or drawing air or smoke into the lungs.
3. **Cognitive** // (adjective): Related to mental processes such as thinking, learning, and remembering.
4. **Therapies** // (noun): Treatments intended to relieve or heal a disorder or disease.
5. **Modulators** // (noun): Agents or substances that can modify or regulate a process or function.
6. **Deterioration** // (noun): The process of becoming progressively worse or showing decline.

Vocabulary quizzes

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



-
1. What is the process of passing something from one person or place to another?
Option: A) Inhaling
Option: B) Modulators
Option: C) Transmission
Option: D) Therapies

 2. What term is used to describe the sudden increase in occurrences of a disease in a particular time and place?
Option: A) Deterioration
Option: B) Outbreak
Option: C) Monitoring
Option: D) Alternative

 3. What is the term for identifying a disease or illness through its signs and symptoms?
Option: A) Pediatric
Option: B) Deterioration
Option: C) Diagnosed
Option: D) Deny

 4. What type of medication is used to treat retroviruses?
Option: A) Contaminated
Option: B) Antiretroviral
Option: C) Adapting
Option: D) Circulating

 5. Which term relates to birds?
Option: A) Pediatric
Option: B) Infection
Option: C) Avian
Option: D) Modulators

 6. A condition that is present at birth is referred to as:
Option: A) Link
Option: B) Pediatric
Option: C) Cognitive
Option: D) Congenital

 7. Which word means to grow or develop well?
Option: A) Alternative
Option: B) Thrived
Option: C) Sirenomelia
Option: D) Modulators



-
8. What is a rare and fatal congenital malformation characterized by fusion of the lower limbs?
Option: A) Contaminated
Option: B) Sirenomelia
Option: C) Monitoring
Option: D) Deny
9. What medical procedure involves moving an organ or tissue from one body to another?
Option: A) Transmission
Option: B) Cognitive
Option: C) Thrived
Option: D) Transplant
10. If something is polluted infected or harmful due to the presence of unwanted substances it is considered:
Option: A) Contaminated
Option: B) Influenza
Option: C) Link
Option: D) Alternative

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

11. The virus was _____ in the community leading to a surge in cases.
12. The doctor's words were _____ to the patient providing comfort and hope.
13. After the surgery the patient required close _____ to ensure recovery progress.
14. The researchers were trying to establish a _____ between the new drug and improved outcomes.
15. When traditional treatments failed the patient sought an _____ therapy.
16. The doctor identified the _____ agent responsible for the disease outbreak.
17. The virus showed signs of _____ to the host environment making treatment more challenging.
18. The patient's _____ functions were assessed after the head injury.



19. The patient's condition continued to worsen indicating _____ despite treatment.
20. The patient refused to _____ the severity of their symptoms delaying diagnosis.

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

21. Breathing in air smoke or other substances.
22. Relating to the branch of medicine dealing with children and their diseases.
23. Substances that regulate or control a particular process.
24. The process of becoming progressively worse.
25. To refuse to admit the truth or existence of something.
26. To connect or bring into relation.
27. Adjusting to new conditions or modifying to fit different circumstances.
28. Treatments to relieve or heal a disorder or illness.
29. A rare condition where a baby is born with its legs fused together.
30. Resulting in death.

Answer

Multiple Choice: 1. C) Transmission 2. B) Outbreak 3. C) Diagnosed 4. B) Antiretroviral 5. C) Avian 6. D) Congenital 7. B) Thrived 8. B) Sirenomelia 9. D) Transplant 10. A) Contaminated

Gap-Fill: 11. circulating 12. reassuring 13. monitoring 14. link 15. alternative 16. pathogenic 17. adapting 18. cognitive 19. deterioration 20. deny

Matching sentence: 1. inhaling 2. pediatric 3. modulators 4. deterioration 5. deny 6. link 7. adapting 8. therapies 9. sirenomelia 10. fatal

CATEGORY

1. Health - LEVEL3

Date Created

2024/05/17

Author

aimeeyoung99