



Gluten Reaction Origins Unveiled: Breakthrough Discovery

Description

Some people can get really sick from eating even a tiny bit of gluten in their food. This happens because of their genes and other factors, making it hard to know exactly why it happens. Scientists from McMaster University found that cells in the gut lining play a big role in this reaction to gluten. They hope this discovery can lead to new treatments.

Celiac disease is when gluten causes an immune response in the intestines. People with this condition can feel bloated, in pain, or have digestive issues. The only way to avoid these symptoms is to avoid gluten completely. Most people with celiac disease have genes called HLA-DQ2.5 or HLA-DQ8, which help the immune system recognize gluten and attack it.

Researchers found that the cells in the gut lining help carry pieces of gluten across, triggering the immune response. By understanding how these cells work, scientists may develop new ways to treat celiac disease and help people enjoy gluten without getting sick.

This study was published in a medical journal called Gastroenterology.

Vocabulary List:

1. **Celiac** /ˈsiːliæk/ (adjective): Relating to a disease in which the body cannot properly digest gluten.
2. **Immune** /ɪˈmjuːn/ (adjective): Relating to the body's defense system against infections and diseases.
3. **Response** /rɪˈspɒns/ (noun): A reaction to something especially in an immune context.
4. **Digestive** /daɪˈdʒestɪv/ (adjective): Relating to the process of breaking down food in the body.
5. **Triggering** /ˈtrɪɡərɪŋ/ (verb): Causing something to happen or start.
6. **Discovery** /dɪˈskʌvəri/ (noun): The act of finding or learning something for the first time.

Comprehension Questions

Multiple Choice

1. What is the main reason some people get sick from eating gluten?

Option: Their genes and other factors

Option: Their diet



- Option: Their exercise habits
- Option: Their lifestyle choices

2. Which university were the scientists who discovered the role of gut cells from?

- Option: McMaster University
- Option: Harvard University
- Option: Oxford University
- Option: Stanford University

3. What is the primary symptom of celiac disease?

- Option: Feeling bloated
- Option: Having a fever
- Option: Experiencing joint pain
- Option: Suffering from memory loss

4. Which genes are commonly found in people with celiac disease?

- Option: HLA-DQ2.5 or HLA-DQ8
- Option: HLA-B27
- Option: BRCA1
- Option: APC

5. What journal published the study on gluten and celiac disease?

- Option: Gastroenterology
- Option: Cardiology
- Option: Dermatology
- Option: Oncology

6. What can lead to the development of new treatments for celiac disease?

- Option: Understanding how gut cells work
- Option: Skipping meals
- Option: Avoiding all carbohydrates
- Option: Not exercising

True-False

7. Celiac disease is caused by an immune response to gluten in the intestines.

8. People with celiac disease can eat gluten without experiencing any symptoms.



-
9. Avoiding gluten completely is the only way to prevent symptoms of celiac disease.
10. Most people with celiac disease have genes called HLA-B27 or BRCA1.
11. The study on gut cells and gluten was published in a journal related to cardiology.
12. Understanding the role of gut cells can potentially help in treating celiac disease.

Gap-Fill

13. Celiac disease is triggered by an _____ response to gluten in the intestines.
14. People with celiac disease should avoid gluten _____ to prevent symptoms.
15. Most individuals with celiac disease carry genes HLA-DQ2.5 or _____.
16. The study on gluten and gut cells was published in the medical journal _____.
17. By understanding how gut cells function, scientists may develop new ways to _____ celiac disease.
18. Gluten triggers an immune response when carried across the gut lining by specific _____.

Answer

Multiple Choice: 1. Their genes and other factors 2. McMaster University 3. Feeling bloated 4. HLA-DQ2.5 or HLA-DQ8 5. Gastroenterology 6. Understanding how gut cells work

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

Gap-Fill: 13. immune 14. completely 15. HLA-DQ8 16. Gastroenterology 17. treat 18. cells

Answer

CATEGORY

1. Health - LEVEL2

Date Created

2024/12/02

Author



aimeeyoung99

ESL-NEWS.COM