

Scientists hopeful of cure for itchiness and eczema

30th November 2023



One of the most annoying things in life is an itch that won't go away. Scientists have worked for decades to find out why we itch, and to find a cure. Researchers at Harvard Medical School in the USA have discovered that skin bacteria make us itch

when they interact with our nerve cells. Lead researcher Liwen Deng said the bacteria are linked to many diseases that cause itchiness. The most common disease is eczema. Dr Leng wrote: "It's not the nicest bug to have on you, for sure. Many patients carry on their skin the very microbe we've now shown for the first time can cause itching." She added that: "Itches can be quite debilitating in patients who suffer from chronic skin conditions."

Dr Leng and her colleagues conducted their research on mice. They found an enzyme (which they dubbed V8) that was responsible for itching in the test mice. The V8 enzyme triggered a protein that made the mice itch. The scientists engineered the protein and developed a drug to stop it making the mice itch. The drug could be used to make anti-itch medication. This could block the itching process in humans. This is good news for eczema sufferers. Eczema affects around 245 million people globally. As well as itchiness, sufferers often get redness on their skin and a rash. They may also get small blisters and a thickening of the skin. Eczema is twice as common in females as it is in males.

Sources: sky.com / bbc.com / harvard.edu

Writing

The best thing to do if we have an itch is ignore it. Discuss.

Chat

Talk about these words from the article.

annoying things / itch / decades / cure / skin / bacteria / diseases / patients / suffer / colleagues / enzyme / protein / drug / humans / globally / redness / rash / blisters

True / False

- 1) The article says an itch is the most annoying thing in life. T / F
- 2) Researchers have tried for decades to find a cure for itching. T / F
- 3) Itchiness is caused by bacteria in our skin. T / F
- 4) A researcher said the bacteria that causes itching is not the nicest bug. T / F
- 5) Researchers carried out tests on itching in rats. T / F
- 6) The researchers made a drug to stop itching in their test animals. T / F
- 7) Around 245 million people around the world suffer from eczema. T / F
- 8) Men are twice as likely as women to have eczema. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|------------------------|---------------|
| 1. annoying | a. stop |
| 2. cure | b. long-term |
| 3. linked | c. treatment |
| 4. debilitating | d. caused |
| 5. chronic | e. worldwide |
| 6. colleagues | f. irritating |
| 7. triggered | g. prevalent |
| 8. block | h. connected |
| 9. globally | i. co-workers |
| 10. common | j. tiring |

Discussion – Student A

- a) What things in life are most annoying?
- b) What do you know about eczema?
- c) How annoying is itchy skin?
- d) What do you do when you have an itch?
- e) What do you do when you have an itch that won't go away?
- f) Why do we itch?
- g) What are the best things to put on an itch?
- h) What do you do to look after your skin?

Phrase Match

- | | |
|--|----------------------------------|
| 1. One of the most annoying things in life | a. females as it is in males |
| 2. Scientists have worked for decades | b. diseases that cause itchiness |
| 3. bacteria are linked to many | c. anti-itch medication |
| 4. It's not the nicest | d. skin conditions |
| 5. patients who suffer from chronic | e. blisters |
| 6. Dr Leng and her colleagues conducted | f. is an itch that won't go away |
| 7. The drug could be used to make | g. their research on mice |
| 8. This is good news for | h. bug to have on you |
| 9. They may also get small | i. eczema sufferers |
| 10. Eczema is twice as common in | j. to find out why we itch |

Discussion – Student B

- What do you think about what you read?
- Why is scratching your head a sign of thinking?
- Should research be done on mice?
- How often do you get redness or rashes?
- How often do you get a blister?
- Why is eczema more common in females?
- How often do you scratch?
- What questions would you like to ask the scientists?

Spelling

- One of the most ynnonaig things in life
- Scientists have worked for deedsca
- skin aacrbtie make us itch
- linked to many aissdees
- Itches can be quite atiigblntedi
- rccnoih skin conditions
- Dr Leng and her osealudlge
- a irnpoe that made the mice itch
- make anti-itch aeincimdto
- block the itching rscopse in humans
- Eczema stafefc around 245 million people
- They may also get small sriebtsl

Answers – Synonym Match

1. f	2. c	3. h	4. j	5. b
6. i	7. d	8. a	9. e	10. g

Role Play

Role A – An Itchy Nose

You think an itchy nose is the most annoying thing. Tell the others three reasons why. Tell them why their things aren't as annoying. Also, tell the others which is the least annoying of these (and why): pins and needles, being unable to sleep or sniffing.

Role B – Pins and Needles

You think pins and needles is the most annoying thing. Tell the others three reasons why. Tell them why their things aren't as annoying. Also, tell the others which is the least annoying of these (and why): an itchy nose, being unable to sleep or sniffing.

Role C – Being Unable to Sleep

You think being unable to sleep is the most annoying thing. Tell the others three reasons why. Tell them why their things aren't as annoying. Also, tell the others which is the least annoying of these (and why): pins and needles, an itchy nose or sniffing.

Role D – Sniffing

You think sniffing is the most annoying thing. Tell the others three reasons why. Tell them why their things aren't as annoying. Also, tell the others which is the least annoying of these (and why): pins and needles, being unable to sleep or an itchy nose.

Speaking – Annoying

Rank these with your partner. Put the most annoying at the top at the top. Change partners often and share your rankings.

- | | |
|--------------------|---------------|
| • An itchy nose | • Back pain |
| • Pins and needles | • Dizziness |
| • A headache | • Sniffing |
| • Cannot sleep | • Sore throat |

Answers – True False

1	F	2	T	3	T	4	T	5	F	6	T	7	T	8	F
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Answers to Phrase Match and Spelling are in the text.