

Slim people's genes help them stay slim

27th January, 2019



New research suggests that people's genes are key to helping them stay slim. A study from Cambridge University in the U.K. discovered that thin people had DNA that contained variants which helped them stay slim and fewer

variants linked to being overweight. Researcher Sadaf Farooqi, professor of metabolism and medicine, said: "We've found that there are genes associated with thinness." She added: "Genes play at least 40 per cent of a role in people's weight. It's much more than people realize." This might help explain why some people are naturally skinny while others have big problems with keeping their weight down and seem to pile on the pounds so easily.

The study is published in the journal PLOS Genetics. The researchers said they undertook the study to find out why so many people struggle with their weight. Over 30 per cent of American adults are obese, while a staggering 94.5 per cent of adults on the South Pacific island of Nauru are overweight. Professor Farooqi said she wanted to help people who are struggling with their weight. She said: "It's easy to rush to judgment and criticize people for their weight, but the science shows that things are far more complex." She added: "Healthy, thin people are generally thin because they have a lower burden of genes that increase a person's chances of being overweight and not because they are morally superior."

Sources: cnn.com / bbc.com / medicalxpress.com

Writing

Obesity is one of the biggest dangers in the world. Discuss.

Chat

Talk about these words from the article.

research / genes / slim / overweight / study / metabolism / medicine / skinny / journal / struggle / easy / rush / judgment / science / complex / healthy / superior

True / False

- a) Researchers found a key to help people lose weight. T / F
- b) A professor of metabolism and medicine was one of the researchers. T / F
- c) Genes play at least a 40% role in people's weight. T / F
- d) The article said some people seem to easily pile on the pounds. T / F
- e) The article said over 40% of American adults are obese. T / F
- f) Over 94% of adults on the island of Nauru are overweight. T / F
- g) The professor didn't want to help people who struggle with their weight. T / F
- h) The professor said thinner people are morally superior. T / F

Synonym Match

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

- | | |
|----------------------|-----------------|
| 1. key | a. increase |
| 2. discovered | b. likelihood |
| 3. associated | c. understand |
| 4. realize | d. complicated |
| 5. pile on | e. found |
| 6. undertook | f. better |
| 7. staggering | g. linked |
| 8. complex | h. did |
| 9. chances | i. amazing |
| 10. superior | j. instrumental |

Discussion – Student A

- a) What do you know about genes?
- b) What do you think of your weight?
- c) Do you think it's OK to alter genes?
- d) Should we alter our genes to keep us slim?
- e) How can people keep from being overweight?
- f) What is the best way to stay slim?
- g) What advice do you have for overweight people?
- h) Can you eat what you want without piling on the pounds?

Phrase Match

- | | |
|--------------------------------------|---------------------------|
| 1. people's genes are key to | a. of being overweight |
| 2. professor of metabolism | b. the pounds |
| 3. there are genes associated | c. superior |
| 4. some people are | d. to judgment |
| 5. pile on | e. with thinness |
| 6. so many people struggle | f. more complex |
| 7. It's easy to rush | g. naturally skinny |
| 8. science shows that things are far | h. with their weight |
| 9. increase a person's chances | i. and medicine |
| 10. they are morally | j. helping them stay slim |

Discussion – Student B

- What do you think about what you read?
- Why are so many people overweight on the island of Nauru?
- Why do people 'rush' to criticize people who are overweight?
- Should we all be vegetarian to be a healthier weight?
- Will we all be a healthy weight in the future?
- Why did the researcher suggest thin people might be 'morally superior'?
- What are your experiences of dieting?
- What questions would you like to ask the researchers?

Spelling

- DNA that contained vrntaasi
- professor of ibmtsmaleo and medicine
- genes edaiastcso with thinness
- much more than people reieazl
- some people are tluraylna skinny
- pile on the dopnus
- The study is published in the onaujlr
- people rsgulgte with their weight
- 30% of American adults are oebse
- iitrecicz people
- they have a lower runbed
- they are morally uoisprer

Answers – Synonym Match

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

Role Play

Role A – Eye Color

You think eye color is the best thing to change your DNA for. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least important of these (and why): hair color, complexion or weight.

Role B – Hair Color

You think hair color is the best thing to change your DNA for. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least important of these (and why): eye color, complexion or weight.

Role C – Complexion

You think complexion is the best thing to change your DNA for. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least important of these (and why): hair color, eye color or weight.

Role D – Weight

You think weight is the best thing to change your DNA for. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least important of these (and why): hair color, complexion or eye color.

Speaking – DNA

Rank these with your partner. Put the DNA you would like to change at the top. Change partners often and share your rankings.

- | | |
|-----------------|----------------|
| • illnesses | • eye color |
| • energy levels | • hair color |
| • aging process | • weight |
| • complexion | • intelligence |

Answers – True False

a	F	b	T	c	T	d	T	e	F	f	T	g	F	h	F
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Answers to Phrase Match and Spelling are in the text.