

# Skinny genes the 'secret to staying slim'

*By Smitha Mundas Global Health Correspondent, BBC News*

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## **Words and Phrases:**

pile on the pounds - набирать килограммы

linked - связанный

inheriting - наследуемый, унаследованный

PLOS Genetics - журнал "Публичная научная библиотека"

a person being overweight - человек с избыточным весом

severely obese people - люди страдающие ожирением

call on - призывать

pinpoint - выделить, установить

emeritus - заслуженный

DNA sample - образец ДНК

superior - превосходящий

conducted - проделанный, проведенный

precocious - ранний, преждевременный

obesogenic - ведущий к ожирению, вызывающий лишний вес

## ***1. Read the article from BBC News***

Scientists say they have discovered the secret behind why some people are skinny while others pile on the pounds easily.

Their work reveals newly discovered genetic regions linked to being very slim.

The international team say this supports the idea that, for some people, being thin has more to do with inheriting a "lucky" set of genes than having a perfect diet or lifestyle.

The study appears in PLOS Genetics.

In the past few decades, researchers have found hundreds of genetic changes that increase the chance of a person being overweight - but there has been much less focus on the genes of people who are thin.

In this investigation, scientists compared DNA samples from 1,600 healthy thin people in the UK - with a [body mass index](#) (BMI) of less than 18 - with those of 2,000 severely obese people and 10,400 people of normal weight.

They also looked closely at lifestyle questionnaires - to rule out eating disorders, for example.

Researchers found people who were obese were more likely to have a set of genes linked to being overweight.

Meanwhile, people who were skinny not only had fewer genes linked to obesity but also had changes in gene regions newly associated with healthy thinness.

### 'Rush to judgement'

Lead researcher Prof Sadaf Farooqi, from the University of Cambridge, called on people to be less judgemental about others' weight.

"This research shows for the first time that 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, as some people like to suggest," she said.

"It's easy to rush to judgement and criticise people for their weight but science shows that things are far more complex.

"We have far less control over our weight than we might wish to think."

Scientists say the next step is to pinpoint the exact genes involved in healthy thinness.

Their longer-term goal is to see if this new knowledge can help shape new weight-loss strategies.

### 'Genetically different'

Commenting on the research, Prof Tom Sanders, emeritus professor of nutrition and dietetics, at King's College London, said: "This is an important and well conducted study confirming that precocious severe obesity is often genetically determined and showing convincingly that those who are very thin are genetically different from the general population."

But he added: "Most obesity is acquired in adult life and is linked to the obesogenic environment we live in - a sedentary lifestyle and abundant access to calorie-dense foods."

Prof Tim Spector, also from King's College London, said about a third of people in most countries managed to remain thin despite this.

"Some of this is down to genes but other factors like individual differences in lifestyle or gut microbes are likely to also be responsible," he said.

Health experts say whatever your shape or genetic make-up, the age-old advice of a healthy level of exercise and good diet still stands.

## ***2. Match the words and phrases with the correct translation***

genetic regions

идеальная диета

set of genes

исключать

perfect diet

пищевое расстройство

lifestyle

сидячий образ жизни

questionnaire

микробы микрофлоры кишечника

to rule out	области генов
eating disorders	образ жизни
sedentary lifestyle	набор генов
gut microbes	опросник, анкета

### ***3. Choose true/false***

- 1) Scientists found out why some people are slim and other gain weight easily. **true/false**
- 2) According to the research the secret of being skinny is in having a healthy lifestyle.  
**true/false**
- 3) This research shows that healthy thin people are thin because they are morally superior.  
**true/false**
- 4) Scientists want to find the exact genes that are responsible for healthy thinness.  
**true/false**
- 5) Some kinds of microbes also can be responsible for obesity. **true/false**

### ***4. Choose the right answer***

- 1) Scientists have discovered that people are slim if
  - a) they have a perfect diet or lifestyle
  - b) go in for sports
  - c) have a "lucky" set of genes
- 2) Most obesity is acquired in .....
  - a) adult life
  - b) childhood
  - c) elderly age
- 3) Prof Tim Spector, also from King's College London, said about a third of people in most countries managed to remain thin despite....

- a) access to calorie-dense foods
- b) having "unlucky" genes
- c) environmental problems

4) Lead researcher Prof Sadaf Farooqi, asked people to be less ..... about others' weight.

- a) sympathetic
- b) judgemental
- c) bored

5) Health experts say whatever your shape or genetic make-up is you should

- a) have time of your life
- b) have a healthy lifestyle
- c) go to the nutritionist

### ***5. Choose the right preposition***

**on                      to                      at                      with                      on**

- 1) Some people pile \_\_\_\_\_ the pounds easily.
- 2) Their work reveals newly discovered genetic regions linked \_\_\_\_\_ being very slim.
- 3) They also looked closely \_\_\_\_\_ lifestyle questionnaires.
- 4) Skinny people had changes in gene regions newly associated \_\_\_\_\_ healthy thinness.
- 5) Lead researcher from the University of Cambridge called \_\_\_\_\_ people to be less judgemental about others' weight.

### ***6. Read the comments. Say what comment do you agree with***

#### **Comments**

*Posted by drHoo*  
on 26 Jan 2019 12:31

This is exactly what fat people (politically correct: "Obese") would love to hear to shift responsibility on their genes. I'm not questioning the science, but the findings could be seen as the old argument of having "big bum bone". There are indeed rare genetic problems for obesity, but look closely at lifestyle, eating-burning habits of people and you'll see genes are not the main factor.

*Posted by Billy Goat Gruff*  
on 26 Jan 2019 13:37

We have a sensational headline "Skinny genes the 'secret to staying slim' Scientists are saying it is just one factor that influences some people more than others. This is the nature of science, especially in the biological sciences. Studies and reports are not definitive, more a case of pointing us in the right direction.

*Posted by iradley*  
on 26 Jan 2019 13:46

281 Zola: "fat people are fat because they eat bad food too often and dont exercise enough"

While this 'simple truth' is in part correct, in reality it's not a given that someone over weight is eating 'bad food' in excess or seriously under exercising. Equally someone who is thin may also be eating the wrong foods and not exercising.

It's how these things affect the individual which varies.

*Posted by Roger B*  
on 26 Jan 2019 16:13

I am old and can remember the British population in the years after the war - overweight people were a rarity and obese people almost non-existent. If genetics are a major factor, it would mean that the genetic make-up in the population has changed. Unlikely I would think.