

Are personalised diets the best way to be healthy?

This is not a word-for-word transcript

Sam

Hello. This is 6 Minute English from BBC Learning English. I'm Sam.

Neil

And I'm Neil.

Sam

In recent years new diets with names like 'vegan', 'keto' and 'paleo' have become very popular. Are you a vegetarian, Neil? Do you follow any particular diet?

Neil

Well, I eat lots of fresh fruit and vegetables and only a little meat from time to time.

Sam

Well, while many diets claim to improve health or help you lose weight, recent research shows that what counts is not *what* you eat but *how your body reacts*.

Neil

Yes, and that reaction doesn't happen where you might think – not in the brain, or tongue, or even the stomach, but in the **gut** – another name for the intestines – the long tube inside your body which digests food.

Sam

Inside everyone's gut are millions of **microbes** – tiny living organisms, too small to see without a microscope. Some of them are good for us, some bad.

Neil

Microbes help digest food, but they influence our bodies more than we know.

Think of them as chemical factories that cause our individual reaction to the food we eat.

Sam

This mix of gut microbes is unique and different for everyone, even identical twins.

Neil

And it's the reason why some doctors now recommend a personalised diet, one that perfectly fits your own unique combination of microbes.

Sam

We'll hear more soon, but first I have a question for you, Neil, and it's about the gut - the tube which includes the large and small intestine. It's very long - but how long exactly is the average adult's gut? Is it:

- a) 3,5 metres?
- b) 5,5 metres? or,
- c) 7,5 metres?

Neil

Well, everybody is different of course, but I'll say on average the gut is b) 5,5 metres long.

Sam

OK, Neil, I'll reveal the answer later in the programme.

Neil

Among the first to investigate gut microbes was Dr Tim Spector, author of bestselling book, *The Diet Myth*. He wanted to check whether the dietary advice he had heard and believed, advice like 'eat little and often' or 'avoid fat', was really true.

Sam

Listen as Dr Spector explains how he started to doubt some of this advice - 'food myths', he calls them - to BBC Radio 4 programme, *The Life Scientific*:

Tim Spector

All these so-called myths that I'd believed, whether it was about **calories**, about fats, when to eat, how to eat, were based on **flimsy** or no evidence, very old, very poor quality, and had been repeated so much that people didn't think to question them.

Neil

One of the food myths Dr Spector questioned was counting **calories** – the units which measure the amount of energy food provides.

Sam

He discovered that much of the dietary advice he had heard was either incorrect or based on **flimsy** evidence. If evidence is **flimsy**, it's weak and unconvincing.

Neil

As Dr Spector questioned these food myths, he remembered an earlier study involving identical twins, pairs of brothers or sisters with the same genes.

Sam

It was the surprising differences in weight between one twin and another that made Dr Spector realise that no two people have the same gut – even identical twins' guts are different.

Neil

But, as he told BBC Radio 4's, The Life Scientific, the discovery came in a very smelly way – by asking his volunteers to send samples of their poo in the post!

Tim Spector

We collected lots of these samples, sequenced them, and looked at twins where one was overweight and one was **skinny**... and we found in every case, the skinnier twin had a more diverse microbiome, greater numbers of different species and they also nearly always had high numbers of a couple of microbes that just **stuck out of the crowd** – and one was called *christensenella* and the other was called *akkermansia*.

Sam

Although genetically identical, one twin was overweight, while the other twin was **skinny**, or very thin.

Neil

Because the weight difference could not be explained genetically, Dr Spector suspected the microbes in the skinnier twin's gut held the answer: the more diverse someone's microbes, the better their gut was at digesting food, regulating fat and maintaining health.

Sam

Two microbes, *christensenella* and *akkermansia*, were especially effective. Dr Spector says these microbes **stuck out of the crowd**, meaning they were easy to notice for their positive effect.

Neil

And since everyone's microbes are different, it follows that a personalised diet which selects the friendliest food for your gut, is best. Right, and all this talk of eating is making me hungry, so tell me, Sam, was my answer to your question, right?

Sam

Ah yes, I asked about the length of the gut in the average adult.

Neil

I said it was 5,5 metres.

Sam

Which was... the correct answer! Well done, Neil – that took 'guts', which is the second meaning of the word: courage.

Neil

OK, let's recap the vocabulary we've learned starting with **gut** – an informal word for the intestines, the tube which digests food from the stomach.

Sam

Microbes are microscopic organisms living inside the body.

Neil

A **calorie** is a unit measuring how much energy food provides.

Sam

If an argument or evidence is **flimsy**, it's weak and hard to believe.

Neil

A **skinny** person is very thin.

Sam

And finally, if something **sticks out of the crowd**, it's noticeable in a good way.

Neil

Unfortunately, our six minutes are up, but remember: look after your gut, and your gut will look after you! Goodbye!

VOCABULARY

gut (informal)

intestines; long tube inside the body which starts below the stomach and helps digest food

microbes

tiny, microscopic organisms living inside the human body

calorie

unit measuring the amount of energy that food provides

flimsy

weak and difficult to believe; not convincing

skinny

very thin

stick out of the crowd

be very easy to notice, in a positive sense