

- Jen:** Hello and welcome to 6 Minute English from BBC Learning English. I'm Jen and with me today is Neil.
- Neil:** Hello there.
- Jen:** Today's story is all about allergies. If you have an **allergy** to something, your body reacts to it in a negative way. Do you have any allergies, Neil?
- Neil:** I get hay fever in the summer; that happens when you have an allergy to pollen from plants or trees.
- Jen:** And what happens when you get hay fever?
- Neil:** It's horrible. I start sneezing, and my eyes become red and itchy, my nose runs and I sometimes get a real headache.
- Jen:** That doesn't sound very pleasant. Well, on today's programme we're going to be taking a look at how genetically modified food might be able to help people with allergies.
- Neil:** That's quite a complicated topic!
- Jen:** It is, but I'm going to ease you in gently with a quiz question first, to get you thinking! In what year was the first genetically modified food sold on the market. Was it?
- a) 1984
 - b) 1994
 - c) 2004
- Neil:** Well, as usual, I have no idea, so this is a guess, but I'll say... 1984.
- Jen:** We'll find out if you're right at the end of the programme, but let's get back to our story about allergies.
- Neil:** Some allergies, like hay fever, can be described as **mild**. That means that you might experience some unpleasant symptoms like itchy eyes, sneezing or a rash.
- Jen:** Others, though, can be more severe, and can cause problems with breathing, or even death.
- Neil:** Many people are allergic to a particular type of food, such as nuts or eggs, for example.

Jen: Very true, but did you know that cow's milk can also cause problems? Listen to the first part of this report from BBC correspondent James Gallagher. How does cow's milk affect some babies?

BBC correspondent James Gallagher:

*Allergic reactions to cow's milk are common in babies. Up to three percent treat it as dangerous with their **immune systems** launching an attack on proteins found in cow's milk, but never in their mother's breast milk.*

Jen: Your body is protected by your immune system. That's a series of cells and tissues which stop you from catching diseases or infections.

Neil: These cells attack anything which they think is harming, or damaging the body.

Jen: It's quite common for babies to have allergic reactions to cow's milk, so their bodies are attacking it.

Neil: However, as we heard in the report, the babies' bodies never attack breast milk.

Jen: So, there must be something in the cow's milk that babies' bodies don't like. Listen to the second part of the report: what have scientists done to cow's milk?

BBC correspondent James Gallagher:

*Now researchers in New Zealand have cut out one of the main culprits - the protein beta-lactoglobulin. They added new **genetic material** to disrupt its manufacturing process in a technique called RNA interference.*

Jen: Scientists identified a protein in cow's milk which causes allergic reactions.

Neil: In the report, this was called the **culprit**. The word culprit is often used to describe the bad guy in a book or film – here, it's used to describe the dangerous protein.

Jen: The scientists have introduced a new genetic material to the cows to stop this protein being made.

Neil: If you like, the cows have been **genetically modified**.

Jen: Their genes have been altered, or changed, so they don't produce the harmful protein in their milk.

Neil: It sounds pretty complicated, but if there is no harmful protein in the milk, then babies shouldn't have an allergic reaction. Now that's good, isn't it?

Jen: Well, not everyone thinks it's a good thing. Here's James Gallagher again:

BBC correspondent James Gallagher:

A study published in Proceedings of the National Academy of Sciences showed the GM cow did not produce the protein in its milk. Other scientists said it was a spectacular

study, while campaign groups have questioned the ethics of genetically modifying farm animals.

Neil: So, some people think this scientific study is **spectacular** – in other words, they think it's amazing.

Jen: Very true, but we also heard in the report that some campaign groups think that it's **unethical** to genetically modify animals.

Neil: They think it's morally wrong to interfere with, or change, nature.

Jen: Some people also worry about what effects genetic modification of animals could have on our health.

Neil: That's true, I suppose there could be **side effects** that people don't yet know about.

Jen: On the other hand, some people argue that genetic modification could be used to produce super crops, and maybe, one day, help to stop world hunger.

Neil: Who knows what type of foods will be available in the future?

Jen: We'll have to wait to find out, but I *can* tell you about the first genetically modified food which became available, but first, I asked you when it came onto the market for the very first time. Was it:

- a) 1984
- b) 1994
- c) 2004

Neil: And I said 1984.

Jen: Well, you were wrong! It was actually 1994. And it was a tomato. It was genetically modified so that it would stay green for longer after it was harvested.

Neil: So it had a longer shelf life.

Jen: Exactly! We're coming to the end of the programme now, so there's just time to go over some of the vocabulary we've heard today.

Neil: The words and phrases were:

Allergy
Mild
Immune system
Culprits
Genetically modified
Spectacular
Unethical

Jen: Bye for now!

Neil: Goodbye!

Vocabulary and definitions

| | |
|-----------------------------|--|
| allergy | a condition in which the body has an adverse reaction to something |
| mild | not severe |
| immune system | cells and tissues which fight disease and infection |
| culprits | people or things who cause trouble or commit crime |
| genetically modified | having had its genes changed to enhance better qualities |
| spectacular | amazing |
| unethical | morally wrong |
| side effects | additional consequences to those expected |

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