# **BBC LEARNING ENGLISH**

# 6 Minute English The wonder of blood



NB: This is not a word-for-word transcript

# Rob

Hello, I'm Rob. Welcome to 6 Minute English. With me today is Finn. Hello, Finn.

# Finn

Hi Rob!

### Rob

In this programme we're going to be talking about blood.

# Finn

Yes. Blood? Did I ever tell you, Rob, that I really hate the sight of blood? And I've even been known to **faint** – that's to lose consciousness - at the sight of a needle.

# Rob

Come on, Finn. I think you've got a lot to learn. You wouldn't be here without it, you know! It's a fascinating topic. All sorts of discoveries are being made these days, which could change medical science for ever.

# **Finn**

Yes. Well, you are right, of course. Blood was even thought to relate to human character. People were hot-bloodied – quick to anger – or cold-bloodied – lacking in passion.

# Rob

There were all the myths about vampires when young blood was thought to revitalise older people. There's a dreadful story that a Hungarian countess had hundreds of young women killed so she could bathe in their blood and stay youthful-looking.

# **Finn**

Right. OK. And in Roman times, if a young gladiator died in battle, people used to drink his blood because they thought it would keep them healthy.

# Rob

For 3,000 years, people have been cut or given leeches to let out the blood because they

thought that would make people better. Incredibly, it carried on until the 19<sup>th</sup> century. But it actually made people worse, or even killed them.

# Finn

So I won't be doing that today.

# Rob

OK. Instead, how about answering a question all about blood Finn?

### Finn

Go on then.

# Rob

If you laid out all the blood vessels in an adult body end to end how long would they be? Would they be...

- a) 30,000 miles
- b) 100.000 miles or
- c) 200,000 miles long?

### Finn

Well, let's say 100,000 miles. That's b).

# Rob

OK. Well, we'll see if you got the right answer at the end of the programme. OK, well let's talk more about blood now. We've heard about blood in history but Finn, did you know that today beauticians are running businesses in which people pay to have their blood extracted, then injected into their face?

# Finn

Yes I have heard about this. It's thought to **rejuvenate** – that's to give new life to - their skin. Michael Mosley has had just that done to his face as an experiment. He's a doctor and presenter with the BBC. Let's listen to him talking about it. He uses an expression that means "go faster". Can you tell me what it is?

# Michael Mosley, TV presenter and doctor

Sometimes known as the Vampire Facelift, PRP – Platelet Rich Plasma therapy – claims to **accelerate** healing and reverse the signs of ageing. First my blood is **treated** to make a concentrated solution of platelets in plasma. Next, this is injected directly into my face.

# Finn

Ouch! And the word he used was "accelerate". Now that means to make faster.

# Rob

And he said they "treated" his blood. This means "changed or transformed" it.

# Finn

Well, today, of course, controlled blood **transfusion** is a completely normal medical practice that saves countless lives. And blood donors – the people who give their blood – are an important part of healthcare.

# Rob

Yes, Finn, but there's all sorts of other amazing things that blood can do. If we are running at altitude – high up - the limbs get tired because there's not enough oxygen. The blood then starts creating new red cells and pours them into the system. That's why athletes often train in the mountains.

# Finn

Altitude training, isn't it? And, apparently, the different types of food you eat have an immediate effect on your blood, or rather the element of blood called plasma. So, if you eat a **cholesterol-high** breakfast, for example, very soon after that you can see the fat in the blood.

### Rob

Nice. Ideas about how blood moves around your body have changed a lot over the years too. The Romans thought blood flowed one way and came out of our feet and hands and was then burnt away. But William Harvey in the 17<sup>th</sup> century found that blood circulated via **veins and arteries** – these are the tubes in our body where blood is carried around.

# Finn

And let's not forget **clotting** – that's when the blood hardens. If our blood didn't clot when we cut ourselves we'd be dead within minutes. It is really fascinating isn't it? And we're just beginning to understand stem cells. These are also in the blood and are used to repair various organs in the body

# Rob

Modern science is really helping us to understand blood properly for the first time and showing us the way forward.

### Finn

Now Rob, before my blood boils, could you let me know the answer to the quiz question Rob?

# Rob

Yes. So, I asked you if you laid out all the blood vessels in an adult body end to end how long would they be: 30,000 miles, 100,000 miles or 200,000 miles?

# **Finn**

Well, I said 100,000 miles.

# Rob

Wow. And you know your blood vessels, because you got that question right.

# Finn

Well, I measured them earlier.

# Rob

Good. And how do you feel about blood now?

# Finn

Well, I'm probably a bit scared of it still. But now that I know all of these wonderful things that it does, I really get why it's so important.

# Rob

Great. So, let's remind ourselves of some of the words we've said today, Finn.

# Finn

Here were are:

faint
rejuvenate
transfusion
cholesterol-high
veins and arteries
clotting
accelerate

# Rob

and treated

Thank you. Well, that's it for today. Please visit bbclearningenglish.com to find more 6 Minute English programmes. Until next time. Goodbye!

# Finn

Goodbye!