Podcast: Imagine This

Episode: Why does our heart beat?

Duration: 9’00

[ABC Podcast sting - This is an ABC Podcast]

Bri: Hello. I'm Bri. On today's episode of Imagine This, we're going to listen to something that's inside our body. If you put your fingertips on your wrist, you might be able to feel something under your skin. Something that goes bump, bump, bump... can you feel it?

Kids: Yes.

Bri: What does it feel like?

Kids: Ba-boom. Ba-boom.

Bri: Do you know what that, ba-boom, is?

Kids: Heart.

The heart!

Bri: And do you know where your heart is in your body?

Kids: Here.

Bri: In your neck? Well, sometimes you can feel your heartbeat in your neck.

Kids: Ba-boom.

Bri: But it doesn't live in your neck.

Kids: Here?

Bri: Ah! In your tummy, close. But your heart is a little bit higher than your tummy.

Kids: In your chest!

Bri: Yes. Your heart lives in your chest.

Kids: Ba-boom.

Bri: Well, today's question is about the heart and it comes from Lewis.

Lewis: Why does hearts beat?

Bri: Hmm, how come our hearts are doing all that beating? Today on the show we're going to talk to heart doctor, Shane Nanayakkara. And we're going to find out more about how our hearts beat. Hi Shane.

Shane: Hello.

Bri: Shane. You have a heart.

Shane: Yeah.

Bri: And I have a heart.

Shane: Yes.

Kids: I have a heart.

Shane: Absolutely.

Bri: So, what is a heart?

Shane: Your heart is a muscle.

Bri: A muscle that does what?

Kids: Helps you breathe!

Yeah. And it helps your heart beat.

Bri: Do our hearts help us breathe and do they help themselves to beat?

[Playful magical music]

Shane: Yep. Your heart has a very important job to do. It pumps blood around your body.

Bri: It's a pump.

Shane: Yup. Your heart has a left side and a right side.

[Ballroom dancing music]

Kids: This side is blue and this side is red.

Shane: So, your left side of your heart pumps to your body and the right side of your heart pumps to your lungs. Our lungs give our blood fresh oxygen from our breath. Once you have oxygen in your blood, it's fresh blood and it's ready for your body to use.

Bri: So, our blood goes around our body.

Kids: Yeah. Then it goes there and then it goes back in there.

Shane: Yeah. It goes around your body.

Kids: All the way around.

Bri: And then back to your heart again.

Shane: Yeah.

Bri: So when does our heart do its first beat?

Shane: So, when you're a tiny, little thing inside your mum's tummy, before you open your eyes, before you move your little hands, your heart starts beating.

[Heartbeat]

Bri: What makes it beat?

Shane: So our heart has special chemicals inside it. And when those chemicals mix together in just the right way, it creates a little jolt of electricity.

[Electricity buzzing]

Kids: Electricity.

Bri: In our heart?

Shane: Yes. Our heart makes a special type of electricity and that's what makes our heart beat.

Bri: But how does the electricity make it beat?

Shane: The electricity spreads through our heart.

[Electricity buzzing, heart pumping]

Shane: And that makes our heart squeeze.

Kids: Squeeze. Squeeze. It looks like it's gone up and down.

Shane: Yep. Once our heart starts pumping, it keeps going for our entire lives.

Bri: Our hearts keep beating?

Kids: Yeah!

They beat by themselves.

Bri: How do they do that?

Kids: They just do it.

By their self.

Because they're clever.

Shane: Yes. Your heart beats all by itself, even when you're not thinking about it.

Kids: When you sleep.

Yes.

Yes.

You can also breathe when you're sleeping.

Shane: Yep. Even when you're sleeping, even when you're busy doing a hundred other things, it keeps on beating.

Kids: Wait I think know when our hearts stop pumping.

Bri: When?

Kids: When we die.

Bri: Oh yeah. So why do you think our hearts keep pumping?

Kids: To keep you alive?

Bri: Yes.

Kids: When cats die the pumps die.

Bri: Yeah. So, cats and other animals, and even all of us, have hearts that pump and keep us alive.

Shane: That's right. Everyone's heart beats to a different beat. Some beat slower.

[Jazzy drums]

Kids: Ba-boom. Ba-bum. Ba-boom.

Shane: And some beat faster.

[Faster drum beat]

Kids: Boom, boom, boom, boom, boom, boom, boom.

Bri: When does our heart beat fast?

[Cascading stings]

Shane: When we run, jump, or dance, or play, or we're a little bit frightened.

Kids: Also when you be a bit naughty.

Bri: Even being naughty can make your heart go faster?

Shane: Yep.

Bri: Well, you're not naughty. Are you Shane?

Shane: No!

[Soft heart beat]

Bri: Neither we are we, are we?

Kids: Umm...no

[kids giggle]

Bri: So, when do our hearts beat slowly?

[Relaxing classical music]

Shane: When we're being quiet or relaxing or sleeping.

Kids: Also you can do this with you sleep.

[Snores]

Bri: So, how does my heart know when to go fast or slow?

Shane: It does it all by itself.

Bri: Can my brain tell my heart what to do?

Shane: A little bit. Our hearts and our brain have a very special connection.

Bri: They're connected?

Shane: Yeah. There is a really tight bond between your heart and your brain. What we think in our brains, we can feel in our hearts.

Bri: So, how do we listen to our hearts?

[Serene piano and strings]

Shane: Sometimes to find out what we feel, we can focus on our heartbeat.

Bri: Okay.

Shane: Close your eyes, take a big breath and focus on your heartbeat. Shut out everything that's happening around you and focus on what's happening inside. Think about what you're feeling and listen to that. Are you feeling more relaxed, Bri?

Bri: Yeah. And I can even feel my very own heartbeat.

Kids: Ba-bum.

[Significant orchestral music]

Bri: So, Lewis, even before you were born, your heart starts beating and it does this, because there's a special type of electricity in our heart that makes it squeeze...

Kids: Squeeze.

Bri: And beat...

Kids: Ba-boom.

[Music builds]

Bri: To pump the blood around our bodies and once our hearts get going, they can beat all by themselves. Sometimes they beat slow and sometimes they beat fast. Our hearts and our brains work together to keep us alive. So, if we want to take care of our hearts, well, we can exercise them.

Kids: Running really fast.

Jumping.

Dancing.

And and and skipping!

Bri: Yep. Because the stronger our hearts are, the happier and the healthier we'll be.

[Music concludes]

Bri: Imagine This is a co-production, brought to you by the conversation and ABC Kids Listen. A special thanks to Dr Shane Nanayakkara, from the Alfred Hospital, and the Baker Institute. Bryce Halliday, for mixing, and all the kids who had their say on today's show. I'm your host and producer, Brianna Peterson. To find more episodes of, Imagine This, you can download the free ABC Kids Listen app, or find them wherever you get your podcasts.