But Why: A Podcast for Curious Kids

Why is the heart a symbol of love?

February 11, 2022

Jane 00:20
This is But Why: a Podcast for Curious Kids from Vermont Public Radio. I'm Jane Lindholm. On this show, we take questions from kids all over the world on any topic you want to learn more about, and it's our job to track down interesting people who know something about what you're wondering. And then they tell us what they know and we all get to learn something cool. On the day, we're putting this episode out, it's almost the middle of February, which means in many parts of the world, it's almost a day that some people choose to celebrate love, a day called Valentine's Day. As part of Valentine's Day celebrations, you might see big red and pink hearts in stores and on candy and chocolates. But why is the heart a symbol of love? And why doesn't the heart shape look more like a human heart? We reached out to two brothers who have thought a lot about the human heart and even written a book on it. And we're going to talk with them today.

Stephen 01:18
Hello, everybody. My name is Stephen Amidon. I'm a writer. I write novels. And I write screenplays and I write articles for newspapers. And one of the things I also like to write is books that interests me about topics that interest me, recently, I've written a book about the human heart with my brother, Tom, who's a doctor. And I thought it would be interesting to look into how the heart is part of what are the things we talk about with things like Valentine's and so forth.

Tom 01:53
Hi, everybody. I'm Tom Amidon. I'm Stephen's younger brother, and I'm a doctor. And I am what's called a cardiologist, which means I take care of people who have heart disease. I treat people with medications and if they have clogged arteries, I open them up. And I talk to people about having a healthy lifestyle.

Jane 02:14
We have a lot of listeners who have questions about hearts. And since Valentine's Day is coming up, and their heart symbols all over the place, and people keep talking about hearts. If you listen to the radio, or you watch TV, we thought it would be a good time to explain a little bit about maybe a little bit about the organ itself, but also why hearts are associated with love. And let's start there.

Charlie 02:36
My name is Charlie, and I live in Austin, Texas. My question is, why do hearts mean I love you. And why do there make you kiss?

Liah 02:48
Hi, my name is Liah. I live in Berkeley, California. I'm almost eight. And my question is, why is the heart a symbol of love?

Jane 03:02
Maybe we should start by understanding what the heart actually is. Here's Tom, the cardiologist or heart doctor.

Tom 03:10
The heart sits in the middle of your chest. And it's a pump. It pumps blood to your body. And it beats about once every second. Which means if you live to be 70 years old, you have 2 billion heartbeats. And it does that with almost never missing a single beat. And it does it without you having to think about it. Which is a good thing because you'd otherwise have to think 2 billion times in your lifetime I want to have a heartbeat.

Quinn 03:38
I'm Quinn. I'm from Louisville, Kentucky and I'm five years old, and how do hearts beat?

Zia 03:45
My name is Zia. I live in Paris, France. And I'm six years old. My question is why do hearts beat?

Graham 03:55
My name is Graham. I live in Indiana. I got a question. How does a heart work?

Avery 04:04
I'm Avery from Petaluma, California, I'm age eight. My question is how does the human heart work?

Tom 04:11
So the heart is a pump. It pumps blood to the rest of your body. And it's actually two pumps, one side of the heart pumps blood to your lungs. And that's where blood picks up oxygen which your body needs. And then the other side of your heart takes that blood that has a lot of oxygen in it and it pumps it to your brain and your arms and your legs so that you can do things. And the heart is a lot like a house. The chambers of the heart are like the rooms. You have valves in the heart that allow the blood to only go in one direction. And they're kind of like the doors and you have arteries that supply blood to the heart muscle itself and that's like the pipes that bring water to your kitchen and your bathroom. And then you have an electrical system that tells the heart to beat every second. And that's like the wiring of your house that let you turn on the lights and turn them off. And so you have, you have rooms and doors and plumbing and wiring. And all of that is so that the heart can pump blood to the body. So you can do things.

Jane 05:20
Okay, so that's what the heart does. But I didn't hear anything about love in there. So why did people think the heart had anything to do with love? Tom says one reason is because sometimes when you see someone you really like or have affection for, you might get really excited to see them. And your heart might start to beat a little faster, because you're excited.
And all of a sudden, you become aware of your heartbeat whereas previously, you weren't aware of it. And then you think, well, there's the person I really like, or the person I love. And now I'm feeling this sensation and pounding in my chest, that must be where the love is coming from, or where it resides, where it lives. When you look at someone who you really like, you don't feel it in your kidney or your liver, or other places. And so I think the heart is the organ that you sense when you get excited. And that's, I think, why people associate the heart with strong emotions.

My name is Elizabeth, I'm eight years old, and I live in Burbank, California. And my question is, do we need a heart to love? Or does the brain do it?

Let me put it this way: sometimes when you get older, you'll feel affection for people. And you won't really know why. It's not really completely something that is rational, by rational, I mean is in your brain and you can think about, and it makes sense. So I think one of the reasons why the heart is always been associated with love, is because people can't really control who they fall in love with all the time. And that's why we say it's not the brain, because in your brain, you should love all these people who make sense, but rather your heart because it's something that's beyond your brain that is deeper within you. And the heart, as Tom just said, is deep in your chest. And it's it's just a place where you maybe feel things that you don't always understand.

Tom, do you think that's a romantic idea? Or does that have any basis in science?

Well, I think it's mostly a romantic idea. If you talk to a brain scientist, he or she will tell you that the part of the brain where love and emotion comes from is called the amygdala. And if I had to choose between sending a Valentine's card with a heart on it, or an amygdala on it, that's pretty easy. I'm going to go with the heart. But that's not really a rational decision. Can you imagine sending little boxes of candy with amygdalas with notes on them?

Well, I can now now I'm enjoying that thought.

So the science actually tells us that emotion resides in that part of the brain. But that's not really romantic. And you don't really feel your amygdala when you look at someone that you're in love with. And and I was gonna say exactly what Stephen said, which is, oftentimes, love is not something that
makes sense. It's not something that your brain figures out. It's something that just happens. It’s not something you think through and so that’s why we associate it with a different part of the body.

Jane  08:44
Okay, so that all makes sense, more or less. But why do we use that symbol for a heart? You know, the one with two rounded humps on top that meet at a point at the bottom? It doesn't really look like a human heart itself. So how is that heart symbol, the symbol of the human heart, and the symbol of love? Take a wiggle break if you need one, but don't go far we're about to find out.

Jane  09:11
This is But Why: a Podcast for Curious Kids. And today we're curious about hearts, how they came to be the symbol of love when as we know now, it's actually a part of the brain called the amygdala that controls the love emotions. By the way, I think I really might make amygdala Valentine's cards for my friends this year. But also, why do we use a heart shape that doesn't match the actual shape of a heart organ?

James  09:38
My name is James and I'm from Towson, Maryland. And I'm seven years old. And I want to know, why do we draw hearts the way we do when they're nothing like the heart inside of your body?

Ainsley  09:50
My name is Ainsley and I am eight years old. And I live in Maryland. And my question is, why do people draw hearts different then real hearts?

Parent  10:01
Okay, Sofia, what's your question?

Sofia  10:03
Why do we don't have hearts that are shaped like a shape of a heart?

Claire  10:11
My name is Claire, I am eight years old. I live in Kingston, Ontario, Canada. My question is, why is the body's heart a different shape than a Valentine heart?

Gavin  10:22
My name is Gavin. I'm five years old. I live in Bloomington, Indiana. And my question is, I do people draw hearts when they love someone?

Jane  10:32
We're getting answers from Tom and Steven Amidon two brothers who wrote a book for adults called The Sublime Engine, a biography of the human heart. Stephen says people have been drawing heart shapes for a very long time. And those shapes have been associated with love for a very long time too.

Stephen  10:51
The heart really became a symbol of human love in the time of the Romans. So this was about 2,000 years ago. And what happened was, there was a saint called Valentine, St. Valentine, and he was a real person. And he lived about, like I say, about 2,000 years ago. And he was a Christian in Rome. So he was very had to be in they were had to be hiding from the Romans, because the Romans didn't like these Christians. And his job St. Valentine's job was to help people get married. And so he would make arrange these marriages, and that one of the symbols they used was this heart symbol, which was the secret code that they would use among people who were in love who wanted to get married, and not get caught by the Romans. Now, why is that funny little heart symbol you see used for love? Well, there are two theories. One is that a Greek philosopher named Aristotle, who was a very smart man, had a theory that that's what the heart look like. And you may ask, well, why didn't they just look at the heart and see? Well, because that was illegal. You couldn't do that you couldn't look into people at this time, it was considered very bad and it was something that they said that Gods forbid you to do. So they had to guess what the heart looks like. And since Aristotle, was the smartest man of all, they said, Aristotle, what does the heart look like? And he said this, and it's not too wrong. So that was one theory. The other theory is that there was something called silphium, which was, this was in the time of the Greeks, that was a love potion. Now, I don't know if you know what love potions are. But it used to be believed, if you would take a drink or a powder, you would fall in love with the next person you saw. And it was a magical potion. And it was believed that it came from a root, you know, like a little plant called silphium. That was found in in Libya, in Africa. And if you took this, you would fall in love. Well, the silphium, which no longer exists, if it ever did look to just like the heart symbol we now use on Valentine's and I Heart New York, and all of that. So those are some of the theories about it. But the short answer is, no one really knows.

Jane 13:26
That's the worst. We have so many of those on this podcast, no one really knows answers. I have so many questions from that, first of all, so when Aristotle was alive, and you couldn't look into somebody did that mean you couldn't open them up and do surgery, but you also couldn't open them up even after they were dead? You couldn't look at a dead person's body to see what things look like inside?

Stephen 13:46
Yes, I mean, it was forbidden to do that by the Greeks and the Romans, and then the Christian church, the Catholic Church. And it wasn't till about 500 years ago, that somebody you may have heard of called Leonardo da Vinci, and other Italian artists and doctors started looking inside the human body. And that's when they started discovering all the things my brother Tom deals with now, but before then they were just guessing they didn't know because they weren't allowed to do it. And they would get in big trouble if they - even on a dead person - that's right.

Jane 14:21
And this plant, it may not have actually been a real thing that were one of the ideas of where this heart shaped symbol comes from and the love potion this plant may not have existed?

Stephen 14:31
Well, there are drawings of it. So they think the plant existed whether or not it caused people to fall in love. I'll let other people decide. All we know now is that it doesn't exist anymore, so it may be extinct.
Jane 14:44
A love potion sounds very scary to me if I took one right now the next thing I'm going to see when I walk out of this closet where I record is either my dog or my cat and luckily I love all of them already, but that sounds terrifying that you would fall in love with the next person you see.

Stephen 14:58
Well there's a very famous play by I don't know If you've ever on your show talked about William Shakespeare, he's a very famous writer. And he wrote a play in which a character takes a love potion falls in love with a donkey. So, so these sorts of things, you have to be careful who you see after you take a love potion, but as of right now, we're not really sure they exist. But it's fun to think about anyway.

Jane 15:20
Given what we now know about the heart, and what that organ does, and the brain and what that organ does, and given that we do now know the shape of a human heart, Stephen, do you have any idea why we still use that heart-shaped kind of emoji icon that people love so much? I mean, now we know that that doesn't even make sense. It's not the shape of a heart and the heart doesn't make us love. So why do we still insist on using that shape?

Stephen 15:47
Well, I think it's basically, as Tom suggested, a romantic idea. I think the further we come to understand the workings of the human body, and what our brains look like, and so forth, we want to hold on to an idea that we're just not machines. By that I mean, just like these machines that you can figure out. We all like to have mysteries. And we all like to have secrets. And that's kind of why I think we hold on to this romantic notion that there's something that doesn't look like a real human heart, which would probably be just as upsetting to send a chocolate looking like that as an amygdala.

Jane 16:29
Well, there you have it. We like the idea that the heart is where love lives. And we like that symbolic shape that we put on cards and candy and use as a kind of shortcut way of saying love. Even though we now know more about the science of love sometimes people just like more romantic or fanciful ways of thinking about it. If you celebrate Valentine’s Day, maybe with your classmates or your family, I dare you to make an amygdala cake or card this year, or one shaped like an actual human heart. And see if you can help people understand where the feelings and emotions of love actually come from. If you do send us a picture so we can see your beautiful creations. And that's it for today. Thanks to Stephen and Thomas Amidon. They are the authors of the book, The Sublime Engine, a biography of the human heart. But Why is produced by Melody Bodette and me, Jane Lindholm for Vermont Public Radio and distributed by PRX. Our theme music is by Luke Reynolds. We'll be back in two weeks with an all new episode. Until then, stay curious.