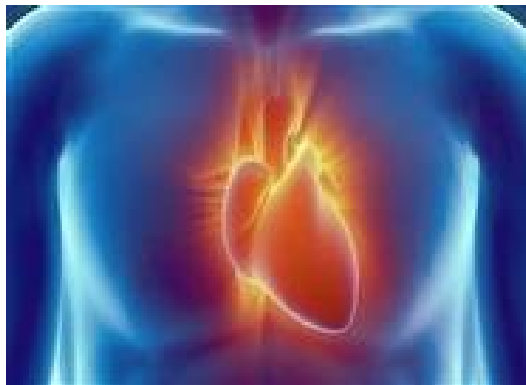




Modern Research Reveals Your Heart Does Have a Mind of Its Own

By: Dr. Mercola
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Warning to sensitive viewers: The beginning of this film shows close-up footage of open heart surgery.

Video from Dr. Mercola on “Of Hearts and Minds” – <https://youtu.be/Xwx5fbElMfk>

[Visit the Mercola Video Library](#)

In the film “Of Hearts and Minds,” science documentary filmmaker David Malone explores the human heart, juxtaposing the modern scientific view of the heart as a mere pump, versus its long history as a symbol of love and the center of innate wisdom and human character.

The film starts off in an operating room where open heart surgery is taking place, and Malone interviews Consultant Surgeon Francis Wells, who talks about the mechanistic and bioelectrical workings of the heart.

On the other side, there’s the poetic view of the heart as a source organ of love, with an intelligence all its own. In Wells’ view, the heart is a pump, and nothing more.

You can replace your heart with an artificial one, and it won’t affect your ability to love. Yet the idea that your heart is somehow an *emotional* organ remains.

The Heart — An Organ of Truth and Emotion

Sayings like “I love you with all my heart,” and “my heart swelled with joy,” or the reference to someone being “broken-hearted” or “cold hearted” — how much of this poetic language is based on something real?

Are these kinds of sayings references to something biologically true, stated in poetic terms? This is the question Malone seeks to answer in this film, and the reason he thinks the answer may be important is because he believes the way we see our heart is a reflection of how we view ourselves as human beings.

The ancient Egyptians saw the heart as an organ of truth. And indeed, your heart does seem to be able to tell you the truth about how you feel and what you think is right or wrong. When you lie, for example, your heart rate tends to speed up.

As the film goes on, Malone scours the latest science, to find out whether our [feelings and emotions](#) really come from our brains, or whether they might actually originate in our hearts.

For starters, Leonardo Da Vinci discovered *how* the blood flowed through the heart, and how the swirling vortexes within the heart’s chambers worked *with* the heart, opening and closing the valves with each heart beat — a far cry from the mechanistic view of the heart as a simple single-stroke pump.

Da Vinci’s drawings and experiments reveal a harmonic beauty — as much a piece of art as a machine.

The ‘Brain’ Within Your Heart

David Paterson, Ph.D. a professor at Oxford University, straddles the two areas of the brain and the heart. His work shows that your brain is *not* the sole source of your emotions, but indeed, your heart and brain work *together* in producing emotions.

Your heart actually contains neurons, similar to those in your brain, and your heart and brain are closely connected, creating a symbiotic emotional whole. As explained in the film:

“When your heart receives signals from the brain via the sympathetic nerves, it pumps faster. And when it receives signals through the parasympathetic nerves, it slows down. “

While this seems to support the view that the heart simply follows the orders of the brain, the reality is far more complex. Because your heart also contains thousands of specialized neurons, predominantly located around the right ventricle surface, forming a complex network. Why did nature put them *there*?

Neurons are what allow your brain to form thoughts. So what are they doing around the right ventricle of your heart? While much about the neurons in your heart is still unknown, one thing is sure — the “brain” in your heart communicates back and forth with the brain in your head. It’s a two-way street.

The Neurons in Your Heart Makes Decisions Too

In the film, Professor Paterson shows a piece of heart tissue from a rabbit — not the whole heart, just a piece of the right ventricle, where the neurons are clustered.

Kept in a tank with nutrients and a steady flow of oxygen, this suspended piece of heart tissue beats *all by itself*, even though it's not attached to a living organism, and there's no actual blood pumping through it.

By sending an electrical impulse into this tissue via an electrode, Professor Patterson demonstrates how the heart tissue immediately slows its contractions; a “decision” made by the neurons in the tissue in response to the stimulation.

This elegant little experiment shows that it's the neurons in your heart that decide how the heart will behave, not the neurons in your brain. What Professor Patterson is finding again shifts our view of the heart back toward its more poetic and philosophical origins.

As Malone says:

“The heart is a pump that does respond when the brain asks it to, but it is not enslaved to the brain. Its relationship to the brain is more like a marriage ... with each dependent on the other. It seems science is now restoring to the heart something that rightfully belongs to it: Our emotions.”

Intense Negative Emotions Puts Your Heart Health at Risk

If negative emotions have the potential to harm your heart, it would stand to reason that positive emotions may heal it, and this indeed seems to be the case. In a study³ of nearly 1,500 people with an increased risk of early-onset coronary artery disease, those who reported being cheerful, relaxed, satisfied with life, and full of energy had a one-third reduction in coronary events like a heart attack.

Those with the highest risk of coronary events enjoyed an even greater risk reduction of nearly 50 percent. This was true even when other heart disease risk factors, such as [smoking](#), age, and [diabetes](#), were taken into account. Separate research has similarly found that:

- Positive psychological well-being is associated with a consistent reduced risk of coronary heart disease (CHD)⁴
- Emotional vitality may protect against risk of CHD in men and women⁵
- Cheerful heart disease patients live longer than pessimistic heart patients⁶
- Very optimistic people have lower risks of dying from any cause, as well as lower risks of dying from heart disease, compared to highly pessimistic people⁷

Yes, Your Heart Also Affects Your Mind

In one test, Malone is shown a series of images of neutral and frightened faces, some synced in time to his heartbeat, and others not synced to his heart. Interestingly, when the frightened faces were shown in sync with his heartbeat, he perceived them as being more intensely frightened than when shown out of sync with his heartbeat.

What this test showed was that how his mind processed the perception of fear was affected by his heart. When his brain processed the image in sync with his heart, there was a greater “resonance” in the emotional output.

By looking at the brain scans taken during the test, the researchers are able to pinpoint the precise brain region affected by the heart, namely the amygdala — an area known to be associated with threat perception. Your amygdala processes fear *in combination* with the signaling from your heart. This brain-heart connection is also at work when you experience feelings of compassion and empathizing with other people’s emotional states.

As Malone says, “*it is our heart working in tandem with our brain that allows us to feel for others ... It is ultimately what makes us human... Compassion is the heart’s gift to the rational mind.*”