

Heart Myths

Eight things many people believe about the heart, and what scientists have found instead.

✗ MYTH Your heart is on the left side of your chest. **1**

✓ FACT It sits near the middle of your chest, behind the breastbone, tilted slightly left. Its lower tip points left, so you feel the beat just left of centre.

✗ MYTH The blood in your veins is blue. **2**

✓ FACT Blood is always red: bright red with lots of oxygen, darker red with less. Veins only look bluish because of the way light passes through your skin.

✗ MYTH Your heart stops for a moment when you sneeze. **3**

✓ FACT It keeps beating. A sneeze changes the pressure in your chest and can briefly alter the rhythm, but heart monitors show no real pause.

✗ MYTH A real heart is shaped like a love heart. **4**

✓ FACT It is shaped more like a pinecone: broad at the top, where the big blood vessels attach, and narrowing to a rounded tip. It is about the size of a fist.

✗ MYTH The 'lub-dub' of a heartbeat is the sound of the muscle squeezing. **5**

✓ FACT It is valves closing. 'Lub' is the tricuspid and mitral valves shutting as the ventricles contract; 'dub' is the aortic and pulmonary valves shutting.

✗ MYTH Your brain has to send a signal to start every heartbeat. **6**

✓ FACT The heart's own pacemaker, the SA node, starts each beat. On its own it would fire about 80-100 times a minute; nerves and hormones just speed it up or slow it down.

✗ MYTH The heart makes your blood. **7**

✓ FACT The heart only pumps blood. Red and white blood cells and platelets are made in the red bone marrow inside bones such as the hips, breastbone and spine.

✗ MYTH The left side of the heart pumps more blood than the right. **8**

✓ FACT Both ventricles pump the same amount with each beat. The left wall is thicker because it must push blood all round the body, which needs much more pressure.



Conventions are not reality

Blue veins in diagrams, the love-heart symbol and 'the heart is on the left' are all handy shortcuts. Use them to remember things, but describe the real heart in an answer.

NEXT IN THE SERIES

8. Human Heart Quiz: Test Yourself