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Sir David Attenborough suggests seeking joy and solace in the natural world during times of crisis. We are part of the natural world and with trillions of cells, a brain that responds to as many as one quadrillion pieces of information in a lifetime and a heart that beats more than 2.5 billion times, let's escape into some natural wonders during COVID-19.

## 1. You're big yet small

Physicist Stephen Hawking once said: "We are very, very small, but we are profoundly capable of very, very big things." [Your pancreas](#) [6] is the size of a dog's tongue, [your pituitary](#) [7] (the body's "master gland") is the size of a pea, and [your eye](#) [8] the size of a ping pong ball, yet in their form and their function your body parts have much to boast about.

## 2. Your circulation

Your body contains 25 trillion red blood cells: that's roughly one-quarter of the cells in your body—in a way, a quarter of who you are. In the time it takes to blink an eye, 1.2 million of your red cells reach the end of their 120-day lifespan and perish.

Writing for the *Reader's Digest* more than 50 years ago, John D Ratcliff, author of "I Am Joe's Body", described the circulation as a transport system with some 75,000 miles of route—or as a garbage man and delivery boy with trillions of "customers" (cells of the body). Hauling away waste and providing the essentials of life, your circulation works tirelessly.

## 3. Your brain

As “chief executive of the nervous system”, [your brain](#) [9] responds to as many as one quadrillion (1,000,000,000,000,000) pieces of information in a lifetime. There are 170,000 kilometres of nerve fibres in your brain: stretched out, they would wrap four times around the globe.

Each of the 86 billion neurons in your brain forms thousands of synapses or connections, across which more than 100 chemicals (known [as neurotransmitters](#) [10]) are known to travel as messengers. Some of these stimulate the brain, keeping us alert, engaged and focussed; others inhibit or calm brain activity.

## 4. Your gut

You've got a *second* brain—in your [gut](#) [11]. Consisting of more than 100 million nerve cells, the “enteric” nervous system helps with digestion. It's likely that the two brains “talk” to each other, with some digestive disorders triggering mood changes; therapies for the mind might then treat the gut too.

[Trillions of microbes](#) [12], mainly bacteria, have set up home inside your body, existing in little communities in your gut, nostrils, mouth and on your skin. You have more microbes than human cells. In the gut, they can weigh 1-2kg, about the same weight as your brain.

## 5. Your skin

Every minute, you lose about [30,000 dead skin cells](#) [13] (that's about 4kg of dead cells every year). Amazingly, cell loss precisely matches cell production.

Under an area of skin the size of a little fingernail, you'll find some 100 sweat glands, 3 metres of nerves, ten hair follicles and a metre of blood vessels. Perfectly packaged indeed.

Dr Monty Lyman, author of [The Remarkable Life of the Skin](#) [14], describes the skin as a beautiful mystery, with nerve endings and microbes alike numbering in their millions.

## 6. Your eyes

You blink 500 million times in a lifetime, about 15 times per minute. Your eye muscles move some 100,000 times each day, to bring objects into focus. You would need to walk 50 miles to give your leg muscles similar exercise.

Each eye is composed of 130 million light-sensitive cells—a number double the population of the United Kingdom in each eye. The cells are named according to their shape with some 120 million of them known as rods and the others as cones. Rods allow vision in dimly lit rooms, at twilight and in pale moonlight; cones detect colour.

## 7. Curiosity and awe

Seventeenth-century physician and author Sir Thomas Browne said that we “carry within us the wonders that we seek around us”. For a closer look, Dr Gunther von Hagens' [Body Worlds](#) [15] Exhibition in London has permanently preserved bodies, stripped of their skin, ready to spark curiosity and awe in equal measure. Showcasing amongst other things the effects of alcohol, smoking and obesity, it might also just change the way you live.



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