## Night owl or early bird, your genes matter

A couple of weeks ago I asked students in one of my classes whether they were early risers or night owls. Almost all identified as one or the other. But is either being up at dawn or burning the midnight oil simply habit, or is something else going on?

Humans are no different to most of the other creatures on earth. We have an internal body clock, which determines a 24-hour rhythm to our activity. This clock can be found in the hypothalamus, at the base of the brain. Across the animal kingdom, the majority of species are either nocturnal (active at night) or diurnal (active during the day).

But does it all come down to habit? Or do the brains and genes of early birds and night owls actually differ?

The simple answer is yes. A number of studies have identified genes that influence a person's chronotype. The genes known as <u>PER1</u>, <u>PER3</u> and <u>ABCC9</u> all play a role in regulating our body clocks and vary predictably among people of different chronotypes.

Read the full, original story: Can a night owl become an early bird?