

How 'masculine' is your brain?

Video transcript: Clip from Countdown to Life: The Extraordinary Making of You (BBC Two, 2015).

MICHAEL MOSLEY:

Laird Hamilton is a big wave surfer. He has an appetite for risk that may have been shaped by what happened to him before he was born.

Both males and females receive some testosterone in the womb. But boys get a far larger dose, which peaks at around 15 weeks and floods the entire body.

This surge coincides with a time when parts of our brain that form our personality are being organized. So, the effects of testosterone on the brain can be significant.

They may even influence, for example, how thrill-seeking we become.

LAIRD HAMILTON:

If I turned around and there was a giant wave I would be almost in a zombie-like state, and I would be drawn to it. It's as simple as it's inside of me. It's inside my soul, it's inside of my bones.

MICHAEL MOSLEY:

Bizarrely, you might spot a risk-taker by looking at their hands. Testosterone appears to affect them as well as the brain.

High levels of testosterone in the womb are associated with a longer ring finger compared to the index finger.

LAIRD HAMILTON:

The length of my ring finger and the length of my index finger are substantially different, which, I guess, leads to a lot of my problem. [Laughs]