

Microbes outnumber human cells 10 to 1? Not so fast.

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It's often said that the bacteria and other microbes in our body outnumber our own cells by about ten to one. That's a myth that should be forgotten, say researchers in Israel and Canada. The ratio between resident microbes and human cells is more likely to be one-to-one, they calculate.

A 'reference man' (one who is 70 kilograms, 20–30 years old and 1.7 metres tall) contains on average about 30 trillion human cells and 39 trillion bacteria, say Ron Milo and Ron Sender at the Weizmann Institute of Science in Rehovot, Israel, and Shai Fuchs at the Hospital for Sick Children in Toronto, Canada.

Those numbers are approximate — another person might have half as many or twice as many bacteria, for example — but far from the 10:1 ratio commonly assumed.

“The numbers are similar enough that each defecation event may flip the ratio to favour human cells over bacteria,” they delicately conclude in a manuscript posted to the preprint server bioRxiv.

The 10:1 myth persisted from a 1972 estimate by microbiologist Thomas Luckey, which was “elegantly performed, yet was probably never meant to be widely quoted decades later”, say the paper's authors. In 2014, molecular biologist Judah Rosner at the US National Institutes of Health at Bethesda, [expressed his doubts](#) about the 10:1 claim, noting that there were very few good estimates for the numbers of human and microbial cells in the body.

Read full, original post: [Scientists bust myth that our bodies have more bacteria than human cells](#)