

Socializing makes chimp microbiome more diverse

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Social interactions play a leading role in determining the content of the chimpanzee microbiome, suggests a study published on January 15 in *Science Advances*. The more chimpanzees interact with others in their group, the more uniform the group's collective microbiome is, and the greater number of species each individual's microbiome has.

Microbiologists have often assumed that animals and humans primarily acquire their microbiomes from their mothers, a phenomenon called vertical transmission. But "chimpanzees within a maternal line did not share more similar gut communities than unrelated socially interacting chimpanzees," said paper coauthor [Andrew Moeller](#), who studies the evolution of the vertebrate microbiome at the University of California, Berkeley.

"This paper provides exciting evidence that social contact has a stronger effect on the chimpanzee microbiome than vertical transmission," [Rob Knight](#) of the University of California, San Diego, wrote in an email to *The Scientist*.

The findings indicate that microbiomes are not self-contained between individual chimpanzees and passed down between parents and offspring. Rather, chimpanzees have a "pan-microbiome," a population of microbes living in their guts that evolves in the context of a whole group of chimpanzees. Member species of a vertically inherited microbiome could easily face bottlenecks or be wiped out by accident if, say, a mother lost certain species or if they didn't jump from the birth canal to the offspring.

Read full, original post: [Chimps Share Microbes When Socializing](#)