

Gut bacteria often similar in humans and chimps, study finds

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Microbial groups may have played role in evolution, researchers say.

(HealthDay)—Humans and chimpanzees have much in common, biologically speaking, and that may now include certain communities—or ecosystems—of gut bacteria, a new study finds.

Gut bacteria play a crucial role in collecting nutrients from food, helping the immune system and protecting people against disease-causing viruses, bacteria and other microorganisms.

Yale University researchers have been investigating why gut bacteria organize themselves into three distinct communities called enterotypes. Each person seems to have one of the three enterotypes in their gut, but some scientists have suggested that enterotypes may merely be the

product of different types of diets.

However, this new study found that chimpanzees in Gombe National Park in Tanzania have the same three enterotypes as humans, which indicates that enterotypes may have played an important evolutionary role in humans and great apes, the Yale team said.

In addition, [gut bacteria](#) samples taken from individual [chimpanzees](#) throughout their lives revealed that enterotypes change over a [chimp's](#) lifetime, the investigators found.

"This shared [human and chimpanzee] organization of the gut microbial community is millions of years old and the findings attest to their functional importance," Howard Ochman, an author of the study and director of the [Microbial Diversity](#) Institute, said in a Yale news release.

"Now that we know enterotypes have been maintained over evolutionary timescales, our goal is to determine their functions and how they might be important to the health of their hosts," Ochman said.

The study was published Nov. 13 in the journal *Nature Communications*.

More information: The U.S. National Institutes of Health has more about the [bacterial makeup of the body](#).

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