Communications of Acquired Knowledge among C. elegans.

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The ability of communication is extremely important among animals, and the way of communication is different across species. Although the communication of higher organisms has been extensively studied, the communication in lower organisms, which are primitive but could be very basic in evolution, remains poorly understood. My study used the nematode C. elegans as a model. C. elegans is a well-studied model organism with primitive behaviour patterns, but little is known about the communication among these worms. This experiment examines the behavior of two groups of nematodes, one trained to recognize butanone as a food cue and the other untrained. After mixing the two groups, the untrained worms learned from the trained ones and acquired the preference for butanone, indicating that worms can transmit learned knowledge to each other in a certain way and change their behavior. This study therefore provides important insights into the primitive but conserved ways of communication during evolution.

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