

# Evolution may explain 'Runner's high,' study says

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Brain reward center boost seems to spur humans, dogs to run long distances.

(HealthDay) -- The pleasurable feeling known as "runner's high" that's triggered by aerobic exercise may have played a role in the evolution of humans' ability to run long distances, a new study suggests.

Runner's high is caused by the release of chemicals called endocannabinoids in the reward centers of the brain.

The researchers found that levels of these chemicals spiked in the blood of dogs and humans after a brisk run, but did not occur in ferrets after they exercised. Humans and dogs belong to a group of mammals built for endurance while ferrets are a sedentary species, the study authors noted.

In human volunteers, the boost in endocannabinoids after running was associated with an increase in positive [emotional feelings](#).

"Aerobic activity has played a role in the evolution of lots of different systems in the human body, which may explain why [aerobic exercise](#) seems to be so good for us," study author David Raichlen, an assistant professor of anthropology at the University of Arizona, said in a news release from

Eckerd College and the University of Arizona.

"These results suggest that natural selection may have been motivating higher- rather than low-intensity activities in groups of mammals that evolved to engage in these types of aerobic activities," he noted.

The study was published in a recent issue of [The Journal of Experimental Biology](#).

**More information:** The U.S. Centers for Disease Control and Prevention has more about [physical activity](#).

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