Princeton University scientists say they've determined exercising in groups, rather than alone, produces better results and is better for the brain.

Many people struggle to maintain a regular exercise schedule on their own, but they do better when they exercise with friends. Now Elizabeth Gould and colleagues have studied the effects of running on the generation of new neurons -- neurogenesis -- in the brains of adult rats housed in groups and in isolation.

The authors report that running increased neurogenesis only when rats were housed in groups and, in rats that run in social isolation, neurogenesis is suppressed.

The scientists said running caused similar elevations of the stress hormone corticosterone in isolated or group-housed rats, but only animals that ran alone were vulnerable to the negative influence of corticosterone on neurogenesis.

Moreover, individually housed runners showed higher levels of corticosterone in response to additional stress when compared with group-housed runners, the researchers said. Preventing the elevation in corticosterone levels in individually housed runners stimulated neurogenesis.

The results, appearing in the current issue of the journal Nature Neuroscience, suggest that without social interaction, a normally beneficial experience can have negative effects on the brain.

Copyright 2006 by United Press International


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.