Exercise May Improve Brainpower, Study Finds

NEW YORK (Reuters Health) - A preliminary study has found that exercise may rev up a person's brainpower.

Dr. Chuck Hillman of the University of Illinois in Urbana-Champaign and colleagues presented the results of their findings at the annual meeting of the Society of Psychophysiological Research in Montreal, Canada last week.

In the study, the researchers measured the thinking ability of 20 men and women aged 18 to 24 after 30 minutes of moderately heavy to heavy running on a treadmill. Once the participants' heart rates had returned to resting levels, they were wired up to an instrument that measures brain waves called an electroencephalogram (EEG).

They then took two computer tests, one more difficult than the other. These results were compared with results from tests the participants took without exercising beforehand.

Brain wave measurements showed that "exercising increased the speed of the decision-making process," Hillman told Reuters Health.

Specifically, brain activity kicked in 35 milliseconds faster after exercise compared with when study participants did not exercise. Although that may sound like a small amount of time, Hillman pointed out that it is actually quite significant.

In addition, the respondents answered more accurately after exercise then they did when they had not exercised, he noted.

Overall, no difference was found in the easier test. The difference in results was only seen with the more difficult test.

Hillman cautioned that the study is preliminary and must be duplicated before any definitive conclusions can be drawn.

If the findings hold true, they can be added to a growing body of research on the beneficial effects of even short periods of activity. One recent study found that 10 minutes of moderate exercise daily can improve mood and reduce fatigue. Another study reported that stair climbing for 2 minutes several times a day can lower total cholesterol, raise HDL ("good") cholesterol and improve the resting pulse rate in sedentary young women.