Being active improves your exam performance

Most people are aware of the importance of physical activity for health, with a role to play in both prevention and treatment. There is considerable evidence that people who are physically active have as much as 50% reduced risk of a range of major chronic diseases. Adding as little as half an hour of moderately intense physical activity to your day can help you avoid a host of serious ailments, including heart disease, diabetes, depression, and several types of cancer, particularly breast and colon cancers.

But did you know that exercise can help you achieve better grades? Research has shown that aerobic exercise, as opposed to other forms of exercise such as stretching and weight lifting, can improve working memory and other executive functions such as selective attention and task switching.¹ These brain activities are crucial in an exam situation.

One study conducted at the University of Illinois asked students to memorize letters and pick them out from a list flashed at them. ² Then they were asked to sit quietly, run on a treadmill, or lift weights for 30 minutes. After a 30-minute rest they completed the task again. In the following days the students returned to try the other 2 options. Running produced the best result, and the students were both quicker and more accurate on the re-test compared to the other two options.

The take-home message is that all exercise is good for us, but aerobic exercise seems to be particularly beneficial for the brain. It is thought that various brain growth factors must be carried from the periphery of the body into the brain to create new neurons and brain connections. For this to happen, a big change in blood flow is needed, which happens when you engage in activities such as cycling, swimming, or brisk walking. Weight lifting, on the other hand, stimulates the production of growth factors in the muscles that stay in the muscles and aren’t transported to the brain.

So make physical activity part of your exam preparation. It won’t replace studying, but it can make your studying more effective.


Cindy Dring, Health Promotion Coordinator, Student Services
cindy.dring@nuigalway.ie