

# Movement and Learning

Do you ever feel yourself getting antsy, distracted, or restless after sitting and studying for long periods of time? While many students can relate to these habits, research shows us that adding movement and exercise into your study periods is one of the most beneficial things you can do. This handout discusses the importance of incorporating movement into studying and how you can add movement into your study routine.

## Why is incorporating movement with studying important?

Contrary to popular belief, sitting and studying for hours (or days) at a time is not the most effective way to go about it, nor is it healthy for our bodies or brains. While it is important to plan ahead and study effectively and enough, it's also crucial to take breaks, be balanced, take care of yourself, and move around. Research shows that standing and moving around *while* you are studying and taking movement breaks in between study sessions has numerous benefits to our bodies, brains, memories, and academic performance. **Research shows us that:**

- Standing while learning and completing assignments improves executive functioning, or the skills you use to break down tasks like writing an essay or solving multi-step math problems.
- In addition to various emotional and physical health benefits, exercise has been shown to boost verbal memory, thinking and learning.
- Exercise improves alertness, attention and motivation, while helping to build new brain cells to help you store information.
- Exercise helps you learn a new language by boosting your ability to remember, recall and understand new vocabulary.

## What is your current movement level?

The first step in incorporating more movement into your schedule and study times is to evaluate where you are currently. Monitor your routine for the next two days and note the following:

- How much did I move within 5 hours BEFORE studying?
- How much did I move DURING studying?
- How much did I move AFTER studying?
- How would I rate my mood on a scale from 1-10?
- How would I rate my productivity on a scale from 1-10?
- How would I rate my energy level on a scale from 1-10?

## How to incorporate movement into your routine

Once you have evaluated your current movement and study habits, you can better decide how much movement you want to add. Here are a few practical ideas to try this week to add more movement to your study times and achieve the benefits that go along with it:

- Take 5, 10, or 15 minute breaks during your study sessions to walk around, change locations, or complete a series of exercises from your favorite routine. Don't have a favorite routine? Mix and match 5 or more bodyweight exercises from this list:
  - <https://greatist.com/fitness/50-bodyweight-exercises-you-can-do-anywhere>
- Make your own standing desk using a counter in your house or purchase an adjustment for your current desk in your room.
- Find an empty classroom and make use of the whiteboard. Classroom too intimidating? Buy a mini whiteboard to post in your room.
- Choose a keyword to look for in your reading. When you see the word, do 10 jumping jacks or 5 push-ups.

## Stick to it

Knowing and understanding the importance of incorporating movement into study times is the first step. Evaluating your current level and finding ways to add more movement is the next step. In order to follow through on these ideas, make an action plan with goals for the next week.

Don't overdo it! No need to go out and run a marathon. Plan to incorporate a few manageable changes into your habits. Choose one manageable goal in each category and get to it:

- To add more movement to my weekly routine, I will...
- While studying, I will...
- After my study session, I will...

## Overcoming barriers

Sometimes it can be difficult to motivate yourself to get moving, and it can be hard to fit it into your already busy schedule. Below are some common barriers to exercise and some practical tips to overcome them.

***“But, I don't have the time to exercise.”***

With all of the benefits of exercise, you don't have time not to! With that said, movement doesn't have to take up a bunch of time. Exercise in small chunks, during your breaks for a few minutes or a few movements at a time.

***“But, I don't like jogging or jumping up and down in aerobics class.”***

Movement doesn't have to be strenuous or high impact to effectively increase your study muscle. Walking or stretching during study breaks, completing a few yoga poses, or standing while studying work just as well as the high impact stuff for learning.

***“But, I don't feel like moving; I'm feeling down.”***

Good news! Exercise releases a flood of feel-good chemicals in your brain that will boost your mood, increase your energy, and promote overall wellness.

## **“But, I have ADHD; won’t moving around be more of a distraction?”**

While everyone should incorporate movement to help them learn better, for students with ADHD, movement is a must! Movement provides people with ADHD with the perfect amount of stimulation to increase attention naturally.

## Works consulted

- Aguiar Jr, A. S., Castro, A. A., Moreira, E. L., Glaser, V., Santos, A. R. S., Tasca, C. I., Latini, A., Prediger, R. D. S. (2011). Short bouts of mild-intensity physical exercise improve spatial learning and memory in aging rats: Involvement of hippocampal plasticity via AKT, CREB and BDNF signaling. *Mechanisms of Ageing and Development*, 132(11-12), 560-567.
- Ding, Q., Ying, Z., & Gómez-Pinilla, F. (2011). Exercise influences hippocampal plasticity by modulating brain-derived neurotrophic factor processing. *Neuroscience*, 192.
- É.W. Griffin, S. M., Carole Foley, S. A. Warmington, S. M. O’Mara & Á. M. Kelly (2011). Aerobic exercise improves hippocampal function and increases BDNF in the serum of young adult males. *Physiology & Behavior*, 104, 5, 934-941.
- Mehta, R. K., Shortz, A. E., Benden, M.E. (2015). Standing Up for Learning: A Pilot Investigation on the Neurocognitive Benefits of Stand-Biased School Desks. *International Journal of Environmental Research and Public Health* 13, 1.
- “Tips & Tools.” Learning Center, [learningcenter.unc.edu/tips-and-tools/](http://learningcenter.unc.edu/tips-and-tools/).