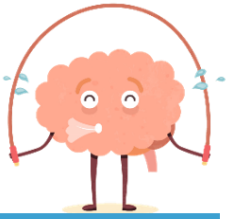
THE MIND-BODY CONNECTION



How Exercise Changes the Brain

MOVING YOUR BODY IS ONE OF THE BEST THINGS YOU CAN DO FOR YOUR MIND.

We know that exercise is good for us. There are plenty of reasons to be active: it helps prevent obesity and chronic diseases like diabetes, it reduces blood pressure, and improves heart health. While there are many ways that exercise improves our physical health and well-being, we can't discount the psychological benefits. Here are some of the fascinating ways that exercise can support our brains:

1. Walking can increase creativity by up to 60%
2. Exercise lowers cortisol that can damage the part of the brain needed for learning and memory
3. Lifting weights for 20 minutes releases enough norepinephrine to increase long-term memory by 10%
4. Strength training can boost the speed at which you process your thoughts
5. Exercise increases your uptake of oxygen increasing blood flow to the brain
6. Exercise reduces insulin resistance (insulin is important for the uptake of glucose to fuel the brain)

FIVE SURPRISING WAYS THAT EXERCISE CHANGES YOUR BRAIN

Exercise can help you connect with others.

You've likely heard of a *runner's high*, but an exercise-induced mood boost isn't specific to running. Research shows the high is linked to *endocannabinoids* – a group of brain chemicals described as "don't worry, be happy" chemicals. Endocannabinoids reduce anxiety and increase dopamine, which fuels feelings of optimism. This exercise high also helps us connect with others by increasing the pleasure we get from being around others. Research has found that on days when people exercise, they report more positive interactions with friends and family.

Exercise can make you more sensitive to joy.

Physical activity provides a jolt to the brain's reward centres – the system that helps feelings of pleasure, motivation, and hope. Over time, regular exercise modifies the reward system, which leads to higher levels of dopamine. This can help relieve depression and expand your capacity for joy. As we age, our brains change and we can lose up to 13% of the dopamine receptors every 10 years. Exercise can help prevent this decline.

Exercise makes you feel more resilient.
Regular exercise can modify the default state of the nervous system so it becomes more balanced and less prone to fight, flight, or fright. Research suggests that lactate (lactic acid) can have positive effects on mental health. After it's released, it travels through the bloodstream to the brain, where it changes your neurochemistry in a way that reduces anxiety and protects against feelings of sadness and depression.

Exercise with others builds trust and belonging.
Moving with others is one of the most powerful ways to experience joy. Psychologists believe that the key to collective joy is synchrony – moving the same way and at the same time as others – because it triggers a release of endorphins. Endorphins make us feel good and also help us bond. People participating in a collective activity like, trust, and feel closer to each other afterward. It's a powerful neurobiological mechanism for creating friendships.

Exercise can transform your self-image.
When you move your body, sensory receptors in your muscles, tendons, and joints send information to your brain about what's happening. The ability to perceive your body's movements is called *proprioception* and it plays an important role in how you think about yourself. Physical accomplishments change how you think about yourself and what you're capable of. When you move with grace, your brain perceives the fluidity of your movements and realizes, "I am graceful." When you move with power, your brain recognizes the explosive contraction of muscles and realizes, "I am powerful." That voice in your head listens to what your body is doing.

WHAT'S THE BEST EXERCISE FOR BRAIN HEALTH?

In general, any activity that is good for your heart will be good for your brain too. Aerobic exercise that increases your heart rate and sweat rate are excellent choices. However, regular exercise is really what matters, so choose something that you enjoy and stick with it! Many people find exercising in the morning beneficial as it makes their brains sharper and they are more mentally ready for a day ahead.

Sources https://greatergood.berkeley.edu/article/item/five_surprising_ways_exercise_changes_your_brain
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