

E-Learning

Meditation & Relaxation



Meditation & Relaxation

Meditation & Relaxation

Mounting scientific research validates the widespread benefits of guided mindfulness meditation. Even small amounts of meditation can help increase productivity, lower stress, and improve memory.

Several studies reveal the benefits of meditation as a stress management strategy.¹ The effects extend to our physiological functions, with studies indicating that regular meditation can help manage the symptoms of chronic conditions such as high blood pressure and heart disease.

Other benefits of meditation include decreases in depression by lowering ruminative thinking², anxiety reduction³, increased focus and sustained attention⁴, and better memory⁵. In fact, meditation can literally change the physical structure of the brain in ways that may boost concentration, memory, and positive emotions.

A study by researchers at Massachusetts General Hospital showed that regular meditation causes the brain's cerebral cortex to thicken, which is responsible for higher mental functions such as concentration, learning, and memory⁶. Another study revealed that meditation reduces the density of brain tissue associated with anxiety and worrying⁷. The benefits of meditation extend to physiological functions as well, such as beneficial changes in blood pressure⁸, improved immune function⁹, and decreased pain¹⁰.

So how long should you meditate? Many of the recent findings point at meditation frequency rather than the duration of meditation sessions. If you're starting out, the most important thing is finding a meditation time length that feels achievable so you can stay motivated. Otherwise, it will be harder to include meditation as part of a consistent routine.

Spending even a few minutes in meditation can lower stress and restore your calm. Longer meditations may be discouraging to beginners and impact adherence to a consistent practice¹¹. Even brief mindfulness meditation sessions of a few minutes can produce demonstrable effects on brain function¹². Any amount of meditation is better than none at all.



"A 2012 review of 36 trials found that 25 of them reported better outcomes for symptoms of anxiety in the meditation groups compared to control groups."

-National Institutes of Health¹³



"In a 2012 study, researchers compared brain images from 50 adults who meditate and 50 adults who don't meditate. Results suggested that people who practiced meditation for many years have more folds in the outer layer of the brain. This process (called gyrification) may increase the brain's ability to process information."

-National Institutes of Health¹⁴



4 Tips For Mindful Meditation

1. Start small. Try meditating for 2-3 minutes to start. Extend your meditation time as it gets easier to stay focused on the present.

2. Become aware of when your mind drifts. Identify your thoughts and try to re-frame your attention on your breathing without judgment.

3. Experiment with a position in a chair or on the floor that works best for you. Instead of focusing only on the breath, you can also try repeating a sound or thinking of a positive word. The goal is to choose a calming focus to direct your attention.

4. Don't be hard on yourself. It's easy to worry about how you're doing and get frustrated that you can't quiet your mind instantly. If this happens, just take a deep breath, recognize that your mind wandered, and gently return your attention to your breathing.

Additional Relaxation Techniques

The “relaxation response” describes the physical and mental changes that occur when the body is calm and relaxed. Think of it as the opposite of the fight-or-flight response. There are many ways to initiate the relaxation response.

- 1.** Deep breathing: Attention to purposeful, slow, and deep breaths.
- 2.** Mindful meditation: Non-judgmental awareness of the present moment; “being in the moment”.
- 3.** Repetitive physical exercise: Can be thought of as “meditation in motion”; walking, jogging, and swimming can relax the mind and body.
- 4.** Imagery: Using our imaginations to recreate a relaxing situation.
- 5.** Progressive muscle relaxation: Systematically relaxing our muscles to reduce tension.
- 6.** Prayer or spiritual connection.
- 7.** Start a positivity journal: Some of us tend to focus only on stressful situations instead of positive events and achievements. A healthy way to cope with stress is to acknowledge things in the day that went well and why.

De-stress positive coping strategies



References

1. Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-Based Stress Reduction for Health Care Professionals: Results From a Randomized Trial. *International Journal of Stress Management*, 12(2), 164-176; Speca, M, Carlson, L. E., et al. (2000) A Randomized, Wait-List Controlled Clinical Trial: The Effect of a Mindfulness Meditation-Based Stress Reduction Program on Mood and Symptoms of Stress in Cancer Outpatients. *Psychosomatic Medicine*, 62(5), 613-622. <http://ajp.psychiatryonline.org/doi/abs/10.1176/ajp.149.7.936>
 2. Ramel, W., Goldin, P.R., Carmona, P.E. et al (2004). The Effects of Mindfulness on Cognitive Processes and Affect in Patients with Past Depression. *Cognitive Therapy and Research*, 28: 433. <https://doi.org/10.1023/B:COTR.0000045557.15923.96>
 3. Albert J. Arias, Karen Steinberg, Alok Banga, and Robert L. Trestman (2006). Systematic Review of the Efficacy of Meditation Techniques as Treatments for Medical Illness. *The Journal of Alternative and Complementary Medicine*, 12(8): 817-832. <https://doi.org/10.1089/acm.2006.12.817>
- Jha, A.P., Krompinger, J. & Baime, M.J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective, & Behavioral Neuroscience*, (7)109. <https://doi.org/10.3758/CABN.7.2.109>; MacLean, Ferrer, Aichele, et al (2010). "Intensive Meditation Training Improves Perceptual Discrimination and Sustained Attention. *Psychological Science*, 21:829-839. DOI: 10.1177/0956797610371339. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3132583/>

4. Zeidan, Johnson, et al (2010). Mindfulness Meditation Improves Cognition: Evidence of Brief Mental Training. *Consciousness and Cognition*, 19(2): 597-605. DOI: 10.1016/j.concog.2010.03.014. <https://www.sciencedirect.com/science/article/pii/S1053810010000681>
5. Holzel, Carmody, et al (2011). Mindfulness Practice Leads to Increases in Regional Brain Gray Matter Density. *Psychiatry Research: Neuroimaging*, 191 (1): 36. DOI: 10.1016/j.psychres.2010.08.006. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004979/>
6. <http://ajp.psychiatryonline.org/doi/abs/10.1176/ajp.149.7.936>
7. <http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/410453>; Paul-Labrador M, Polk D, Dwyer JH, Velasquez I, Nidich S, Rainforth M, Schneider R, Merz CNB (2006). Effects of a Randomized Controlled Trial of Transcendental Meditation on Components of the Metabolic Syndrome in Subjects With Coronary Heart Disease. *Arch Intern Med*, 166(11):1218–1224. doi: 10.1001/archinte.166.11.1218. <https://www.ncbi.nlm.nih.gov/pubmed/16772250>
8. Davidson, Richard J. PhD; Kabat-Zinn, Jon PhD et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4): 564–570, doi: 10.1097/01.PSY.0000077505.67574.E3. <https://www.ncbi.nlm.nih.gov/pubmed/12883106>
9. Zeidan F, Martucci KT, Kraft RA, Gordon NS, McHaffie JG, Coghill RC (2011). Brain Mechanisms Supporting Modulation of Pain by Mindfulness Meditation. *The Journal of Neuroscience: The Official Journal of the Society for Neuroscience*, 31(14):5540-5548. doi:10.1523/JNEUROSCI.5791-10.2011. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3090218/>

10. Mitchell JT, Zylowska L, Kollins SH (2015). Mindfulness Meditation Training for Attention-Deficit/ Hyperactivity Disorder in Adulthood: Current Empirical Support, Treatment Overview, and Future Directions. *Cognitive and Behavioral Practice.*, 22(2):172-191. doi:10.1016/j. cbpra.2014.10.002. <https://www.ncbi.nlm.nih.gov/pubmed/25908900>
11. Moyer CA, Donnelly MP, Anderson JC, Valek KC, Huckaby SJ, Wiederholt DA, Doty RL, Rehlinger AS, Rice BL (2011). Frontal electroencephalographic asymmetry associated with positive emotion is produced by very brief meditation training. *Psychol Sci*, 22(10):1277-9. <https://www.ncbi.nlm.nih.gov/pubmed/21921291>
12. Chen KW, Berger CC, Manheimer E, Forde D, Magidson J, Dachman L, Lejuez CW (2013). Meditative Therapies for Reducing Anxiety: A Systematic Review and Meta-analysis of Randomized Controlled Trials. *Depress Anxiety*, 29(7): 545–562. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3718554/>
13. National Center for Complementary and Integrative Health (2016). "Meditation." U.S. Department of Health & Human Services, National Institutes of Health, available at https://nccih.nih.gov/sites/nccam.nih.gov/files/Meditation_04-25-2016.pdf