

BRAIN HEALTH BOOST



How Much Exercise is Enough to Enhance Brain Health and Optimize Brain Performance?

*The Brain Health Initiative (BHI) is working to develop brain healthy communities, creating a culture that promotes brain health protective factors and decreases risk factors, thereby improving brain health, optimizing brain performance, and preventing and fighting brain illness across the lifespan for the Florida Suncoast region and beyond. **Today we talk about how much exercise we need for a brain healthy life.***

The 20-minute workout. Take 10,000 steps a day. The 20 best exercise programs. Our news feeds are filled with plans and guidelines for physical activity, but how much exercise do we really need for a brain healthy life?

Living a physically active life, versus a sedentary lifestyle, promotes brain health. According to [Harvard Health](#), exercise can boost memory and thinking indirectly by improving mood and sleep, and by reducing stress and anxiety. Exercise improves blood flow to and within the brain, providing the oxygen and nutrients it needs for optimal health and performance and slow or prevent cognitive impairment. In addition to improving our mood, attention, concentration, and memory, exercise promotes new learning.

For those of us with activity trackers and smart watches, the devices are usually set with a goal of 10,000 steps each day. But according to a recent article in the [New York Times](#), that number is actually a coincidence with no basis in science. A pedometer created in Japan after the 1964 Olympics was named with a Japanese character that resembles a walking man. The rough English translation for that character is “10,000-steps meter,” and an exercise myth was born. The *Times* article says we take about 5,000 steps a day during our normal activities and adding an additional 2,000 to 3,000 steps (the equivalent of about one mile) provides the brain- and physical -health benefits we need.

Instead of counting steps, most exercise recommendations focus on the amount of time we spend doing them. A recent article in [Harvard Gazette](#) suggests 12-minute bursts of exercise produce chemical changes that support our metabolic, cardiovascular, and long-term health. The article references a Massachusetts General Hospital study, drawing on data from the

Framingham Heart Study, that measured the levels of more than 500 circulating metabolites before and immediately after 12 minutes of vigorous exercise. These short bursts of exercise had a positive impact on the circulating levels of metabolites, an end-product of metabolism, which govern several key bodily functions and are important for physical and brain health, including insulin resistance, oxidative stress, vascular reactivity, inflammation, and longevity.



The U.S. Department of Health and Human Services guidelines for physical activity are based on minutes per week and according to the current research, the key to physical activity isn't how many steps we take but rather that we get moving and keep moving. To learn more about the positive impact exercise has on our brain health, visit our [Brain Boost](#) library.

WHAT YOU CAN DO TODAY TO PROTECT YOUR BRAIN HEALTH

The U.S. Department of Health and Human Services (HHS) updated its physical activity guidelines in 2018. These guidelines for adults are primarily based on time and not number of steps or repetitions. Additional guidelines for children, older adults, and adults with special conditions can be found on the [HHS website](#).

- People of all ages should move more and sit less throughout the day, but even some physical activity is better than none. People who sit less and do any amount of moderate-to-vigorous physical activity gain some brain and physical health benefits.
- Adults should strive for at least 150 to 300 minutes a week of moderate-intensity, or 75 to 150 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
 - Additional health benefits may be gained by engaging in physical activity beyond the equivalent of 300 minutes of moderate-intensity physical activity a week.
- Children and teens ages 6 through 17 years should do 60 minutes or more of moderate-to-vigorous physical activity daily. Most of the 60 minutes or more

per day should be either moderate- or vigorous-intensity aerobic physical activity that includes muscle- and bone-strengthening activity.

- Muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups two or more days a week provide additional health benefits.
- Stretching counts! [The American College of Sports Medicine](#) recommends daily stretching. Most adults should stretch to the point of feeling tightness and hold for 10 to 30 second, and older adults may want to hold a stretch for 30 to 60 seconds to build flexibility.
- And don't forget to **BE BRAIN HEALTHY and adopt a lifestyle** that includes thoughts, behaviors, emotions, responses, and language that promote brain health protective factors:
 - Stress resilience
 - Nutrition
 - Physical activity
 - Sleep
 - Social connection
 - Emotional wellbeing
 - Meaning and Purpose
 - Cognitive stimulation and creativity
 - Engaging with nature
 - General health
 - Positive impacts

About the Brain Health Initiative (www.brainhealthinitiative.org)

The Brain Health Initiative (BHI) is a cutting-edge, new approach to protecting brain health, optimizing brain performance, and fighting brain illness across the lifespan. The BHI is a collaborative effort with Massachusetts General Hospital, a Harvard Medical School Teaching Hospital, to build brain healthy communities through education, collaboration, research, innovation, and action, with a specific focus on *brain health promotion, prevention, early detection, evidence-based intervention, and optimization of performance*. The BHI is creating a culture that promotes brain health protective factors and decreases risk factors, thereby improving brain health and optimizing brain performance outcomes for the Florida Suncoast region and beyond. Join the **Be Brain Healthy** movement, **because brain health matters, and lifestyle makes a difference**. To view all Brain Health Boosts [click here](#).