

Impressive Brain Benefits from Exercise

In the latest pair of studies to document the positive effects that physical exercise has on brain function, it was found that performing moderate exercise, such as aerobics, yoga and strength training during midlife lead to a 39 percent decreased risk of developing mild cognitive impairment.

Moderate exercise late in life was associated with a 32 percent lower risk.

The second study even found that high-intensity aerobic exercise for six months was enough to *improve* brain function in those already suffering from mild cognitive impairment -- without the extra cost and dangerous side effects that occur when drugs are used instead. The authors stated:

"Six months of a behavioral intervention involving regular intervals of increased heart rate was sufficient to improve cognitive performance for an at-risk group without the cost and adverse effects associated with most pharmaceutical therapies."

These are impressive results, considering that mild cognitive impairment affects about 20 percent of people over 70, according to the American College of Physicians. This condition often causes memory problems and blips in language, reasoning, judgment, and even reading and writing.

Mild cognitive impairment is often described as a transitory phase between normal brain function and more serious problems like dementia and Alzheimer's disease. While 1 percent to 2 percent of people develop dementia, this rate rises to 10-15 percent among those with mild cognitive impairment.

So the more you can do to keep your brain functioning at its peak, and avoid any type of cognitive impairment whatsoever, the better off you will be.

How Does Exercise Protect Your Brain?

Exercise [encourages your brain to work at optimum capacity](#) by causing your nerve cells to multiply, strengthening their interconnections and protecting them from damage.

Lab tests on animals have shown that during exercise, their nerve cells release proteins known as neurotrophic factors.

One in particular, called brain-derived neurotrophic factor or BDNF, triggers numerous other chemicals that promote neural health. Further, exercise provides protective effects to your brain through:

- The production of nerve-protecting compounds
- Greater blood flow to your brain
- Improved development and survival of neurons
- Decreased risk of heart and blood vessel diseases

A regular exercise program can also [slow the development of Alzheimer's disease](#) by altering the way damaging proteins reside in your brain. In animal studies, significantly fewer damaging

plaques and fewer bits of beta-amyloid peptides, associated with Alzheimer's, were found in mice that exercised.

Four Principles of Exercise

Your body is an efficient machine, and if you do the same type of exercise day after day, you'll become quite good at it. However, when exercise becomes easy to complete, it's a sign you need to work a little harder and give your body a new challenge.

So when you're planning your exercise routine, make sure it incorporates the following types of exercise:

1. **Aerobic:** Jogging, using an elliptical machine, and walking fast are all examples of aerobic exercise. As you get your heart pumping, the amount of oxygen in your blood improves, and endorphins, which act as natural painkillers, increase. Meanwhile, aerobic exercise activates your immune system, helps your heart pump blood more efficiently, and increases your stamina over time.
2. **Interval (Anaerobic) Training:** Research is showing that the BEST way to condition your heart and burn fat is NOT to jog or walk steadily for an hour. Instead, it's to alternate short bursts of high-intensity exercise with gentle recovery periods. That is one of the primary reasons I am so fond of the exercises my personal trainer has been showing me.
3. This type of exercise, known as [interval training or burst type training](#), can dramatically improve your cardiovascular fitness and fat-burning capabilities.

Another major benefit of this approach is that it radically decreases the amount of time you spend exercising, while giving you even more benefits. For example, intermittent sprinting produces high levels of chemical compounds called catecholamines, which allow more fat to be burned from under your skin within the exercising muscles. The resulting increase in fat oxidation increases weight loss. So, short bursts of activity done at a very high intensity can help you reach your optimal weight and level of fitness, in a shorter amount of time.

4. **Strength Training:** Rounding out your exercise program with a [1-set strength training routine](#) will ensure that you're really optimizing the possible health benefits of a regular exercise program.

You need enough repetitions to exhaust your muscles. The weight should be heavy enough that this can be done in fewer than 12 repetitions, yet light enough to do a minimum of four repetitions. It is also important NOT to exercise the same muscle groups every day. They need at least two days of rest to recover, repair and rebuild.

5. **Core Exercises:** Your body has 29 core muscles located mostly in your back, abdomen and pelvis. This group of muscles provides the foundation for movement throughout your entire body, and strengthening them can help protect and support your back, make your spine and body less prone to injury and help you gain greater balance and stability.

Exercise programs like pilates and yoga are great for strengthening your core muscles, as are specific exercises you can learn from a personal trainer. You might be aware that I have recently become interested in Ayurvedic medicine, and yoga is an important element of that. In March I visited the Miraval Health Resort in Tucson and had a great introduction to yoga and am now committed to applying that as a regular discipline in my life and will start seeking yoga instruction very soon.

Focusing on your breath and mindfulness along with increasing your flexibility is an important element of total fitness.

Is Staying Motivated an Issue for You?

More than half of U.S. adults don't get the recommended amount of exercise, and one out of four don't exercise at all.

The most common reason why people say they don't exercise? A lack of time.

Unfortunately, not enough people are willing to arrange their schedules around exercise, and this is due to something much deeper than time management -- it's due to psychological resistance.

No matter what reason you have for not exercising – feeling it's too hard, getting bored with your routine, not knowing where to start – you can help yourself get into a more positive frame of mind by giving the [Emotional Freedom Technique \(EFT\)](#) a try. It can help you remove the negative emotional blocks that are preventing you from successfully implementing your program.

Further, instead of focusing on the negatives, like the work and the time it takes to stay active, focus on how great you'll feel once exercise becomes a regular part of your life.

In case you weren't aware, exercise does far more than just assist in weight loss. I'm going to list some of the many, many things exercise can do for your mind and body.

Go ahead and print this list out, send it to your exercise buddy or take it with you to the gym. Then, whenever you're thinking of quitting, take a look. These benefits are just too good to pass up.

1. [Improve your brainpower](#)
2. [Lower your blood pressure](#)
3. [Fight off a cold](#)
4. [Manage arthritis](#)
5. [Lower your risk of heart disease](#)
6. [Cure insomnia](#)
7. [Fight depression](#)
8. [Lower your risk of diabetes](#) and [reverse pre-diabetes](#)
9. [Build strong bones](#)
10. [Lose weight](#)
11. [Reduce your risk of cancer](#)
12. [Boost your IQ and think better](#)
13. [Relieve chronic knee pain](#)
14. [Increase your energy levels](#)
15. [Slow down your aging process](#)

You can also check out our new fitness site, [Mercola Peak Fitness](#), which is a treasure trove of fitness videos and articles by Darin Steen, a world-class athlete, bodybuilder and personal trainer. It's a wonderful resource to help you become fitness savvy and make exercise a regular part of your life.

Related Links:

- » [Staying in Shape Protects Aging Brain](#)
- » [The Mind-Altering Benefits of Exercise](#)
- » [The Secret Behind How Exercise Fights Alzheimer's](#)

Reference website: <http://fitness.mercola.com/sites/fitness/archive/2010/02/02/the-single-most-important-thing-to-preserve-your-brain-function.aspx>