

# PSYCHOLOGICAL BENEFITS OF EXERCISE

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Psychological health is an important part of our lives. It affects our moods, emotions, behavior, and social interactions. Not only in our personal lives, but in our professional lives as well. It even has consequences for our physical health. Exercise can bolster our energy, make us resilient in the face of hardship, and has many other benefits for your mental health.

## EXERCISE ALLEVIATES STRESS

This exercise benefit isn't going to shock anyone. It's a well known psychological benefits. Also one of the biggest reasons why people take up exercise. The science behind it is well documented, as well as it's calming effect on a stressed mind. But how does a physically stressful activity on the body actually end up relieving stress? It's a bit of a puzzle, but the long term benefits definitely compensate for the short term stress. For starters, it releases neurochemicals into the brain. The big ones being endorphins, dopamine, and norepinephrine. These chemicals are associated with better cognitive functioning, alertness and elevated moods. In addition to dumping feel good chemicals into your head, it also helps purge stress hormones from your body cortisol and adrenaline. From a psychological perspective, exercise also gives you a way to distract yourself from focusing on daily stressors. This could be from your boss, a task at work, or any number of personal problems. When the mind has nothing else to focus on, it will drift. Many people can fixate on immediate issues, specific stressful problems, or strong emotional feelings. So exercise can simply give you an immediate task to focus your energy on.

So while this benefit of exercise won't come as a surprise to you, it's still one of the best, time tested reasons to get out there and get moving. As we'll explore in other articles, stress is one of the biggest enemies of efficient brain operation. And exercise is an efficient stress management technique.

## GIVES EMOTIONAL RESILIENCE

Stress also affects your emotional state. Strong emotions can be an unfortunate side effect of stressful events. One study separated participants between participants between those who exercised regularly and those who didn't. Both groups were equal in mood before the experiment. Then they were exposed to a stressful event. They observed that the physically fit group actually had smaller declines in positive mood than their more sedentary counterparts. It seems that people who get regular exercise are able to maintain a more positive attitude and emotional outlook after something stressful occurs. This gives exercisers yet another level of protection from the day to day stress that happens to all of us.

## REDUCES ANXIETY

A meta-analysis published in 1995 had researchers take a look at 40 studies to measure the effects of exercise on anxiety. In analyzing several different study types, they found that exercise had a low to moderate effect on reducing anxiety levels. They also noted that adults who led a more stressful lifestyle, benefited most from the exercise. So for those that are feeling anxious from stress will benefit even more from exercise than someone who isn't.

## INCREASES PAIN TOLERANCE

It has been pretty well documented that intense exercise can dull pain in the short term. Your body releases endorphins and other chemicals during and shortly after exercise that will decrease pain in the body.

But it's more than just short term. Exercise could be the key for those of you looking to increase your mental grit. A small study published in 2014 from Australia showed that participants who completed a six week aerobic exercise program increased their tolerance for pain. It wasn't that they felt less pain. In fact, researchers noted that participants were feeling pain at the same levels as before. The change was actually a mental one. They were able to withstand pain at higher levels after they had completed the exercise regimen.

## HELPS BATTLE DEPRESSION

Depression is one of the most common mental conditions that affects people worldwide. An estimated 350 million according to the World Health Organization. Even scarier is the fact that depression is on the rise. It is set to be the 2nd biggest medical condition by 2020.

A large meta-analysis analyzed the effect of exercise on alleviating symptoms of depression. Two things were found from the review. They found positive results from a significant and moderate relief from depression. The second result came from the comparison of exercise to other forms of psychological therapy or drugs. Exercise was found to be just as effective as the other alternatives. Pretty important news for a nation that has a slight addiction to pills and prescriptions. People who may be looking for other, more cost effective ways to help fight depression, regular exercise could hold promise.

## PREVENTS DEPRESSION

Preventing depression is even more important than fighting it. I won't use a cliché quote referencing ounces and pounds here. But let's agree prevention is far better than curing. Research tells us exercise helps the symptoms of depression, but scientists didn't understand how. At least until recently. In a study published in September 2014, researchers found a mechanism that helped explain the puzzle. And not just fight it, but help prevent the symptoms of depression.

The study gets pretty technical, but here are the key points. During stressful situations, there's a harmful substance that builds up in the blood. The blood then carries that substance to the brain. Scientists used genetically modified mice to help produce a certain protein. A protein which helps break down and remove the harmful substance in the blood.

Normal mice and the mice with the protein were then exposed to multiple stressful situations. Scientists saw the normal mice begin to express depressive behaviors, while the genetically modified mice acted normally.

So here's where the rubber hits the road. This same protein can be produced by skeletal muscle (both in mice and humans) through physical activity. The more physical activity you do, the more protein produced. So by doing regular exercise you build up the amount of protein in your system. When stress strikes, the protein eliminates the harmful substance, and shields your brain from symptoms of depression.

### **IMPROVES MOOD**

Exercise causes the release of feel good chemicals in the brain. This part you know. So I want to share some interesting information you may not be familiar with.

Researchers took a look at how people deal with their bad moods. They identified a total of 32 different methods that people reported using. They then analyzed which methods were most effective at regulating their bad moods. After all the data was analyzed, exercise emerged as the most effective method at changing a bad mood. If you're curious, the methods coming in second and third were music and social interaction.

### **EXERCISE MIGHT JUST MAKE HAPPIER**

Moods come and go. They are temporary by nature. But can exercise have an effect on happiness in the long term?

An important question, but also a difficult one. I thought there would be tons of information on the subject, but it's surprisingly sparse. There are various definitions of happiness and different ways to measure it. And happiness can mean different things for different people. Despite these problems, there have been some initial attempts to answer the exercise happiness question.

One study looked at data from 15 European countries. They compared people's physical activity from different categories. Higher levels of activity correlated with higher levels of happiness. Researchers noted that even though there was a link, they couldn't determine if the physical activity was the cause of the happiness.

In a slightly more convincing study, researchers looked at levels of physical activity in residents of Canada. They first established a baseline happiness for participants. They then analyzed data for changes in activity levels and happiness in the following years.

People who were inactive through the years were twice as likely to become unhappy than those who were active. Those people who were inactive were also more likely to become unhappy than others who became active over the same years. And finally, the researchers noticed people who were active and became inactive later increased their odds of becoming unhappy.

### **BEYOND THE PSYCHOLOGICAL**

Exercise has some incredible benefits for our mental states, but it can do more than just that.