DAILYGOOD
News that Inspires

How Exercise Benefits the Brain
by Leo Widrich

Exercise has been touted to be a cure for nearly everything in life, from depression, to memory loss, Alzheimer's disease, Parkinson's and more. At the same time, similar to the topic of sleep, I found myself having very little specific and scientific knowledge about what exercise really does to our bodies and our brains.

"Yes, yes, I know all about it, that's the thing with the endorphins, that makes you feel good and why we should exercise and stuff, right?" is what I can hear myself say to someone bringing this up. I would pick up things here and there, yet really digging into the connection of exercise and how it effects us has never been something I've done.

Inspired by a recent post from Joel on what makes us happy I've set out to uncover the connection between our feeling of happiness and exercising regularly.

What triggers happiness in our brain when we exercise?

Most of us are aware of what happens to the body when we exercise. We build more muscle or more stamina. We feel how daily activities like climbing stairs becomes easier if we exercise regularly. When it comes to our brain and mood though, the connection isn't so clear.

The line around our "endorphins are released" is more something I throw around to sound smart, without really knowing what it means. Here is what actually happens:

If you start exercising, your brain recognizes this as a moment of stress. As your heart pressure increases, the brain thinks you are either fighting the enemy or fleeing from it. To protect yourself and your brain from stress, you release a protein called BDNF (Brain-Derived Neurotrophic Factor). This BDNF has a protective and also reparative element to your memory neurons and acts as a reset switch. That's why we often feel so at ease and things are clear after exercising and eventually happy.

At the same time, endorphins, another chemical to fight stress, is released in your brain. Your endorphins main purpose is this writes researcher McGovern:

These endorphins tend to minimize the discomfort of exercise, block the feeling of pain and are even associated with a feeling of euphoria.

Overall, there is a lot going on inside our brain and it is in fact oftentimes a lot more active than when we are just sitting down or actually concentrating mentally:

So, BDNF and endorphins are the reasons exercise makes us feel so good. The somewhat scary part is that they have a very similar and addictive behavior like morphine, heroine

or nicotine. The only difference? Well, it's actually good for us.

The key to maximize happiness through exercise: don't do more, but focus on when

Now here is where it all gets interesting now. We know the basic foundations of why exercising makes us happy and what happens inside our brain cells. The most important part to uncover now, is of course how we can trigger this in an optimal and longer lasting way.

A recent study from Penn State university shed some light on the matter and the results are more than surprising. They found that to be more productive and happier on a given work day, it doesn't matter so much, if you work-out regularly, if you haven't worked out on that particular day:

"Those who had exercised during the preceding month but not on the day of testing generally did better on the memory test than those who had been sedentary, but did not perform nearly as well as those who had worked out that morning."

New York Times best-selling author Gretchen Reynolds has written a whole book about the subject matter titled "The first 20 minutes". To get the highest level of happiness and benefits for health, the key is not to become a professional athlete. On the contrary, a much smaller amount is needed to reach the level where happiness and productivity in every day life peaks:

"The first 20 minutes of moving around, if someone has been really sedentary, provide most of the health benefits. You get prolonged life, reduced disease risk — all of those things come in in the first 20 minutes of being active."

So really, you can relax and don't have to be on the look-out for the next killer work-out. All you have to do is get some focused 20 minutes in to get the full happiness boost every day:

"On exercise days, people's mood significantly improved after exercising. Mood stayed about the same on days they didn't, with the exception of people's sense of calm which deteriorated." (University of Bristol)

How to get into a consistent exercise habit: The dance with the endorphins

Now, that's all nice to hear you might say, starting to exercise regularly or even daily is still easier written than done. At end of the day, there is quite a lot of focus required to help you get into the habit of exercising daily. The most important part to note first, is that exercise is a keystone habit according to Charles Duhigg, New York Times bestselling author of "The Power of Habit: Why We Do What We Do in Life and Business". This means that daily exercise can pave the way not only for happiness, but also growth in all other areas of your life.

In a recent post from Joel, he wrote abou the power of daily exercise for his every day life. Coincidentally, he follows the above rules very accurately and exercises daily before doing anything else. He writes:

By 9:30am, I've done an hour of coding on the most important task I have right now on Buffer, I've been to the gym and had a great session, and I've done 30 minutes of emails. It's only 9:30am and I've already succeeded, and I feel fantastic.

I’ve spoken lots to Joel about his habit of exercising and here are some of the most important things to do, in order to set yourself up for success and make your daily exercise fun:

** Put your gym clothes right over your alarm clock or phone when you go to bed: This technique sounds rather simple, but has been one of the most powerful ones. If you put everything the way you want it for the gym before you go to sleep and put your alarm underyour gym clothes, you will have a much easier time to convince yourself to put your gym clothes on.

** Track your exercises and log them at the same time after every exercise: When you try to exercise regularly, the key is to make it a habit. One way to achieve this is to create a so called “reward”, that will remind you of the good feelings you get from exercising. In our big list of top web apps, we have a full section on fitness apps that might be handy.Try out Fitocracyor RunKeeper to log your work-outs. Try to have a very clear logging process in place.Log your work-out just before you go into the shower or exactly when you walk out of the gym.

** Think about starting small and then start even smaller: Here is a little secret. When I first started exercising, I did it with 5 minutes per day, 3 times a week. Can you imagine that? 5 minutes of timed exercise, 3 times a week? That’s nothing you might be thinking. And you are right, because the task is so easy and anyone can succeed with it, you can really start to make a habit out of it. Try no more than 5 or 10 minutes if you are getting started.

There are lots more great ideas for how you can create a habit from Joel in his post on the exercise habit, be sure to check it out, it might be a lot of help here. I am sure that if you dedicate just very little time, you can get into an awesome exercise routine that makes you happier, more productive and relaxed than ever before.

Quick last fact: You get the highest level of happiness with exercise if you are just starting out

As a quick last fact, exercise, the increase of the BDNF proteins in your brain acts as a mood enhancer. The effects are similar to drug addiction one study found. So when you start exercising, the feeling of euphoria is the highest:

“The release of endorphins has an addictive effect, and more exercise is needed to achieve the same level of euphoria over time.” (McGovern)

So this means that if you have never exercised before or not for a long time, your happiness gains will be the highest if you start now.

Exercise and how it affects our level of happiness is an absolutely exciting topic for me. Have you played around with this too and seen any results? I would love to hear your thoughts on how exercise and happiness work together.