How Exercise Makes You Happier and Less Stressed

Do you want to be happier? More calm and less stressed? There's a way to do this that's completely natural, free, and has no nasty side-effects: exercise. Scientists have shown again and again that exercise improves your mental health (Raglin, 1990).

It all comes down to what's happening in your brain. When you exercise, your brain releases lots of different molecules, and these have the effect of making you happier, calmer, and less stressed.

References: https://drive.google.com/file/d/1gyky1ZAtBtCDGvQo3wFc4SAcGo -RtNY_/view?usp=sharing





Approximate BDNF Levels Before and After Exercise (Briken, et al., 2016)



Ever heard of a runner's high? Scientists used to think that this was caused by the release of molecules called endorphins. But now, new evidence shows that the runner's high might actually be caused by your brain releasing molecules called endocannabinoids, doing so in response to exercise (Brellenthin, et al., 2017). Studies supporting this idea have confirmed that endocannabinoids make you feel happier and calmer (Fuss, et al., 2015).

There's a lot of debate at the moment as to what exactly is going on, and this hasn't been decisively confirmed- but it's likely that both molecules are involved in some way. They aren't the only molecules that improve happiness, however- here are some other essential ones.



Studies show that when you exercise, your brain releases three key chemicals: serotonin, dopamine, and noradrenaline (Greenwood & Fleshner, 2011). These are key in making you feel happier, and the more your brain makes, the calmer and less stressed you are (Prins, et al., 2011).



But even more key is a molecule called BDNF. BDNF makes your brain bigger and improves its ability to adapt to things that happen to it, helping you cope with stress and stay on top of things (Erickson, et al., 2011). Drugs that treat depression all work by increasing BDNF levels, and exercise does it naturally and with no side-effects (Bjoerkholm & Monteggia, 2016), demonstrated by the graph to the left.