## silver--lining Podcast Scripts

## 7. Sleep and Relaxation

Good morning, good afternoon, or good night! Wherever you are right now, I'm sure you have heard about the importance of sleep and rest countless times. Today, I want to give you an easily digestible scientific overview of why that is true and highlight the implications of sleep (or lack thereof) on our mental health. This is silver--lining, and I'm your "host", Daniel.
[intro music]

First, let's look at the general function of sleep. According to Johns Hopkins Medicine, "a healthy amount of sleep is vital for 'brain plasticity', or the brain's ability to adapt to input. If we sleep too little, we become unable to process what we've learned during the day and we have more trouble remembering it in the future. Researchers also believe that sleep may promote the removal of waste products from brain cells-something that seems to occur less efficiently when the brain is awake. Sleep is vital to the rest of the body too. When people don't get enough sleep, their health risks rise. Symptoms of depression, seizures, high blood pressure and migraines worsen. Immunity is compromised, increasing the likelihood of illness and infection. Sleep also plays a role in metabolism: Even one night of missed sleep can create a prediabetic state in an otherwise healthy person." Furthermore, the link between missing sleep and neurological disorders is bidirectional. The latter affects the former, and the former aggravates the latter. Both taken together can have further consequences for the rest of your body. According to NeurologyLive, "results from the Sleep Heart Health Study1 showed that middle-aged and older adults have roughly twice the risk of stroke if they are diagnosed with obstructive sleep apnea (OSA) [, or the cessation of breathing during sleep]. Not only was a strong correlation apparent between the [two] conditions, but the data also showed that the severity of OSA mattered; patients with milder cases of sleep apnea had a smaller increase in stroke risk, while patients with the most severe cases of sleep apnea had the highest risk for stroke. Investigators for the study, which followed more than 5000 patients for 9 years, also found that the risk for stroke was greater in men than women, although that may be due to a tendency for men to develop sleep apnea at a younger age than women."

To sum it up: A lack of sleep is "not good". Its effects on your physical health alone are already likely to trigger a second-stage reaction within your mental well-being. At the same time, it's always good to remember that mental health is physical health in most aspects, only that we do not tend to view it as such because research can be fuzzy and definitions blurry. There is a prevailing vicious circle: Lack of sleep leads to lack of energy, which leads to more difficulties in handling daily life, which can lead to lower self-esteem, which in turn gives rise to stress and worries that eventually can make it even harder to sleep at all, and so on.

Therefore, it's important to look out for ourselves. Here you have some strategies for more and better sleep. Since lack of sleep can be both the cause for and the result of mental health disorders, I'd like to point out that, if you are suffering from serious variants of the latter, you should talk to a professional and see what can be done (which is often a lot). I shall focus on the former aspect and tell you what you can do to ensure sufficient sleep when it's possible.

What sufficient sleep is has been heavily discussed among the scientific community, but often, it is very personal and thus varies. For different teenagers around the age of 18, anywhere 79 hours of sleep may be optimal. The tendency is that younger people should sleep more and older people need less sleep than this - but this also depends on what your preexisting health conditions are, what your occupation is, what your nutrition is like, and so on. Try sleeping as much as you can one day, and figure out how much you need to truly feel energized, but not tired again. You probably know your "optimum" already.

To sleep more, refrain from drinking coffein and perhaps alcohol starting late in the day, don't eat to late either, set a fixed sleep schedule for both week and weekend days (both sleeping and waking times) and stick to it consistently, eliminate unnecessary, long or irregular naps during the day, and limit your screen time and try out reading instead of scrolling on your phone the last hour before going to bed. For better sleep, minimize blue light exposure in the evening (there are settings or apps for this on all operating systems), organize your room and optimize your room temperature to your preference (this will be around $20^{\circ} \mathrm{C}$, or $70^{\circ} \mathrm{F}$, for many), meditate, take a shower before going to bed (without wasting water), exercise frequently (not right before going to bed, though), don't consume too many liquids before sleeping, look at more comfortable bedding, mattresses or pillows, and, under professional counsel and at responsible dosage, consider taking melatonin, magnesium or other supplements. Again, if you have preexisting conditions such as insomnia or depression, these ideas may be unhelpful and professional help more helpful to you.

Well, this was it for today's episode. I hope you liked it and found it helpful! Please let me know through our website's community forum if there are more sleep- or neurology-related topics that you would like me to present. Lucid dreaming sounds nice. Anyway, have a nice day! Remember, you are never alone, and remember your silver--lining.
[outro sound]

