

# Why We Sleep - Matthew Walker

April 6

This book starts out by going over the basic physiology behind sleep and the basis of the circadian rhythm. The author goes over the importance of adhering to the circadian rhythm and the important role it plays within a multitude of steroid hormones. The loss of sleep is also taken into account. If you will not be able to pay off your sleep debt. This is because loss of sleep adds up exponentially even exponentially if the loss of sleep is over a certain threshold. Whereas the sleep credit that you obtain is in a logarithmic state. Lack of sleep has many physiological impacts. This includes, but not limited to, blood sugar management, weight gain, affect on steroidogenesis. The author also goes over how the most natural sleep pattern for humans is a biphasal sleep pattern with 8 hours of sleep at night, then a 30 minute to 1 hour nap in the afternoon. Another aspect of sleep which the author touches upon is the fact that as we grow older our melatonin cycles change with decreased peaks and valleys, creating a strong case for "Melatonin Replacement Therapy". Another aspect which the author talks about is the fact that when you are short on sleep you look inherently more attractive. A major complaint of the author is how sleep is being diagnosed.



pharmacologically and in medicine. Many of the sleeping pills given to patients by doctors are really just giving pills which put the individuals in a state of sedation rather than the useful sleep states of REM and deep sleep.

Comparing the sleep activity of sleeping pills to that of normal sleep, you can see that the sleep induced by the sleeping pills is not of the largest and deepest sleeping wave. Another general idea which the author addresses is the current outlook on sleep within society. This cavalier attitude, which includes the boasting of lack of sleep attained, has caused a great deal of productivity loss. When comparing two townships of similar socioeconomic status you can see that the township which attained more deep had better productivity. The most important axioms when it comes to optimizing your sleep, are sticking to a consistent sleep schedule, exercising, but not right before sleeping, avoiding large meals and drinking right before sleep, avoiding medications which can affect sleep, not taking naps after 3pm, relax before bed, take a hot bath before bed, have a dark, cool bedroom, have white light at the right level, also don't be in your bed awake. Overall this book goes over the vast importance of sleep on physiology.