## **Studies Show That Bad Sleep Can Cause Weight Gain!**

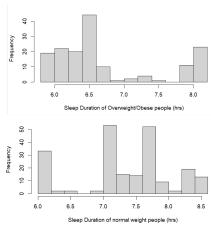
For this study the "Sleep, health, and lifestyle" dataset from kaggle was used in the analysis of the different aspects of a range of different types of people. The dataset contains various types of information which includes occupation, quality of sleep, BMI category, etc.. Despite the fact that the dataset did not have an incredibly large number of participants, the results are very clear and may be considered statistically significant.



## Sleep and Weight: Two Peas in a Pod

As the title of this article suggests, an incredibly interesting finding that came from the analysis of this dataset was the striking relationship between sleep and weight. It became apparent that overweight people not only have less sleep, but a lower quality of sleep, and even a higher probability of having a sleeping disorder. When subsetting the dataset by BMI category, it was found that the average quality of sleep on a 1 through 10 scale, 10 being the best possible sleep and 1 being the worst, overweight and obese people rated their sleep around 15% lower than those with normal weight.

Furthermore, overweight and obese people, on average, get 40 fewer minutes of sleep than their normal weighted counterparts. The graphs on the right portray the distribution of sleep duration, where the upper graph is the sleep of obese/overweight people, and the lower one is the sleep of normal weighted people. 40 minutes may not seem like much, but because it is daily the lost time accrues and affects the person. After only a week, the 40 minutes of daily sleep loss becomes 280 minutes(4 hr and 40 min), and after a month it is about 1200 minutes(20 hours) of total sleep loss. These countless hours of lost sleep(as compared to a normal person) could very well affect a multitude of things in a person's body, evidently being a possible cause of weight gain.



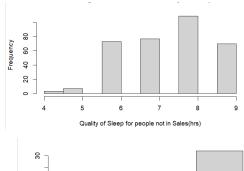
Another astounding piece of evidence supporting this relationship between sleep and weight is the clear effect that a sleeping disorder has on a person's weight. In fact, an obese or overweight person is 12.6 times more likely to have a sleeping disorder than a normal weighted person.

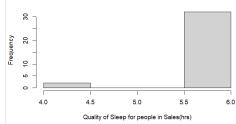
## If you want a good lifestyle, become an engineer:

When analyzing the lifestyles of engineers, it becomes abundantly clear that they have by far the best lives. Despite the fact that becoming an engineer is notoriously stressful, the stress levels of other professions are 46% higher than that of engineers. Not only that, 95% of engineers are normal weight while the rest of the population is only 50% normal weight. Lastly,

engineers get, on average, an additional hour of sleep as compared to other professions. Engineers evidently lead the best lives out of all other professions in the dataset, so why not become one?

## If you want a bad lifestyle, go into sales:





It is typically thought that salespeople have relatively easy jobs that require little technical knowledge and incur little stress(at least compared with an engineer), but the data says otherwise. For one, people in Sales have 37% more stress than those in other professions. People not in sales get over 45 minutes of sleep more than those in sales, with a quality of sleep 27% higher than those in sales. On the left is the distribution of quality of sleep for people, the upper one for people not in sales and the lower one for people in sales. Worse still, people in sales are 2.2x more likely to be overweight/obese than those in other professions. Apparently, going into sales could end up being one of the worst decisions of your life!