

## Introduction

Scientific evidence has already suggested that inactivity, obesity, and high sodium diet can raise blood pressure in people. The effects of blood pressure and sleep deprivation alone in healthy individuals has yet to be investigated.

The purpose of this study to investigate the correlation of healthy males between the ages of 18-45 years and blood pressure and if lack of sleep of 6 months or greater can lead to Stage 1 hypertension or worse.



## Methods

Health and sleep questionnaires were administered to determine health history average amount of sleep each day. Blood pressure assessments were administered 3 times using a blood pressure cuff with 5 minutes between assessments. The average blood pressure was recorded.

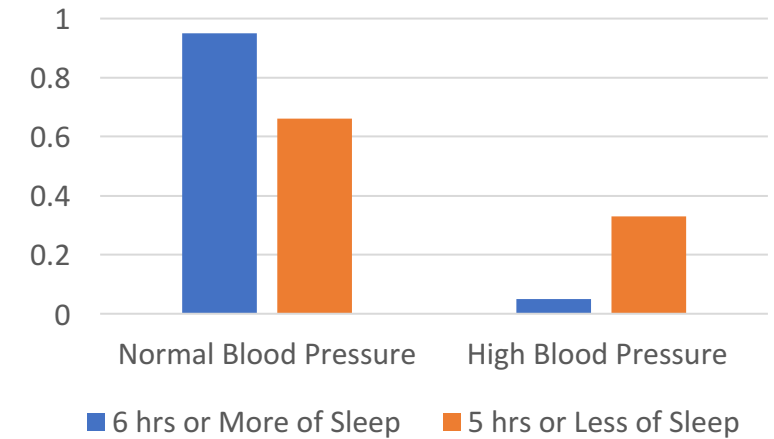
Pearson correlation was calculated to determine the association between average hours of sleep each night and blood pressure readings.



## Results

Participants who slept five hours or less had 33% elevated blood pressure. Individuals who got 6 hours or more of sleep per night had no significant data suggesting elevated blood pressure.

## SLEEP AND BLOOD PRESSURE



## Conclusion

The less sleep an individual gets, the higher the chance of developing elevated blood pressure. Further investigation is needed to conduct a long-term study on the long-term effects of sleep deprivation over time.

## References

1. Presentation Information. Experimental Biology website. <https://experimentalbiology.org/2018/Abstracts/Presentation-Information.aspx>. Updated 2019. Accessed July 21, 2019.
2. 1 in 3 Adults Don't Get Enough Sleep. CDC website. <https://www.cdc.gov/media/releases/2016/p0215-enough-sleep.html>. Updated February 18, 2016. Accessed July 22, 2019.