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## How Does Sleep Affect Body Mass Index in College Students?

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**PURPOSE:** To compare sleep quantity and body mass index in college students. **METHODS:** A convenience sample of 99 college students participated in a free comprehensive physical fitness assessment which included measurement of height and weight to determine body mass index. Body mass index was categorized as normal ( $< 25 \text{ kg/m}^2$ ) or overweight/obese ( $> 25 \text{ kg/m}^2$ ). Participants also completed an online health survey which included questions pertaining to the number of hours of sleep per night during the week. Sleep quantity was categorized as 1-3 hours, 4-5 hours, 6-7 hours, and 8 or more hours per night. An unpaired t-test was used to examine the relationship between sleep quantity and body mass index. **RESULTS:** Average body mass index for all participants was  $24.99 \text{ kg/m}^2$  ( $SD=4.69$ ) and hours of sleep per weeknight was 7.0 ( $SD=3.06$ ). The average body mass index for participants categorized as overweight/obese was  $28.67 \text{ kg/m}^2$  ( $SD=4.22$ ) and the number of hours of sleep per weeknight for the same group was 6.8 ( $SD=1.29$ ). The average body mass index for participants categorized as normal was  $21.96 \text{ kg/m}^2$  ( $SD=2.18$ ) and the number of hours of sleep per weeknight for the same group was 6.61 ( $SD=1.18$ ). Male participants had an overall average body mass index of  $25.44 \text{ kg/m}^2$  ( $SD=4.63$ ) and slept an average of 7.3 hours ( $SD=4.08$ ). Female participants had an overall body mass index of  $25.5 \text{ kg/m}^2$  ( $SD=4.67$ ) and the number of hours of sleep per weeknight for the same group was 6.67 hours ( $SD=1.40$ ). **CONCLUSION:** The results showed that, participants categorized as overweight/obese, had slightly more hours of sleep per weeknight compared to participants categorized as normal per body mass index standards. However, findings were not significant ( $t=0.72$ ;  $p>.05$ ).