

# Sleep to protect your brain

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A new study from Uppsala University, Sweden, shows that one night of sleep deprivation increases morning blood concentrations of NSE and S-100B in healthy young men. These molecules are typically found in the brain. Thus, their rise in blood after sleep loss may indicate that a lack of snoozing might be conducive to a loss of brain tissue. The findings are published in the journal *SLEEP*.

Fifteen normal-weight men participated in the study. In one condition they were sleep-deprived for one night, while in the other condition they slept for approximately 8 hours.

"We observed that a night of total [sleep loss](#) was followed by increased blood concentrations of NSE and S-100B. These brain molecules typically rise in blood under conditions of [brain damage](#). Thus, our results indicate that a lack of sleep may promote neurodegenerative processes", says sleep researcher Christian Benedict at the Department of Neuroscience, Uppsala University, who lead the study.

"In conclusion, the findings of our trial indicate that a good night's sleep may be critical for maintaining brain health", says Christian Benedict.

**More information:** Benedict C et al. Acute sleep deprivation increases serum levels of neuron-specific enolase (NSE) and S100 calcium binding protein B (S-100B) in healthy young men. *SLEEP* (in press)

Provided by Uppsala University

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