

Want to Be Smarter? Get More Sleep

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Gray matter refers to specific cells in your brain that get their name from their color. It's made up neuronal cells responsible for taking in and processing information from nerve fibers in the brain, in the form of nerve signals.

Several studies have concluded that gray matter may be linked to intelligence. In fact, having more gray matter seems to be highly correlated to how quickly a person processes incoming information – whether the information is from an external stimulus or in the form of questions requiring interpretation. Because of this probable link, scientists are studying gray matter and looking for ways to increase the size and effectiveness of gray matter in people's brains.

One area of focus is the relationship between how much consistent sleep you get and the amount of gray matter in the brain. A number of studies support the idea that sleep significantly affects how much gray matter you have. There appears to be a close connection between having a smaller amount of gray matter in your brain's frontal lobe and having sleep problems. One study of Gulf War veterans, published in *Journal Sleep*, clearly showed a link between the amount of gray matter and how much sleep each vet was able to get each night.

Studies of cognitive development in children reinforce this correlation between sleep and gray matter. A child's brain is not yet fully developed; because of this they can be affected more dramatically by external stimuli. Studies show that the more sleep a child gets, especially in the adolescent phase of childhood development, the better they perform at activities testing cognitive understanding.

Evidence reinforced by thousands of individual reports and a number of scientific studies suggests that more sleep increases your brain power and the amount of gray matter you have. Getting a good night's sleep can directly affect your performance the next day, whether on a school exam or at work. The really interesting question for researchers is whether better sleep patterns can, over time, restore or replace some of the lost gray matter.

If you struggle to get enough sleep, you're not alone. Tens of millions of Americans are tossing and turning just like you, due to a variety of sleep disorders, which is my specialty in medicine.

Here are some things you can do to get a good night's sleep:

- eliminate distractions, like using mobile electronic devices at bedtime
- keep your bedroom dark and quiet
- use a white noise device to help you get to sleep
- go to bed and wake up at the same time each day

Don't fall into the trap of believing that sleep debt is harmless simply because the effects of sleep deprivation haven't caught up with you.