

睡眠 与 脑健康

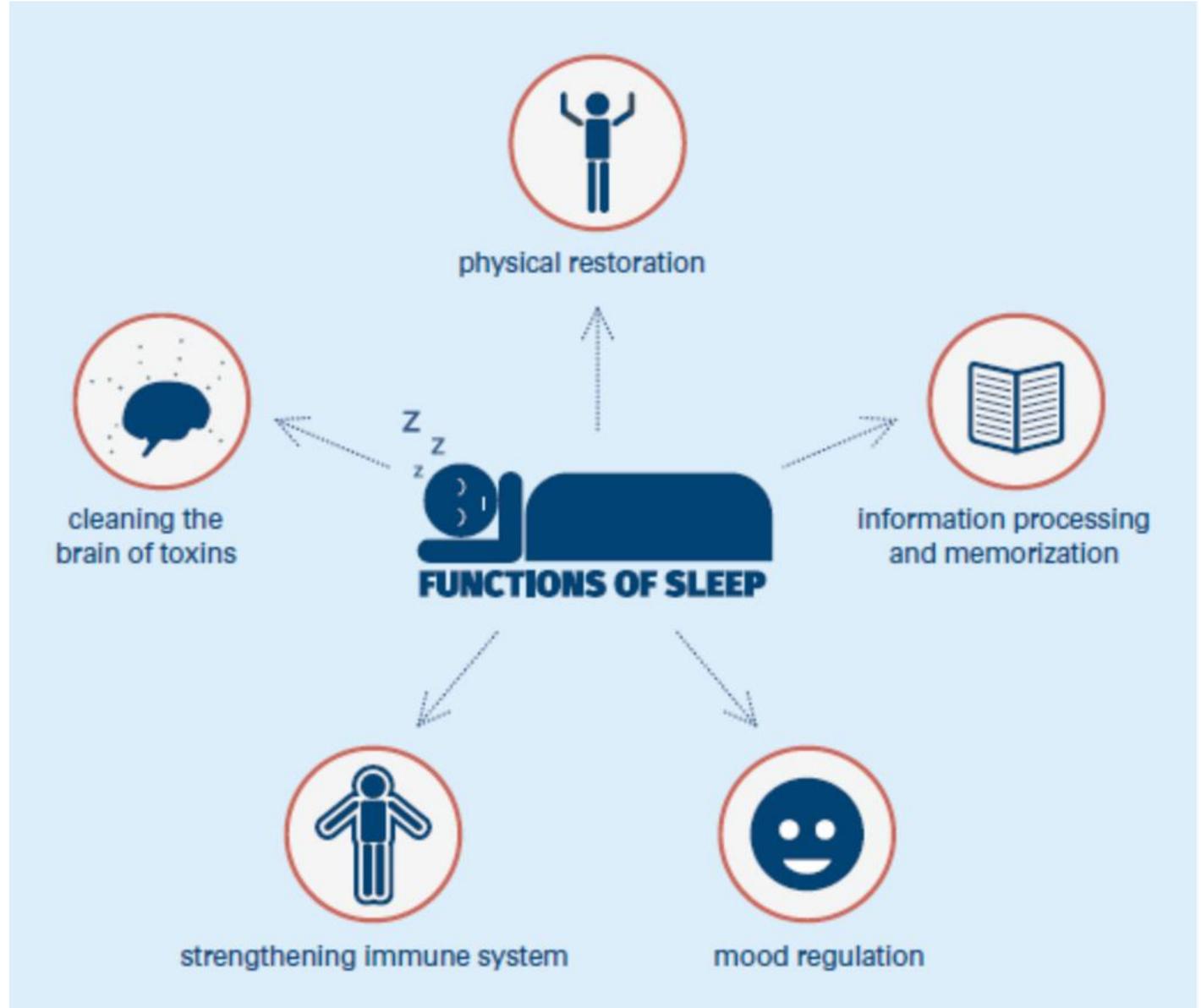
吴恒趋

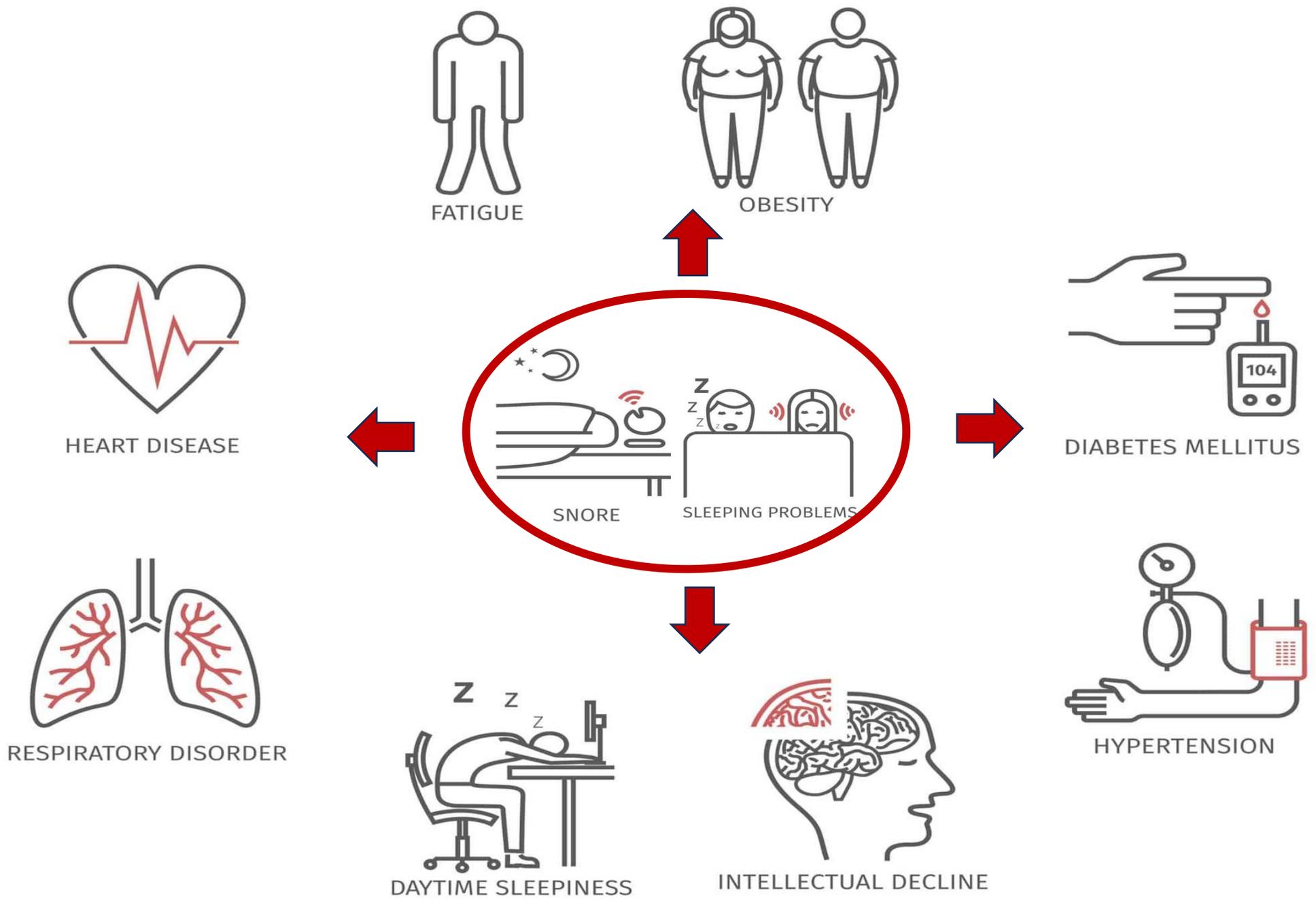
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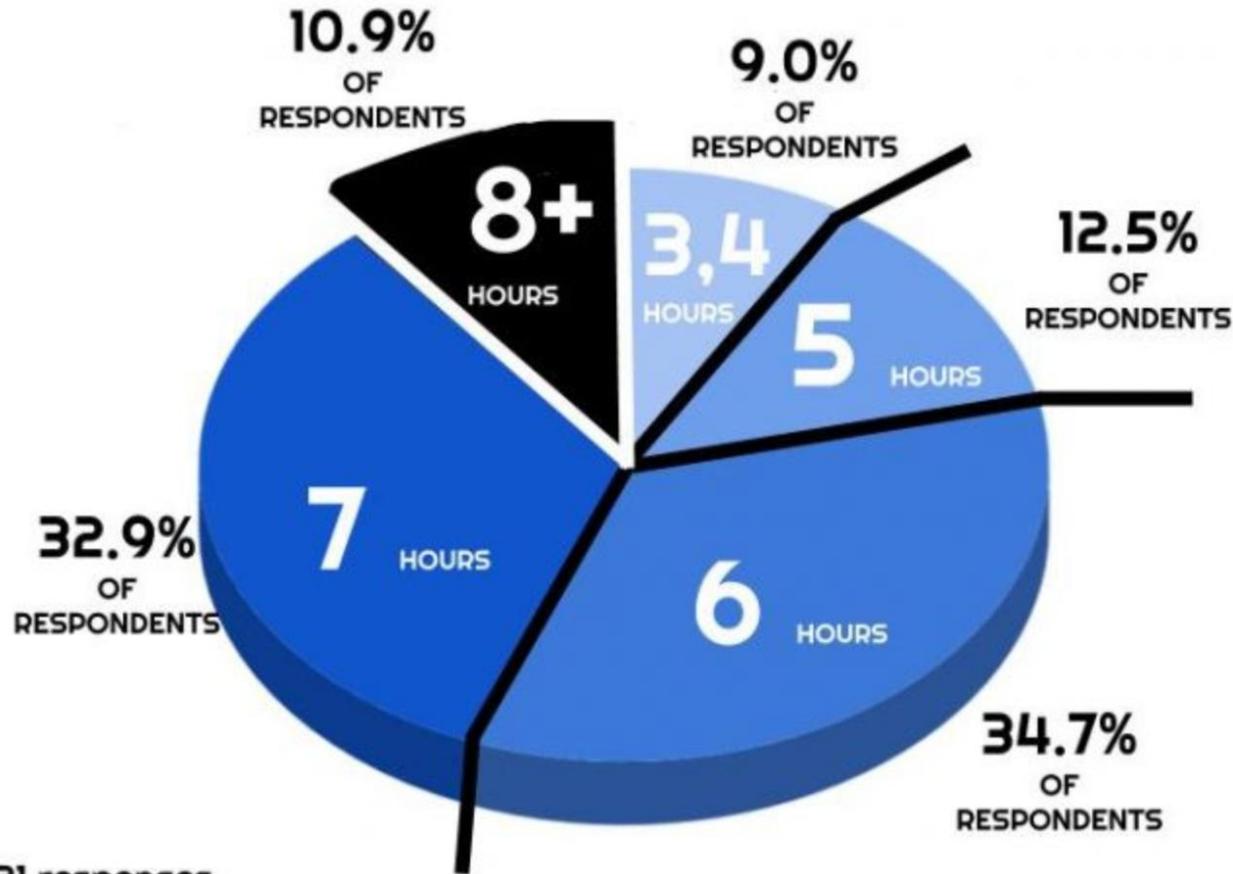
Why Sleep Important

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HOURS OF SLEEP PER NIGHT



*Based on 331 responses from a survey sent to all students in the General Student News email Nov. 7-16

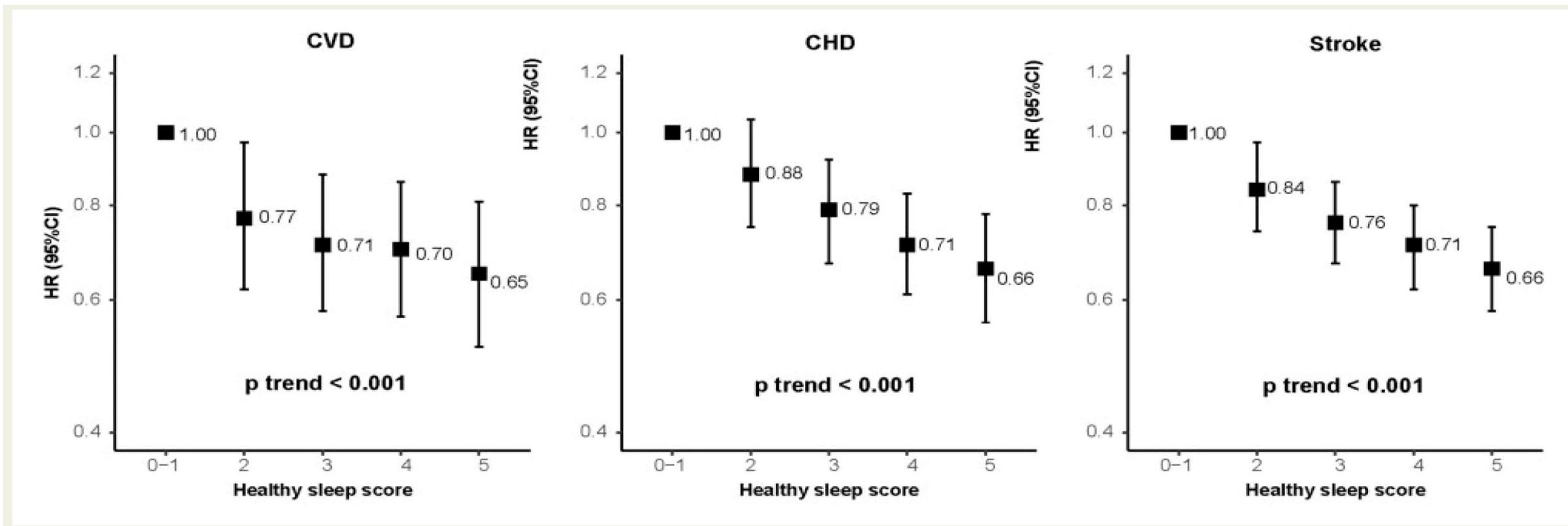
social status:

.....many people are unable to have high-quality sleep.....

What kind of impact will have on our brain?

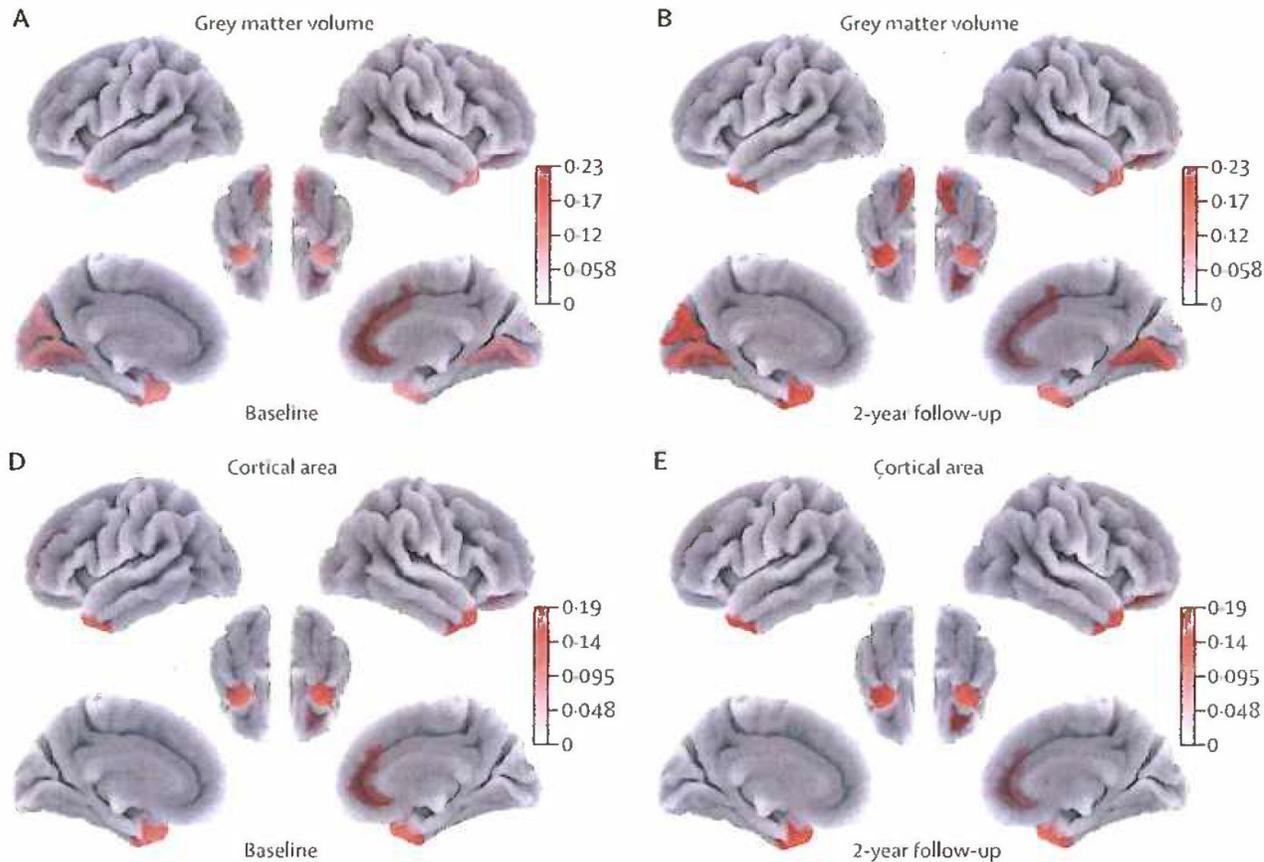
Sleep Deprivation and CVD

Sleep patterns, genetic susceptibility, and incident cardiovascular disease: a prospective study of 385 292 UK biobank participants



Incident risk of cardiovascular diseases(often leading to brain damage) **according to healthy sleep**

Sleep-deprived people suffer long-term damage to their brains



THE LANCET Child & Adolescent Health

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Effects of sleep duration on neurocognitive development in early adolescents in the USA: a propensity score matched, longitudinal, observational study

Fan Nils Yang, PhD [†] • Weizhen Xie, PhD [†] • Ze Wang, PhD [✉] • Show footnotes

- 8,323 children aged 9-10 years
- 4,142 in the adequate sleep group and 4,181 in the insufficient sleep group
- examined MRI images, medical records, and surveys completed at baseline and at a two-year follow-up at 11-12 years of age
- Result: Children who slept less had smaller gray matter volumes on regions responsible for memory, intelligence, and well-being and the differences persist

Lack of sleep causes the brain to shrink, and the effects persist



Better sleep, smarter brain

Thanks

HOW SLEEP AFFECTS YOUR HEALTH

SLEEP DEPRIVATION

IMPAIRED COGNITION

Lack of sleep impairs memory and your ability to process information.

INCREASES SYMPTOMS OF DEPRESSION

A lack of sleep disrupts neurotransmitters to the brain which regulates mood.

HIGHER LEVELS OF ANXIETY

Lack of sleep raises the brain's anticipatory reactions, increasing overall anxiety levels.

INCREASED RISK OF BREAST CANCER

Melatonin decreases when you are exposed to light late at night. A decrease in melatonin disrupts estrogen production which can lead to breast cancer.

STROKE RISK

When you sleep 6 hours or less a night, your chance of a stroke increases 4x.

INCREASED RISK FOR HEART DISEASE

Blood pressure decreases when you sleep.

INCREASED RISK FOR DIABETES

Lack of sleep increases cortisol and norepinephrine, both are associated with insulin resistance.

WEIGHT GAIN

Sleep helps balance hormones that make you feel hungry and full.

