

Disrupted sleep linked to increased amyloid-beta production

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(HealthDay)—Disrupted sleep is associated with increased amyloid- β

production in adults, according to a study published online Dec. 8 in the *Annals of Neurology*.

Brendan P. Lucey, M.D., from the Washington University School of Medicine in St. Louis, and colleagues examined whether sleep disruption increases soluble amyloid- β using indwelling lumbar catheters to serially sample [cerebrospinal fluid](#) while eight participants (aged 30 to 60 years) were sleep-deprived, treated with sodium oxybate, or allowed to sleep normally. Amyloid- β kinetics were measured by infusion with $^{13}\text{C}_6$ -leucine.

The researchers found that, compared with controls who were allowed to sleep normally, sleep deprivation correlated with increased overnight amyloid- β -38, amyloid- β -40, and amyloid- β 42 levels (25 to 30 percent increases).

"These findings suggest that disrupted sleep increases Alzheimer's disease risk via increased amyloid- β production," the authors write.

Several authors disclosed [financial ties](#) to C2N Diagnostics, including receiving royalties for patents and technology.

More information: [Abstract](#)
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