

# Disrupted sleep linked to increased amyloid-beta production

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amyloid- $\beta$  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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(HealthDay)—Disrupted sleep is associated with increased amyloid- $\beta$  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- $\beta$  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- $\beta$  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- $\beta$ -38, amyloid- $\beta$ -40, and amyloid- $\beta$ -42 levels (25 to 30 percent increases).

"These findings suggest that disrupted sleep increases Alzheimer's disease risk via increased

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