

Could Alzheimer's originate outside the brain?

We associate Alzheimer's with physical deterioration in the brain, but new research shows the nerve damage responsible for Alzheimer's onset might actually originate outside the brain, as a cascade of breakdowns that begin elsewhere in the body. The findings could open a whole new pathway for research into the devastating degenerative neurological condition.

The brains of Alzheimer's patients exhibit an excess of a protein called amyloid-beta, which coalesces into "plaques" that disrupt neurological function. Until now, scientists have generally believed that deposits of amyloid-beta found in the brain originate in the brain. But the protein can be synthesized in peripheral tissues anywhere in the body.

...

[S]cientists surgically joined healthy mice to mice that had been genetically modified with high concentrations of amyloid-beta. Then they monitored the mice's brains for signs of the Alzheimer's disease-associated plaques. After a year, the healthy mice developed the same telling neurological symptoms as the genetically modified mice.

...

[S]ince the cell walls separating our blood vessels from our brain's gray matter become weaker as we get older, the amyloid-beta in our bodies could cross over into our brains, making them a catalyst for dementia.

[Editor's note: Read the [full study](#) (behind paywall)]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Alzheimer's Disease Might Start in Our Bodies, Not Just Our Brains