





A new study finds evidence that good oral hygiene could help prevent Alzheimer's disease.  
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## Gum disease-causing bacteria could spur Alzheimer's

By [Jocelyn Kaiser](#) | Jan. 23, 2019 , 2:00 PM

Poor oral health is a risk factor for Alzheimer's disease. What's not clear is whether gum disease causes the disorder or is merely a result—many patients with dementia can't take care of their teeth, for example. Now, a privately sponsored study has confirmed that the bacteria that cause gum disease are present in the brains of people with Alzheimer's, not just in their mouths. The study also finds that in mice, the bacteria trigger brain changes typical of the disease.

The provocative findings are the latest in a wave of research suggesting microbial infections may play a role in Alzheimer's disease. But even some scientists who champion that once-fringy notion aren't convinced that *Porphyromonas gingivalis*, the species fingered in the new study, is behind the disorder. "I'm fully on board with the idea that this microbe could be a contributing factor. I'm much less convinced that [it] causes Alzheimer's disease," says neurobiologist Robert Moir of the Harvard University-affiliated Massachusetts General Hospital (MGH) in Boston, whose work suggests the  $\beta$ -amyloid protein that forms plaques in the brains of Alzheimer's patients is [a protective response to microbial invaders](#).

The new study, published today in *Science Advances*, was sponsored by the biotech startup Cortexyme Inc. of South San Francisco, California. Co-founder Stephen Dominy is a psychiatrist who in the 1990s became intrigued by the idea that Alzheimer's could have an infectious cause. At the time, he was treating

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