



## Alzheimer's and gum disease

As you age, it is important to maintain the same oral health habits you learned as a child. This includes brushing twice daily, flossing at least once per day, using fluoride and getting routine dental visits.<sup>1</sup> These preventive habits will help keep both your mouth and body healthy, especially for those who are more at risk for certain diseases, such as Alzheimer's disease.

Alzheimer's is a degenerative disorder that results in memory loss and is the most common cause of dementia in adults 65 and older.

A recent study suggests a possible association between Alzheimer's and gum disease.<sup>2</sup> Researchers analyzed brain tissue from Alzheimer's patients and found evidence of the bacteria *P. gingivalis*. A toxic enzyme secreted by *P. gingivalis* was found in 96 percent of the brain tissues. *P. gingivalis* also increased the production of beta-amyloid — a main component of amyloid plaque found in Alzheimer's patients.

The study also confirmed that *P. gingivalis* can travel from the oral cavity to the brain and that the related gingipains can destroy brain neurons. This suggests a biological connection between bacteria found in gum disease and how it may play a role in the development of Alzheimer's.<sup>3,4</sup>

While the study has noteworthy findings, more research is needed. Regardless, the study does reaffirm the important role gum health plays in overall wellness, including how crucial it is to manage gum disease — especially in older adults or for individuals who have an increased risk for dementia. Speak with your dentist if you or a loved one has an increased risk, and make sure to keep up with regularly scheduled dental appointments, as well.

*For more information about the link between gum disease and Alzheimer's, visit [DeltaDental.VA.com](https://www.DeltaDental.VA.com).*

<sup>1</sup>"Older Adults: Don't Brush Off Dental Care"; Delta Dental, [www.deltadental.com/us/en/protect-my-smile/life-stages/oral-care-for-older-adults/older-adults--don-t-brush-off-dental-care.html](http://www.deltadental.com/us/en/protect-my-smile/life-stages/oral-care-for-older-adults/older-adults--don-t-brush-off-dental-care.html)

<sup>2</sup>Inflammation as a potential mediator for the association between periodontal disease and Alzheimer's disease. Amber Watts, Eileen M Crimmins, and Margaret Gatz *Neuropsychiatr Dis Treat.* 2008;4(5):865-76. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2626915/#>

<sup>3</sup>Serum antibodies to periodontal pathogens are a risk factor for Alzheimer's disease. Pamela Sparks Stein, Michelle J. Steffen, Charles Smith, Gregory Jicha, Jeffrey L. Ebersole, Erin Abner, Dolph Dawson III *Alzheimer's & Dementia* Volume 8, Issue 3, May 2012. <https://www.sciencedirect.com/science/article/pii/S1552526011001129>

<sup>4</sup>Association between periodontitis and Alzheimer's disease. Abbayya K, Puthanakar NY, Naduwinmani S, Chidambar YS. *N Am J Med Sci.* 2015;7(6):241-6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4488989/>