

## LOSS OF TEETH LINKED WITH POORER MEMORY

Here's yet another reason to keep care of those pearly whites. A new study published in the *European Journal of Oral Sciences* shows that, there's a significant relationship between the number of natural teeth and memory performance.

The study involved 273 men and women between the ages of 55 and 80 who had, on average, 22 of their natural teeth left. The participants underwent an extensive clinical oral examination and health assessment and performed a variety of memory tests. The researchers found that even after taking into account differences in age, gender, education, medical history, occupation, and living conditions, those with more tooth loss did poorer on the memory tests.

Not all types of memory were found to be impaired due to tooth loss. Those with tooth loss performed worse on tests that tested for episodic memory, which involves the recollection of specific experiences, events, and situations, and semantic memory, which recalls knowledge learned such as facts, meanings, and concepts. On the other hand, researchers found no link between tooth loss and working memory, which recalls and processes information needed to plan and carry out behavior.

The researchers hypothesize that the reduced sensory signals that the brain receives as a result of tooth loss somehow affects brain functioning, including memory. Natural teeth send sensory signals to the brain for motor functions, such as chewing and biting, and sensation. Prosthetic replacements don't have the nerves and ligaments that attach natural teeth to the jaw, which means reduced sensory signals.

Other explanations proposed by the researchers include gum infections, which lead to tooth loss and can cause inflammation that then leads to neuronal death and memory loss, and the avoidance of eating certain foods that contain nutrients important to memory because of tooth loss.

Several dentists contacted by Daily Glow weighed in with their opinions on the study.

"Teeth are calcified neurons derived from neuronal tissue that send signals to the brain. Decreased brain activity due to tooth loss could yield memory loss for the individual. More follow up studies will be necessary, but this supports the growing body of evidence that oral



health is directly linked to the rest of the body," said board certified prosthodontist and oral care expert Dr. Jonathan B. Levine.

**The link between tooth loss and memory loss certainly doesn't surprise Dr. Lana Rozenberg, who specializes in cosmetic dentistry in New York City.**

**"It makes total sense; when people are missing teeth and need to wear dentures, they avoid certain foods and that can lead to lack of certain vitamins and nutrients in the system, which, in turn, can lead to memory loss," she noted.**

Dr. Marc Lowenberg, of Lowenberg & Lituchy, however, believes that the study is "totally inconclusive" considering that there were only 273 participants. If there is a link between tooth loss and memory, however, he does feel that it may be because of people with tooth loss not getting the nutrients necessary for maintaining good memory.

"I also feel there is a correlation between having good oral hygiene and having a good education and thus having better memory," he said.

Besides not regularly brushing and flossing and going to the dentist for annual cleanings, be aware of these surprising things that can cause tooth damage over time, contributing to tooth loss.