

DENTAL, HEALTH & MEDICAL NEWS

# Why Brushing Teeth Is Key To Long Life: 6 Ways Gum Disease Can Lead To Major Health Problems

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If you thought that preventing gum disease is only to the benefit of your oral hygiene, think again. Gum disease, also called periodontitis, can be a prelude to more serious health problems far beyond your mouth. As it turns out, the health of your gums can dictate long term health from head to toe.

Millions of Americans currently suffer from gum disease. Symptoms include swollen, red and tender gums. Gum disease is curable if caught early. Avoiding gum disease is as simple as flossing regularly, brushing your teeth twice a day, using mouthwash, and going for routine check-ups at the dentist.

So just how is the condition linked to overall health? Research published on StudyFinds over the years reveals links between gum disease to everything from heart and blood pressure complications to mental health problems. Be sure to visit your dentist regularly to find out the health of your gums and learn ways to prevent periodontitis.

Here's a look at some of the health issues tied to gum disease:

#### Increases risk of heart disease

Add gum disease to the growing list of factors that increase your risk of <a href="heart disease">heart disease</a>, according to findings. The association was stronger the more severe the periodontitis.

"Our study suggests that <u>dental screening programs</u> including regular check-ups and education on proper dental hygiene may help to prevent first and subsequent heart events." says Dr. Giulia Ferrannini of the Karolinska Institute in Stockholm, Sweden and study author. "We postulate that the damage of periodontal tissues <u>in people with gum disease</u> may facilitate the transfer of germs into the bloodstream. This could accelerate harmful changes to the blood vessels and/or enhance systemic inflammation that is harmful to the vessels." People with gum disease were 49% more likely to experience heart problems than people with healthy gums, the study concludes.

## Risk of developing mental health problems, autoimmune conditions

Poor dental health may also lead to <u>poor mental health</u>, a study reveals. Researchers from the University of Birmingham say developing gum disease can also increase a risk of suffering from depression and anxiety over the next few years. Along with mental health problems, study authors found that a history of gum disease can significantly raise a person's chances of developing autoimmune diseases, heart disease, and even metabolic disorders like <u>diabetes</u>.

Researchers examined the medical history of more than 64,000 people with a <a href="history of periodontal disease">history of periodontal disease</a> during the study. This includes gingivitis and periodontitis — a serious gum infection that leads to bleeding gums and can destroy the jawbone without immediate treatment. Overall, 60,995 participants had gingivitis and 3,384 had periodontitis.

Results show those with periodontal disease at the start of the study had a 37-percent higher risk of developing mental health problems over the next three years. Study authors note these issues include higher <u>rates of depression</u>, anxiety, and "serious mental illness."

"An important implication of our findings is the need for effective communication between dental and other healthcare professionals to ensure patients obtain an effective treatment plan targeting both oral and wider health to improve their existing overall health and reduce the risk of future illness," adds co-senior author Professor Krish Nirantharakumar.

# Those with gum disease 9X more likely to die from COVID-19

It's no secret that patients have been scared to enter the dentist's office <u>during COVID-19</u> due to all the tiny particles that can fly through the air. For people with gum issues however, getting a cleaning could actually save their lives. A study finds patients with gum disease who contract COVID-19 are an alarming *nine times* more likely to die.

An international team finds COVID patients are three times more likely to end up in intensive care or on a ventilator if they already suffer from periodontitis. Around half the world's population over 30 years-old suffers from periodontitis. Gum disease causes swelling and bleeding in and around the gums which line the teeth.

If not treated properly, the inflammation can spread throughout the body and even infect the lungs. Coronavirus patients on ventilators could be particularly vulnerable as they are more likely to inhale oral bacteria, scientists say.

"The results of the study suggest that the inflammation in the oral cavity may open the door to the coronavirus becoming more violent," study co-author Professor Lior Shapira of the Hebrew University. "Oral care should be part of the health recommendations to reduce the risk for severe COVID-19 outcomes."

### From gum to gut: Periodontitis makes IBD worse

<u>Inflammatory bowel disease</u> (IBD) affects about three million people in the United States. An imbalance in the <u>gut's microbiome</u> can be the cause of painful, and sometimes chronic, stomach conditions. A study suggests trouble in your gut may actually start with trouble in your mouth. Researchers from the University of Michigan hygiene can make a person's IBD worse.

The study reveals two possible ways bacteria in a patient's mouth travels to the gut and causes more inflammation. Researcher Nobuhiko Kamada says there is growing evidence that people with IBD have an overgrowth of foreign bacteria in their gut. That Kamada says, typically starts within one's mouth.

Researchers say gum disease creates an unhealthy imbalance in the mouth's microbiome. That bacteria causes both inflammation and disease which then travels down into the gut. This particular process doesn't trigger IBD, researchers say, but it did symptoms of mice with colon inflammation. "In mice with IBD, the healthy gut bacteria are disrupted, weakening their ability to resist disease-causing bacteria from the mouth," explains Kamada.

The team also says periodontitis actually causes the body's own immune system to damage the gut. Gum disease causes the immune system to react, sending T cells to the mouth to fight infection. In a healthy gut, inflammatory and regulatory T cells work in harmony and know how to tolerate local bacteria. Researchers say gum disease triggers mostly inflammatory T cells to react. Those cells eventually travel to the gut and throw off the natural balance, causing diseases to worsen.

## Strong connection to high blood pressure

What do puffy, bleeding gums have to do with high blood pressure? Apparently more than you might expect. Research shows that people battling gum disease are more likely to suffer from hypertension.

High blood pressure is the leading cause of premature deaths worldwide, impacting 30% to 45% of the population. Similarly, inflammation of the gums, connective tissue and bones supporting the teeth is present in more than half of the world's population. Doctors say it's no coincidence so many people struggle with both conditions.

Past research has suggested a link between the two ailments. For the study, researchers gathered information from 81 studies conducted in 26 countries. They sought to determine how often patients with moderate to severe cases of gum disease also <a href="https://have.high.org/newsure">have.high.org/newsure</a>. Results showed that patients with periodontitis tended to have higher arterial blood pressure — 4.5 mmHg higher systolic (contracted) and 2 mmHg diastolic (resting) blood pressures, on average.

While this may seem like a small number, researchers say that just a 5 mmHg rise in blood pressure increases the risk of death from heart attack or stroke by 25%. In all, the authors calculated that the odds of having hypertension were 22% higher for patients with moderate to severe periodontitis and 49% higher for patients with severe periodontitis.

#### Gum disease linked to Alzheimer's disease

Brushing your teeth twice a day will do more than just clean your teeth, it may also help prevent Alzheimer's disease, a study finds.

Researchers from the University of Bergen in Norway say that the bacteria that causes the gum disease gingivitis — P. gingivalis — was found in the <u>brains of Alzheimer's</u> <u>patients</u> and is believed to significantly raise one's odds of developing the condition. Enzymes produced by the bacteria, known as gingipains, destroy nerve cells in the brain and cause memory loss, before turning into Alzheimer's, the authors say.

For the study, researchers recruited 53 people diagnosed with Alzheimer's disease and found the bacteria in the brains of 96% of participants. Though the bacteria doesn't cause Alzheimer's by itself, researchers say that it plays a major role in its development may also cause it to progress faster.

"We discovered DNA-based proof that the bacteria causing gingivitis can move from the mouth to the brain," says study co-author Piotr Mydel, a researcher from the of Clinical Science at the university.

As always, check with your dentist and doctor about issues dealing with your oral hygiene or any concerns you have with the health issues listed in this article.

Author

### **Matt Higgins**