

A Healthy Body Needs a Healthy Mouth

Why Oral health matters... more than you might think!

Good oral health isn't about simply trying to avoid cavities. It's about caring for your teeth and gums so you can avoid more complex health problems.

Oral health issues can be early warning signs for many diseases. For example, bone loss in your jaw or problems when you open your mouth to do things like eat, talk, and yawn can be caused by osteoporosis and arthritis.¹

Moreover, to better understand the effects oral health has on other parts of the body, researchers took a closer look at the relationship between gum disease and other health conditions.²

Gum disease

Good oral hygiene includes regular brushing and flossing to keep teeth free from plaque. In its early stages of development, dental plaque contains millions of bacteria which can be easily removed with proper brushing and flossing. Without regular gum maintenance, soft deposits start to accumulate on the teeth. Over time, the build-up of dental plaque will harden to form tartar which can lead to **gingivitis**.³

Gingivitis is the mildest form of periodontal disease or gum disease. There is usually little or no discomfort at this stage other than redness and slight bleeding when flossing or brushing teeth. While gingivitis is often caused by poor oral hygiene, factors such as diabetes, hormonal changes, smoking, aging, and certain medication use may also contribute to this disease.^{4,5}

If left untreated, gingivitis will turn into **periodontitis**. At this stage, the infection spreads below the gum line and starts to break down the gum tissue which supports the tooth. Some forms of periodontitis may lead to swelling, bleeding or colour changes in gums, but even at this stage, people may experience only very mild symptoms.^{6,7}

While preventable, gum disease that goes untreated can result in years of inflammation and bacterial infection in the mouth which can then travel to other parts of the body. Some research suggests that the bacteria responsible for periodontitis can enter your bloodstream through your gum tissue.⁸

“Oral health is essential to general health and quality of life. It is a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual’s capacity in biting, chewing, smiling, speaking, and psychosocial well-being.”

World Health Organization,
2012

As such, gum disease is the basis for the proposed link between oral health and other health issues.⁹

Gum disease and its link to other health conditions

Let's take a closer look at some health issues like diabetes, respiratory illness, cardiovascular and Alzheimer's diseases and their links to gum disease.

Diabetes

Research suggests an important link between gum disease and diabetes.¹⁰ While gum disease also occurs in people who do not have diabetes, it is more common and more severe in those with diabetes.

Let's explain this further.

People with diabetes are more susceptible to bacterial infections and therefore, are more susceptible to gum disease.¹¹

In addition, new research suggests gum disease makes it more difficult for people with diabetes to control their blood sugar levels. This is explained by the fact that periodontal infections can provoke insulin resistance. Moreover, it was found that bacterial infection can also decrease the body's ability to use glucose properly.¹²

In light of these findings, it is recommended that people with diabetes be especially vigilant with their oral health care. Regular gum treatment like teeth cleaning can reduce inflammation of the gums and improve blood sugar control in people with diabetes.^{13,14,15}

Respiratory Illness

There is more and more scientific evidence that links oral health to various respiratory illnesses including pneumonia and chronic obstructive pulmonary disease (COPD).¹⁶

The mouth and throat areas can act as a reservoir for respiratory infections. Bacteria contained in dental plaque and oral debris can be inhaled into the lungs and cause illness.¹⁷ New research identifies gum disease as the leading culprit for causing pneumonia, which can be especially serious for older adults.¹⁸

This can occur in instances where older adults can no longer clean their teeth regularly or as thoroughly as they should because they have lost the necessary dexterity. In response, the build-up of bacteria in their mouth puts them at greater risk of developing pneumonia.

On the other hand, studies show that simple preventive measures, such as supervised tooth brushing and regular use of antibacterial mouthwashes, can lower the risk of pneumonia among seniors and especially among seniors living in nursing homes with reduced access to oral health care. ^{19,20,21}

In addition, chronic obstructive pulmonary disease (COPD) has been linked to gum disease. While COPD is primarily caused from the effects of smoking, initial studies indicate that gum disease may also contribute to make it worse. ^{22,23}

Cardiovascular Disease (CVD)

Research suggests that people with gum disease may have increased risk for CVD. While a cause-and-effect relationship has not yet been proven, research indicates that inflammation caused by gum disease may be responsible for this association. It is suggested that bacteria may travel to the arteries in the heart, where they might trigger a cycle of inflammation and arterial narrowing that contributes to heart attacks.

More studies are needed to support that CVD may be improved by gum treatment. ^{24,25}

Alzheimer's disease

Knowing that Alzheimer's disease may be associated with inflammation in the brain, researchers have started to investigate links between the inflammation in other parts of the body caused by periodontal diseases and Alzheimer's disease. Early findings seem to correlate this hypothesis, but it is still too early at this stage to establish a clear connection between the two. It will certainly be interesting to follow this closely in the near future. ^{26,27,28,29}

Oral Cancer

Oral cancer can develop at any age. That said, your chances of developing oral cancer increases dramatically at age 40 and peaks at 60 years of age.

In 2013, the Canadian Cancer Society estimated at least 4,100 new cases of oral cancer were diagnosed across Canada. Sadly, about one in three of these cases will result in death.³⁰ The good news is that oral cancer is treatable provided it is detected early. While the cause of oral cancer hasn't been clearly identified you can protect yourself by learning more about some of the common risk factors:³¹

- Smoking and chewing tobacco (at higher risk if combined with alcohol)
- Heavy alcohol consumption (at higher risk if combined with the use of tobacco products)
- Excessive sun exposure (lips)
- Oral sex — Human Papillomavirus Infection (HPV)

- Poor diet (lack of consumption of fruit and vegetables)

Check your mouth regularly for these signs and symptoms:

- Changes in the colour or texture of gums, cheeks or tongue (like white or dark red patches)
- Presence of lumps in the neck or mouth tissues
- Bleeding or numbness in the mouth
- Mouth sores that do not heal
- Difficulty swallowing
- Changes in taste or tongue sensation

Regular oral check-ups with an oral health professional will enable early detection and, therefore, reduce risks of developing diseases or more serious complications.

The Bottom Line

- **Oral health matters!** It can impact overall well-being and contribute to other diseases if good oral health is not maintained.
 - Studies show that gum disease can increase the risk of diabetes, pulmonary infections like pneumonia, and some cardiovascular diseases.
- **Read the [Smile: Healthy Teeth, Healthy Body booklet](#) to:**
 - Get tips on how to maintain the health of your mouth, gums and teeth; and
 - Learn how to recognize the signs and symptoms of gum disease and oral cancer

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