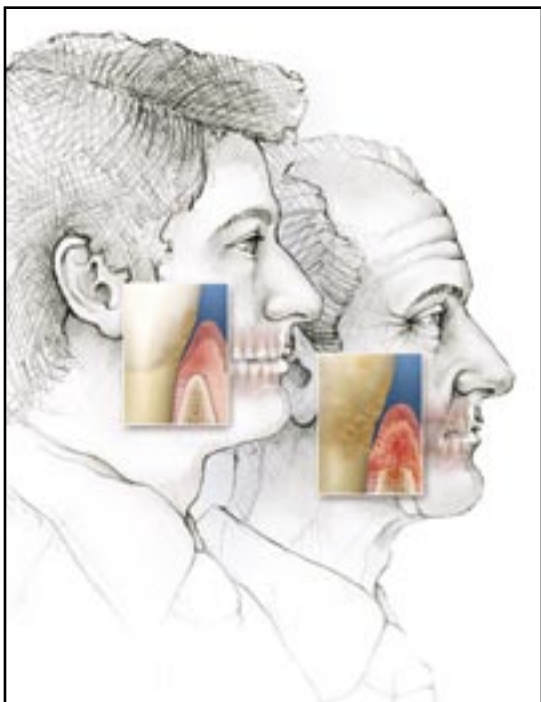


# Helping Patients Understand the Importance of Maintaining Oral Health Throughout the Aging Process

One of the greatest myths of the aging process is that tooth loss is inevitable — that losing teeth in old age is a fact of life and rarely avoided. In fact, tooth loss often increases with age, but not because of age. Another myth is that losing teeth as we grow older represents a problem that is confined to the oral cavity. The truth is very different. Untreated periodontal disease and tooth decay influence an older person's overall health status.

It is important to understand the difference between the normal changes that occur during aging and the long-term effects of certain diseases and conditions that speed up the process of aging. During the aging process, elderly people can expect to experience a gradual reduction in the ability of certain organs to function properly, and various tissues throughout the body undergo such changes as dehydration, degeneration, reduced elasticity and a diminished ability to repair itself. The mouth is no exception.



*This illustration portrays what happens when periodontal disease is left untreated in earlier life. The result is progression of disease, loss of teeth, and possibly increased risk for coronary artery disease, stroke, aspiration pneumonia, and complications of diabetes.*

influence the rate of aging. Some of these risk factors are modifiable, and some, like genetics, cannot be modified. This explains why some people are “old” at 50, and other individuals who are 80 don't really seem “old” because they have retained their health. The modifiable risk factors which accelerate the aging process and increase the likelihood of developing serious chronic diseases throughout the body include smoking, obesity, sedentary lifestyle, long term lack of calcium and vitamin D intake, and alcohol and drug abuse. Developing a healthy lifestyle or eliminating these risk factors earlier in life, provides obvious advantages in later life including oral health.

## ***What are some of the most common things that happen in people's mouths as they grow older?***

Changes that frequently occur in the aging process are related to subtle alterations in lip contours, and changes in the mucosal lin-

## ***What do these gradual changes that take place during the aging process have to do with the oral cavity?***

One of the most important changes we see during the aging process is increased susceptibility to infection. Individuals who have lowered resistance and decreased ability to fight infection will be at greater risk for periodontal disease and other oral conditions. When there is lowered resistance to certain bacteria, this often leads to a shift from oral bacterial populations that are beneficial (the “good bacteria”) to an overgrowth of bacteria known to cause serious infections such as gum disease (periodontal disease), or a fungal infection called candidiasis. As a result of these changes, many elderly persons become more vulnerable to developing periodontal disease, or if they have periodontal disease, this could trigger increased disease activity resulting in more severe disease. Nutrition also has a significant impact on susceptibility to infection. In that regard, individuals who are unable to eat nutritious meals because of loss of teeth or other oral conditions are at greater risk for infection, regardless of age.

Another thing that is commonly seen in the aging process is a general tendency for elderly individuals to experience impaired healing ability. This usually means that when elderly persons are trying to recover from an ailment, or when they are treated by an invasive procedure, they experience a slower recovery to health. This goes for treatment for oral conditions and diseases.

It is important to point out the difference between biological age and chronologic age. Biological aging is often influenced by certain risk factors that

ing the mouth, the tongue, the teeth, the gums, and the bone that supports the teeth. Knowledge of these changes and knowing what to look for in the mouth of elderly persons is the first step in ensuring oral health during the aging process.

**Changes in the Lips:** One of the most common changes to occur in the lips of elderly persons is a condition called angular cheilitis. This is a type of lesion that appears as skin folds with fissures at the corners of the mouth. This condition is primarily caused by candidiasis (fungal infection) and a lack of vitamin B.

**Changes in the surface texture of the oral mucosa:** The tissue which lines the inside of cheeks may become thinner, less elastic, and receive less blood supply. These changes are usually brought on by diminished salivary flow which prevents proper lubrication of the oral cavity. Dry mouth, a condition known as xerostomia, is found frequently in older people who are taking certain medicines or who are undergoing radiation therapy, which causes the salivary glands to degenerate. In addition, sharp edges of broken teeth or poorly fitting dentures may irritate the mucosa. This often appears as white patches on the mucosa.

**Changes in the tongue:** When the tongue appears smooth and shiny, it is often a manifestation of a condition called “Burning Mouth Syndrome.” The condition is usually brought on from a deficiency of iron (anemia) or other deficiencies, and can be very uncomfortable. It is not unusual for elderly people to experience a loss of taste sensation, but this does not routinely occur among those elderly who are healthy.

**Changes in the teeth:** “Yellowing” of teeth is a normal change that occurs during the aging process. Signs of chipping and tooth wear on the biting surfaces are also commonly present in older people. Thinning around the neck of teeth, often related to the use of hard-bristled toothbrushes over many years of improper tooth brushing, is not uncommon. It is important to examine the teeth for gum recession and exposed root surfaces, generally the result of chronic periodontal disease. Individuals who experience dry mouth (xerostomia) lose the protective quality of saliva. As a result, these individuals often develop a significant amount of root decay. The roots of teeth are significantly softer than the enamel and therefore more prone to decay when exposed to bacteria and acids in soft drinks.

**Changes in the gums and supporting bone surrounding the teeth:** It is estimated that 90% of the elderly population has periodontal disease (gum disease) and the majority may be undiagnosed. As a result of untreated periodontal infection over many years, inflammation and destruction usually goes beyond just

the gum tissue and into the bone. Typically, periodontal disease is not painful until the most advanced stages when abscesses and tooth loss, through natural means or extraction, are very common. Unfortunately though, the damage from periodontal disease is not limited to the oral cavity. Recent research suggests that there may be a relationship between periodontal disease and other serious chronic conditions, including coronary heart disease, stroke, aspiration pneumonia, and increased risk for complications of diabetes — all of which are highly prevalent in the elderly population. For these reasons, it has become increasingly clear that prevention, diagnosis and treatment of periodontal disease are very important in maintaining overall health during the aging process.

### ***Important Next Steps to Ensure Oral Health***

- Make sure that you come to each dental appointment with an up-to-date list of the prescribed and over-the-counter medications you are taking so your dentist or dental hygienist will be aware of any medications that may affect the oral cavity or be a contraindication for certain types of dental treatment.
- Make sure you provide updated information regarding the status of your overall physical health to your dental care provider.
- Make sure you provide the status of your oral health, especially when periodontal disease has been diagnosed, to your medical care provider.
- Make sure you see your dentist or dental hygienist on a routine basis and ask him/her to perform a comprehensive evaluation of your mouth to determine whether you may have periodontal disease. If you are diagnosed with periodontal disease, it is important to undergo the treatment which is recommended. This includes making sure you adhere to frequent dental visits to maintain periodontal health after treatment is completed.
- Eliminate risk factors that influence the rate of aging (e.g., smoking, obesity, sedentary lifestyle). Research indicates that elimination of these risk factors also has a positive influence on oral health.
- Ask your dental hygienist to devise a customized preventive care plan that includes control of root decay with certain fluoride therapies; relief of dry mouth with certain products that are soothing and stimulate salivary flow; recommendation of the appropriate toothpaste; and the addition of an automatic toothbrush.
- Tooth decay, and possibly periodontal infection, are considered transmittable diseases. In order to make sure you do not transmit these diseases, decay and periodontal infections must be treated. The bacterial plaque (biofilm) that is present in your mouth must be cleaned from your teeth, thoroughly and everyday. The use of an automated toothbrush and oral irrigation are particularly helpful. Ask your dental hygienist to help you master complete biofilm removal.