Stress and Your Mouth

By Ellen Zanichelli RDH, BS

As the holiday season wanes and the New Year season begins, the peace and joy we previously felt may not seem quite as joyous now. The perfect holiday we all strived for found us spinning in a whirl wind of demands. The Christmas parties, the financial stress of buying gifts, the baking, the endless cleaning and entertaining may have left you stressed and depressed. Though stress is purely a mental phenomenon, it can have very serious and real affects on your physical health. Medical research suggests up to 90% of all illness and disease is stress related, according to the Centers for Disease Control and Prevention. Evidence shows chronic stress can lower immunity and make people more susceptible to infections.

One of the most severe stress related mouth conditions is gum disease. It is known that bacteria must be present to cause destruction of the tissue surrounding our teeth but that their presence alone is not sufficient to cause disease in all individuals. It is other factors that tip the scale from health to disease in any given individual. Psychosocial stress is considered a risk indicator for periodontal disease. A report by CBS news in August 2007 found 57% of the studies it revived between 1990 and 2006 found a strong correlation between stress and periodontal disease. Levels of cortisol, a hormone produced by stress can lead to the increased destruction of the gum tissue and supportive bone tissue surrounding our teeth. When the cortisol levels are high in our blood stream our immune system is suppressed leaving us even more compromised by the destruction of bacteria. "Individuals with high stress levels tend to increase their bad habits, which can be harmful to periodontal health. They are less attentive to their oral hygiene and may increase their use of nicotine, alcohol or drugs." said Preston Miller Jr., President of the American Academy of Periodontology.

Tooth decay can also increase during stressful times. Numerous studies show that in an increased state of stress people produce less saliva which helps buffer the affects of harmful bacteria and their waste products to the enamel surface. Reaching for that energy drink to get a quick burst of energy when stressed or fatigued can also create havoc on our tooth enamel. The pH level of these drinks can lead to tooth erosion. The results of one study published in <u>General Dentistry</u> show that energy and sports drinks had the strongest potential for erosion of tooth enamel.

Stress is also one of the main factors of bruxism or teeth grinding. Many people that grind their teeth are totally unaware of their actions because they do it in their sleep. However; clenchers and grinders may grind their teeth for several hours a day. Clenchers may experience the following side effects: 1. tenderness, spasm and fatigue of the muscles of mastication, the muscles of the face and neck leading to frequent headaches especially in the morning. 2. Damage to the tempromandibular joint (TMJ), the joint in front of the ear. The damage may be minor, evident by a clicking sound when opening or closing the mouth or the damage may be severe preventing the lower jaw from functioning properly. 3. If the condition becomes chronic, cheek muscles become over developed causing distortion to the face. 4. Excessive grinding wears off tooth structure creating flat shorter teeth. Excessive force causes gum recession and subsequent tooth sensitivity. Gum and periodontal damage causes tooth mobility and tooth fracture. What can be done? Check with your dentist and evaluate how traumatic your clenching pattern is to your

health. Night guards, a plastic appliance can be made to help protect your teeth especially during sleep. Fluoride varnishes can be applied to teeth to help reduce the hypersensitivity clenching creates.

Mouth ulcerations are also a result of stress and our bodies' inability to ward of infection while cortisol levels are increased and our immune system is suppressed. Canker sores are small ulcers with a white or grayish center and a red border. They appear inside the mouth sometimes in multiple numbers. Although their cause is still unknown, they may be caused from immune system problems, bacteria or viruses. Experts do believe that stress as well as fatigue and allergies can increase the incidence of getting them. Canker sores are not contagious but can be very painful. From onset to healing it may take up to ten days. Try over the counter topical anesthetics for relief and to reduce irritation, don't eat hot spicy foods or foods with a high acid content such as tomatoes and citrus fruits.

Another mouth sore is a cold sore or fever blister which is caused by Herpes Simplex type one. Before you actually get a cold sore you may feel a tingling, itchy, or burning sensation beneath the surface of the skin usually around the mouth or base of the nose. This is the first sign of a cold sore called the prodrome stage. It is estimated that in the US 80-90% of the population has been infected by the cold sore virus by the time they are 50 years old. Only about 30% of these infected with the virus actually ever get a cold sore. A cold sore outbreak usually lasts for 7-10 days and they occur 3-4 times a year. Cold sores are very contagious and can be spread through physical contact. Don't kiss other people and don't touch your cold sore with your hands. Consult with your healthcare provider for an antiviral prescription to alleviate discomfort and decrease the outbreak.

Be aware during this post holiday season for stress responses you may be experiencing. Take time for yourself, eat well, exercise, get plenty of sleep and brush and floss your teeth.

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