

Stress, dieting, and periodontal disease

[Health & Medicine](#), [Disease](#)



Christine Dursunian Principles of Dental Hygiene II Professor Willis Research Paper Stress, dieting and periodontal disease and to compromised systemic health. Stress, dieting, cultural diversity, foundation of health and periodontal disease: The average person would never think that all four of these topics would coincide with one another. They do, each affecting the other as stepping stones towards periodontal disease. Periodontal disease, including periodontitis and gingivitis, are chronic, bacterial infections and inflammatory diseases affecting the periodontium (tissues that support the teeth).

Periodontal diseases are the most prevalent chronic diseases affecting children, adolescents, adults, and the elderly. The periodontium is a complex, highly specialized, shock-absorbing and pressure-sensing system consisting of four interrelated tissues supporting the teeth: cementum, periodontal ligament, alveolar bone and junctional and sulcular epithelia (1). Periodontal disease can affect one or many teeth. It can also lead to progressive bone loss around teeth, which can lead to loosening and possible loss of the teeth if left untreated.

There are many factors to periodontal disease that have been proven to be directly related to this growing disease, in certain populations and cultures that have been proven to stand out more than others. Through research and advanced studies with guidelines of evaluation, stress and dieting has been shown to be associated with periodontal disease(2). These additional factors involve diet, lifestyle, cultures, also including collective types of strains in ones everyday life. Periodontal disease is an infection of the tissues that support the teeth.

These infections are associated with specific pathogenic bacteria that colonize the subgingival area. When the teeth are being supported by the gingiva; the gingiva does not attach to the tooth firmly as one might think. Part of the tooth's anatomy consists of a shallow v-shaped gap called the sulcus which exists between the tooth and the gingiva. Periodontal disease affects this gap causing the tissue supporting the tooth to break down. Periodontal disease transitions through different levels to become what it is.

Research studies indicate that a specific set of guidelines during evaluation of the association of stress and periodontal disease are important. When proposing experimental approaches, specifically in psychosocial stress and periodontal disease; present studies and future experiments show the next six factors to be very useful. Periodontal disease is measured as unique disease outcome and should not be included in a composite index with other oral diseases(3). Validated instruments are assessed for stress, distress, and coping behaviors.

These helpful instruments, validated by prior studies, also on the population for each applied for research. Indications of compliance with oral health organization system should measure at-risk behaviors. Including oral health behaviors such as preventive dental visits, regulations of oral hygiene regimens, and an assessment of plaque, gingivitis, and other existing disease. By rigorously establishing psychosocial factors such as stress distress, and coping behaviors are true risk factors for periodontal disease case studies and case-control series generate hypotheses (4).

These hypotheses are over large cross-sectional and longitudinal epidemiological studies. Studies in which mechanisms of psychosocial stress

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or distress show the application of periodontal disease. The necessity to show relationship and correlation of applying different assessments such as biochemical mediators of stress, immune functions, or neurological and endocrine alterations as well as behavioral changes are significant in these cases(5). Lastly are randomized controlled trial methodology, the intervention of studies using stress management to establish efficacy of modification of stress as modality of stress-associated disease.

Managing these controlled trials allows to reduce stress or distress. Periodontal disease has been associated for years with risk factors such as oral environment, age, female hormones, family factors, smoking and nicotine, and diseases associated with periodontal disease. When discussing oral environment the first issue that comes to mind is lack of oral hygiene. Lack of oral hygiene encourages bacterial buildup and plaque formation, which puts the oral cavity into a very susceptible position for periodontal disease.

Inadequate contoured restoration has also created rise to periodontal disease for its restorations of fillings and crowns. By poor dentistry the restorations help trap for debris and plaque because of its defect in contour. Anatomical tooth abnormalities are influential risk factors just as poor restorations would be, because of these abnormalities the teeth are not aligned in their natural state causing food particles to build up to the ladder of periodontal disease causing plaque and bacteria formation. Lastly would be the anatomy of the third molars, also known as the wisdom teeth.

This tooth especially is a known to be a major breeding ground for bacteria, by reason of its location and patients finding difficulty reaching posteriorly to the mouth while brushing. Other studies of this particular tooth show the

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unique tissues surrounding this molar region has been destructed of the plaque formation and the tissue becoming more sensitive when the third molar is impacted, meaning when the tooth is wedged between another tooth and the jaw. Next commonly associated risk factor with periodontal disease is age.

Another problem in aging, comes the increase of obtaining periodontal disease. Studies have shown that thirty percent of the adults in America have periodontal disease and mostly found in people over the age of seventy years old, eighty-six percent have periodontitis (6). Rare cases it has been shown for young adolescents who are subjected to this disease. Adding to this is family factors, periodontal disease often occurs to members of the same family. A mixture of factors belong to this title, such as intimacy, genetics and hygiene.

A considerably important factor is smoking and nicotine. Being the most significant factor, causing bone loss and gingival recession and inflammation by reducing the amount of oxygen present in the gingiva tissue. When nicotine combines with oral bacteria, the production levels expectations are greater. Lastly are diseases associated with periodontal disease, such as diabetes, type one and two, osteoporosis, herpes related gingivitis, human immunodeficiency virus associated with gingivitis, autoimmune disease (7).

Others diseases of genetic disorder are also at high risk for periodontitis. Contemporary conceptualization of the stress process supports the evaluation of stress at three levels. Stressors, moderating and mediating factors, and stress reactions. These three factors have emphasized the process and the unity stress can have on periodontal disease, including <https://assignbuster.com/stress-dieting-and-periodontal-disease/>

emotions and coping(8). These stress responses would be determined primarily by the process that makes personalized perception of a stress indicator or a threat to ones health.

The aim of each study is to unfold influential factors such as personality traits, coping strategies, and experimentation of referenced information (9). The resolution of all studies suggested that depression, stress, and salivary cortisol are important correlates of periodontal disease. Therefore, it is likely that periodontitis is related to immunologic and behavioral changes related to psychologic states. Salivary cortisol seemed to have different associations with periodontal disease, because of the outcomes in models involving stress compared to models involved with depression.

Periodontitis is indicated when addressing depression or stress. By strongly suggesting that stress, distress, and inadequate ways of handling difficult situations of coping are important risk indicators for periodontal disease. Furthermore, it is likely that systemic disease associated with periodontal disease such as diabetes, cardiovascular disease, preterm delivery and osteoporosis may share psychosocial stress as a common risk factor.

During these early beginnings of study and research, requirement for one to fully understand the molecular and cellular basis of the role of stress, and in turn these studies may lead to effective intervention strategies that minimize or negate stress as a contributor to periodontal disease. Research has also proven within certain limitations this systematic review showed a positive relationship between stress and psychosocial factors and periodontal disease.

However, caution should be used when interpreting this review because the different methodologies used in the included studies may have an impact on the results of the reports. The difficulties inherent is isolating the variable of stress, the lack of a reliable standardize psychological analysis to quantify and define most psychiatric disturbances, the individual ability of patients to cope with negative life events, and the different types and clinical parameters used to determine periodontal tissue breakdown may cat as a confounding biases and cause result distortion at several stages. lthough a positive relationship was observed between stress and periodontal disease, further representative research is need to determine the impact of stress and psychological factors as risk factors for periodontal disease. Reference: Ng SKS, Leung WK. A community study on the relationship between stress, coping, affective dispositions and periodontal attachment loss. Community Dental Oral Epidemiol 2006; 24: 252-66 Page RC, Kornman KS. The pathogenesis of human periodontitis: an introduction. Periodontol 2000 1997; 14 9-11 Robert J. Genco, Alex W. Ho, Jeffrey Kopman, Sara G. Grossel, Robert G.

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