

The Connections Between Oral and Systemic Health



The Mouth

A primary portal of entry for infections and source of potentially pathogenic organisms. Systemic health issues and chronic conditions (like diabetes and heart disease) are also associated with oral health problems, like tooth loss and periodontitis.¹

Bone Health

Skeletal changes that could indicate osteoporosis and musculoskeletal disorders can often be revealed by regular examinations of the mouth and face.¹

The Heart

In patients with gum disease and bleeding gums, infectious oral bacteria can potentially pass into blood vessels and be carried to the heart.^{1,4}

Immunodeficiencies

Oral signs – along with other symptoms like rash, fever, headache, malaise, enlarged lymph nodes or lesions – can indicate larger systemic issues like immunodeficiencies.¹

Diabetes & Periodontitis

Diabetes is a major risk factor for periodontitis. Research has shown that periodontal therapy is associated with improvements in glycemic control – and oral health is a key aspect of diabetes management.^{1,2,5}

The Lungs

Poor oral care may increase the risk of aspiration of oral bacteria and potentially lead to respiratory disease.^{1,3}



Sources:

- ¹ U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
- ² Grenco, R. J., Graziani, F., & Hatsurk, H. (2020, June). *Effects of periodontal disease on glycemic control, complications, and incidence of diabetes mellitus* (Volume 83 Issue 1 pages 59-65). *Periodontology* 2000. <https://doi.org/10.1111/prd.12271>
- ³ Sapey, E. (2020, June). *The Clinical and Inflammatory Relationships between Periodontitis and Chronic Obstructive Pulmonary Disease*. *Journal of Clinical Periodontology*. <https://doi.org/10.1111/jcpe.13334>
- ⁴ Sanz, M., Marco del Castillo, A., Kepsen, S., Gonzalez-Juanatey, J. R., Bouchard, F. D. P., Chapple, I., Dietrich, T., Gotsman, I., Graziani, F., Herrera, D., Loos, B., Madianos, P., Michel, J. B., Perel, P., Pieske, B., Shapira, L., Schechter, M., Tonetti, M., Vlachopoulos, C., & Wimme, G. (2019, August). *Periodontitis and cardiovascular diseases: Consensus report*. *Journal of Clinical Periodontology*. <https://doi.org/10.1111/jcpe.13189>
- ⁵ Preshaw, P. M., Alba, A. L., Herrera, D., Jepsen, S., Konstantinidis, A., Makrilakis, K., & Taylor, R. (2011, November). *Periodontitis and diabetes: a two-way relationship*. <https://doi.org/10.1007/s00125-011-2342-y>