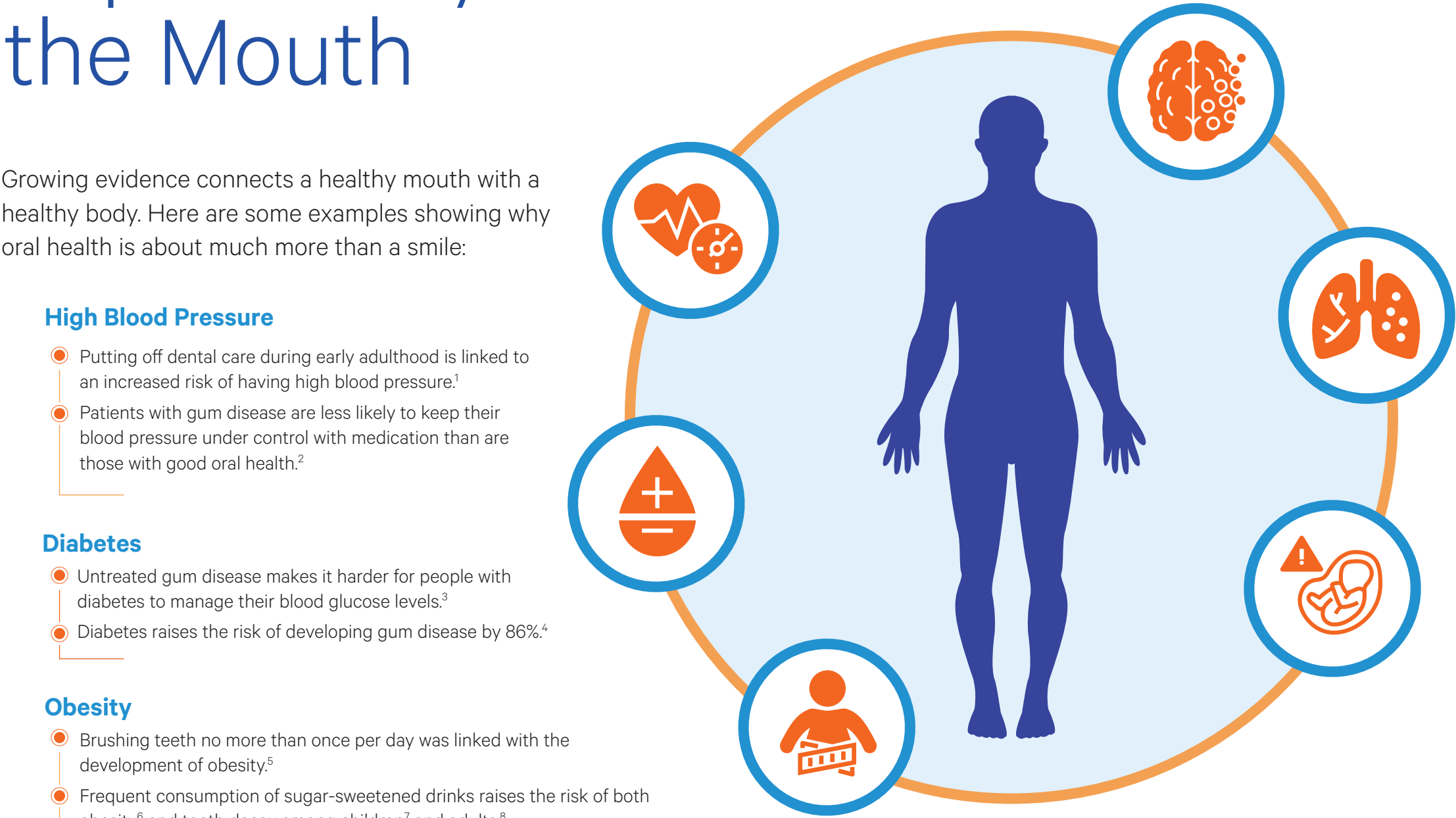


Impacts Beyond the Mouth

Growing evidence connects a healthy mouth with a healthy body. Here are some examples showing why oral health is about much more than a smile:



High Blood Pressure

- Putting off dental care during early adulthood is linked to an increased risk of having high blood pressure.¹
- Patients with gum disease are less likely to keep their blood pressure under control with medication than are those with good oral health.²

Diabetes

- Untreated gum disease makes it harder for people with diabetes to manage their blood glucose levels.³
- Diabetes raises the risk of developing gum disease by 86%.⁴

Obesity

- Brushing teeth no more than once per day was linked with the development of obesity.⁵
- Frequent consumption of sugar-sweetened drinks raises the risk of both obesity⁶ and tooth decay among children⁷ and adults.⁸

Dementia

- Having 10 years of chronic gum disease (periodontitis) was associated with a higher risk of developing Alzheimer’s disease.⁹
- Researchers report that uncontrolled periodontal disease “could trigger or exacerbate” the neuroinflammatory phenomenon seen in Alzheimer’s disease.¹⁰

Respiratory Health

- Research shows that improving oral hygiene among medically fragile seniors can reduce the death rate from aspiration pneumonia.¹¹
- Patients with ventilator-associated pneumonia (VAP) who engaged in regular toothbrushing spent significantly less time on mechanical ventilation than other VAP patients.¹²
- Improving veterans’ oral hygiene reduced the incidence of hospital-acquired pneumonia (HAP) by 92%, preventing about 136 HAP cases and saving 24 lives.¹³

Adverse Birth Outcomes

- Gum disease among pregnant women is associated with preterm births, low birthweight babies and preeclampsia, a pregnancy complication that can cause organ damage and can be fatal.¹⁴

Sources

1. Oreskovic, NM et al. (2017). Oral health status and longitudinal cardiometabolic risk in a national sample of young adults. *Journal of the American Dental Association*, 148(12), 930-935.

2. Pietropaoli D, et al. Poor Oral Health and Blood Pressure Control among US Hypertensive Adults: Results from the National Health and Nutrition Examination Survey 2009 to 2014. *Hypertension*. 2018 Dec; 72(6): 1365-1373. Müller F. Oral Hygiene Reduces the Mortality from Aspiration Pneumonia in Frail Elders. *Journal of Dental Research*. 2015 Mar; 94(3 Suppl.): 14S-16S.

3. Preshaw PM, Bissett SM. Periodontitis and diabetes. *British Dental Journal*. 2019; 227: 577-584; Teeuw WJ, et al. Effect of periodontal treatment on glycemic control of diabetic patients: A systematic review and meta-analysis. *Diabetes Care*. 2010 Feb; 33(2): 421-427.

4. Baranowski MJ, et al. Diabetes in dental practice-review of literature. *Journal of Education, Health and Sport*. 2019; 9(2), 264-274

5. Furuta M, et al. (2020). Longitudinal associations of toothbrushing with obesity and hyperglycemia. *Journal of Epidemiology*, JE20190165.

6. Luger M, et al. Sugar-Sweetened Beverages and Weight Gain in Children and Adults: A Systematic Review from 2013 to 2015 and a Comparison with Previous Studies. *Obesity Facts*. 2017; 10(6): 674-693.

7. Bleich SN, Vercammen KA. The negative impact of sugar-sweetened beverages on children’s health: an update of the literature. *BMC Obesity*. 2018; 5(6).

8. Bernabé E, et al. Sugar-sweetened beverages and dental caries in adults: a 4-year prospective study. *Journal of Dentistry*. 2014; 42(8): 952-958.

9. Chen CK, et al. (2017). Association between chronic periodontitis and the risk of Alzheimer’s disease: a retrospective, population-based, matched-cohort study. *Alzheimer’s Research & Therapy*, 9(1), 56.

10. Teixeira FB, et al. Periodontitis and Alzheimer’s Disease: A Possible Comorbidity between Oral Chronic Inflammatory Condition and Neuroinflammation. *Frontiers in Aging Neuroscience*. 2017 Oct; 9:327

11. Müller F. Oral Hygiene Reduces the Mortality from Aspiration Pneumonia in Frail Elders. *Journal of Dental Research*. 2015 Mar; 94(3 Suppl.): 14S-16S.

12. de Lacerda Vidal CF, et al. Impact of oral hygiene involving toothbrushing versus chlorhexidine in the prevention of ventilator-associated pneumonia: a randomized study. *BMC Infectious Diseases*. 2017 Feb 27; 17(1): 173.

13. Munro S, Baker D, 2018. Reducing missed oral care opportunities to prevent non-ventilator associated hospital acquired pneumonia at the Department of Veterans Affairs. *Applied Nursing Research*, 2018; 44: 48-53.

14. Daalderop LA, et al. Periodontal Disease and Pregnancy Outcomes: Overview of Systematic Reviews. *Journal of Dental Research Clinical and Translational Research*. 2018; 3(1): 10-27.