

GLP-1 Medications and Oral Health

Emerging Evidence on Benefits, Risks, and Clinical Implications



Key Takeaways

- Use of GLP-1 medications has increased rapidly over the past decade for diabetes, cardiovascular risk, and obesity.
- Because these conditions are linked to periodontal disease, GLP-1 use may offer potential indirect oral health benefits.
- On the other hand, GLP-1 side effects such as xerostomia (dry mouth) and gastrointestinal symptoms, including gastric reflux and vomiting, could increase the risk of enamel erosion and other oral health concerns.
- Research on the effects of GLP-1s on oral health is still in its early stages. Health care providers and patients taking GLP-1 medications should understand the potential oral health implications — including both possible indirect benefits and risks — and monitor for symptoms that may affect oral health.

What Are GLP-1 Medications?

Glucagon-like peptide-1 (GLP-1) is a naturally occurring hormone made in the small intestine that helps regulate appetite and blood glucose (sugar) levels. Medications known as “GLP-1s” are synthetic versions (agonists) of this hormone. This means that these medications work the same way as the natural hormone. Common GLP-1 medications include semaglutide (Ozempic® and Wegovy®), dulaglutide (Trulicity®), and tirzepatide (Mounjaro® or Zepbound®). GLP-1 medications were first prescribed in 2005 to help treat type 2 diabetes, a condition that results in elevated blood glucose levels.

Since 2014, GLP-1s have also been prescribed for weight management. GLP-1 medications work in several ways. They lower blood glucose levels by triggering the release of insulin and blocking the secretion of glucagon. These medications also slow digestion so that food leaves the stomach more gradually. They also affect feelings of hunger and early satiety in the brain, resulting in feeling full earlier in the meal and for longer afterward.

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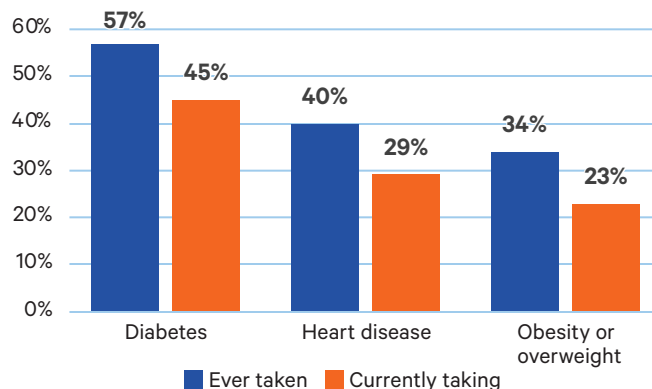
How Common Is GLP-1 Medication Use?

Between 2018 and 2023, spending on GLP-1s in the United States grew from \$13.7 billion to \$71.7 billion, an [increase of more than 500%](#). It is estimated that approximately [25 million individuals](#) in the US will be treated using a GLP-1 medication by 2030, a substantial increase from 5 million in 2023.

As of late 2025, [nearly one in five US adults](#) say they have ever taken a GLP-1, and one in eight say they are currently taking such a medication. GLP-1 use is highest among individuals with diabetes, though uptake is also substantial among those with cardiovascular disease and obesity.

As the use of these medications continues to increase, evidence is expanding on their benefits and risks to overall and oral health.

Ever Taken or Currently Taking a GLP-1 by Diagnosis



Data source: Poll: 1 in 8 Adults Say They Are Currently Taking a GLP-1 Drug for Weight Loss, Diabetes or Another Condition, Even as Half Say the Drugs Are Difficult to Afford,” KFF, November 14, 2025, <https://www.kff.org/public-opinion/poll-1-in-8-adults-say-they-are-currently-taking-a-glp-1-drug-for-weight-loss-diabetes-or-another-condition-even-as-half-say-the-drugs-are-difficult-to-afford/>.

Potential Oral Health Benefits of GLP-1 Medication Use

Use of GLP-1s has been found to reduce the impacts of certain chronic health conditions that are linked to poor oral health. As noted above, GLP-1s were originally prescribed to [help treat type 2 diabetes](#) by increasing the secretion of insulin after meals and subsequently lowering blood glucose (sugar) levels. There is a hypothesized [two-way relationship](#) between type 2 diabetes and periodontal disease. Individuals with type 2 diabetes are [three times more likely](#) to develop periodontal disease. While individuals with [poorly controlled diabetes](#) often have more severe periodontal disease, studies are still needed to determine whether treating type 2 diabetes with GLP-1s has a positive downstream impact on periodontal disease.

The US Food and Drug Administration approved semaglutide, a specific type of GLP-1 medication, as a treatment to reduce certain [risks associated with cardiovascular disease](#) (heart attack, stroke, and death) in adults with obesity or who are

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overweight. Researchers propose that GLP-1s help lower blood pressure, cholesterol, and inflammation, all of which [improve cardiovascular health](#). In fact, the American College of Cardiology has identified GLP-1 medications as a [first-line strategy for weight management](#) along with diet and exercise. Similar to type 2 diabetes, [cardiovascular disease is linked with periodontal disease](#), suggesting that management of cardiovascular disease through GLP-1s may help improve periodontal health.

While relationships between oral health and both diabetes and cardiovascular disease are relatively well established, additional research is needed to determine whether GLP-1 treatment directly improves periodontal outcomes.

Oral Health and GLP-1 Medication Use

Researchers have suggested that semaglutide [may cause xerostomia](#) (dry mouth) by influencing how effectively salivary glands produce saliva. [Xerostomia is linked to oral health problems](#) such as increased rates of dental caries (decay), periodontal disease, bad breath, and dysgeusia (changes in taste), and is often associated with the use of [many different](#)

Good oral hygiene practices while taking these medications can maintain or improve oral health and also help ensure that the GLP-1 medications are working effectively.

[types of medications](#). While there are user reports of oral health impacts (sometimes described as “[Ozempic mouth](#)” or “[Ozempic teeth](#)”) from the use of GLP-1s, no studies to date have shown that semaglutide or any other GLP-1s directly cause xerostomia or other oral health problems.

Some [common gastrointestinal side effects](#) of GLP-1s include nausea, vomiting, and esophageal reflux. When [gastric \(stomach\) acid](#) repeatedly comes up into the mouth through vomiting or gastric reflux, it can cause erosion of protective tooth enamel, leaving teeth vulnerable to decay. Together, reduced saliva and increased acid exposure may significantly elevate caries risk. In addition to oral health risks of taking GLP-1 medications, some animal studies suggest that periodontal disease, particularly in its severe form, [may interfere with GLP-1 effectiveness](#). This suggests that good oral hygiene practices while taking these medications can maintain or improve oral health and also help ensure that the GLP-1 medications are working effectively.

What This Evidence Suggests

The current literature suggests that there may be both oral health benefits and risks to taking GLP-1 medications. Lowering blood glucose levels, blood pressure, and cholesterol all have considerable positive impacts on the management of type 2 diabetes and cardiovascular disease, conditions that are both linked to periodontal disease. Relatedly, individuals taking GLP-1s may change their diets in efforts to lose weight, which may increase their consumption of fruits and vegetables and decrease their consumption of caries-producing fermentable carbohydrates.

At the same time, GLP-1s may negatively affect salivary function and cause gastrointestinal side effects, increasing the risk of dry mouth and caries. Despite the potential oral health benefits and risks associated with taking GLP-1 medications, health care providers do not yet routinely consider oral health impacts of

these medications when prescribing them. Similarly, oral health care providers may not be regularly asking their patients if they are taking GLP-1s as part of their routine health histories.

Despite the potential oral health benefits and risks associated with taking GLP-1 medications, health care providers do not yet routinely consider oral health impacts of these medications when prescribing them or ask patients about GLP-1 use.

Implications for Health Care Providers, Patients, and Policymakers

Both health care providers and patients play a role in ensuring positive oral and overall health outcomes with the use of GLP-1 medications. Oral health care providers should include GLP-1 medications on their regular health history forms and ask patients at every visit about any prescription medications they are taking (currently, GLP-1 medications are only available by prescription). For patients taking GLP-1s, oral health providers should ask at every visit about dry mouth and gastrointestinal

symptoms like nausea, vomiting, and gastric reflux. They should also monitor patients for increased caries rates and signs of enamel erosion. Providers should also counsel their patients about the need to maintain good oral hygiene — particularly periodontal health — and a healthy diet, and to manage dry mouth symptoms as needed through drinking water and using products like xylitol lozenges to increase salivary flow.

Primary care physicians and other health care providers should routinely ask their patients taking GLP-1 medications about any side effects, such as dry mouth or gastrointestinal symptoms, that could affect oral health, as well as any other side effects. They should counsel their patients to seek regular dental care and, if needed, refer their patients to a dental provider so they can establish a [dental home](#) where they can receive regular preventive care. Physicians should counsel their patients who are taking GLP-1s to maintain a healthy and balanced diet that will both advance their overall health goals and help maintain good oral health.

In addition to counseling patients individually, successful management of oral and other side effects with GLP-1 medications requires coordinated [medical-dental integration](#), in which oral health providers and medical providers can communicate about their mutual patients' experiences with these medications. [Interoperable electronic health records](#) allow providers to communicate with each other about patients' side effects and their own treatment recommendations and provide accurate medication lists that do not rely on patient self-report. This bidirectional

communication helps enable seamless communication with patients about their experiences and treatment recommendations.

Individuals taking GLP-1s are already taking proactive steps toward improving their health, and this should extend to maintaining regular dental and medical care in addition to consistent communication with their oral and overall health care providers about any side effects they are experiencing. Staying hydrated with water throughout the day and practicing good oral hygiene through brushing and flossing regularly will help maintain good oral health while taking GLP-1s for diabetes or weight loss.

Starting on July 1, 2026, and running through December 31, 2027, the [Medicare GLP-1 Bridge program](#) allows eligible individuals who receive Medicare Part D (prescription) benefits to receive certain GLP-1 medication prescriptions for a monthly \$50 copayment. Given the potential negative impact of severe periodontal disease on the effectiveness of GLP-1 medications, Medicare should provide coverage for periodontal disease treatment for its members.

What Is Lacking in the Current Literature about GLP-1s and Oral Health

While GLP-1s have been used for over two decades to treat type 2 diabetes and more recently for weight loss, the scientific literature surrounding oral health impacts of GLP-1 use remains scant. There are currently no longitudinal studies or research using population-level data to evaluate changes to oral health with GLP-1 use. There are very few studies of GLP-1s that evaluate oral health impacts directly.

Without studies that examine oral health outcomes directly and through long-term GLP-1 use with large sample sizes, health care providers are unable to provide tailored recommendations

to patients beyond prevention and management of caries and periodontal disease. Research in this area should evaluate changes in caries risk and periodontal disease incidence over time in large samples of individuals taking GLP-1 medications. Encouraging the use of dental diagnosis codes — that is, not simply procedure codes — will help researchers better understand the long-term oral health impacts of GLP-1 medications. In this way, providers and patients may better prevent and manage oral health problems while also improving overall health outcomes.

Conclusions

GLP-1 medications are reshaping diabetes and obesity care, with important but still emerging implications for oral health. As use expands, integrating oral health into medical management will be critical to ensuring that patients realize the full benefits of these therapies while minimizing risks.

Suggested Citation:

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