

## Oral Health and Osteoporosis

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## Take a Bite Out of Osteoporosis: Oral Health Concerns

Our bone is active living tissue that serves several purposes. Besides being the structural foundation for our bodies, bone supports the muscles, protects vital organs and stores most of the body's calcium. Its framework is made up of elastic fibers called collagen and crystals of calcium phosphate that form the hardened yet flexible structure. During our lifecycle, a natural process of remodeling occurs in which bone is removed by osteoclast cells, and new bone is formed via osteoblast cells.

As we age, the structure of our bones weakens. Osteoporosis is not partial to any area; it can impact any bone in the body. Whether you've been diagnosed with osteoporosis as a primary condition or secondary, you may be concerned with how this may impact your oral health.

Research has demonstrated a link between osteoporosis and bone loss in the jaw. Being the support and anchor for the teeth, if the jaw bone becomes less dense tooth loss can occur. According to the National Institute of Health, women with osteoporosis are three times more likely to experience tooth loss than those who do not have osteoporosis. Poor bone density in the jaw can also lead to other dental care issues, such as loose-fitting dentures, receding gums and poor surgical outcomes.

An additional oral health concern is periodontitis, which is a chronic condition that affects the gums and bones. This infection breaks down the bone and connective tissue responsible for holding the teeth in place. While it's unclear if periodontitis has a direct relationship with osteoporosis, there is a potential connection with decreased bone density being more susceptible to bacteria, increasing the risk for periodontitis.

Oral medications, nutritional supplements and physical activity are common treatments for osteoporosis; it is not clear whether these treatment modalities have the same effect on oral health as they do on other bones. The likelihood is high that elements directly impacting bone density may positively influence oral health.

It's important to note a concerning side effect that has been documented in a group of medications used to treat osteoporosis. Bisphosphonates have been linked to osteonecrosis of the jaw. Research demonstrates a rare occurrence in those taking the oral forms versus the IV form that is commonly used in cancer treatment.

Taking an approach to improve your overall bone health will cascade into improved oral health as well. Consider a well-rounded treatment plan to improve bone health that includes a well-balanced diet rich in calcium and vitamin D, supplement with calcium and vitamin D if necessary, a regular exercise routine that includes weight-bearing and resistance activities, avoidance of smoking and limiting alcohol intake and of course, routine oral care.