

A Little Bit Goes a Long Way

You may not be familiar with the term “minimally invasive dentistry,” but many dentists practice it every day. Learn more about what minimally invasive dentistry is and how your dentist can use its techniques to help preserve your smile.

What is minimally invasive dentistry?

The goal of minimally invasive dentistry, also known as microdentistry, is to conserve healthy tooth structure through preventive care. It focuses on prevention, remineralization, and minimal dentist intervention. Using the latest scientific advances, the dentist performs the least amount of work needed, never removing more of the tooth structure than is required to restore teeth to a healthy condition. Minimally invasive dentistry also utilizes long-lasting materials that conserve as much tooth structure as possible, minimizing the need for future repairs. For patients, minimally invasive dentistry often means less drilling and less pain, and better disease prevention.

How does it work?

First, your dentist will evaluate your risk for tooth decay, which is affected by the presence of bacteria in your mouth, the quality and quantity of your saliva, and your diet. If you show signs of decay, the dentist may use special technology to map the diseased areas of your teeth, allowing him or her to remove and replace only those areas. In addition to performing minimally invasive techniques, your dentist may recommend strategies to

prevent or reduce your tooth decay risk; for example, if you have a high level of oral bacteria, your dentist may advise you to rinse with a special mouthwash, limit your intake of certain carbohydrates, and practice good oral hygiene.

What techniques are involved?

Minimally invasive dentistry techniques include:

- **Remineralization:** This technique can repair the damage caused by demineralization, a process in which acid exposure weakens the teeth. The use of fluoride plays an important role in helping to remineralize teeth.
- **Sealants:** These are used to protect teeth from the bacteria that cause decay. Usually made of plastic resin, sealants fit into the grooves and depressions of the tooth, protecting it against bacteria and plaque. Sealants do not require any cutting of the tooth and are easily placed.
- **Laser-assisted preparation:** Your dentist may use a dental laser to remove decay and prepare your tooth for a cavity. This method can be more precise than others, allowing the dentist to preserve as much of the tooth as possible.
- **Inlays and onlays:** These can be used to restore a tooth without removing as much tooth structure as required for a crown. Typically gold or tooth-colored, inlays are similar to fillings, but they are custom-made to fit your cavity. For more substantial restorations, onlays can be used instead, incorporating a replacement for the tooth cusp and preserving more of your tooth structure.



- **Bite splints:** These devices can help correct bruxism, or grinding, which often cause serious damage to the teeth if left unchecked. If you grind your teeth, your dentist can create a bite split for you to wear at night or during times of stress, when most grinding occurs.
- **Air abrasion:** This involves a stream of air combined with a super-fine, abrasive powder, which is used to remove decay if a tooth cannot be remineralized. The dentist may use this technique instead of a traditional drill as this process may not require anesthesia.

These techniques, along with proper oral health habits, can help keep your teeth healthy and prevent future dental problems. Ask your dentist if these minimally invasive techniques might be right for you.



KnowYourTeeth.com

Brought to you by the Academy of General Dentistry (AGD), this website answers important dental health questions, offers the latest information on current treatments, provides tips for first-rate oral hygiene, and helps visitors find highly qualified general dentists near where they live.

The AGD is a member of the Partnership for Healthy Mouths, Healthy Lives, a first-of-its-kind national dental coalition composed of 37 leading dental health organizations. Look for more information about the Kids' Healthy Mouths campaign at www.2min2x.org.

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