



DENTAL ADVANCES TO MAKE YOU SMILE

Technology Changes The Way You Go To The Dentist

BY KRISTY STEVENSON

Did you know that your dentist is about more than just teeth and gums? As doctors of oral health, dentists diagnose and treat a range of conditions and related complications. And as medicine often dictates that a healthy mouth goes hand-in-hand with a healthy person, it's understandable that dentists can spot early warning signs of disease elsewhere in the body (possibly warranting a referral to a physician or specialist) simply by examining your mouth.

Studies have shown a link between our dental and overall health. Cavities and periodontal disease (the loss of bone around the teeth) are both caused by bacteria. And periodontal problems can be further linked to cardiovascular disease, arterial blockage, stroke and bacterial pneumonia. Everyone has bacteria in their mouths – but there are good and bad types of bacteria. Good oral hygiene is paramount to maintaining good dental health, and a healthier mouth could mean a healthier you. The most important step is removing plaque and food particles from around teeth. When properly used, an electric toothbrush has been shown to clean teeth better than a manual brush. Floss must also be used to clean in-between teeth where brushes cannot reach. Patients with braces and those with more space around their teeth may also benefit from using an oral irrigator such as a Water Pik.

There are everyday things that we can all do to improve our smiles. And modern medicine has provided today's dentist with even more ways to help us keep our pearly whites. Read on to learn more about what's new and what's worked for years.

TO FLOSS OR NOT TO FLOSS

Flossing every day is a simple way to care for your teeth, yet many fail to do it. Even the person who brushes three times a day may only floss three times a year. As an often overlooked means of helping with the longevity your teeth, flossing can stop gingivitis as well as cavities.

"Whatever you eat will basically have some form of sugar in it. If these particles are left in the very small spaces between your teeth, they can form cavities in-between and on top," says Dr. Giles Willis, Jr. of Willis Family Dentistry. "This is why flossing after every meal is ideal, but before bed is even more important." It's key to make sure everything you consumed during the day is out of your mouth when you lay down to sleep at night.

Flossing is also vital to diabetics and those with a weakened immune system. Bacteria in your mouth can reach vital organs through your blood stream, increasing the chance of damage to the heart. "If you start to floss at a young age, and can maintain this habit throughout life, the chances of you maintaining healthy teeth and gums are increased tremendously," says Willis.





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FEARING THE SHOT

Advances in technology have made getting numb much easier and more comfortable. “We now use a computer-controlled local anesthetic delivery system,” says Dr. Paul Kazmer, a Cary specialist in periodontics and implant dentistry.

Often times what patients fear the most is the pinch of the needle coupled with the pressure of the anesthetic. The computer-controlled delivery system still requires a needle – but it is very small and the computer regulates the delivery speed, sensing pressure and adjusting for it. This makes conventional shots a thing of the past.

Having patients comment on the ease of injections is gratifying to Kazmer. “Dentistry has had a focus on patient comfort in recent years, and improvements like this are just one way technology is improving our client’s experience,” he says.

MAKING THINGS EASIER, FASTER & MORE COMFORTABLE

Many dental practices now employ handheld wands which can be used to detect decay and measure its severity before even an exam or x-ray. The problem

can then be treated with lasers and resolved non-invasively. There are even FDA-approved oral cancer screenings that aid in early detection, long before a problem is viewable to the naked eye.

“Computers have allowed major advances in dentistry that weren’t available just a few short years ago,” says Family & Cosmetic Dentistry’s Dr. Raymond M. Ferri. “They are used in selecting color restorations for your teeth to more closely match your natural color, and in capturing images of your teeth so you no longer have to bite into a gooey impression.”

The image is then used by another machine to make the restoration to be placed in your mouth. Today’s computer can even take a 3D image of your jaw and plan everything to restore your mouth – from choosing the type of implant, to where it should be placed in your mouth, and the restorations placed over them.

CHEW ON THIS: IMPLANTS WORK FOR ALL AGES

As today’s dental implants simulate natural tooth roots and allow patients to restore their grins with crowns or partial dentures that act like real teeth, many no longer need to rely on full dentures. The implant, made primarily of titanium, is attached to the jawbone to support the dental crown. For several decades, it has been used for both the upper and lower jaw.

“Patients of all ages have chosen dental implants as treatment for missing teeth,” says Stonebridge Dentistry’s Dr. Joseph Yu. “It can be a successful treatment to replace a single missing tooth and/or multiple teeth to support an over denture.”

As long as you’re in good health, free of oral disease, and have an adequate jawbone to support the implant, you are a

good candidate. “Talk to your dentist or a dental specialist (periodontist, prosthodontist, or oral maxillary surgeon) to learn more about the procedure and restore a strong chewing dentition,” says Yu.

AN ALTERNATIVE TO BRACES

Now there’s a safe and affordable way for adults to avoid metal mouth. Six Month Smiles™ combines proven orthodontic techniques, contemporary materials and an innovative philosophy to gently straighten teeth in an average of six months. “Appearance is important in today’s society, and everyone wants to have a nice smile when they greet friends, acquaintances and business associates,” say Drs. Greg and Lisa Mayes of Preston Dental Center.

Braces are the most effective tool to align teeth. For people who don’t have a problem with their bite, Six Month Smiles™ uses the same gentle movement – but because it’s only straightening the crooked teeth, it can be done faster than regular braces. The hardware is also tooth-colored, making the process less conspicuous. And because treatment is shorter and requires fewer visits,



“Water fluoridation is also the single most effective public health measure available to prevent tooth decay – reducing it by 20-40%.”

the overall cost can be less than regular orthodontics, aligners, or veneers.

“The technique is a low-force method,” says Dr. Mayes. “We don’t tighten braces to get the teeth moving. The acceleration comes from the focus, not the procedure.” Not every patient is a candidate for this innovation, however. Schedule a consultation with your provider to learn more.

FOR KIDS ONLY?

Do you remember childhood fluoride treatments – the tray with the bad tasting gel that had to sit there forever? Well, it’s just as important for some adults to continue fluoride treatments as when they were kids. People are living longer today – more are keeping their teeth into the later adult years, and as we age we tend to take more prescription medications.

“This is important because up to 25 percent of medications have the side effect of decreased saliva production,” says Dr. Lisa N. Ribaud-Powell, a Cary Prosthodontist. “Saliva is one of the body’s natural defenses against dental caries, and as it becomes less available we are at a higher risk for dental decay.”

Today there is a new fluoride varnish available that makes it easier for your dentist to provide the necessary fluoride treatments. It takes less time to apply, lasts longer, and is much more effective than the trays. “If this is something you need to consider, make an appointment with your dentist and be sure to bring a current listing of your medications with you. Let’s keep teeth happier longer!” says Powell.

SAFER, BETTER QUALITY X-RAYS

Today’s medical and dental records are most often digital, visible chair-side so that your practitioner can easily view and manipulate images to detect problems before they happen.

“Electronic x-rays use about 80 percent less radiation than traditional x-ray film,” says Dr. Kirk Wilkie, an implant and general dentist practicing in Cary. They offer the advantage that no film or processing chemicals are needed, which helps protect our environment. “The image is nearly instantaneous with exceptional quality and the ability to use color contrast and magnification,” says Wilkie.

Newer special imaging systems allow the dentist to create 3D volumetric x-ray images to help identify oral diseases, locate pathology, and help to place dental implants in just the right location for improved esthetics and maximum chewing efficiency.



OLD SCHOOL DENTISTRY

Although there are many high-tech aspects of dentistry currently on the market, sometimes a conservative methodology is still the best approach. Even when a practice uses digital equipment and is essentially a paperless environment, the tried and true ideals of old fashioned dental treatment are still available.

When restoring a patient’s teeth, for example, amalgam (silver mercury) fillings remain the best option for those at a high risk for cavities. Although tooth-colored fillings are becoming more popular, the ADA endorses amalgam as a viable and safe choice for dental patients whose home care is less than perfect. Gold restoration is also an option.

“I rarely recommend invasive treatments,” says Dr. Todd W. Garcia of Garcia Dental, a family practice in Cary. “To me, enamel (the outer layer of teeth) is priceless.” Garcia’s own mother has two discolored teeth, but coming from a family of dental practitioners, she knows the importance of enamel – and that once you remove it, it can never be replaced. “Veneers and bonding can be used in extreme cases such as tetracycline staining, but Mother Nature really did it right the first time,” Garcia says.

New innovations are everywhere – from digital x-rays, same-day crowns, chair-side bleaching and tooth-colored materials, to sleep apnea treatments, laser dentistry, and remineralizing pastes created to strengthen tooth enamel and make it less susceptible to decay. But we must continue to do our part in preserving our oral health. In addition to daily care, the ADA recommends regular checkups and advises seeing your dentist at signs of bleeding gums during brushing, swollen gums or gums pulling away from teeth, persistent bad breath, pus between gums, loose teeth, bite change or a change in the fit of partial denture. Water fluoridation is also the single most effective public health measure available to prevent tooth decay – reducing it by 20-40%. Children and adults can drink a glass of water daily to benefit from fluoridation’s cavity protection. If you have children and your water comes from a well, please have your supply tested by your town office as a simple daily supplement may be necessary to help them keep brilliant, healthy smiles. ①