

word of mouth[®]

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A Semiannual Publication of the Massachusetts Dental Society



JUST CHEW IT.



When it Comes

word of mouth®

The Massachusetts Dental Society (MDS) is pleased to make this publication available to our member dentists as a way of communicating important dental health information to their patients.

Information in *Word of Mouth* comes from dental healthcare professionals of the MDS and leading professional dental organizations, including the American Dental Association. If you have any questions about specific content that may affect your oral health, please contact your dentist. For timely news regarding oral health, visit the Public section of the MDS Web site at www.massdental.org.

Your comments and suggestions regarding this publication are always welcome. All correspondence and requests for additional copies may be sent to Melissa Carman, Managing Editor of Publications and Web Site, Massachusetts Dental Society, Two Willow Street, Suite 200, Southborough, MA 01745-1027, or email mcarman@massdental.org.

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We've all seen the television commercials and heard that familiar tagline: "Four out of five dentists recommend chewing sugarless gum." But do we know why dentists recommend chewing gum? After a meal—especially at a restaurant or on the run—we don't always have access to a toothbrush, but by stimulating the production of saliva, chewing gum serves as a makeshift cleaner. When you eat anything that contains sugar or starch, the bacteria that are naturally present in your mouth convert these sugars and starches into acids, which eat away at the enamel on your teeth, resulting in tooth decay. And the longer you wait to brush your teeth after a meal, the more chance there is for these acids to attack your teeth, causing decay.

But it's not as simple as chewing *any* gum. There are some gums available that feature an extra ingredient—a natural sweetener called xylitol—that has been proven to dramatically reduce the occurrence of new tooth decay, as well as retard the effects of existing decay. Some sugar substitutes, like aspartame, don't cause decay, but they don't prevent it either. This is where xylitol is unique and why it could prove extremely beneficial to your oral health.

Chemistry 101

Xylitol, a natural sugar alcohol, is an extract from the bark of birch trees and can also be found in small quantities in foods such as raspberries, plums, corn, strawberries, endive, and mushrooms. Most of the bacteria in the mouth are unable to ferment xylitol in their metabolism, thus slowing the bacteria's growth. Xylitol keeps the bacteria that cause tooth decay—the worst bacterial offender being *Streptococcus mutans*—from sticking to the surface of the teeth, reducing the amount of plaque.

The first studies on the effects of xylitol took place in Finland in 1976 and showed that when xylitol was substituted for sucrose, it resulted in an 85 percent decrease in cavities versus sucrose. Later studies also revealed that, in addition to not causing new cavities, xylitol might actually help prevent tooth decay. One of these studies—also Finnish—discovered that, when compared to chewing gum containing sucrose, chewing gum with xylitol reduced cavities by a range of 70 to 81 percent, and by 59 to 79 percent when compared to the group that did not chew any gum.

A later study, conducted at the University of Minnesota School of Dentistry, continued to support the claims that xylitol helps keep cavities away. In this study, subjects with elevated levels of bacteria present in their mouths were instructed to rinse twice a day for two weeks with an antimicrobial mouthwash and then were instructed to do one of three things after meals: chew gum containing xylitol, chew sugarless gum sweetened with sorbitol, or not chew gum of any kind. After three months, the group that chewed xylitol gum was the only group that kept the bacteria at bay, which meant fewer cavities.

to Gum and Your Teeth, it's OK to **JUST CHEW IT.**


However, to be effective, the gum has to have xylitol as its sole sweetener, according to Dr. Gary Hildebrandt, the study's lead researcher. Many sugarless gums may contain xylitol in addition to other sweeteners, so you need to check the ingredients.

And if you don't like chewing gum, there are other options. Xylitol is also available in candy and mint form, and the anticavity power in these forms may be just as effective as in the gum form. A 2000 study showed that candies containing xylitol showed a reduction in cavities by 33 to 59 percent.

How, Where, and When

Reaping the oral health benefits of xylitol requires not too much effort on your part. According to the xylitol information Web site www.xylitol.org, it's as easy as finding xylitol-sweetened products that encourage chewing or sucking to keep the xylitol in contact with your teeth. And while 100-percent xylitol products will obviously provide the greatest results, using products that contain xylitol as an ingredient, though not the sole ingredient, can still have benefits.

Xylitol can be found in many of the sugarless gums you see at your local convenience store. Some common brands that contain xylitol as an ingredient are Arm & Hammer Dental Care Sugar Free Gum and Orbit Sugar Free Gum. But be sure to check the ingredients before you buy. To find gum that contains 100-percent xylitol, you may have to special order it. (See "Where to Buy Xylitol Gum," at right, for a list of online retailers who sell 100-percent xylitol products.) You should also ask your dentist if he or she sells xylitol gum or products in the office.

For the best bang for your chew, you should chew xylitol gum at least three to five times a day, according to www.xylitol.org; 4 to 12 grams of xylitol per day is the recommended dosage. Note that 100-percent xylitol gum and candies contain about 1 gram of xylitol in each piece, so chewing one piece four times a day will help you easily reach this goal. The Web site states that if used only occasionally or once a day, xylitol may not be as effective, regardless of the amount. The site also advises you to use the xylitol immediately after eating and to swish your mouth with water to help clear it of food particles. And between meals, you should try to replace any ordinary sugarless gum and mints you use with similar products containing xylitol. It can only help. 

Where to Buy Xylitol Gum

There are several online companies that sell 100-percent xylitol gum and candy products. Some of them are listed here. You should also ask your dentist about buying xylitol products directly from the dental office.

www.epicdental.com

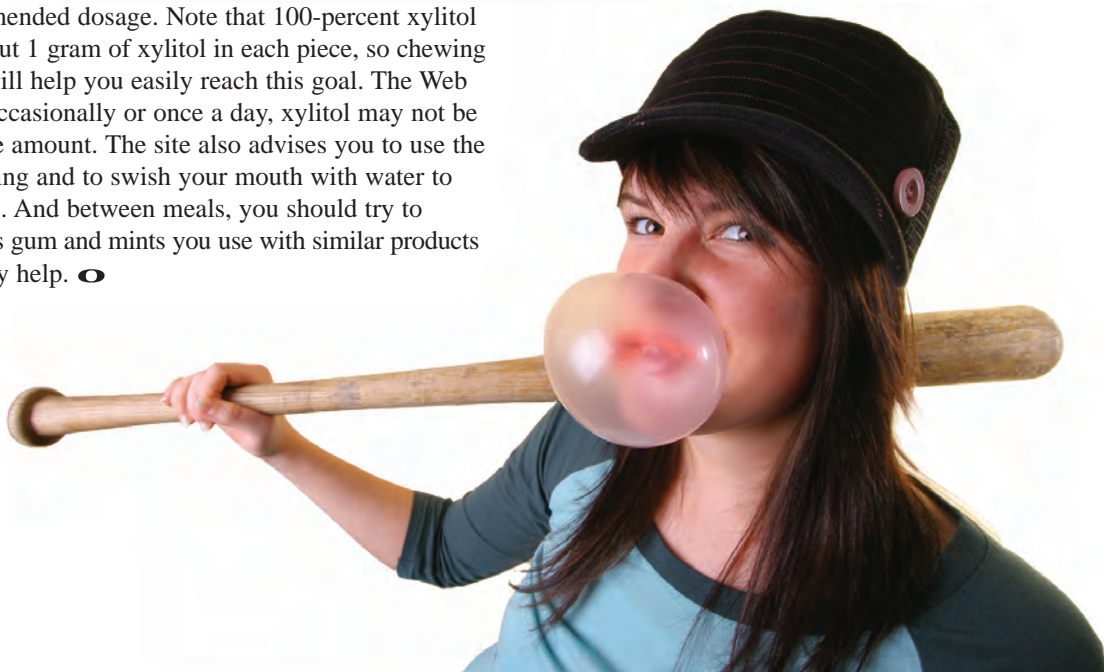
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You don't have to lose sleep over snoring

Much has been said about the health benefits of a good night's sleep, and nothing disrupts a sound sleep like snoring. Many adults suffer from snoring; in fact, 45 percent of adults are occasional snorers, and 25 percent are habitual snorers, according to the American Academy of Otolaryngology–Head and Neck Surgery. But what you may not know is that it is also common for children to snore. While snoring may seem harmless enough (unless you ask the snorer's bunkmate) the truth is that chronic snoring could be the sign of something more serious, and when a child snores, it could indicate that something is affecting the child's dentition and/or facial development.

Snoring, which occurs when there is an obstruction to the free flow of air through the passages of the back of the mouth and nose, can lead to a decrease in the amount of oxygen a person is receiving. It's amazing what the body will do to make sure it gets enough oxygen and also how the interruption of oxygen flow can affect a person. Both hyperactivity and Attention Deficit Disorder in children have been linked to the disruption of oxygen flow. What is causing the obstruction and where the obstruction is located will contribute to certain changes in the body. The most common areas of airway obstruction in a child are the nose, adenoids, and tonsils.


Airway obstruction can also cause sleep apnea, a serious sleep disorder that occurs when excessive sagging of throat tissues

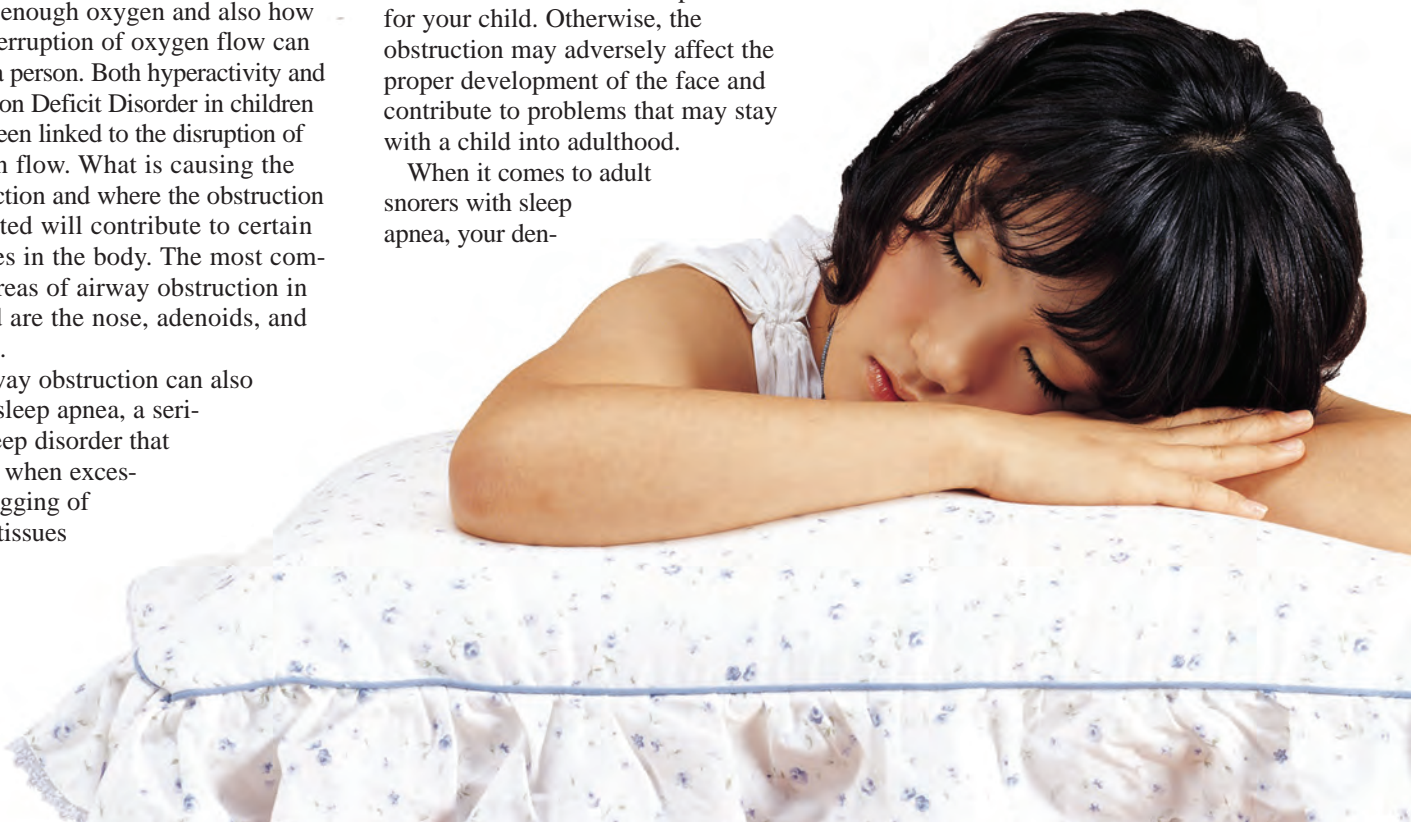
causes the airway to collapse, preventing the sleeper from breathing. Eventually, the lack of oxygen and the increase in carbon dioxide signal the sleeper to wake up, forcing the airway open with a loud snort. Chronic sleep apnea can lead to high blood pressure and an increased risk of heart disease—even in children. What's more, airway obstruction in children can signify changes in the growth of the upper and lower jaws, abnormal swallowing patterns, breathing through the mouth, and changes in the child's bite.

If this is the case, your dentist may recommend a consultation with an ear, nose, and throat (ENT) specialist to evaluate possible airway obstruction and treatment options for your child. Otherwise, the obstruction may adversely affect the proper development of the face and contribute to problems that may stay with a child into adulthood.

When it comes to adult snorers with sleep apnea, your den-

tist can often diagnose the problem and help treat it by fabricating an appliance to eliminate the snoring and/or the sleep apnea. Alleviating these conditions can have a dramatic, positive effect on a person's health and quality of life.

Today's dentists are not just about teeth and gums; they are also specialists of the head-and-neck region. So, if you have questions concerning snoring, speak to your dentist. And for more information on your oral health, contact the Massachusetts Dental Society at **(800) 342-8747** or visit www.massdental.org. 



Taking the “Fear Factor” Out of a Child’s Dental Visit

Health experts recommend that a child’s first dental visit occur at the age of one. But a young child’s first visit to the dentist can be a stressful time for both child and parent. Fortunately, there are some tips Mom and Dad can follow that will help ease the anxiety of the visit for everyone.

First, look for a dental practice that takes young children’s special needs into account. Much like a pediatrician is a doctor for children, a pedodontist is a dentist for children. However, your choices aren’t limited to just pedodontists; many general dentists treat children as well as adults. For help in selecting a dentist, visit the Massachusetts Dental Society (MDS) Web site at www.massdental.org and use the *Find an MDS Dentist* service.

Another thing to look for is a dental office that provides a fun environment for children so that they are excited about going to the dentist. Nowadays, many dentists incorporate kid-friendly design into their office environment. Some offices even go so far as to offer entertainment, such as books, toys, video games, and DVDs, all of which help to make the visit a little more like playtime.

If the child seems especially anxious, the dentist may be willing to schedule a pre-visit, where the dentist will walk the child through the dental office, show him or her the equipment and tools, let the child sit in the chair, and perhaps even demonstrate the exam on a family

member. All of these activities will help make the child feel more comfortable, as he or she will now know what to expect.

Also, to ensure that there are no surprises at the little one’s first dental visit, take the time to ask the dentist beforehand what the procedures will entail. Every child is different; some may be calm and quiet, and some may be fussier than others, which means that sitting still for an extended period of time could be a problem. Parents know their child best, so take your child’s personality into account, and if you think he or she may have trouble sitting in the chair for the course of the exam, you should prepare the child for what to expect. Not everyone likes surprises. And since your child may be overly anxious, be sure he or she knows that you will be right by his or her side the whole time (but first confirm that the dentist allows a relative to accompany the patient into the treatment room).

If you can alleviate a child’s anxiety about going to the dentist at an early age, he or she can look forward to visiting the dentist and will have a better chance of adopting a lifetime of healthy dental habits. ◉

For more information on children’s oral healthcare, contact the Massachusetts Dental Society at **(800) 342-8747** or visit www.massdental.org.




Keep Brushing “on the Tip of Your Tongue”

While the importance of daily brushing and flossing is pretty much understood, the Massachusetts Dental Society wants you to know that it's just as important that you don't give your tongue the “brush off” when it comes to your oral health.

Many people don't realize that proper oral hygiene also includes cleaning your tongue. Because the tongue collects food particles and bacteria, plaque is manufactured on its surface, and if it's not cleaned, bad breath will result. (Think of what your breath is like when you wake up in the morning.)

The easiest way to clean your tongue is simply to brush it—with fluoridated toothpaste—when you brush your teeth. Because many bad breath odors stem from the back of the tongue, it's especially important to thoroughly brush that area. However, be careful not to brush your tongue too hard or reach your brush so far back that you gag yourself. And don't forget to brush the sides of your tongue; plaque can form there, too.

If you want to go to the ultimate level of tongue hygiene, you can buy a tongue scraper, a device designed specifically for tongue cleaning. Your

dentist may recommend this if you suffer from acute bad breath problems. To use a tongue scraper, just glide it firmly across the top and sides of your tongue. Tongue scrapers are available at most pharmacies and many cost less than \$5. 



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HERE COMES THE SUN

AND MAYBE HEALTHIER TEETH

We're smack in the middle of winter, which means snow, sleet, ice, freezing temperatures, below-zero wind chills—and shorter days. As of next year, however, daylight saving time will be extended by almost a month, beginning in early March and ending the first weekend in November.

Besides lowering our electric bills and improving our spirits (studies have shown a link between lack of sunlight and depression and mood disorders, such as Seasonal Affective Disorder), this additional amount of daylight may also help extend the life and health of our teeth and bones.

Why? Because vitamin D—which is sometimes called the “sunshine vitamin”—is obtained by the body primarily through natural sun exposure, and it is just as essential as calcium for healthy teeth and bones, according to a study in the *Journal of Periodontology*, the publication

of the American Academy of Periodontology.

Both vitamin D and calcium reduce bone resorption and counteract deficiencies that can result not only in bone loss but also in increased inflammation, which is a symptom of periodontal disease. Periodontal, or gum, disease is a bacterial infection that, if left untreated, may cause damage to the bone and eventually lead to tooth loss. Periodontal disease increases the production of something called proinflammatory cytokines, which are molecules that have destructive effects throughout the body. But it has been demonstrated that vitamin D can suppress cytokine production and possibly decrease the risk of periodontal disease, according to the report.

One of the best sources of vitamin D is sunshine, and just 10 to 15 minutes of sun exposure at least twice a week to the face,

arms, hands, or back is typically sufficient to provide adequate vitamin D, according to the National Institutes of Health.

You should still wear sunscreen, however; according to the American Academy of Dermatology, even the most effective sunscreens let through enough ultraviolet ray (UV) exposure to allow for adequate vitamin D absorption.

Some elements, such as season, geographic latitude, time of day, cloud cover, smog, and sunscreen, can affect UV exposure and vitamin D synthesis. People who live in an area with limited sun exposure—or during the winter months—should try to consume foods fortified with vitamin D, such as milk, eggs, sardines, and tuna fish. Vitamin D and calcium supplements may also be an option, but you should check with your doctor to ensure that you are meeting the recommended daily allowance. ◉

Don't Leave Your Mouth in



Some days, does it feel like your mouth is on fire? If so, the Massachusetts Dental Society says that you could be one of the more than one million adults in the United States suffering from Burning Mouth Syndrome (BMS), an abnormal burning sensation of the lining of the mouth.

A fairly common condition, BMS is a painful disorder that affects mostly women over the age of 60; however, both sexes are susceptible to it. BMS is a constant and aggravating source of discomfort during which patients say they experience a scalding sensation in their mouth, on the palate, lips, and/or tongue, as well as partial or complete loss of taste. It can also cause dry mouth and thirst.

Patients with BMS often state that the pain starts gradually and intensifies as the day progresses. It also affects sleep and causes mood changes, anxiety, and depression.


According to the Academy of General Dentistry, the exact cause of BMS is difficult to identify. In 30 percent of cases, it is caused by a preexisting condition such as diabetes, the onset of menopause, a deficiency in certain nutrients, or complications from radiation or chemotherapy.

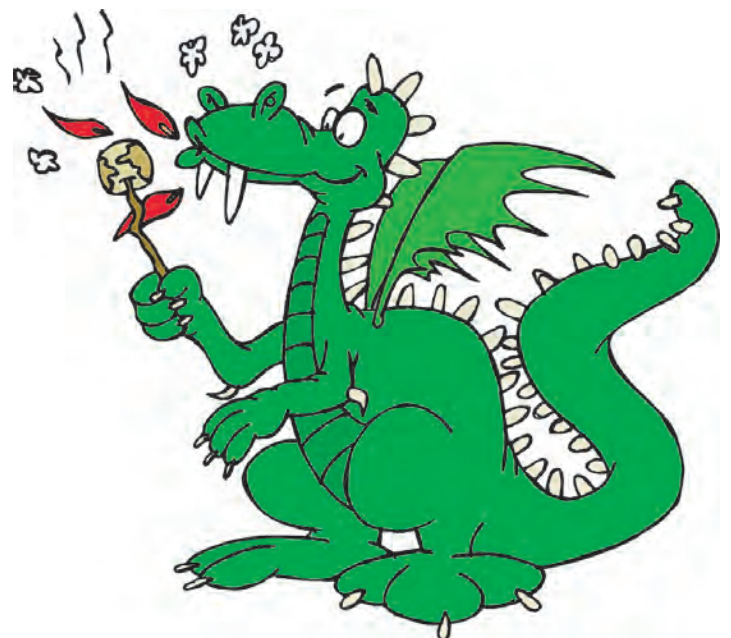
In the other 70 percent of cases, dentists and physicians are unable to pinpoint the exact cause. However, experts believe that poorly fitting dentures, dry mouth, tongue thrusting, and teeth grinding are often the causes of BMS. According to the American Academy of Family Physicians, approximately one-third of patients reported feeling BMS symptoms shortly after undergoing a dental procedure, experiencing an illness, or taking medication.

Treatment for BMS depends on the patient and the cause of the problem. If the cause is dry mouth, your dentist may either recommend that you drink more fluids or prescribe medication to increase the flow of saliva. If you are suffering

from BMS due to tongue thrusting or tooth grinding, an intra-oral appliance may help. If dentures are the problem, your dentist can either adjust them so they won't irritate your mouth or replace them with better-fitting dentures.

If it's determined that there are no oral problems causing BMS, your dentist will refer you to your primary care physician, who may be able to treat you with other medications or treatments.

Although Burning Mouth Syndrome is difficult to diagnose and is sometimes resistant to treatment, the symptoms may spontaneously disappear. If you are experiencing an ongoing burning sensation in your mouth, contact your dentist immediately. 



The Hard Line

on

SOFT DRINKS

Soda Doesn't Have to Be the Last "Straw" When It Comes to Healthy Teeth



You are probably aware that drinking soda and other soft drinks is not the healthiest thing you can do for your teeth because it can lead to an increased risk of tooth decay. But did you know that habitually sipping soft drinks does not have to be the last straw when it comes to your dental health? Furthermore, did you know that how you sip that soft drink could actually play a role in how likely you are to get one of those dreaded cavities?

According to a report in the May/June 2005 issue of *General Dentistry*, the clinical journal of the Academy of General Dentistry (AGD), drinking soft drinks and other sugary beverages through a properly positioned straw can actually help minimize the risk of cavities.

The AGD report followed the soda drinking habits of patients and found that different factors, including the frequency of sipping and the length of time the beverage remained in the mouth, affected the type, location, and severity of tooth decay. For example, decay will be found in the back molars of someone who drinks directly from a can, while decay is more


likely to occur on the front teeth of someone who drinks through a straw positioned at the front of the mouth.

According to the report, the best way to prevent tooth decay when consuming soft drinks is to sip through a straw positioned toward the back of the mouth. Why? This position limits the amount of time the beverage is in contact with the teeth, decreasing the chances of tooth decay. An additional benefit to using a straw: Colas and other dark-colored beverages are less likely to stain the front teeth if sipped through a straw directed toward the back of the mouth.

Just why do these sweet drinks wreak such havoc with our teeth? Tooth decay is the result of the destruction of tooth enamel, which occurs when the sugar and starch in certain foods and drinks—such as soda—cling to the teeth and combine with the bacteria that are naturally already present in the mouth to produce acids. Over time, these acids attack the tooth enamel, which is the thin, outer layer of tissue that helps protect the tooth from decay. To make matters worse, the majority of soft drinks on the

market already contain one or more acids, most commonly phosphoric and citric acids, which also have the potential to erode tooth enamel.

And for those of you who think you're in the clear because you drink diet soda, those low-cal or no-cal beverages may not have sugar, but they do contain acid, which can still lead to enamel breakdown and, yes, tooth decay. So even though you're watching the sugar content, you still need to be aware of what else is in that can.

However, drinking soft drinks doesn't necessarily mean a mouthful of decay. According to the Massachusetts Dental Society, tooth decay can be avoided by simply brushing your teeth as soon as possible after consuming these types of drinks. Additionally, try not to "nurse" soft drinks; taking constant sips over an extended amount of time means that the decay-causing acids spend that much more time in your mouth, increasing your odds of tooth decay. Instead, drink water—preferably treated with fluoride—as often as possible to help prevent the erosion of enamel. 



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implants

filling the toothless gap



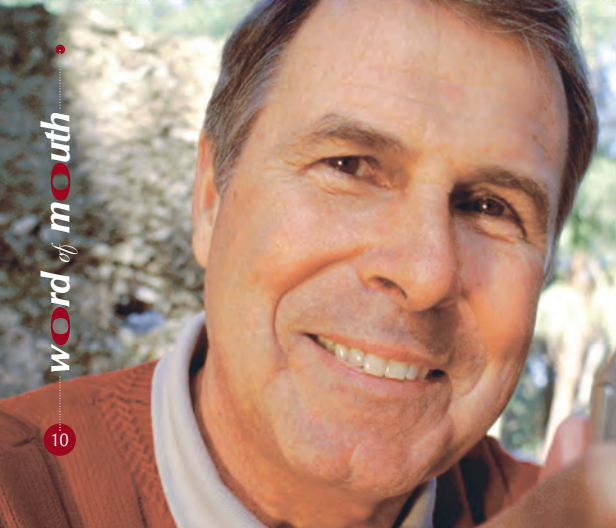
there's more to a healthy mouth than just a pretty smile. According to the American Academy of Periodontology, nearly one in three U.S. adults ages 30 to 54 and half of adults ages 55 to 90 have some form of periodontal disease (also known as gum disease). Periodontal disease is a chronic bacterial infection affecting the gums and bone supporting the teeth. As the disease destroys gum tissue and bone, teeth can become loose and may have to be removed.

But you don't have to suffer in silence with a toothless grin; dental implants are a great tooth replacement option. A dental implant is an artificial tooth root placed into your jaw to hold a replacement tooth, bridge, or denture in place. Implants typically take two to six months for the bone and implant to bond together to form anchors. During this time, a removable temporary tooth replacement can be worn over the implant site. Research has advanced to the point where in some cases an implant can be placed immediately following tooth extraction.

So, are you wondering if you could be suffering from periodontal disease and are a potential candidate for an implant? The warning signs of periodontal disease include:

- Persistent bad breath
- Gums that bleed when you brush your teeth
- Red, swollen, and bleeding gums
- Gums that have pulled away from the teeth
- Pus between the gums and teeth
- A change in the way your teeth fit together when you bite

If any of these symptoms sound familiar to you, you should see your dentist or a periodontist, who specializes in the prevention, diagnosis, and treatment of diseases of the tissue surrounding the teeth. You don't want to sacrifice a full smile, do you? **o**





THE “BZZZZZZ” ON POWER TOOTHBRUSHES

With all the toothbrushes available on the market these days, from the simple plastic or rubber “old school” handheld manual brushes for \$2.99 at the local drugstore to the much fancier power or electric toothbrushes that can retail for as much as \$100-plus and seem to do almost everything except vacuum your wall-to-wall carpet, the question is: Which type is better at brushing your teeth?

According to the Massachusetts Dental Society (MDS), the bottom line is that no matter what type of toothbrush you choose, the most important thing is the technique you use and that you brush your teeth regularly, at minimum two times a day for at least two minutes each time. And no matter what type of toothbrush you use, flossing is still necessary at least once each day to ensure healthy teeth and gums.

So, not accounting for personal taste and financial constraints, an electric or power toothbrush will do as good a job of cleaning your teeth as a manual brush. Power toothbrushes have features that essentially do the work for you and are designed for maximum cleaning ability. Another benefit is that the user doesn’t need to maneuver a power brush as much as a manual toothbrush, making power toothbrushes a great alternative for anyone who has limited hand movement, such as an arthritis sufferer.

Power toothbrushes are also a good choice for children, who may not yet have the dexterity to be able to reach all areas of their mouth to clean it thoroughly. But a power toothbrush can do this for them. In addition, kids may find the power toothbrush fun to use and, as a result, may become more enthusiastic about brushing their teeth. The MDS advises that children can begin using a power toothbrush around the age of five.

As with a manual toothbrush, to be effective, the power toothbrush needs to be used two times a day for a minimum of two minutes each time. Many power brushes even have timers built in, so you know how long you’ve brushed. With the majority of power toothbrushes, you can use any fluoridated toothpaste, but there are some models that request you use a specific type of toothpaste.

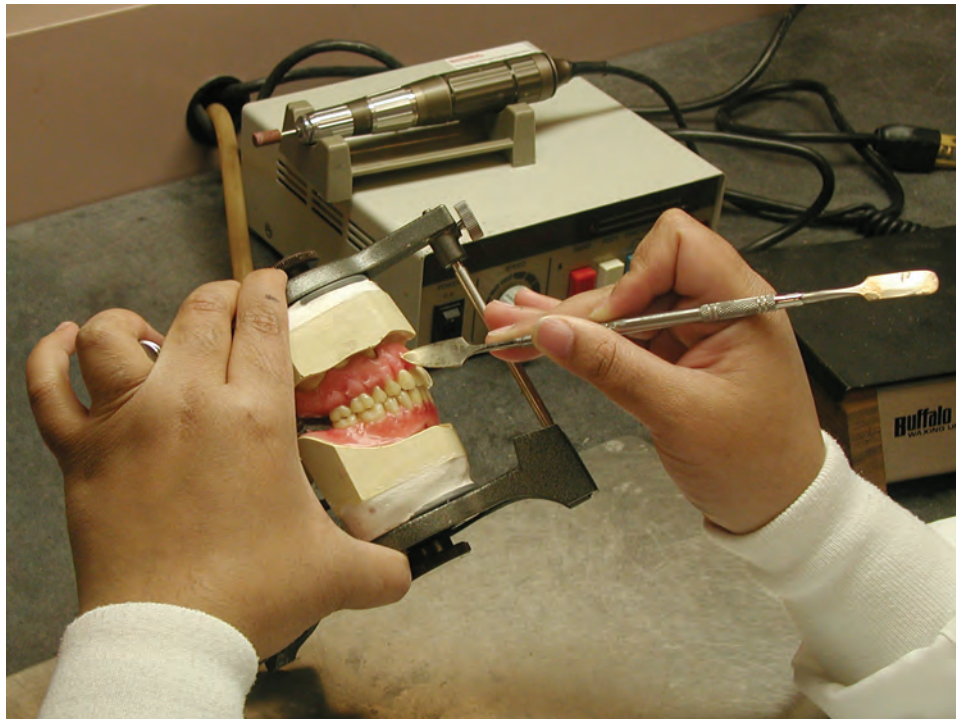
It’s important to remember, however, that power toothbrushes do not take the place of flossing, which is a common misconception.

Although a power toothbrush can be a good alternative to a manual toothbrush, similar problems can arise when using either. Do not use a brushing motion with a power toothbrush because it already has a built-in feature that does that for you. As a result, it’s important not to brush with too much force or you can damage your teeth and gums. Instead, allow the power toothbrush to do the work for you. Similarly, if you use a manual toothbrush with hard bristles, you can wear away enamel and harm your gums. If you choose a manual toothbrush, it’s important to buy one with soft bristles. And don’t forget to visit your dentist at least every six months for optimum dental health. ◉

For more information on your oral health, contact the Massachusetts Dental Society at (800) 342-8747 or visit www.massdental.org.



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