A Healthy Mouth and a Healthy Earth:
Something to Smile About
A Spoonful of Sugar Makes the Risk of Cavities Go Up

We are nearing the end of yet another cold and flu season, and despite recent reports questioning the effectiveness of children’s cold medicines, many parents have been busy feeding spoonfuls of over-the-counter and prescription medications to their children to help them feel better. However, moms and dads may not be aware that as they’re trying to relieve their children’s nasal congestion, sore throats, and coughs, they’re also giving them a “spoonful of sugar to make the medicine go down,” and this increases the risk of tooth decay. That’s certainly nothing to sing about.

According to the Massachusetts Dental Society (MDS), both over-the-counter and prescribed children’s medications contain large amounts of sugar. Nearly 100 percent of children’s medicines contain sucrose, or sugar, to improve the taste and help children consume their medicines more easily. However, all this added sugar could also increase the likelihood for tooth decay. The stickiness of the medication, the frequency with which it is taken, and the amount of sugar content all play a role in higher cavity risk.

So what can parents do? Ideally, after children take their medicine, they should brush and floss their teeth immediately or parents should wipe down babies’ gums with a clean washcloth. However, because it may not be easy or practical to have sick children brush and floss their teeth a number of times throughout the day, an alternative for those in-between times could be to rinse with or drink water to help dilute the sugar. If drinking water is not possible, parents can give their children sugar-free gum or gum that contains Xylitol to help increase salivary flow and, therefore, dilute any acid production, which is a contributing factor toward tooth decay.

Increasing oral home care, rinsing with water, and chewing sugar-free gum are all especially important for children who suffer from chronic illnesses, because they may have to continuously take medication. Depending on the child’s level of tooth decay, his or her dentist may also need to evaluate the possibility of more frequent visits to the dentist.

For more information on children’s oral health, contact the Massachusetts Dental Society at (800) 342-8747 or visit www.massdental.org.
You’re sniffling, coughing, and sneezing, and your sinuses feel as if they’ve gone on strike. You have a cold, or worse, the flu. As if that’s not bad enough, now your teeth are starting to ache. How can that be? Is there a connection between what’s going on with your drippy nose and your teeth? And is there anything you can do to ease the pain when your teeth have a “cold”?

The common cold is an acute infection of the upper respiratory tract caused by one or more of several viruses. Symptoms of the common cold may vary depending on the part of the respiratory tract involved, but almost all patients have nasal discharge, nasal congestion, and a sore throat. Some patients may complain of fatigue and cough; other less-common symptoms include fever, headache, earache, and sensitive teeth.

In some cases, the common cold is brought on by a virus that causes a sinus infection. Symptoms of a sinus infection are headache and severe pain localized in the region of the involved sinus. However, the roots of the upper premolars and molars, along with the nerves supplying these structures, are in proximity to the upper sinus. This relationship explains why dental symptoms are frequently associated with upper jaw sinus disease. The upper teeth close to the infected sinus also often ache, feel elongated, and are sensitive to pressure.

In order for you to alleviate the toothache pain associated with the common cold or a sinus problem, the Massachusetts Dental Society recommends adopting good oral hygiene habits, which means brushing twice a day, flossing daily, and using an antiseptic mouthrinse. A healthy diet of soft foods is also recommended. Be sure not to eat extremely hot or cold foods, and don’t chew or swallow on the infected side.

Antibiotics are the first choice in the treatment of a sinus infection and should be used in conjunction with antihistamines to help provide drainage for the upper sinus, so you may want to consult your physician. And if any pain unrelated to your cold persists, see your dentist as soon as possible to rule out any oral health problems.

For more information on your oral health, contact the Massachusetts Dental Society at (800) 342-8747 or visit our Web site at www.massdental.org.
Every day, many dental patients hear those dreaded words: “You need a root canal.” Just the phrase “root canal” has been known to make the strongest person quiver at the knees. But the truth is, more often than not, the anticipation of a root canal is far worse than the actual procedure. So, what exactly is a root canal and what can you expect from the procedure?

Endodontics, better known as root canal therapy, is a procedure that's performed to save a tooth that would otherwise be extracted. If your dentist has informed you that you need endodontic treatment, you are not alone. More than 14 million teeth receive endodontic treatment each year. By choosing endodontic treatment, you are opting to keep your natural teeth as a healthy foundation for chewing and biting for years to come. Although many general dentists can perform root canal procedures, they may instead refer you to an endodontist, a dentist who specializes in root canal therapy.

Endodontic treatment is necessary when the tooth’s pulp becomes infected or inflamed. Pulp is found in a canal that runs through the center of the hard tissue on the inside of the tooth. The pulp carries the tooth's nerves, blood vessels, and connective tissues. If the pulp becomes damaged through injury or disease, bacteria can leak into the pulp and cause it to die, according to the American Dental Association. The most common causes of pulp death are a cracked tooth or a deep cavity. Left without treatment, pus builds up at the root tip in the jawbone, forming an abscess.

Unfortunately, the tooth can not heal itself. That’s where the root canal comes in. Root canal therapy is the process of removing the diseased pulp tissue, disinfecting the canal, and then replacing the pulp with a filling material. The canal is filled with a rubberlike substance, called gutta-percha, or another material to prevent recontamination of the root. The tooth is then sealed with a post and/or a crown. If the tooth is not treated, the infection can spread into the bone surrounding the tooth.

Root canal treatment frightens many people, but it shouldn’t. Endodontic concepts and techniques have undergone a multitude of changes in the past 20 years—and most likely will continue to evolve. With modern techniques, anesthetics, medications, and new products constantly being introduced in the field of dentistry, root canal procedures can be done more comfortably and in less time than in the past. Gone are the days of multiple painful visits; most treatments are completed in approximately one or two appointments, depending on the condition of the pulp.

During the first appointment, the endodontist will remove the diseased pulp, clean and shape the root, and then place a temporary filling in the crown opening to keep saliva out so that the area can heal properly. At the second appointment, the endodontist will remove the temporary filling and then fill and permanently seal the root canal.

Most patients report that they’re comfortable during and after the procedure. You can expect to have inflammation of the surrounding tissues and some discomfort, but an over-the-counter analgesic can help alleviate the pain, which should last for only a few days. A follow-up exam will ensure that your tissue is healing properly. Then, if your treatment is being performed by an endodontist, he or she will send you back to your general dentist to have a permanent restoration placed on the tooth.

Root canal therapy allows you to save your tooth—and your smile.
You’re brushing your teeth at least twice a day for two minutes, using fluoride toothpaste, and flossing regularly. That’s all good stuff for your mouth (and your overall health), but did you know that while you’re being good to your oral health, you could also be good to our planet?

Every day, the average person in the United States uses more than 50 gallons of water, according to the U.S. Geological Survey. Over the course of a year, that same person uses 107,000 gallons of water for everything from showering to flushing the toilet to washing dishes to, yes, brushing his or her teeth.

It may surprise you to learn that if you let the faucet run while you brush your teeth, you’re using 2 gallons of water—every time you brush your teeth. That’s like pouring two of those big jugs of bottled water right down the drain. That seems like a lot of water when you put it that way, doesn’t it? But by just turning the faucet off while you brush your pearly whites, you can save up to 2 gallons of water during each brushing session. The same is true when you wash your face or shave. So think about how much water you’ll be saving by just turning off the tap while you brush—and you can save even more water by filling a glass with water and using that to rinse with after you’re done brushing.

Don’t Flush the Floss

On the one hand, it’s good news that you’re flossing your teeth; your gums and your dentist will love you for that. But you want to be careful not to get into the bad habit of flushing your used dental floss down the toilet because that can have serious ramifications for the environment. According to an article in the Journal of the Canadian Dental Association, dental floss that is flushed down the toilet wreaks havoc on wastewater treatment facilities.

The Toronto Water Authority conducted a campaign last year to alert the public to problems associated with flushing shred-resistant dental floss, which often forms softball-sized clumps that jam machinery at water treatment plants.

So, while it’s important to continue flossing your teeth, it’s a good idea to remember to throw used floss away rather than flushing it down the toilet.

Tossing Your Toothbrush?

Floss isn’t the only discarded dental item that can wreak potential havoc on the environment. Nonbiodegradable toothbrushes can also be problematic. According to an article in Natural Health magazine, if every American changes toothbrushes every three months—which is the recommendation of the American Dental Association, since worn-out toothbrushes aren’t as effective for cleaning your teeth properly and can become rife with bacteria—that will add up to nearly 100 million pounds of landfill waste.

However, the article states that there are several companies that manufacture toothbrushes made from recycled material such as yogurt cups or that will take your old toothbrush and reprocess the plastic and use it to create other items, such as planters, decking, and benches. Check out www.greenfeet.com for more information.

When it comes to preserving the Earth’s resources, every little bit helps.

If you have more questions about your oral health, contact the Massachusetts Dental Society at (800) 342-8747 or visit our Web site at www.massdental.org.
If you “Google” the words “dental fear,” more than 2 million references appear. That’s not surprising because as many as 40 million Americans suffer from some form of dental anxiety. However, recent advances in dentistry can help many of those individuals who may become “down in the mouth” just thinking about visiting their dentist.

According to the Massachusetts Dental Society (MDS), a serious form of dental fear is called “dental phobia,” which is a condition that leaves patients panic-stricken at even just the thought of going to the dentist. Individuals suffering from dental phobia are aware that their fear is irrational, and yet they are unable to do anything about it. Dental phobics will do everything possible to avoid the dentist and will seek dental care only when they are suffering from extreme pain. However, delaying a trip to the dentist can result in additional oral health problems, and consequently, additional expenses.

There are a number of reasons why people suffer from dental phobia, including the loss of control, embarrassment, or a previously difficult or painful experience. Another fundamental reason people suffer from dental phobia is the fear of pain. The worry and anticipation over any pain associated with a dental procedure is too overwhelming for them, so many avoid the dentist altogether —until serious oral health problems arise. But some of the latest advances in dentistry may help to change this.

Many dentists now offer the use of sedatives that can reduce anxiety in patients suffering from dental phobia. This effect can be achieved through drugs administered either intravenously or orally, or with the use of nitrous oxide sedation. When patients become sedated, they usually become relaxed. Soon their anxiety is diminished and they are ready to accept treatment.

The American Dental Association (ADA) strongly supports the use of this technique in the treatment of dental patients and is committed to ensuring its safe and effective use by educationally and clinically qualified dentists and staff.

Hate the thought of a needle? Topical anesthesia, sometimes referred to as numbing gel, may be applied to gums before an injection is given so that the pain of the needle is diminished. This topical anesthesia agent is typically applied to the injection site with a cotton swab.

Advances in dentistry are helping to change the way many patients view the dentist’s chair. However, the most important step to overcoming a dental phobia is finding a dentist who makes you feel calm and relaxed through communication and by understanding your fears. Look for a dentist who will listen to your concerns, help you through your fear, and not be judgmental. It takes a true partnership between patient and dentist, a trusting relationship that will enable you to maintain great oral health and obtain the care you need.

For more information on dental fear, contact the Massachusetts Dental Society at (800) 342-8747. And visit the Find a Dentist page on the MDS Web site at www.massdental.org for a listing of dentists close to where you live or work.

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More than 35 million Americans—both women and men—suffer from eating disorders. And while the long-term physical health implications of eating disorders include heart failure, kidney damage, osteoporosis, and digestive system problems, the frequent vomiting and nutritional deficiencies associated with eating disorders can severely affect oral health, as well.

Changes in the mouth are often the first physical signs of an eating disorder, according to the National Eating Disorders Association (NEDA). That is why dental offices are one of the first places where the physical damages that may accompany such a disorder can be detected. Common oral health issues that result from eating disorders include tooth erosion, tooth sensitivity, dry mouth, and bad breath.

The two most common eating disorders, affecting approximately 11 million sufferers, are bulimia and anorexia nervosa. Both disorders are psychological in nature and are predominant in young women, revolving around body-image issues that result in the sufferer depriving his or her body of essential nutrients—nutrients that are critical to not only a healthy body but also a healthy mouth.

Bulimia is characterized by compulsive overeating (“bingeing”) followed by self-induced vomiting (“purging”), whereas anorexia nervosa is marked by extreme weight loss typically achieved through self-starvation. Yet both diseases produce signs and symptoms that can be detected in the mouth during a routine oral exam, such as dry mouth, reddening of the palate, and chapped lips.

In addition to these symptoms, repeated vomiting, a common characteristic of both disorders, exposes teeth to gastric acids which erode tooth enamel, the hard protective covering of the tooth. According to NEDA, studies have indicated that up to 89 percent of bulimic patients show signs of tooth erosion due to the powerful effects of stomach acid. With prolonged exposure to these acids, teeth may change in shape, color, and length, and amalgam fillings may start to protrude above a tooth’s surface. Left untreated, extreme cases of eating disorders may expose the innermost layer of the teeth, called the pulp, resulting in infection, discoloration, and, eventually, pulp death. If the latter occurs, the patient may need to have a root canal performed or the tooth extracted.

The oral effects of eating disorders often can be successfully treated when detected early. Dentists may be able to teach patients how to minimize the impact of constant purging, but if the patient has not sought medical or psychological treatment for the eating disorder, any reconstructive efforts may prove ineffective because additional acid will destroy any new restorations.

Although eating disorders are potentially fatal (anorexia nervosa has the highest mortality rate of any mental illness, according to NEDA), they are treatable. And the oral implications, if detected early enough, can be reversed.

If you think you or someone you know may have an eating disorder and are experiencing any of the symptoms described above, please talk with your physician and your dentist.
Ah, stress. It seems that no one can escape it these days. You worry about school, work, finances, illness, relationships. You even worry about how much you worry. Not to add to your stress, but you should be aware that all that worrying could have a negative impact on your oral health.

According to an article published last summer in the Journal of Periodontology, there is a strong relationship between stress and periodontal disease, also known as gum disease. In addition to stress, other psychological factors, such as anxiety, depression, and loneliness, are linked to an increased likelihood of periodontal disease.

So how does stressing out about your next car payment, for example, lead to gum disease? Researchers believe that the hormone cortisol may be a factor. Cortisol, also known as the “stress hormone,” is secreted by the adrenal glands and involved in many functions, including proper glucose metabolism, blood pressure regulation, insulin release for blood sugar maintenance, immune function, and inflammatory response. An earlier study in the Journal of Periodontology in July 2006 found that increased levels of cortisol can lead to more destruction of the gums and bone due to periodontal diseases.

Behavioral factors may also come into play. People who are under extreme amounts of stress or suffering from depression may be more likely to disregard their good oral hygiene, such as brushing and flossing regularly. They may even create new behaviors that could negatively impact their oral health, such as adopting the use of nicotine, alcohol, or drugs, all of which can affect teeth and gums, according to the American Academy of Periodontology.

Your gums aren’t the only oral victims of stress. Another oral side effect is teeth grinding, also known as bruxism, which often occurs during sleep. According to the American Dental Association, people who grind their teeth may wake up with a headache, earache, or toothache. Their facial muscles may be sore and jaw joints tender. Besides causing discomfort, continuous grinding can eventually damage dental restorations and even loosen teeth. In addition, the pressure from clenching or grinding may cause cracks or fractures in teeth.

If stress seems to be causing you a “pain in the mouth,” it may be helpful to find healthy ways to relax, such as listening to music, reading a book, or taking a walk. A regular exercise routine can do wonders for relieving stress, and a balanced diet and plenty of sleep can also be helpful. If you feel that your stress is unmanageable, you should speak to your physician, who may refer you to a mental health professional. And before stress takes a bite out of your oral health, make an appointment to see your dentist.

For more information on your oral health, call the Massachusetts Dental Society at (800) 342-8747 or visit www.massdental.org.
Osteoporosis is a serious disease affecting millions of people, most over the age of 50. Characterized by low bone mass and structural deterioration of bone tissue, osteoporosis leads to weakening of the bones and an increased risk of developing fractures, especially of the hip, spine, and wrist, although any bone can be affected, according to the National Osteoporosis Foundation (NOF).

The disease afflicts more than 10 million Americans, with 80 percent (or 8 million) of those being women. And while it is often thought of as an older person’s ailment, osteoporosis can strike at any age. What’s more, people may not even be aware that they have the disease until it’s too late. Bone loss occurs without symptoms, as the bones become so weak that a sudden strain, bump, or fall causes them to fracture or vertebrae to collapse, resulting in excruciating pain and a visit to the doctor’s office or emergency room.

But a trip to the dentist may help diagnose this “silent disease” before any damage is done, since early signs of oral health problems, such as tooth loss and gum disease, can often raise a flag for your dentist to suspect osteoporosis, according to a 2004 study published in General Dentistry, the publication of the Academy of General Dentistry.

Early signs of osteoporosis can often be seen in a patient’s mouth, according to the study’s author. If the dentist observes that some teeth are loose, the gums are not attached to the teeth, and any dentures are not fitting properly, dental X-rays may be taken to confirm the diagnosis. If the X-rays reveal a decrease in the density of the jawbone and bone around the teeth, as well as the remaining part of the jaws, then osteoporosis may be likely. The patient would then be referred to his or her physician for confirmation of the diagnosis with a bone mineral density test.

The best defense against developing osteoporosis in later life is to build strong bones during childhood and adolescence. But there are a few steps, according to the NOF, that can optimize bone health and help prevent osteoporosis:

- A balanced diet rich in calcium and vitamin D
- Weight-bearing and resistance-training exercises
- A healthy lifestyle with no smoking or excessive alcohol intake
- A discussion with a health care professional about bone health
- Bone density testing and medication, when appropriate

There is no cure for osteoporosis, but physicians may prescribe antiresorptive medications, also known as oral bisphosphonates, to prevent and/or treat the disease. Some examples of this kind of drug include alendronate (Fosamax®), risedronate (Actonel®), and ibandronate (Boniva®). However, in the last two years, some media reports have linked the use of bisphosphonates with the development of osteonecrosis of the jaws (ONJ).

ONJ is a rare but potentially serious condition that can cause severe destruction of the jawbones, according to the American Dental Association (ADA). Most cases of ONJ have been seen in patients with cancer who receive treatment with intravenous bisphosphonates, which absorb differently from oral bisphosphonates, says the ADA.

Further, it is estimated that alendronate may reduce the risk of experiencing a hip fracture in patients with osteoporosis by 40 percent, so the benefits of taking oral bisphosphonates are certainly to be taken into consideration. Given the risks associated with osteoporosis and the benefits of oral bisphosphonate therapy, it’s in your best interest to speak with your physician to determine whether bisphosphonates are right for you. However, you should never, under any circumstances, stop taking the medication without talking to your doctor. Your doctor may recommend that you continue receiving oral bisphosphonate treatment despite the slight risk of developing ONJ.

If you are taking an oral bisphosphonate, make sure to let your dentist know. Some dental procedures, such as extractions, may increase your risk of developing ONJ, according to the ADA. And make sure to visit your dentist regularly for checkups and maintain good oral hygiene (brush and floss regularly) to make sure your gums and jawbones are healthy, which will decrease your risk of developing ONJ.

Meanwhile, the dental and medical communities are continuing to study ways to prevent and treat osteonecrosis of the jaws to ensure the safest result for dental patients taking bisphosphonates.
In this world, nothing lasts forever. Children grow up and leave home, starting their own lives. Cars pass the 100,000-mile mark and eventually sputter out. Your spring break vacation comes and goes far too quickly. And sadly, the same can be said for one of the most common dental treatments: fillings. So even if your tooth doesn’t hurt and that filling you got when you were 15 years old is still in place, you may be surprised when your dentist tells you that it needs to be replaced. Dental fillings may last many years, according to the American Dental Association, but all fillings will need to be replaced eventually.

Why is that? Contrary to popular belief, dental fillings are not permanent. And pain is not always a symptom of dental decay or infection. There may be a number of reasons why you would need a filling replaced.

The most common reason is recurrent decay or decay around an existing filling. Over time, due to chewing forces, fillings or enamel may begin to chip away around the edges of the tooth. This chipping is not visible to the naked eye. Clenching and grinding your teeth can also contribute to weakening the filling.

Additionally, one of the properties of the older silver fillings is dimensional change, similar to expansion and contraction, and this is caused by exposure to moisture and temperature changes. As a result, fluid and bacterial plaque may seep into the openings caused by expansion and contraction and could eventually reach the nerve. This could lead to infection, abscess, cysts, inflammation, and even facial swelling.

Decay that is undiagnosed and untreated can progress to infect dental pulp (the layer of the tooth that contains its nerve and blood supply), which can result in the need for a root canal or possibly even loss of the tooth.

And occasionally, this could all happen without the tiniest bit of discomfort, so you wouldn’t even know your tooth was infected. That’s why it is recommended that you visit the dentist at least twice a year. At your next cleaning, be sure to ask your dentist or hygienist to examine any fillings you have to be sure they are fully intact. Problems with existing fillings can generally be detected in the early stages, so a thorough examination by your dentist is a good measure to take. Your dentist may opt to take dental radiographs (or X-rays) that help detect any decay under existing fillings or between teeth, two spots that are difficult to check just by looking at the teeth. Preventive dentistry and early detection are the keys to good oral health.

And if you do need to have a filling replaced, you have more choices today than ever before. The most common fillings are either amalgam or composite. Amalgam is a mixture of silver, copper, tin, and mercury, and it is a durable filling that is highly resistant to wear and tear. Composite fillings are a tooth-colored mixture of acrylic resin and finely ground glasslike particles, and they provide durability and resistance to fracture in small-to-midsized restorations that need to withstand moderate chewing pressure. Your dentist can recommend the best type of filling to meet your needs.

For more information on fillings or your oral health, contact the Massachusetts Dental Society at (800) 342-8747 or visit our Web site at www.massdental.org.
With the warm weather of spring just around the corner, it’s time to start thinking about throwing open the windows and cleaning out the winter dust. And the Massachusetts Dental Society (MDS) wants to remind you to remember your oral health as part of your “spring cleaning.”

For most patients, having your teeth professionally cleaned twice a year is enough. However, the same cannot be said for all patients. How often you need to have your teeth professionally cleaned depends on your overall health and if you suffer from any oral health problems. If you have a normal level of health, six months between visits to your dentist for an exam and cleaning is usually appropriate, according to the MDS. However, if you suffer from such problems as periodontal disease, gingivitis, or diabetes, your dentist may vary the number of dental visits to suit your needs because you’re more prone to oral health problems.

For example, patients with gum disease will need to have their teeth professionally cleaned every three to four months for an indefinite period. Others, such as pregnant women and patients with braces, may also need more frequent visits, at least temporarily.

In addition to removing plaque and tartar that brushing and flossing miss, a cleaning and checkup can give you something besides polished pearly whites. It also gives your dentist an opportunity to screen for early signs of other diseases, such as oral cancer.

If you have questions as to how often you should have your teeth professionally cleaned, speak to your dentist. For more information on dental visits and your oral health, contact the Massachusetts Dental Society at (800) 342-8747 or visit www.massdental.org.
Always Open

You may not be able to visit your dentist 24 hours a day, but you can access oral health information any time, day or night, by visiting the recently redesigned Massachusetts Dental Society Web site at www.massdental.org. There you'll find information on a wide range of subjects—everything from bridges and braces to nightguards and mouthguards.

Of course, our Web site is no substitute for actually going to the dentist. But when you visit us online, at least you won't be asked how often you floss.

This message is brought to you by the 4,500 members of the Massachusetts Dental Society.
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