

Word_{OF} MOUTH[®]

A SEMIANNUAL PUBLICATION OF THE MASSACHUSETTS DENTAL SOCIETY



**Bad Breath:
It's Not a
Mask Thing**

massdental.org
800.342.8747

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

Information in WORD OF MOUTH articles comes from dental health care professionals of the MDS and other 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 more information regarding oral health, please visit the Public Resources section of the MDS website at massdental.org.

Your comments and suggestions regarding WORD OF MOUTH are always welcome. All correspondence may be sent to:

Melissa Carman
Director of Publications
Massachusetts Dental Society
Two Willow Street
Southborough, MA 01745-1027
mcarman@massdental.org
508.449.6060

Copyright© 2021 Massachusetts Dental Society

Kevin C. Monteiro, CAE – *Executive Director*

Melissa Carman – *Director of Publications*

Suzanne Gullledge – *Graphic Designer*

Todd Belfbecker, DMD – *Consultant*

“Masking”

Since face mask guidance and mandates were implemented last year to help slow the spread of COVID-19 and keep ourselves, our loved ones, and our communities safe, many people have become aware of something that had previously eluded them: They have bad breath. And while some may think that wearing a mask causes bad breath, the fact is that if you have bad breath, it already existed. Donning a face mask has just put the stinky news, well, right under your nose.

According to the American Dental Association (ADA), approximately 50% of adults have or have had bad breath (also known as halitosis) at some point in their life, so if you suffer with halitosis, you aren't alone.



Bad Breath



But the good news is that it's not something you have to be stuck with forever; there are treatments you can use to banish bad breath. But before you stock up on breath mints and mouthwash, be aware that these merely cover up the symptom and don't address the cause. That's why it's important to know what's behind your bad breath because you want to be sure it's not something more serious.

The most common cause of bad breath is poor oral hygiene, so you'll want to start there. Any time we eat something, food particles can remain in the mouth and become lodged between teeth, along the gum line, or on the surface of the tongue. When this happens, bacteria that are naturally present in the mouth begin to break down these particles, releasing chemicals with a strong odor. Failure to brush and floss your teeth daily can result in this bacteria being allowed to thrive in your mouth. To prevent this, be sure to brush your teeth at least twice a day with a fluoride toothpaste and floss daily to remove any particles the brush can't reach.

The surface of the tongue is also a major breeding ground for the same bacteria that cause bad breath, so you don't want to ignore it. The easiest way to clean your tongue is simply to brush it when you brush your teeth, and since bad breath odors may stem from the back and sides of the tongue, it's especially important to thoroughly brush those areas. You can also buy a tongue scraper specifically designed for tongue cleaning at your local pharmacy. To use a tongue scraper, just glide it firmly across the top and sides of your tongue.

If you are on top of your tooth game and follow good oral hygiene habits and your bad breath persists, the cause could be one of the following:

DIET

Certain foods, such as garlic and onions, have strong odors that can impact your breath, and when these foods are digested, the odor-causing chemicals can be absorbed into the bloodstream and even move into the lungs, so when you exhale, these chemicals (and odors) are also exhaled. Following a low-carbohydrate/high-protein diet (e.g., keto) may also increase your risk for developing bad breath. When you are on a low-carbohydrate diet, the body modifies the way it deals with fat by producing a chemical substance called ketones, which can give your breath a different, and oftentimes bad, odor.

ORAL CONDITIONS

Bad breath may be a sign that you have an infection in your mouth, which could take the form of an infected tooth (sometimes as the result of a cavity) or periodontal (gum) disease. One of the warning signs of periodontal disease is persistent bad breath. Periodontal disease is caused by plaque that forms on the teeth, which then irritates the gums. This can cause

gum tissues to pull away from the teeth and form pockets where more bacteria can collect and become trapped, leading to worse odors. At times, only a professional periodontal cleaning can remove extensive bacteria and plaque. Make an appointment with your dentist to have them take a closer look to rule out any potential oral causes.

DRY MOUTH

Persistent dry mouth (xerostomia) occurs when saliva flow decreases in the mouth, and that can lead to bad breath because saliva helps clean the mouth, remove odor-causing particles, and neutralize acids produced by plaque. According to the ADA, more than 500 medications can contribute to dry mouth, including antihistamines, blood pressure medications, decongestants, pain medications, diuretics, and antidepressants. Additionally, cancer therapy, the use of recreational or medicinal marijuana, and constantly breathing through the mouth can cause xerostomia.

MEDICAL CONDITIONS

Halitosis may also be the sign of an underlying medical disorder, such as an infection in the respiratory tract (nose, throat, windpipe, or lungs), chronic sinusitis, postnasal drip, chronic bronchitis, diabetes, gastrointestinal disturbance, or even a liver or kidney ailment. If your dentist determines that your teeth and gums are healthy, they may refer you to your primary care physician or a specialist to determine the medical cause of the bad breath.

CONCLUSION

While it's tempting to try to solve your bad breath problem with a quick fix, know that over-the-counter mouthwashes, breath mints, and gum only help fight temporary mouth odor. If you need to frequently use a mouthwash or mints to cover up your bad breath, consult with your dentist, who can determine the source of the problem. Your dentist will be able to rule out any oral cause of the bad breath and recommend or prescribe specific products, medications, or treatments that can help. For example, if your dentist determines that your bad breath is caused by medication-induced dry mouth, they can recommend that you use sugar-free gum or sugar-free candy or lozenges, or even an artificial saliva product to help stimulate saliva flow.

Bad breath is embarrassing and unpleasant, which is why it's so important that you maintain good oral hygiene that will help you steer clear of many dental problems before they occur, and not just try to "mask" the problem.



Don't Overlook Your Child's Oral Health This School Year

The 2020-2021 school year was fraught with anxiety, stress, and confusion for students and parents (and teachers!) alike due to the COVID-19 pandemic and the need to adapt to remote and hybrid learning modalities. The increased availability of vaccines last spring brought somewhat of a return to normal, with more students heading back to class for in-person learning. But as we head into this school year, concerns are arising again due to the COVID-19 Delta variant and its high transmission rates, and debates over vaccine and mask requirements for teachers and eligible students (at this point, children age 12 and under are ineligible for the vaccines, which are still undergoing clinical trials, with the U.S. Food & Drug Administration telling NBC News in July that emergency use authorization for the vaccine for that age group may not be approved until early to midwinter 2022). These serious issues aside, one thing that shouldn't be up for debate is scheduling a dental exam as part of the back-to-school routine for your student.

According to the American Dental Association (ADA), cavities are one of the most prevalent infectious diseases among children in the United States, and more than 34 million school hours are lost each year due to dental-related causes. Untreated cavities can cause pain and infections that may lead to problems with eating, speaking, playing, and learning. And with many children learning entirely virtually last year, dietary habits likely led to increased tooth decay risk due to more frequent snacking, immediate access to sugary and carbonated beverages, and disruption to their daily routine. That's why keeping your child's semi-annual dental checkup is even

more important than ever. A dentist will be able to examine your child's teeth and mouth for signs of tooth decay or other issues and make sure everything in the mouth is developing properly, which may help prevent them from missing valuable school days in the future.

Preventing dental disease in children also includes adopting good oral hygiene habits and mouth-friendly diets. You can help your child maintain a healthy smile all year long by making sure they floss their teeth and brush at least twice a day with fluoridated toothpaste. Also, avoid packing school lunch bags with snack items such as candy, sticky granola bars, and raisins, which can cling to the teeth and lead to decay, or sugar-filled fruit juices and energy drinks. Lastly, dental sealants, which are thin plastic coatings brushed and hardened onto the surfaces of molars, are also very important. According to the U.S. Centers for Disease Control and Prevention (CDC), dental sealants prevent more than 80% of cavities in the permanent molars, in which nine in 10 cavities occur.

And for those concerned about the safety of dental visits, the ADA and Massachusetts Dental Society want to remind all patients that dental professionals have always been required to complete extensive and ongoing training in infection control. In addition, per guidelines from the Massachusetts Department of Public Health, masks are still required in all health care settings—including dental practices—for providers and patients.

Parents, you have a lot of concerns on your mind as your child enters this school year, but ensuring they have a healthy smile shouldn't be one of them.



A Cleaner Toothbrush AND A HEALTHIER YOU

For the past 18 months, we've been taking the necessary precautions to protect ourselves from the deadliest virus to emerge in most of our lifetimes. Vaccinations, social distancing, masking, and maintaining good hand hygiene have helped many Americans stay safe from COVID-19. However, with the emergence of the Delta variant and increasing cases and breakthrough cases, it doesn't look like we are out of the woods just yet. In addition, we are heading into flu—and good old-fashioned head cold—season, so you will want to be extra diligent when it comes to keeping yourself healthy. This includes making sure that you use and store your toothbrush correctly, because unless properly cared for, your toothbrush can become a breeding ground for germs and bacteria.

A toothbrush is designed to remove plaque and food particles from the teeth and gums, but in doing so, it can become contaminated with the bacteria, blood, saliva, and oral debris it removes. Unless cleaned properly, bacteria can flourish and be transferred back to you. Follow these tips to make sure your toothbrush is in tip-top shape so you, too, can be as healthy as possible.

- Rinse your toothbrush completely with water after brushing to remove any residue and toothpaste.
- Air dry your toothbrush thoroughly in an upright position.
- Don't let your toothbrush touch any other toothbrushes stored in the same holder—germs can be passed along that way.
- Replace your toothbrush after you've had any illness, as germs can remain on the toothbrush even after you've recovered. (This also means if you've tested positive for COVID-19 but are asymptomatic.) You also should replace it every three or four months, or if the bristles look worn and frayed.
- Don't share your toothbrush. If you have children, make sure that each child is using their own designated toothbrush. An easy solution for this is to "color code" toothbrushes for each member of your household (e.g., your toothbrush is always orange, Ian's toothbrush is always blue, Emma's is always green, etc.).
- If you use a disinfectant solution or mouthwash to rid your toothbrush of germs, be careful not to reuse the solution over a period of time or to disinfect multiple toothbrushes in the same solution.
- Don't routinely cover your toothbrush or store it in a closed container because the humid environment that closed storage promotes can lead to bacterial growth. If you insist on covering your toothbrush, be sure to clean the cover frequently.
- Keep your toothbrush away from contaminated areas, such as the toilet bowl. If your toothbrush holder is placed nearby, be sure to close the toilet seat cover before flushing to help prevent airborne bacteria from dispersing and landing on your toothbrush.



PREVENTING TOOTH LOSS

of tooth decay. This is why it is important for you to keep your dentist up-to-date on any medications or supplements you may be taking.

CONCLUSION

The risk of experiencing tooth loss may increase as you age. Good oral hygiene at home and regular visits to your dentist may help reduce this risk. These measures will allow you to enjoy your teeth throughout your life. They will give you more than just a good-looking smile.

REFERENCES

1. Hung M, Moffat R, Gill G, et al. Oral health as a gateway to overall health and well-being: surveillance of the geriatric population in the United States. *Spec Care Dentist*. 2019;39(4):354-361.
2. Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. Chronic disease indicators. 2016. Available at: <https://nccd.cdc.gov/cdi>. Accessed June 12, 2020.
3. National Institute of Dental and Craniofacial Research. Seniors. Available at: <https://www.nidcr.nih.gov/research/data-statistic/seniors>. Accessed June 17, 2020.
4. Dye BA, Thornton-Evans G, Li X, Iafolla T. Dental caries and tooth loss in adults in the United States, 2011-2012. *NCHS Data Brief*. 2015;197:1-8.
5. National Institute of Dental and Craniofacial Research. Periodontal disease in seniors (age 65 and over). Available at: <https://www.nidcr.nih.gov/research/data-statistics/periodontal-disease/seniors>. Accessed June 17, 2020.

Prepared by Anita M. Mark, senior scientific content specialist, ADA Science and Research Institute, American Dental Association, Chicago, IL. Copyright© 2020 American Dental Association. This article was published in the Journal of the American Dental Association, Vol. 151, No. 9, Page 712. It is reprinted here with permission.

Your teeth are more than just part of a beautiful smile. Healthy teeth help you speak clearly and allow you to eat a variety of foods, thereby helping you maintain a healthy diet. A large national study found that people older than 65 years who had good dental health tended to be healthier overall.¹ So, it is important to take care of your teeth.

TOOTH LOSS

Research shows that more than one in three adults aged 65 years or older have lost six or more teeth. And about one in 10 in this age group have lost all their teeth. Leading up to the age of 65 years, however, adults seem to fare much better, with nearly 68% keeping all their teeth.² This suggests that after the age of 65, there are some thing or things that are different about oral health, the care given to teeth and gums, or both.

HOW TO PREVENT TOOTH LOSS

The most common reasons for tooth loss may be controlled with good oral hygiene and regular visits to the dentist (see “Taking Care of Your Teeth,” at right). Often, older adults lose teeth to tooth decay and gum disease.³ Although just about everyone has had tooth decay by the age of 65, nearly one-half of the adults in this age bracket have untreated tooth decay or gum disease serious enough to cause tooth loss.^{4,5}

Sometimes tooth loss is not easily controlled. Some people with certain chronic diseases—such as cardiovascular diseases and diabetes—seem to lose more teeth as they age than people who do not have those diseases.¹ Although it is not clear whether one causes the other, you should let your dentist know if you have any chronic disease.

Certain medications, taken regularly, can cause chronic dry mouth. Without enough saliva to wash food particles out of your mouth when chewing and to bathe your teeth in fluoride, which strengthens your teeth, you are at greater risk

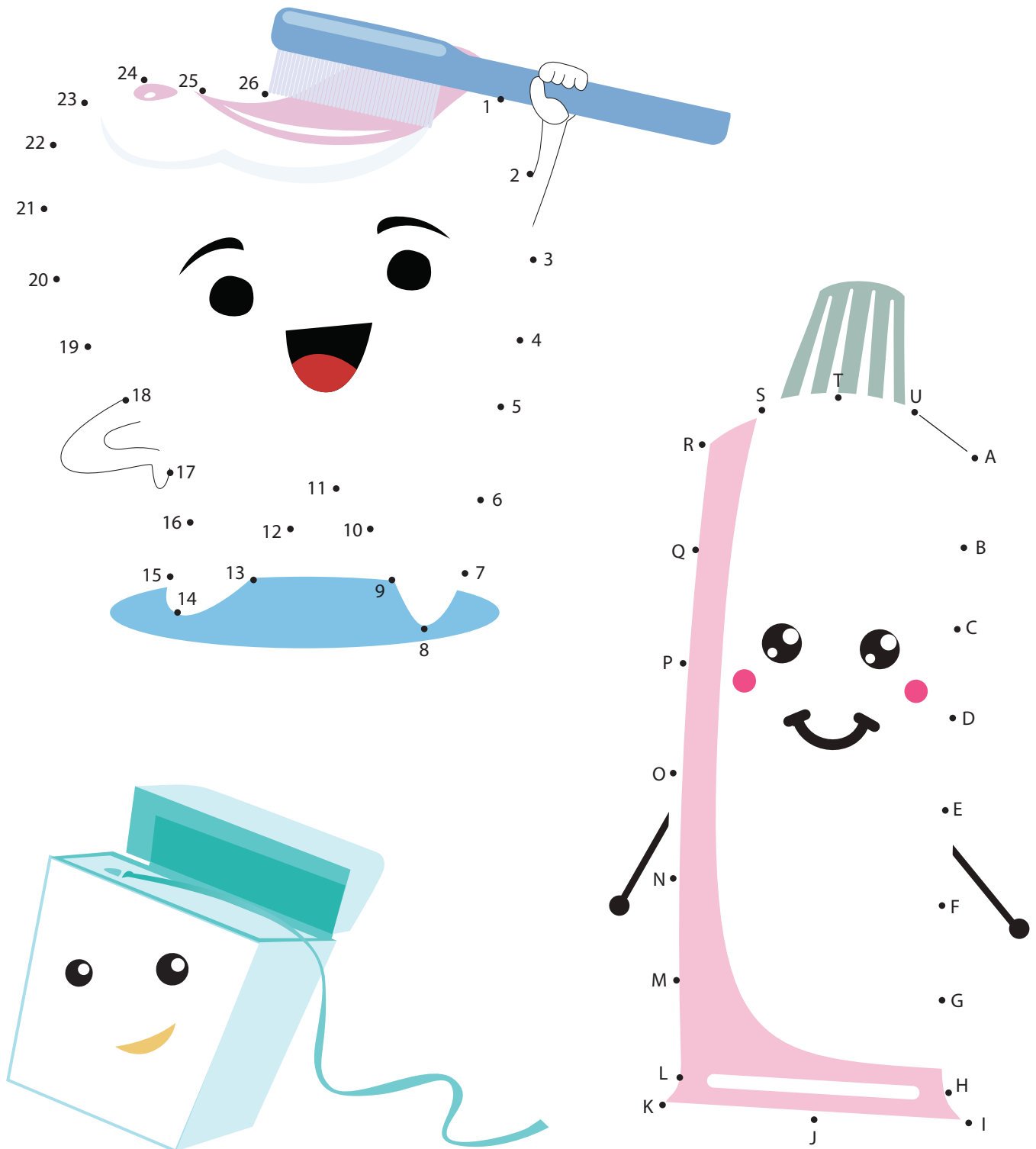
TAKING CARE OF YOUR TEETH

The best ways to help control tooth decay and gum disease—two major causes of tooth loss—are good oral hygiene and regular visits to your dentist. Good oral hygiene involves the following:

- **Brushing your teeth with a fluoride toothpaste twice a day for two minutes each time (you can use a manual or powered toothbrush, whichever is easier to handle)**
- **Cleaning between your teeth with a product designed for that purpose—special picks, brushes, dental floss, or a water flosser**

Your dentist also may suggest a mouth rinse to provide extra help in preventing tooth decay. Be sure to see your dentist regularly, and at every visit be sure to tell them about your overall health and any medicines or supplements you are taking.

Connect The Dots



Can you find who is hiding on this page?



FLUORIDE

It Does a Mouth Good

Fluoride, a naturally occurring mineral found in water sources all over the world, is good for your teeth because it is absorbed easily into tooth enamel and is effective at preventing cavities by keeping tooth enamel strong. Strong enamel means strong teeth—and less dental decay.



Learn more about the oral health benefits of fluoride at massdental.org/fluoride.

ADS
MASSACHUSETTS
DENTAL SOCIETY