



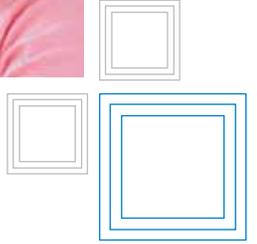
MASSACHUSETTS

Oral Health for Total Health





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Oral Health for Total Health

Most people don't realize that brushing, flossing, and regular dental checkups do more than keep your teeth clean and cavity-free. Studies have shown that one's oral health is directly connected to their overall health. The risk of heart disease, for example, can double for people with severe periodontal (gum) disease.* *The Journal of the American Dental Association* found that pregnant women with gum disease are more likely to have a baby born prematurely.** Additionally, people with Type 2 diabetes are three times more likely to develop gum disease, and when you add smoking to the mix, the chance of developing gum disease increases almost 20 times!***

Learn More About a Healthy Mouth

Learning more about oral health will help you in a number of ways:

- Learn how to keep your mouth healthy
- Reduce your risk of developing certain chronic conditions
- Be able to identify many health concerns linked to proper oral health

At Blue Cross Blue Shield of Massachusetts, one of our main goals is to help you stay healthy, and that means keeping your teeth, gums, and tongue clean and healthy.

* Paquette DW. "The periodontal infection—systemic disease link: A review of the truth or myth." *The Journal of the International Academy of Periodontology*. 2002 Jul; 4(3): 101-109.

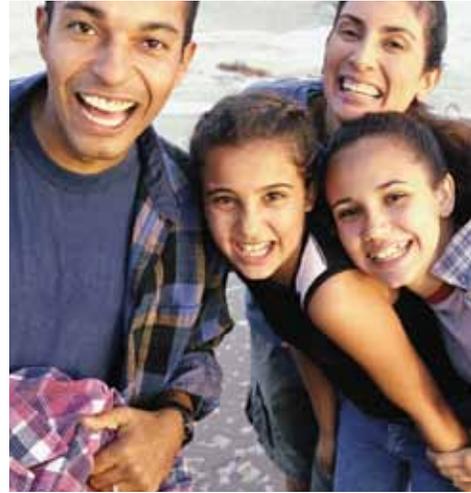
** Jeffcoat MR, Geurs NC, Reddy MS, Cliver SP, Goldenerg RL, Hauth JC. "Periodontal infection and preterm birth: results of a prospective study." *Journal of the American Dental Association*. 2001 Jul; 132 (7): 875-880.

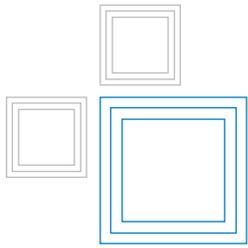
*** Mealey BL, Rethman MP. "Periodontal disease and diabetes mellitus. Bidirectional relationship." *Dentistry Today*. 2003 Apr; 22 (4): 107-113.



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Education





About Your Teeth

Baby or Primary Teeth

By the time a baby is merely six or eight months old, he or she will begin getting his or her first teeth. It can take up to three years before all of a baby's first teeth come in (erupt). Generally, the first baby teeth to erupt are the front teeth, or central incisors, while the last baby teeth to erupt are usually the second molars. When all of the baby teeth erupt, a child will have 20 teeth, each of different shapes and sizes.

Form and Function

Teeth are different in size, shape, and location so that they can perform different functions. Although the primary function of teeth is to help you chew and to speak clearly, your teeth also help give your face its form and shape.

What different teeth do:

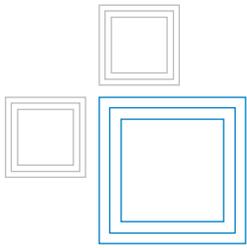
- The **front teeth** are called incisors, because they help you incise or bite food.
- The **eye teeth**, called cuspids or canines, are the longest-rooted teeth in the mouth, and are strong to help you tear food.
- Your **molars** have flat chewing surfaces to help you grind up your food before swallowing.
- Your **teeth** also give you the ability to smile—one of a person's most notable features.

Secondary Teeth

Shortly after the baby teeth come in, the process begins again with the eruption of permanent teeth. As permanent teeth come in, baby teeth fall out. The form and function of the permanent teeth remain the same as those of the baby teeth.

In most children, permanent teeth begin to erupt at about six years old. As the permanent teeth push up into the mouth, they cause pressure on the roots of the baby teeth, causing those roots to dissolve. This will cause the baby teeth to become loose and eventually fall out. The first permanent teeth to erupt are usually the lower central incisors and the first molars. The permanent teeth then continue to erupt into their final location in the mouth.

Secondary or permanent teeth continue coming until the last teeth, the third molars or wisdom teeth, have a chance to come in, usually between the ages of 17 and 21. However, wisdom teeth often have to be removed due to the fact that there is not enough space in the jaw for them to erupt into a functional location.

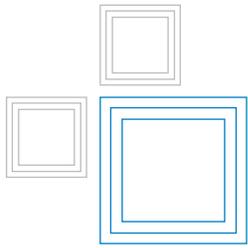


About Your Teeth *(continued)*

Permanent Teeth: Your Only Set

Your permanent teeth need to last a lifetime. They're the last set of natural teeth that you'll ever have, so it's important to take care of them from the start. The basics of good oral hygiene are simple: brush with a soft toothbrush, floss regularly, and use a fluoride toothpaste. Seeing a dentist regularly for checkups and cleanings will help you treat any developing problem at an early stage.

Remember, your teeth are meant to last a lifetime, but they do not come with a warranty. So if you want your smile to last for a lifetime, take good care of your teeth.



Put Some Bite into Your Oral Care

Control and Eliminate the Buildup of Plaque and Tartar

Plaque is a sticky film of bacteria. Plaque is always forming on teeth. Bacteria release acids that attack tooth enamel. Cavities are a result of the enamel on teeth breaking down. Daily flossing will remove plaque and disrupt the formation of harmful bacteria before the cavity can develop.

Tartar is accumulated and hardened plaque. It takes as little as 24 hours for plaque to calcify into tartar. Tartar can only be removed by professional cleaning.

Prevent Periodontal Disease

Periodontal disease is also known as gum disease. More than 75 percent of Americans over 35 have some form of gum disease.¹ It is the most significant dental disease affecting adults. Gum disease is caused by the buildup of plaque on the teeth. In its early stages, called gingivitis, it is characterized by swelling and bleeding of the gums. If untreated, gingivitis may progress to periodontitis. Bacterial toxins and the body's enzymes actually break down the bone and tissues which hold teeth in place. Teeth often become loose and must be removed as a result of this process. Your attention to daily oral hygiene and regular professional cleanings will help reduce the likelihood of your developing gum disease.

Reduce the Rate of Tooth Decay

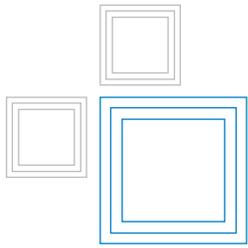
Bacteria in your mouth produce acid that is responsible for tooth decay. Bacteria that are not disrupted by brushing and flossing can colonize and produce acid, which then causes the tooth's enamel to break down. If the enamel breaks down, your teeth are more susceptible to cavities, and eventually tooth loss may occur. You can help reduce the risks for tooth decay by eating a well-balanced diet, limiting between-meal snacks, brushing teeth twice a day with a fluoride toothpaste, flossing daily, and seeing a dentist regularly.

Decrease Your Risk for Heart Disease

Coronary artery disease is one of the most common forms of heart disease. In coronary artery disease, the lining of coronary artery walls becomes narrowed when thick, sticky lumps called plaque build up on the inside of the artery. Patients with untreated moderate to advanced periodontitis may be up to 200 percent more likely to exhibit this kind of heart disease.² Studies have shown that oral bacteria appear to be present in many of the plaques in major arteries.

¹ADA News Release, American Dental Association, Sept 2001.

² Paquette DW, 101-109. (For previously cited work, see page 1.)



Put Some Bite into Your Oral Care *(continued)*

Help Control Your Diabetes

Periodontal disease is often linked to the control of diabetes. Patients who inadequately control their blood sugar appear to develop periodontal disease more often and more severely than people with good control of their diabetes.³ Improvement in a person's oral health may lead to a decrease in the amount of insulin or oral medication a diabetic must take.⁴ Additionally, better control of the diabetic condition can lead to a decrease in oral inflammation and periodontal disease.

Have Healthier Pregnancies and Births

Did you know that women who have a higher incidence of periodontal disease may also have a higher incidence of a premature birth? When periodontal disease is treated, the likelihood of a preterm delivery may also be reduced. According to a study in the *Journal of the American Dental Association*, patients with generalized periodontal disease may be up to seven times more likely to have a baby born prematurely.⁵ Treatment of periodontal disease may reduce this by up to 84 percent.⁶ It is important to realize that if the control of periodontal disease may lead to a risk of preterm birth, the reduction of preterm birth will also help to reduce complications to the baby from this event. Documentation suggests that premature births are associated with increased rates of cerebral palsy, asthma, poor motor skills, and other medical conditions.⁷

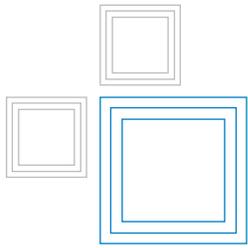
3 Mealey, 107-113.

4 Grossi SG. "Treatment of periodontal disease and control of diabetes: An assessment of the evidence and need for future research." *Annals of Periodontology*. 2001; 6 (1): 138-145.

5 Jeffcoat MK, Geurs NC, Reddy MS, Cliver SP, Goldenberg RL, Hauth JC. "Periodontal infection and preterm birth: results of a prospective study." *J Am Dent Assoc*. 2001 Jul; 132(7):875-80.

6 Jeffcoat, MK, Hauth JC, Geurs NC, Reddy MS, Cliver SP, Hodgkins PM, Goldenberg RL. "Periodontal disease and preterm birth: Results of a pilot interventional study." *J Periodontol*. 2003 Aug;74(8): 1214-1218.

7 Hack M, et al., "Rates of adverse infant outcomes among extremely low birth weight infants compared to normal birth weight infants." *JAMA*, 2005; 294: 318-325.

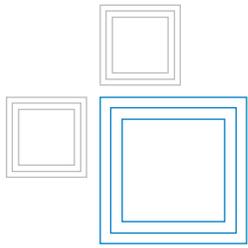


Top Ten Tips for a Healthy Smile

1. **Brush your teeth at least twice a day.** In the morning and night is always easy to remember.
2. **Floss in addition to brushing.** Flossing loosens plaque between teeth, where the toothbrush cannot reach.
3. **Get regular dental checkups.** Dental professionals are capable of removing tartar from your teeth. You cannot remove tartar on your own at home. Additionally, your dental professional can identify and treat small problems occurring in your mouth before they become larger ones.
4. **Limit sodas, coffee, and alcohol.** Limiting these beverages is important for reducing tooth decay and discoloration.
5. **Visit your dentist before becoming pregnant and during pregnancy.** You may reduce your risk of having a baby born prematurely by controlling gum infection.
6. **Put out the cigarette.** Smokers are seven times more likely to develop periodontal disease, and tobacco products are a major risk factor for over 75 percent of oral and throat cancers.¹ There are 30,000 new cases of oral cancer each year. The five-year survival rate for oral cancer is about 50 percent.
7. **Increase your calcium intake.** Adults who consume at least three servings of food rich in calcium each day have significantly lower rates of periodontal disease, a leading cause of tooth loss.²
8. **Wear a mouthguard if you play contact sports.** Mouthguards help cushion blows that might otherwise cause broken teeth and injuries to the lips, tongue, face, or jaw.
9. **Eat a healthy, well-balanced diet.** Limiting sugary food left on the teeth may reduce tooth decay and discoloration.
10. **Consider using an electronic toothbrush.** Many brands of battery-powered toothbrushes have a timer—so you won't underbrush—and a vibrating or spinning action that encourages you to brush softly.

¹ACS (American Cancer Society). Cancer Reference Information revised 7/10/2006.

²Nishida M, Grossi, SG, et al "Calcium and the Risk for Periodontal Disease." *Journal of Periodontology*. 2000 Jul; 71 (7): 1057–1066.



The Dos and Don'ts of Brushing

Caring for your teeth and gums is easier than you think. Here are some helpful, tips to keep your teeth healthy.

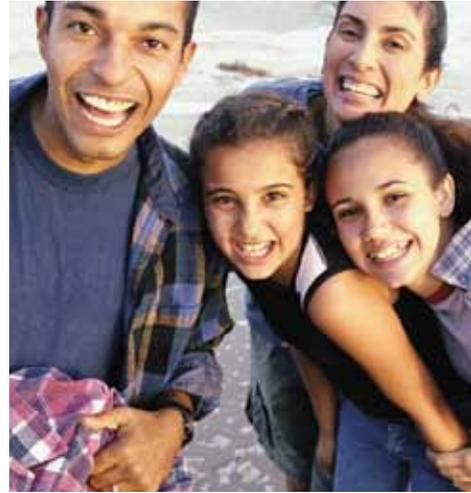
- DO use a soft-bristled toothbrush.
- DO use toothpaste that contains fluoride. (Hint: Check your toothpaste label; not all brands contain fluoride. Also check your water—if it does not contain fluoride, you may want to look into using a fluoride rinse.)
- DO brush for at least two minutes. (Hint: Buy yourself a small egg timer or use a powered toothbrush with a timer.)
- DO schedule dental checkups every six months.
- DO floss your teeth daily. Bacteria take 24 hours to attach to teeth. By brushing and flossing daily you are disrupting the bacteria, which will help prevent tooth decay.
- DO brush your tongue. Plaque on the tongue can cause bad breath and is an ideal environment for bacteria.
- DO eat a well-balanced diet, and limit between-meal snacks. This helps reduce development of cavities.
- DON'T brush your teeth too roughly or use a hard toothbrush. This may cause your gums to recede or may wear away the enamel on the teeth.
- DON'T forget to change your toothbrush every three months, or earlier if the bristles become worn.
- DON'T share your toothbrush with someone else; germs and bacteria can be passed back to you.

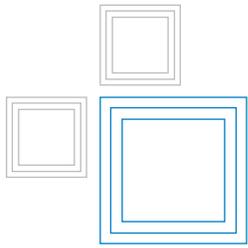




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Activities



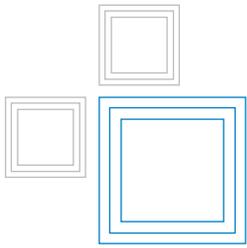


Oral Health Self-Assessment

Do you know how well you're caring for your teeth? Find out by taking this self-assessment. Then use your score to learn more.

1. How often do you brush your teeth?
 - A. Never
 - B. Once a day
 - C. At least twice a day
2. How long do you spend brushing your teeth?
 - A. Thirty seconds
 - B. At least two minutes
 - C. One minute
3. How often do you use dental floss to clean between your teeth?
 - A. Once a week
 - B. Once a month or more
 - C. Once a day
4. Do you smoke?
 - A. Yes
 - B. No
 - C. Sometimes
5. How often do you see a dentist?
 - A. At least every six months
 - B. Once every five years
 - C. Once a year

Please see the following page for answers



Oral Health Self-Assessment *(continued)*

Self-Assessment Answer Key

Add up your points to learn how well you care for your teeth.

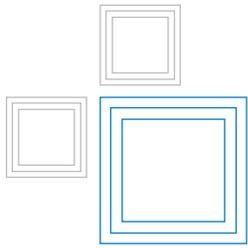
- | | | | | | |
|----------------|-------------|-------------|----------------|-------------|-------------|
| 1. A. 0 points | B. 0 points | C. 1 point | 4. A. 0 points | B. 1 point | C. 0 points |
| 2. A. 0 points | B. 1 point | C. 0 points | 5. A. 1 point | B. 0 points | C. 0 points |
| 3. A. 0 points | B. 0 points | C. 1 point | | | |

If you scored:

4–5 points: Congratulations on taking excellent care of your teeth! Keep up the good work!

2–3 points: Your getting there. You have a little more work to do for optimal health care. Remember, good oral health and overall health go hand in hand.

0–1 point: Let's start working harder on your oral care to improve your oral and overall health. Our oral health is connected to the health of many other systems in our bodies.



Oral Health for Total Health Activities

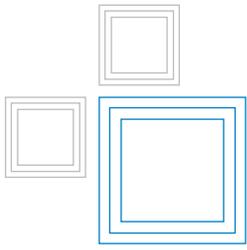
Once you've read Oral Health for Total Health, test your knowledge with the quizzes below. The better your score, the more likely you are to improve your oral and overall health!

Activity #1: The Tooth Truth Quiz

How much do you know?

1. Plaque that isn't removed by brushing and flossing may harden into tartar.
TRUE or FALSE
2. Only a dental professional can remove tartar.
TRUE or FALSE
3. Controlling plaque requires 20 minutes of brushing each day.
TRUE or FALSE
4. To help control plaque and tartar buildup you should visit your dentist once a year.
TRUE or FALSE
5. Plaque is made of bits of dried saliva.
TRUE or FALSE
6. Gingivitis, characterized by bleeding and swelling of the gums, is the first stage of periodontal disease.
TRUE or FALSE
7. The only treatment for periodontal disease is removal of the teeth.
TRUE or FALSE
8. Gum disease can be a risk factor in developing coronary artery disease.
TRUE or FALSE
9. Periodontal disease more commonly affects women than men.
TRUE or FALSE

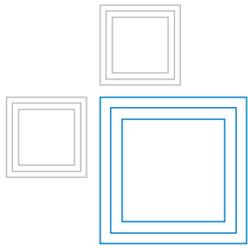
Please see the following page for answers



Oral Health for Total Health Activities *(continued)*

Tooth Truth Quiz Answer Key

1. True.
2. True.
3. False. You should brush your teeth for a minimum of two minutes twice a day and floss at least once a day.
4. False. You should visit your dentist twice a year or more frequently if you have gum disease.
5. False. Plaque is a sticky film of bacteria that accumulates on the teeth.
6. True.
7. False. Periodontal disease can be controlled with good oral hygiene and professional dental care.
8. True.
9. False. Periodontal disease can affect both men and women equally.

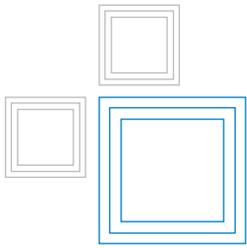


Oral Health for Total Health Activities *(continued)*

Activity #2: The Tooth Care Quiz

1. On a daily basis, how often is it recommended that you brush your teeth?
 - A. Never
 - B. Once
 - C. At least twice
2. How hard should teeth be brushed?
 - A. Bend the bristles
 - B. Hard enough that you are strengthening muscles while brushing
 - C. Using a gentle touch
3. In accordance with #2, is it possible to over-brush teeth with a soft-bristled toothbrush?
 - A. No
 - B. Yes
 - C. Maybe
4. What is the least amount of time that should be spent on brushing teeth each time?
 - A. Thirty seconds
 - B. Three minutes
 - C. Two minutes
5. How often is it recommended to use dental floss?
 - A. Once a week
 - B. At least once a day
 - C. Once every two days
6. Dental checkups are recommended _____.
 - A. Monthly
 - B. Yearly
 - C. Every six months
7. Sharing toothbrushes is _____.
 - A. Okay as long as you are not sick
 - B. Never okay
 - C. Okay if you are married

Please see the following page for answers



Oral Health for Total Health Activities *(continued)*

Answers

1. C. At least twice. Brushing your teeth twice a day helps to remove bacteria and food particles from around the teeth before they have a chance to cause cavities or harden into tartar.
2. C. Using a gentle touch. Teeth should always be brushed gently. Brushing hard or using a hard toothbrush may wear away the tooth enamel and cause gum recession.
3. A. No. Soft bristled toothbrushes are best in helping to prevent gum recession caused by rigorous brushing.
4. C. Two minutes. Two minutes is a reasonable amount of time to brush to fully clean all of the surfaces of your teeth.
5. B. At least once a day. Bacteria and food particles accumulate between teeth. Flossing once a day effectively removes this accumulation to help prevent cavities or gum disease.
6. C. Semiannually. Dental checkups are routinely recommended every six months. Checkups may be required more frequently if you are prone to gum disease.
7. B. Never okay. Bacteria can accumulate on toothbrushes. Using someone else's toothbrush makes you more susceptible to having bacteria transferred from that toothbrush to your mouth.

