

Healthy smile, healthy you

Oral health tips from Delta Dental



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Oral health and you



An ounce of prevention. Regularly scheduled dental checkups, a healthy diet, and brushing and flossing are the best ways to achieve good oral health and prevent problems such as cavities and gum disease.

One of the most important things you can do for your oral health is schedule **regular dental checkups** and **cleanings**. By seeing your dentist twice a year, you can help prevent any oral health problems before they cause discomfort or require extensive or invasive treatment.

An oral exam also can detect other health issues such as **poor nutrition** and **hygiene, growth** and **development problems**, and **improper jaw alignment**. You should provide your dentist with a complete medical and dental history at your first visit and continue to update him or her with any recent health changes on each following visit, even if they seem unrelated to your oral health.



Sit back and relax!

Choose a time to visit the dentist when you will not be rushed or under pressure. Listen to your favorite music. Talk to your dentist about any concerns you may have. You can find more information about dealing with dental visit anxiety in the Oral Health section of our web site.

Back to basics

Prevention includes maintaining good oral hygiene, **drinking fluoridated water** and making healthy dietary choices. Develop a simple daily routine of **brushing, flossing** and **eating a balanced diet** with plenty of fruits and vegetables.

According to the American Dental Association (ADA), public water fluoridation is the most efficient and cost-effective way to prevent cavities. However, not all communities have fluoridated tap water. In such cases, or if you drink only bottled water, you should consider other sources of fluoridation such as regularly using fluoride toothpaste or fluoridated mouth rinses.

How does it work?

Fluoride promotes remineralization, or the rebuilding of minerals in the tooth enamel. The presence of fluoride on tooth surfaces attracts other minerals (such as calcium) and helps to speed up remineralization. In addition, the new tooth mineral is actually a harder mineral compound than the original and more resistant to decay.

Brushing and flossing



A dynamic duo. Combining flossing and tooth-brushing to thoroughly remove plaque each day will help prevent cavities and gum disease. It doesn't matter whether you floss or brush first; what matters is that you remove the plaque.

Good daily oral hygiene practices are just as important for your oral health as regular dental checkups. **Brushing and flossing** protect your teeth from decay and gum disease, which is caused by your teeth's most persistent enemy, **plaque** — a sticky, colorless, invisible film of harmful bacteria that builds up on your teeth every day.

Brushing

You should brush your teeth for **two to three minutes** with fluoridated toothpaste at least **twice a day**. If you can brush your teeth after every meal, that's even better. Keep a toothbrush at work so you can brush after lunch.

What's the best toothbrush? The requirements for a good toothbrush are simple:

- it should bear the American Dental Association (ADA) stamp of approval (found on the package);
- its head should fit easily into your mouth;
- it should be labeled “soft” and have round-ended bristles to prevent damage to teeth and gums.

An electric toothbrush may help those who have difficulty brushing their teeth, but a regular toothbrush can clean teeth just as well.

Technique tips. When you brush, you should keep the bristles **angled against the gumline** and **brush along the gumline** and the inner and outer surfaces of each tooth. You should finish by brushing your tongue, which helps remove bacteria from your mouth. You can find more helpful tips on how to brush and floss properly in the Oral Health section of our web site.

Flossing

How important is flossing? According to the Academy of General Dentistry, only flossing can remove plaque from between teeth and below the gumline, where decay and gum disease often begins. Make sure to floss **at least once a day**, preferably before bed, to clean the places where a toothbrush can't reach.



The truth about toothpaste.

Tartar control. Baking soda. Whitening action. How do you choose the one that's most effective? The truth is that as long as your toothpaste contains fluoride and has the ADA seal of approval, the brand or extra features you choose don't really matter.

Diet and oral health



You are what you eat. What you eat can help you keep your teeth. Antioxidants and other nutrients found in fruits, vegetables, legumes and nuts improve your body's ability to fight bacteria and inflammation, helping to protect your teeth and gums.

Some foods may actually help defend against tooth decay in special ways. For instance, recent studies have indicated that **fresh cranberries** interrupt the bonding of oral bacteria before they can form damaging plaque. Other foods that have beneficial effects on oral health include:

- **Calcium-fortified juices, milk** and other **dairy products**, which are rich in calcium and vitamin D, help promote healthy teeth and bones, and reduce the risk for tooth loss.
- **Cheese**, which unleashes a burst of calcium that mixes with plaque and sticks to the teeth, protecting them from the acid that causes decay and helping to rebuild tooth enamel on the spot.
- Crisp fruits and raw vegetables like **apples, carrots** and **celery**, which help clean plaque from teeth and freshen breath.

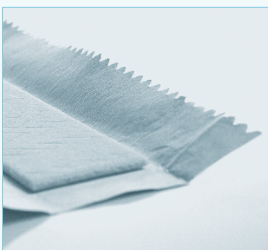
You may already know that cavity-causing organisms feed on the sugar in foods such as **soda, chocolate milk** and **candies** and convert it to acid, which attacks tooth enamel and causes tooth decay. But did you know the following:

- Acidic foods and drinks such as **carbonated drinks, citrus fruits** and **juices, wine, pickles** and **honey** can cause tooth enamel to wear away and teeth to become sensitive, cracked and discolored.
- Tannins found in **coffee** and **tea** etch into the pits and grooves of tooth enamel, producing a rough, stained surface.

Timing is everything

A diet that promotes good oral health is not just about the foods you eat or avoid — when and how you eat them is equally important.

- Foods that take a long time to chew or that you hold in your mouth (such as cough drops) can damage teeth as they hold sugar against teeth longer than do other foods.
- Instead of snacking on sugary, carbohydrate-rich or acidic foods throughout the day, eat these foods just during meal times in order to minimize the amount of time the teeth are exposed to acid.



Chew on this.

Chewing sugarless gum that contains xylitol can help reduce plaque and fight cavities because chewing stimulates saliva, which helps keep teeth clean, while xylitol inhibits the growth of the oral bacteria that cause cavities.

Gum disease



What you don't know. When it comes to gum disease, what you don't know *can* hurt you. Because gum disease is usually slow to progress and painless, it can easily reach an advanced stage before you're even aware of it.

Gum disease is a **bacterial infection** caused by **plaque** — the sticky, colorless, bacteria-filled film that adheres to your teeth. As plaque builds up on teeth, it hardens and becomes **tartar**, which can be difficult to remove. The bacteria in plaque produce toxins that irritate the gums and cause **inflammation** and **gingivitis**. If bacteria are not removed and the inflammation continues, the gum tissues can be destroyed, causing them to pull away from the teeth, forming pockets that fill with more plaque. As the disease advances, the pockets grow deeper, and plaque moves further down the tooth root, destroying supporting bone. The affected teeth may loosen and eventually fall out.

Did you know?

Gum disease — not old age — is the leading cause of tooth loss for people in the U.S. In fact, nearly 80 percent of adults have gum disease during their lifetime.

Prevention is the best medicine

While regular dental exams and cleanings are necessary to remove bacteria, plaque and tartar and detect early signs of gum disease, you can play a major role in preventing gum disease:

- **Brush** for two to three minutes, twice a day, with fluoridated toothpaste. Be sure to brush along the gumline.
- **Floss** daily to remove plaque from places your toothbrush can't reach.
- In addition, use a **mouth rinse** to reduce plaque up to 20 percent.
- Eat a **healthy diet**, which provides the nutrients (vitamins A and C, in particular) necessary to prevent gum disease.
- Avoid **cigarettes** and **smokeless tobacco**, which may contribute to gum disease and oral cancer.
- Be aware that certain **medications** can aggravate gum disease, including oral contraceptives, antidepressants and heart medicines.
- Have your dentist correct problems, such as faulty fillings, crowded teeth or teeth grinding.



What's the best floss to use?

The best floss is the one you're going to use. Waxed, unwaxed, plain, mint, cinnamon, wide or regular size — floss of any type helps clean and remove plaque.

Amalgam versus resin fillings



Just the facts. Dental amalgam is a safe, inexpensive and long-lasting filling material. Much of the concern over the safety of amalgam arises from the fact that it contains mercury. But the miniscule amount of mercury released in the mouth under the pressure of chewing is, in fact, less than what patients are exposed to in food, air and water.

Thanks to technological advances, dentists and patients today have several choices when it comes to selecting materials to fill cavities. Among the choices are natural tooth-colored materials such as resin-based composite fillings. The advent of these newer materials has not eliminated the usefulness of more traditional dental fillings made of amalgam.

What is amalgam?

Also referred to as silver fillings, dental amalgam is a mixture of silver, tin, copper and mercury into a putty-like substance that can be easily manipulated to fill a cavity.

Many dentists consider amalgam to be **stronger** than the resin-based composite and **easier to place**, making it a more suitable material for fillings in the back teeth. Many patients prefer amalgam for the same reasons, plus its **cost-effectiveness** and ability to fill cavities quickly. It is estimated that more than 1 billion amalgam fillings are placed annually.

Major U.S. and international scientific and health organizations, including the National Institutes of Health, the U.S. Public Health Service, the Centers for Disease Control and Prevention, the Food and Drug Administration and the World Health Organization, among others, have been satisfied that dental amalgam is a safe, reliable and effective restorative material.

What are resin fillings?

Resin composite fillings are made of ceramic and plastic compounds. Because resin-based composites mimic the **appearance of natural teeth**, these fillings have been used in front teeth for years. When they first appeared, resin compounds weren't strong enough to be used in back teeth, where high-pressure grinding and chewing require greater durability. However, in the past 10 years, technology has improved enough to allow the use of resin material in back teeth. Resin fillings cost more than amalgam, which can make the cost of the service higher than for comparable amalgam fillings.



Did you know?

When you eat, the bacteria in plaque transform the sugars and starches in food into acids. Each time acid is produced, it attacks the tooth enamel for about 20 minutes. Eventually, the enamel breaks down and the tooth decays. A cavity is a hole in the tooth that is caused by this decay.

Oral health for a lifetime



A lifetime of healthy smiles. Good dental care is vital throughout life, and your oral health concerns can change as you age. You can find more information about the special oral health needs of each life stage in the Oral Health section of our web site.

Babies and children

Good oral care begins even before the first tooth appears. You should clean and massage your baby's gums daily to help establish healthy gums and to aid in teething. Cleaning your child's teeth should begin when the first tooth is visible — at about age six months — because teeth are susceptible to decay as soon as they appear in the mouth.

Of special concern at this stage of life are the following:

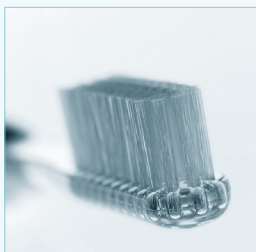
- **Baby bottle tooth decay** occurs when an infant is allowed to fall asleep with the bottle in his or her mouth, and acids produced by bacteria feeding on the juice or milk attack the baby's tooth enamel and cause damage to the teeth.
- Prolonged **pacifier use** and **thumb-sucking** can cause changes in the shape of the roof of the mouth, prevent proper growth of the mouth and create problems with tooth alignment. The Academy of General Dentistry recommends that children stop using pacifiers by age one.

As your child's permanent molars come in, you may want to consider **dental sealants**, a thin plastic film painted on the chewing surfaces of teeth to prevent cavities. The sealant fills in the teeth's grooves, hardens and creates a barrier that keeps cavity-causing bacteria out of the teeth's pits and fissures.

Teens

Two of the most important things your teen can do for his or her oral health are practice **good oral hygiene** and **eat nutritious foods**. Unfortunately, teens often displace healthy foods such as milk, fruits and vegetables with soda and sugary, high-carbohydrate foods. As a result, teens can cause permanent damage to their oral and overall health.

Regular brushing and flossing are especially important when braces are placed to correct crooked or overcrowded teeth. Food and plaque can get trapped in the tiny spaces between braces and wires, causing decay and discoloration. In addition to good oral hygiene, the best way for teens to keep a bright smile is to avoid tobacco and excessive



Start them early.

From age 2, children should begin to brush their own teeth with a parent's help. Use a small, soft brush with a pea-sized amount of toothpaste. After age 8, children can brush and floss alone, with an occasional check by an adult. You can find more information about caring for your child's teeth in the Oral Health section of our web site.



Did you know? You can prevent “pregnancy gingivitis” by keeping your teeth clean, especially near the gumline, by brushing and flossing each day. Regular dental cleanings can reduce gum irritation, help control plaque and prevent gingivitis.

use of soda, tea and coffee, which stain teeth. But many image-conscious teens who want a whiter smile have been trying **teeth whitening**. Teens should wait to use tooth-whitening products until at least age 14, at which time the tooth’s pulp (nerve) is fully formed and the teen will experience less sensitivity. Teens should always consult their dentist before using an over-the-counter teeth-whitening product.

Another common oral health issue for teens is **tongue piercing**. Teens need to be made aware that tongue piercings can cause fracturing and damage to the teeth. Under certain circumstances, tongue piercings can even cause life-threatening infections.

Seniors

Contrary to common belief, tooth loss is primarily the result of oral disease — not the aging process. As we get older, our dental needs become increasingly specialized, making regular dentist visits even more vital. Your dentist can check for signs of **gum disease** and **oral cancer** (See “Tobacco use and oral health” on page 8 for more information about oral cancer screening).

Many seniors take **medications** that can adversely interact with dental anesthesia or may cause changes to the oral tissues. Seniors should keep their dentist informed of any changes or updates in their medical history to prevent potentially harmful drug interactions. Some medications can cause **dry mouth**, a decrease of saliva. Since saliva plays a major role in preventing tooth decay by rinsing away food particles and neutralizing harmful acids, you should talk to your dentist about ways to treat dry mouth.

Pregnancy

You may experience changes in your oral health during pregnancy due to a surge in hormones, which can cause your gum tissues to exaggerate their reaction to plaque. This may increase your risk of **gingivitis**, a condition with symptoms of red, swollen and tender gums that are more likely to bleed. Because gingivitis can lead to **periodontitis**, a more serious gum disease, it’s important to take preventive steps.

New research suggests a possible link between gum disease and **preterm, low birth weight babies**. Excessive bacteria can enter the bloodstream through your gums and travel to the uterus, triggering the production of chemicals called prostaglandins, which are suspected to induce premature labor. Though further research is needed, we do know preventive dental care during most of pregnancy improves oral and overall health and is safe for both mother and child.



Cavity in a can.

A typical 12-ounce can of regular soda contains approximately 10 teaspoons of sugar. The average 12- to 19-year-old male drinks the equivalent of 868 cans a year. Not only is sugar in soda harmful to teeth, acidic flavor additives (also found in sugar-free soda) can erode and damage tooth enamel. If you drink soda, be sure to drink it through a straw and rinse your mouth with water afterwards to reduce the risk of cavities.

Tobacco use and oral health



Double the odds. Smokers are about twice as likely to lose their teeth as non-smokers, according to two 30-year studies at Tufts University that investigated the relationship between smoking and tooth loss. Another study cited in the *Journal of Dental Research* shows that cigarette smokers are nearly twice as likely as non-smokers to need root canal treatment.

While most people are aware of the impact tobacco use has on their overall health, some might not consider its effects on oral health. Smoking increases risk of **mouth pain, cavities, gum recession, gum (periodontal) disease and tooth loss**. In fact, an estimated 50 percent of adults who smoke have gum disease.

What about smokeless tobacco?

It's not just smoking tobacco that has negative effects on your oral health. Use of **smokeless tobacco** causes **bad breath, discolors teeth** and promotes tooth decay that leads to **tooth loss**. Smokeless tobacco users have a decreased sense of smell and taste, a greater risk than non-users of developing cavities and a 50 percent greater risk of developing **cancers** of the cheek, gums and lining of the lips.

Kicking the habit

The good news is that the risk of tooth loss decreases after you quit smoking. To help you kick the habit, your dentist may prescribe a variety of **nicotine replacement therapies**, such as a transdermal nicotine patch (worn for 24 hours over several weeks with a dissipating flow of nicotine) or chewing gum (which is slowly chewed every one to two hours and then discarded).

Early detection saves lives. Survival rates greatly increase the earlier oral cancer is discovered. Have your dentist screen for oral cancer every six months, and be sure to tell him or her about any of the following:

- a sore that persists longer than two weeks;
- a swelling, growth or lump anywhere in or about the mouth or neck;
- white or red patches in the mouth or on the lips;
- repeated bleeding from the mouth or throat; or
- difficulty swallowing or persistent hoarseness.

For more information about oral cancer screenings, visit the Oral Health section of our web site.



How many teeth are in that cigarette pack?

According to the Academy of General Dentistry, a one-pack-a-day smoking habit can cause you to lose at least two teeth every 10 years.

The medical-dental connection



Healthy smile, healthy you. Regular dentist visits can do more than keep your smile attractive — they can tell a dentist a lot about your overall health, including whether you may be developing a disease like diabetes. New research suggests that when your mouth is healthy, chances are your overall health is good, too.

There is mounting evidence of a connection between oral health and a person's overall health. It is well documented that a high percentage of health conditions have an oral component such as swollen or bleeding gums, ulcers, dry mouth, bad breath, metallic taste and various other changes in the oral cavity. These conditions include:

- **Diabetes.** According to the American Academy of Periodontology, people with diabetes are more likely to have **gum disease** than people without diabetes. Researchers think this is because diabetes reduces the body's resistance to infection, and the gums are among the tissues likely to be affected.
- **Cancer.** As part of a routine dental exam, the dentist **screens patients for oral cancers** including cancer of the head and neck. Other cancers the dentist may recognize include skin cancer, cancer of the jaw bone and thyroid cancer.
- **Heart disease.** Studies have shown that people with moderate or advanced **gum disease** are more likely to have cardiovascular disease (CVD), including heart disease and stroke, than patients with no gum disease, gingivitis or early periodontitis. However, studies have not established that one causes the other — a difficult task because many of the risk factors for gum disease and CVD (smoking, poor diet and nutrition, diabetes, being male and having a low socioeconomic status) are the same.
- **Kidney disease.** When the kidneys do not function properly, the by-products of incomplete protein breakdown are released. As a result, a patient with kidney disease may have **bad breath** and may also notice an **unpleasant taste** in the mouth. Other signs are **dry mouth** and a **metallic taste**. With dry mouth, the amount of saliva is reduced and its normal cleansing effect is diminished. This allows bacteria to increase, potentially leading to the development of gingivitis and gum disease.
- **Anxiety.** Did you know that emotional anxiety can affect your oral health? Stress affects the immune system, which fights against the bacteria that cause periodontal disease, making a person suffering from anxiety more prone to **gum infection**.
- **Other medical conditions.** There are more than **120 medical conditions** — many of them life-threatening — that may possibly be detected in the early stages by a dentist, including thyroid problems, high blood pressure, asthma, sleep and breathing disorders, skin rashes, bruxism (teeth grinding), HIV, tuberculosis, drug abuse, anorexia, digestive disorders and upper respiratory disorders.

Taking antibiotics before dental procedures



Good news in the new guidelines. Taking a precautionary antibiotic before a trip to the dentist isn't necessary for most people and, in fact, might do more harm than good, according to updated recommendations from the American Heart Association.

The American Heart Association now recommends that only people who are at the greatest risk of bad outcomes from infective endocarditis (IE) should receive short-term preventive antibiotics before routine dental procedures. Infective endocarditis is an infection of the heart's inner lining or the heart valves, which results when bacteria enter the bloodstream and travel to the heart.

The new guidelines say that **many patients who have taken preventive antibiotics** regularly in the past **no longer need them**, including people with the following conditions:

- Mitral valve prolapse
- Rheumatic heart disease
- Bicuspid valve disease
- Calcified aortic stenosis
- Congenital heart conditions such as ventricular septal defect, atrial septal defect and hypertrophic cardiomyopathy.

Risks of preventive antibiotics outweigh the benefits. The revised guidelines are based on a growing body of scientific evidence that shows that the risks of taking preventive antibiotics outweigh the benefits for most patients. The risks include adverse reactions to antibiotics and, more significantly, the development of drug-resistant bacteria.

The new guidelines emphasize that maintaining optimal oral health and practicing daily oral hygiene are more important in reducing the risk of IE than taking preventive antibiotics before a dental visit.

Some conditions still warrant preventive antibiotics. There are, however, some patients who should still take antibiotics prior to dental procedures. Patients at the greatest risk of bad outcomes if they developed a heart infection, and for whom preventive antibiotics prior to a dental procedure are worth the risks, include those with the following conditions:

- Artificial heart valves
- A history of having had IE
- Certain specific, serious congenital (present from birth) heart conditions
- A cardiac transplant which develops a problem in a heart valve.

Patients and their families should ask their primary care doctor or their cardiologist if there is any question as to whether they should continue to take preventive antibiotics based on the new guidelines.

Information used in this booklet courtesy of the American Dental Association and the Academy of General Dentistry. The oral health information in this booklet is intended for educational purposes only. You should always consult a licensed dentist or other qualified health care professional for any questions concerning your oral health.

Dental health quiz



How much do you know about oral health? Take this quiz and find out. You can find the answers to these questions on the next page of this booklet. For more information about these topics and more, visit the Oral Health section of our web site at www.deltadentalins.com.

1. **How many permanent teeth do adults have?**
 - a. 24
 - b. 28
 - c. 32
 - d. 36
2. **What is the generally recommended number of times a year you should visit the dentist?**
 - a. every month
 - b. only when you have a toothache
 - c. once a year
 - d. twice a year
3. **At the very least, how much time each day should you spend brushing your teeth?**
 - a. 30 seconds
 - b. 1 minute
 - c. 4 minutes
 - d. 10 minutes
4. **You should brush your teeth vigorously to remove food and plaque.**

True or false?
5. **How often should you replace your toothbrush?**
 - a. every 3 weeks
 - b. every 3 months
 - c. once a year
 - d. every 2 years
6. **When is the best time to floss?**
 - a. anytime, as long as you floss at least once a week
 - b. morning
 - c. mid-day
 - d. before bedtime
7. **If your gums bleed when you floss, you should stop flossing until they heal.**

True or false?
8. **What can you do to cleanse your mouth if you find yourself without a toothbrush or toothpaste after a meal?**
 - a. chew on sugarless gum with xylitol
 - b. use a toothpick to remove food particles from teeth
 - c. eat a piece of fruit
 - d. rinse your mouth with milk
9. **How does sugar contribute to tooth decay?**
 - a. Sugar directly attacks tooth enamel
 - b. Sugar is converted by bacteria into acid which attacks tooth surfaces
 - c. Sugar doesn't actually contribute to tooth decay; that's a misconception
 - d. Sugar scratches tooth surfaces, allowing bacteria to attack the teeth
10. **What percentage of adults have gum disease during their lifetime?**
 - a. nearly 15 percent
 - b. nearly 50 percent
 - c. nearly 65 percent
 - d. nearly 80 percent



1. c

Adults have 32 permanent teeth.

2. d

You should visit the dentist for an oral exam and dental cleaning twice a year, even if you don't seem to have any dental health complaints.

3. c

The Academy of General Dentistry suggests brushing two to three minutes, twice daily. Most people think they brush for the recommended amount of time but actually brush for less than 30 seconds.

4. False

You should brush your teeth gently, applying just enough pressure to feel the bristles against the gums and between the teeth in order to avoid gum injury and tooth wear (the loss of tooth structure caused by the weakening of dental enamel).

5. b

You should change your toothbrush every three months or sooner if it begins to look worn. You should always change your toothbrush after you have been sick.

6. d

The best time to floss is before bedtime to make sure to remove plaque and food particles that may cause damage overnight (this is also the reason you should brush your teeth before you go to bed). However, flossing at least once a day is more important than when it's done.

7. False

If you have not been flossing regularly, your gums may bleed and be sore for the first five or six days. As you continue to floss and plaque is broken up and bacteria removed, the bleeding will stop and your gums will heal.

8. a

Although there's no substitute for brushing with fluoride toothpaste, you can vigorously rinse your mouth with water to remove any loose food particles and then chew sugarless gum. Chewing gum stimulates saliva, which naturally controls bacteria growth in the mouth.

9. b

Bacteria in the mouth feed on sugar to provide the energy to multiply. A by-product of this process is acid. Acid attacks tooth enamel and causes tooth decay.

10. d

According to the Academy of General Dentistry, nearly 80 percent of adults in the U.S. have some form of gum disease at some point in their lives.



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