

grin!

**solutions to
5 dental problems
for older adults**

**zoology 101:
creature feature**

**5 worst foods
for your social
calendar**

**science 101:
tooth forensics**



grin!

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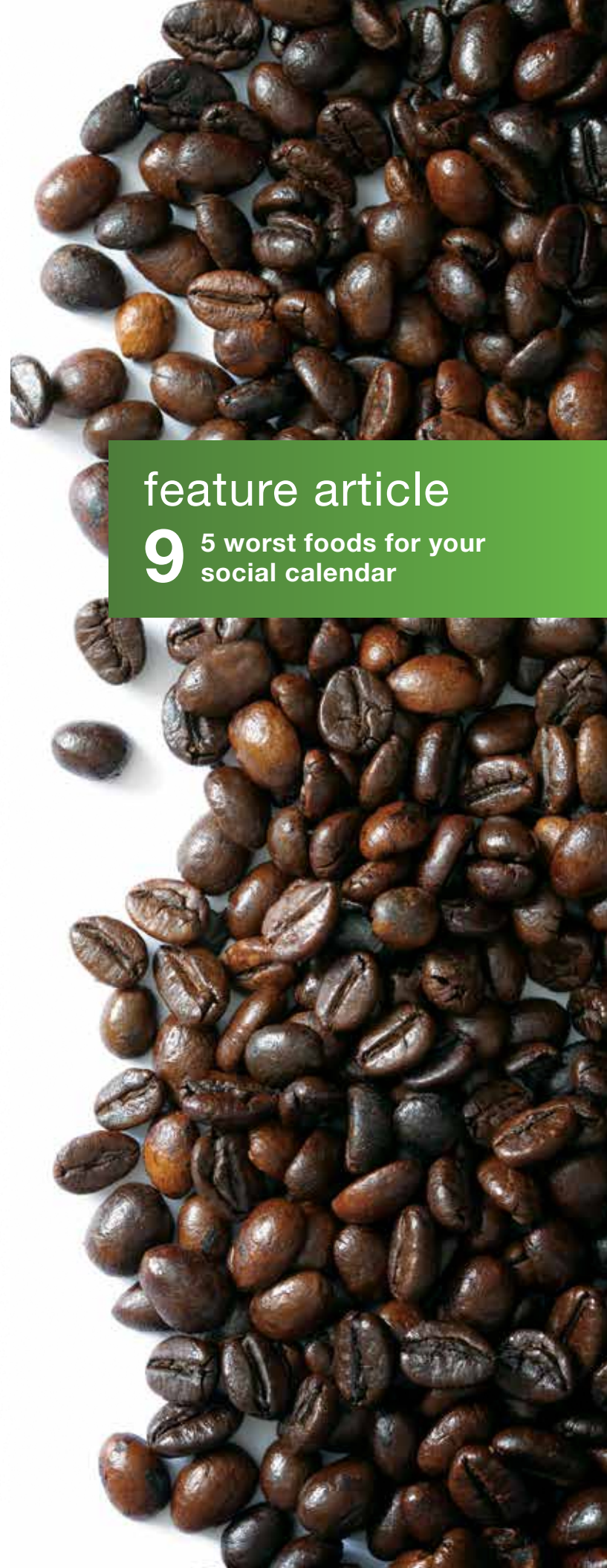
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cavity-free calendar



August

National Tooth Fairy Day is August 22!

See our **“two-word answers”** section below to find out if the Tooth Fairy leaves extra money for a first tooth.

September

Say “Arr!” on September 19!

Although it’s Talk Like a Pirate Day, we don’t recommend eating like one. Pirates often had bad teeth because they lacked vitamin C, which contributes to healthy teeth and gums.

October

Happy Halloween!

Visit toothfairytrickytreats.com for a pumpkin carving template and Tooth Fairy tips on healthy trick-or-treating.



two-word answers

**Q: How much more
does the Tooth Fairy
pay for the first
tooth a child loses
versus other teeth?**

A: 43% more.



Source: 2013 Delta Dental Children’s Oral Health Survey.



real Delta Dental smiles

Get to know the folks who work hard every day to make sure you're getting the most out of your Delta Dental benefits. Meet Earlina McKnight, contract analyst at Delta Dental of Arizona.

Have your oral health habits changed since you started working for Delta Dental?

They have only slightly changed. I have always brushed and flossed twice a day. However, I now keep a toothbrush at work, and most days I brush and floss after lunch, too.

Do you prefer an electric toothbrush or a manual toothbrush?

I like both. I use an electric toothbrush at home, and a manual toothbrush when on vacation or at work.

How do you spend your time outside of work?

I enjoy watching movies and cooking shows, attending church activities and volunteering at a local hospice center.

Tell us one of your favorite quotes.

My favorite quote is by Maya Angelou: "If you don't like something, change it. If you can't change it, change your attitude."

readers ask, we answer

Henry writes:

"I've heard sealants can make a big difference when it comes to my teenage son's oral health. Is that really true?"

Hi, Henry. It is true! Sealants are plastic coatings that cover the pits and grooves in teeth where bacteria hide and create decay. The sealants typically last 5 to 10 years. Not only can they help prevent cavities from forming, but they can also deter small existing cavities from getting bigger. More than a third of kids ages 13 to 19 have sealants, so if you and your dentist decide sealants would be a good option for your teen, he'll be in good company. Your dentist can also help you determine whether sealants are covered under your dental plan.

Sealants are most effective for children with a higher risk for decay, however. So if your son has made it to his teens without molar decay, your dentist may not recommend them. If your son does fall into the higher-risk category, helping prevent cavities won't just benefit his oral health – it may benefit his academic performance as well. A study conducted in California showed that an estimated 504,000 children in the state missed at least one school day per year due to dental pain. These types of absences have been linked to poor academic performance, so you'll likely be helping your son make the grade in more ways than one if you opt for sealants.

Have a question you'd like us to answer? Send your question to grin@deltadental.com, and it could be featured in an upcoming issue!

the history of oral health:

our favorite pop culture icons with braces



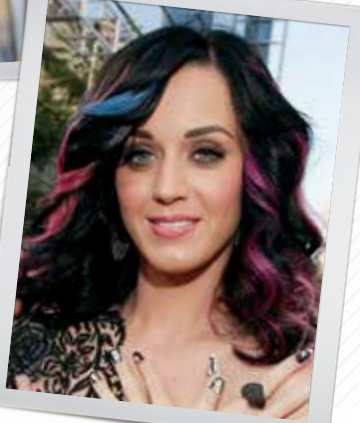
Lead singer **Gwen Stefani** of the band No Doubt sported braces in 1999 as a fashion accessory – not because she needed them.

Tom Cruise straightened up his smile with mostly clear braces in 2002.

Faye Dunaway proved you're never too old for a perfectly aligned smile. The *Bonnie and Clyde* actress had braces applied in 2002 at age 61.



Actress **Katherine Heigl** wore braces in 2007 to ensure a perfect smile for her wedding day.



Katy Perry had braces when she played her teenage alter ego, "Kathy Beth Terry," in the 2011 video for "Last Friday Night (T.G.I.F.)."

Not only did country singer **Faith Hill** have braces as an adult, she actually wore them at the 2013 Grammy Awards.



SCIENCE 101

TOOTH FORENSICS

Tooth enamel is harder than any other substance in the human body, which is why teeth last longer than almost any other body part. In addition to telling criminologists and archaeologists whether a person brushed and flossed regularly, teeth can reveal age, ethnicity, and even lifestyle and eating habits. Here's how a bit of enamel can open up a whole world of information.

Forensic dentistry has been around since at least 49 B.C., when Agrippina, Emperor Claudius' new wife, had his previous wife killed out of jealousy. To ensure that the correct person was killed, Agrippina demanded to see the victim's teeth – Claudius' ex-wife reportedly had very distinctive dentition.

AGE

Forensic dentists can estimate age based on the size of a person's teeth. Teeth grow an average of four micrometers a day – a mere 0.000157 inches. Although such growth is virtually invisible to the untrained eye, a knowledgeable dentist with the right tools can measure teeth to give a rough approximation of age. It's also possible to take an educated guess at younger ages based on the teeth that have erupted.

ETHNICITY

Just as eye color, hair color, facial features and body types can vary among ethnic groups, so can teeth. Size and even shape can indicate ethnicity. For example, some Asians and Native Americans have incisors that are scooped out on the back side, similar to a spoon.

LIFESTYLE AND EATING HABITS

In some cases, teeth can determine a person's profession, or even what hobbies he or she enjoyed. Someone who smoked a pipe or played a wind instrument will have worn down his or her teeth in a specific pattern. People who often stick pins in their mouths, such as tailors, may have tiny telltale tooth chips.



If you think that's pretty impressive, consider this:

What you eat today could potentially be fodder for archaeologists thousands – even millions – of years from now. In 2008, scientists found the remains of a human ancestor that were more than 2 million years old. The ancestor, *Australopithecus sediba*, still had food particles stuck in his teeth, revealing his diet of fruit, leaves and bark. The research team could even pinpoint the exact family of plants the man had been snacking on.

OTHER WAYS DENTAL RECORDS CAN HELP

Though it may not work with ancient archaeology, modern-day dental records are helpful when attempting to match someone who has crowns, fillings, root canals or other distinctive teeth characteristics.



mouth-friendly recipe: oat snack bars

For a healthy yet yummy addition to your child's lunch box, whip up these tasty oat treats.

Ingredients:

2 cups oats
1 cup brown sugar
1 cup whole-wheat flour
½ tsp baking soda
½ tsp baking powder
1 tsp cinnamon
1 tsp salt
1 tsp vanilla
½ cup honey
Assortment of nuts, seeds and dark chocolate chips

Directions:

Preheat oven to 325 degrees and grease a 9" x 13" pan. Mix all ingredients together in a large bowl. Take the dough, which should be dry and crumbly, and press it into the greased pan. Bake for 20 minutes or until the edges are browned. Once it has cooled, cut into strips and store in snack-size bags. **Enjoy!**

on topic with dr. kohn

Meet Delta Dental's Vice President of Dental Science and Policy, Bill Kohn, DDS. Formerly the director of the Division of Oral Health at the Centers for Disease Control and Prevention, Dr. Kohn has timely tips and valuable insights to share as our resident dental expert.



Despite our best efforts to provide a healthy diet for our children, what they eat during school hours is basically out of our control. Studies have shown that students' academic success is linked to their health, so eating well may actually boost academic achievement. Here are two suggestions to increase the likelihood of your child eating healthy meals and snacks at school.

First of all, it starts at home. Set a good example by providing nutritious foods. Serve plenty of vegetables, fruits, whole-grain products, low-fat or non-fat dairy products, and lean proteins, such as poultry, fish and beans. Make it easy by keeping healthy foods you know your child likes on hand.

Second, research your school's policies on lunches and vending machines. Encourage implementing policies that give students access to healthy lunches and snacks while limiting access to sugar-sweetened beverages. **Remember – good daily eating choices are a recipe for school success!**



5 WORST FOODS FOR YOUR *Social Calendar*

Before you bite into that egg salad sandwich at lunchtime, stop and think about its effect on your afternoon. Some foods are worse than others in causing bad breath, which results when stomach gases react with food particles stuck in the mouth. Whether you're brown-bagging it, ordering out or participating in a lunch meeting, beware of these five dishes that can impede your social presence.



1 *Garlic Bread*

Garlic bread may be tasty, but eating too much garlic is known to lead to bad breath. Sulfur particles in garlic linger on the tongue and in the stomach, and they mingle with gases in your body to produce an unsavory odor. Bad garlic breath can sometimes be banished by drinking milk, but it's safest to stick to more traditional methods such as using mouthwash, brushing your teeth and flossing regularly.



2 *French Onion Soup*

Onions contain an odor compound that, when mixed with gastric chemicals, gives off the smell of rotten eggs. Beat bad onion breath by brushing your teeth after eating, paying special attention to your gums to avoid the spread of bacteria.

3 *Hard-Boiled Eggs*

This simple dish is a great source of protein, but watch out for the smell! One of the main components of eggs is cysteine, which breaks down in the mouth and stomach to create hydrogen sulfide, producing a hard-to-miss odor. Dairy products, such as milk, help your body produce cysteine. But eggs infuse cysteine right into your body, making the odor more immediate. To get these egg bits out of your mouth, practice good oral hygiene by remembering to floss at least once a day.



4 *Coffee*

Good coffee is known for its tantalizing aroma, but when this scent lingers, it can make you want to break away from the brew. This is due to a molecule called 3-mercapto-3-methylbutylformate, which smells like old fish and expired milk. Coffee is the culprit behind another common mouth issue: stained teeth. It takes diligent care to clean teeth after drinking coffee, but rinsing with mouthwash can help your breath return to normal.



5 *Chicken Curry*

This spicy Indian and Southeast Asian staple can produce some serious dragon breath. The oils in curry leaves get caught on the tongue and create a film in the mouth. Although drinking milk helps reduce the burning sensation, it doesn't clean your mouth as thoroughly as mouthwash and fluoride toothpaste. Stick to traditional methods of oral hygiene, and your breath will be fresh in no time.

Keep in mind that the risk of bad breath doesn't mean you have to completely cut these foods out of your diet. Just eat them in moderation, chew sugar-free gum afterward and maintain good dental hygiene. The people around you will thank you.

ZOOLOGY 101: CREATURE FEATURE

WHAT WE HAVE IN COMMON WITH GREAT WHITE SHARKS AND OTHER BEASTS

When it comes to teeth, we're not as different from animals as you might think. Our pearly whites are specifically shaped for unique functions, just as theirs often are. Here are a few ways we're similar to nature-dwellers – and a few ways we're quite different.



GREAT WHITE SHARKS

In terms of sheer numbers, sharks definitely have us beat. Great white sharks have rows and rows of teeth designed to fall out if too much pressure is applied to them, which is why a shark may have up to 20,000 teeth in its first 25 years of life. Where we're similar, though, is in the upper teeth: **The great white's are triangular with serrated edges for cutting, similar to our incisors.** Though our incisors tend to be chisel-shaped, not serrated, they're definitely designed for cutting, tearing and holding.

GIRAFFES

Because they munch mostly on leafy greens, **giraffes have broad, flat molars meant for grinding up a gigantic salad. Our molars serve pretty similar purposes – crushing and grinding** – even though most humans aren't strictly herbivores. Giraffes also have 32 teeth, the same as a permanent set of human teeth. What giraffes have that we don't is a "horny pad" where you'd typically expect upper incisors. The animals use the pad along with the bottom incisors to rip plants and graze on grass.



CHIMPANZEES

To find the animal with teeth most similar to ours, look no further than the primate exhibit at your local zoo. **Like humans, chimps have 32 teeth as adults. They also start out with no teeth, grow a set of primaries (or baby teeth), and eventually graduate to a permanent set.** Here's something to consider before you embark upon a career as a dentist to primates, though: Thanks to an enlarged set of mandible muscles that give chimps a vice-like grip, their bites pack an incredibly powerful punch.



THE NARWHAL'S INSIDE-OUT TOOTH

Though many animals have dentition similar to human teeth, the narwhal's cuspid tooth – the unicorn horn-like protrusion coming from its head – is actually the exact opposite of our teeth. Instead of having a hard, protective surface, such as enamel, on the outside to protect the sensitive dentin and pulp within, the narwhal's tender spots are on the outside with hard, dense centers.

CROCODILES

You'd think that a crocodile's teeth are meant for ripping, tearing and otherwise annihilating its prey, sort of like our incisors. But that couldn't be further from the truth. **A crocodile's bottom jaw doesn't move the same way a human's jaw does, so crocodiles can't chew.** Because crocodiles can clamp down with great force, they simply pin the prey between the jaws and swallow it whole. If the meal is too large to swallow in one gulp, the crocodile tears off a manageable chunk and swallows that. This gives new perspective to what your mom always told you at dinnertime: "Chew your food!"



solutions to 5 dental problems for older adults



Aging is a natural part of life. Dealing with dental problems doesn't have to be. In honor of Healthy Aging Month in September, here are five common dental ailments that often affect older adults and how to combat them.

1 Cavities

It's a common misconception that cavities only affect children and teens when, in fact, **tooth decay is the top chronic disease among people age 65 and older.** More than nine out of 10 older adults who still have their own teeth have had cavities, including about one-fourth who have cavities that are untreated. It just goes to show that mom was right: Brushing and flossing are always important, no matter your age.

2 Dry Mouth

Dry mouth affects many older adults at one point or another and can cause problems with swallowing, tasting and even speaking. The culprit is often a medical condition or a medication, so a Sahara-like mouth should not be accepted as a normal part of aging. Talk with your physician or dentist to determine the cause and find the appropriate treatment, which may be as simple as switching to a different medication.

3 Gum Disease

The term "gum disease" is a bit misleading, because it not only harms gums but also the bones that hold teeth in place. It occurs when plaque builds up on teeth around the gum line. Plaque consists of bacteria that release toxins and acids that attack, infect and destroy the soft and hard tissues. The longer the plaque accumulates, the greater the damage. **The key to preventing gum disease is good oral health care:** Regular brushing, flossing and professional cleanings ensure that plaque doesn't sit on teeth long enough to cause damage.

4 Poor Denture Care

Improper denture care can be a barrier to achieving good oral health. **Just as with natural teeth, dentures need to be properly cleaned and kept free of food particles, so daily brushing is a must.** At night, dentures should be removed and placed into water or a denture cleaning solution. Even if all natural teeth are gone, regular dental appointments still should be a part of your oral health routine.

5 Oral Cancer

Ninety percent of all oral cancer cases occur in people older than 45, so it's important for older adults to have regular oral cancer screenings, even if they no longer have their natural teeth. Why is this important? People whose oral cancers are diagnosed in the early stages have a much higher chance of survival.

By being a little extra cautious and practicing good habits, anyone can enjoy good oral health well into the golden years.

brushing up



Ever wonder what your dentist is really thinking? Grin! wanted to find out too, so we talked to Dr. Ann Ullah of Cumming's Family Dentist in Georgia.

What advice do you give your patients?

Stay away from sugary drinks. Try to chew sugar-free or xylitol-containing gum or mints to help reduce the bad bacteria in your mouth.

In your opinion, which celebrity has the best smile? Megan Fox.

What's your favorite dental joke?

Q: What did the shark say with the dog in his mouth?

A: I think one of my canines is getting loose.

Do you prefer an electric toothbrush or a manual toothbrush? Electric.

If you could tell patients to stop doing one thing, what would it be? Don't chew on ice, popcorn kernels, or other hard candy or foods.

Any funny stories from the dental chair?

A little girl comes to the office and is scared in the dental chair. Nothing anyone did could comfort her. Then my assistant handed the dental doggie puppet to me. In the dental doggie puppet there is a pump that squirts water from the dog's mouth. Also, the puppet has a huge smile with model teeth in its mouth. This puppet made the little girl's fear go away. She had a wonderful visit and when she comes back, she always asks to see the "doggie."

If you'd like to recommend your dentist for a Brushing Up interview, email grin@deltadental.com with his or her name and contact information.



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- Access to your personal coverage information, including plan type, benefit levels, deductibles and maximums, and the status of recent dental claims.
- A mobile ID card so you don't have to keep a paper copy handy.
- A toothbrush timer to help make sure you brush for a full two minutes.

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